# 2013 Summit County Youth Risk Behavior Survey

**High School Report** 

September 2014



Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University



#### Acknowledgements

The 2013 Summit County High School Youth Risk Behavior Survey (YRBS) Report embodies the expertise, cooperation, and dedication of multiple partners.

Most notable are Summit County Public Health (SCPH); the Alcohol, Drug Addiction & Mental Health Services Board (ADM Board); Summit County Family and Children First Council (FCFC) and the Summit County Educational Services Center (ESC). We are especially grateful to the students, teachers, principals, and superintendents who agreed to participate in the survey.

To this end, the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University is grateful for the collective financial support from the consortium.

Report prepared by: Prevention Research Center for Healthy Neighborhoods (PRCHN) Department of Epidemiology and Biostatistics Case Western Reserve University 11000 Cedar Ave., 4<sup>th</sup> floor Cleveland, OH 44106-7069

Shelby Barnes, Surveillance and Evaluation Research Assistant Whitney Crane, YRBS Field Coordinator Marissa Wayner, YRBS Field Coordinator Erika Hood, YRBS Scheduling and Volunteer Coordinator Jean Frank, Manager of Community Initiatives Erika Trapl, Principal Investigator

Submitted to Summit County Adolescent Health Consortium on September 19, 2014

## Introduction

Through collaborations between the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University and a youth-focused consortium represented by Summit County Public Health and the County of Summit Alcohol, Drug Addiction and Mental Health Services Board; the Youth Risk Behavior Survey (YRBS) was administered for the first time in Middle Schools and High Schools throughout Summit County. The YRBS is a cross-sectional tool developed by the Centers for Disease Control and Prevention (CDC) to track adolescent risk behavior over time. The national YRBS has tracked many of the major causes of morbidity and mortality for adolescents since 1991. Nationwide, the YRBS is conducted every two years among students in grades 9 through 12.

In the fall of 2013, the YRBS was administered to students in grades 9 through 12 throughout Summit County. The survey was tailored to fit local needs and addressed a wide range of topics. The 2013 Summit County High School YRBS asked questions covering the following health-related behavior categories:

- Section 2: Behaviors that contribute to unintentional injuries
- Section 3: Behaviors that contribute to violence including self-injurious behaviors
- Section 4: Tobacco use
- Section 5: Alcohol use
- Section 6: Marijuana and other drug use
- Section 7: Gambling
- Section 8: Behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV
- Section 9: Obesity and weight control
- Section 10: Dietary behaviors
- Section 11: Physical activity
- Section 12: Other health-related topics
- Section 13: Positive youth development

This report summarizes results from the 2013 Summit County High School YRBS. A unique chapter has been written for each category of behaviors. Each chapter starts with a brief literature review that explains the rationale for including items in the survey. A table tracking Summit County progress toward achieving 2020 Healthy People indicators follows. Graphs with explanations are also included depicting risk behavior prevalence reported by US, State, Summit County overall and for the four Summit County clusters. Graphs and explanations are also included for survey items that were not amenable to dichotomous analysis. Significant differences in prevalence observed by gender and by grade are noted in a chart. Immediately following the narrative sections are a series of tables which summarize the data presented in the report:

- Overall prevalence tables
- Comparison of 2013 Summit County prevalence to state of Ohio and nation
- Regional prevalence tables
- Demographic tables



#### Methodology

#### Sampling and Weighting

The primary goal of the Summit County Youth Risk Behavior Survey project for the Summit County youth-focused consortium was to obtain baseline adolescent risk behavior data representing each of the four pre-identified Summit County clusters. Because of this, the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University dispensed with the conventional two-stage cluster sample design patterned from the Centers for Disease Control and Prevention (CDC) and its national Youth Risk Behavior Survey (YRBS).

For the 2013 Summit County High School YRBS sample, all public schools in Summit County that contained grades 9 through 12 were included in the sampling frame. All classrooms in a given subject or during a given period of the day were selected. All students in the selected classrooms were eligible to participate allowing for the survey to be administered to the entire student body.

Student participation was both anonymous and voluntary. Permission slips were mailed to the homes of selected students; parents or guardians that approved for their student to participate took no action while parents or guardians with questions or who did not wish for their student to participate called their school's main office. Student nonparticipation was due to absence on the day of survey administration, parental refusal, or student refusal. Additionally, a small number of questionnaires failed quality control and were removed from the final data set.

Of the 26 Summit County high schools, 22 agreed to take part. A total of 15,364 students were eligible to complete the survey, and 12,548 usable questionnaires remained after the data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. The school response rate was 84.6% and the student response rate was 81.7%. The overall response rate was **69.1%** (84.6% x 81.7%).

The overall response rate allowed for data to be weighted to the population of 9<sup>th</sup> through 12<sup>th</sup> grade students in Summit County. Weighting makes the data representative of the population from which it was drawn. A weight was applied to each record to adjust for student non response and the distribution of students by grade, gender, race/ethnicity, and geographic region within Summit County.

Statistical analyses were conducted on weighted data using SPSS complex samples procedures to account for the complex sampling design. Prevalence estimates and 95% confidence intervals were computed for all variables that could be analyzed in a dichotomous fashion. Differences between prevalence estimates were considered statistically significant if the 95% confidence intervals did not overlap. Prevalence estimates with confidence intervals appear in the data tables which summarize the data presented following each narrative section.

The questionnaire included five risk behavior related items for which more than one answer could be chosen. Analyses were completed which demonstrated the range of responses. Graphs were created and results descriptions were also included in the narrative sections.



#### Summit County Clusters

In order to provide a geographic representation of the prevalence of different risk behaviors in Summit County, the county was divided into four clusters. These four clusters are used in county planning, data analyses and interpretation, and in program development. The four clusters are:

- Area I: West Akron (response rate=75.0%)—John R. Buchtel Community Learning Center, Firestone High School Campus for International Baccalaureate and Visual & Performing Arts, Kenmore High School
- Area 2: East Akron (response rate=73.6%)—East Community Learning Center, Ellet High School, Garfield High School, North High School, National Inventors Hall of Fame<sup>®</sup> Science, Technology, Engineering and Mathematics High School, Akron Early College High School
- Area 3: North Suburbs (response rate=51.8%)—Copley High School, Cuyahoga Falls High School, Hudson High School, Nordonia High School, Revere High School, Stow–Munroe Falls High School, Twinsburg High School, Woodridge High School
- Area 4: South Suburbs (response rate=79.4%)—Barberton High School, Coventry High School, Green High School, Manchester High School, Mogadore High School, Norton High School, Portage Lake Career Center, Springfield High School, Tallmadge High School

Sufficient schools within the East Akron, West Akron and South Suburbs clusters participated in the survey project to permit weighting to these regions, as well as to the county. The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



#### SUMMIT COUNTY HIGH SCHOOLS



#### Sample Description

The table below presents a demographic profile of students who completed the 2013 Summit County High School YRBS. A total of 12,548 usable surveys were completed.

2013 Summit County High School YRBS					
	N	Weighted %			
Total	12548	100%			
Gender					
Female	6287	50.1			
Male	6179	49.9			
Grade Level					
9 <sup>th</sup>	3407	27.0			
10 <sup>th</sup>	3493	27.4			
11 <sup>th</sup>	2847	23.7			
12 <sup>th</sup>	2624	22.0			
Race					
Black*	2128	16.3			
White*	7991	66.3			
Asian*	519	4.0			
Hispanic	647	5.1			
Other/Multiple	1070	8.3			

\*Non-Hispanic

The survey included several items intended to supplement standard demographic information. Students were asked who lived with them, the number of times they had changed homes since kindergarten, and the primary language used at home. The tables below depict student responses to these items.



	Akron	Akron	Suburbs	Suburbs	
	East	West	North	South	Overall
Mom and Dad	36.8%	30.5%	58.8%	53.1%	50.8%
Mom and Stepdad	10.3%	8.0%	7.1%	10.8%	8.7%
Stepmom and Dad	3.6%	2.4%	3.5%	4.1%	3.5%
Mom only	31.0%	37.6%	18.8%	18.7%	22.7%
Dad only	4.1%	4.1%	3.8%	4.2%	4.0%
Grandparents or Aunt/Uncle	8.0%	11.4%	4.0%	5.9%	5.9%
Foster family	1.0%	1.3%	0.5%	0.3%	0.6%
Other situation	5.1%	4.8%	3.5%	2.2%	3.5%

Students provided household composition information by responding to the item, "Think of where you live most of the time. Which of the following people live there with you? (Select all that apply.)"

Students provided information intended to assess level of enrollment transience for Summit County school districts overall and for the four regions by responding to the item, "How many times have you changed homes since kindergarten?"

	Akron East	Akron West	Suburbs North	Suburbs South	Overall
Never	29.3%	25.7%	39.7%	36.9%	35.9%
1 or 2 times	26.5%	26.2%	32.4%	30.8%	30.4%
3 or 4 times	18.1%	20.4%	14.7%	16.1%	16.2%
5 or 6 times	9.5%	10.4%	5.7%	7.2%	7.2%
7 + times	10.0%	10.4%	5.5%	6.3%	6.9%
Not sure	6.6%	6.9%	2.1%	2.6%	3.4%

Language at home was assessed by student response to the item, "What is the language you use most often at home?"

	Akron East	Akron West	Suburbs North	Suburbs South	Overall
English	87.1%	95.2%	93.4%	97.2%	93.6%
Spanish	2.6%	1.8%	1.7%	0.8%	1.6%
Another language	10.3%	3.1%	4.9%	2.0%	4.8%



#### **Terms and Conventions**

The following terms are used in this report:

- **Cigar use:** Having smoked any of the following products: cigars, cigarillos, little cigars, or flavored cigars such as Black and Milds, Swisher Sweets, or Phillies.
- **Obese/overweight:** Classification based on a student's Body Mass Index (BMI) (kg/m<sup>2</sup>), which was calculated from self-reported height and weight. The BMI values were compared with sex- and age-specific reference data from the 2000 CDC growth charts. Obese was defined as a BMI of >95th percentile for age and sex. Overweight was defined as a BMI of >85th percentile and <95th percentile for age and sex. Previous YRBS reports used the terms "overweight" to describe youth with a BMI >95th percentile for age and sex and "at risk for overweight" for those with a BMI >85th percentile and <95th percentile. However, this report uses the terms "obese" and "overweight" in accordance with the 2007 recommendations from the Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity convened by the American Medical Association (AMA) and co-funded by AMA in collaboration with the Health Resources and Services Administration and CDC. These classifications are not intended to diagnose obesity or overweight in individual students, rather to provide estimates of obesity and overweight for the population of students surveyed.
- **Race/ethnicity:** Analysis included this process: computed from two questions: 1. "Are you Hispanic or Latino?" (Response options were "yes" or "no"), and 2. "What is your race?" (Response options were "American Indian or Alaska Native," "Asian," "Black or African American," "Native Hawaiian or Other Pacific Islander," or "White"). For the second question, students could select more than one response option. For this analysis, students were classified as "Hispanic/Latino" if they answered "yes" to the first question, regardless of how they answered the second question. Students were classified as "White" if they answered "no" to the first question and selected only "White" for the second question. Students were classified as "Black" if they answered "no" to the first question and selected only "Black or African American" for the second question. Students were classified as "Asian" if they answered "no" to the first question and selected only "Asian" for the second question. Students were classified as "Other" if they answered "no" to the first question and selected only "Asian" for the second question. Students were classified as "Other" if they answered "no" to the first question and selected only "Asian" for the second question. Students were classified as "Other" if they answered "no" to the first question and selected more than one response to the second question. Race/ethnicity was classified as missing for students who did not answer the first question and for students who answered "no" to the first question.



#### Executive Data Summary

The Youth Risk Behavior Survey provides cross-sectional data about those categories of risk known to contribute most to morbidity and mortality among youth. Within risk behavior categories, questions are included to characterize the level of risk engagement and to determine the prevalence of risk engagement along several timeframes:

- "ever" or lifetime engagement,
- "during the past 12 months" engagement,
- "during the past 3 months" engagement,
- "current" or past 30 days engagement,
- "early initiation" or before the age of 13 years, and
- "past 7 days" engagement

The series of graphs that follow reveal the prevalence of risk behavior engagement according to these timeframes. The survey contains 17 items addressing behaviors that students may have engaged in over their lifetime. The chart below depicts the prevalence for each of these items.



## Lifetime behaviors



The survey contains 17 items addressing behaviors that students may have engaged in over the past 12 months. The chart below depicts the prevalence for each of these items.



## Behaviors during the past 12 months

 $0\% \ \ 10\% \ \ 20\% \ \ 30\% \ \ 40\% \ \ 50\% \ \ 60\% \ \ 70\% \ \ 80\% \ \ 90\% \ \ 100\%$ 

The survey contains 2 items addressing behaviors that students may have engaged in during the past 3 months. The chart below depicts the prevalence for each of these items.

## Behaviors during the past 3 months





The survey contains 21 items addressing behaviors that students may have engaged in during the past 30 days, considered to be "current use". The chart below depicts the prevalence for each of these items.



#### During the past 30 days



Overview | Page 9

The survey contains 4 items addressing behaviors that students may have engaged in for the first time before the age of 13 years. Students who participate in risk behaviors before the age of 13 years are considered to be at higher risk for these behaviors to become habitual and to be more likely to engage in multiple risk behaviors. The chart below depicts the prevalence for each of these items.



Before the age of 13 years

The survey contains 10 items addressing behaviors that students may have engaged in during the 7 days before the survey. The chart below depicts the prevalence for each of these items.



#### Behaviors during the past 7 days

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



Overview | Page 10

To measure academic achievement, Summit County high school students were asked to describe their grades in school. Overall, 76.7% of students described their grades as mostly A's and B's. The following pie chart depicts the breakdown of self-described school grades by Summit County High School students.





## Section 2: Behaviors that Contribute to Unintentional Injuries

The 2013 Summit County High School YRBS included five items about unintentional injury and safety, including items related to driving and head injury. Unintentional injuries are the leading cause of death for adolescents between the ages of 12 and 19; motor vehicle accidents are the most common unintentional injury death. <sup>i</sup> Safety belts, when used appropriately, reduce the risk of fatal injury to front-seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%. <sup>ii</sup> Behaviors that co-occur with driving, such as drinking and driving or texting and driving, are also important to consider. For example, in 2008, 22% of 15- to 20-year-old drivers who were killed in motor vehicle crashes and 4% of those injured in crashes had been drinking alcohol.<sup>iii</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>IVP-15:</b> Increase the use of safety belts to 92.4%	88.3% of Summit County high school students reported sometimes, usually or always wearing a seatbelt when riding in a motor vehicle.
<b>SA-1:</b> Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol to no more than 25.5%	17.9% of Summit County high school students reported that they rode with a driver who had been drinking alcohol at least once during the past 30 days.

Students in Summit County were asked how often they wore a seat belt while riding in a car driven by someone else. Overall, in Summit County, students were significantly more likely to report rarely or never wearing their seatbelt than students nationally in 2013. There is also variability across Summit County, with students in the West Akron cluster most likely to report rarely or never wearing a seatbelt, as seen in the graph below.



#### Never or rarely wore a seat belt



Students were asked how many times in the past 30 days they rode in a car driven by someone who had been drinking alcohol; responses are depicted in the graph below. Overall, Summit County high school students were significantly less likely than students nationally to have ridden in a vehicle driven by someone who had been drinking alcohol although similar to other Ohio students. There is also variability across Summit County, with students in the West Akron cluster most likely to report having ridden in a vehicle driven by someone who had been drinking alcohol.



#### Rode with a driver who had been drinking alcohol

The following graphs show behaviors from the past 30 days among Summit County <u>high school drivers</u> related to drinking and texting or emailing while driving in Summit County overall and across the four clusters, as compared to the US and Ohio results from 2013. Summit County students were significantly more likely than other Ohio students to have driven when drinking alcohol although similar to students nationally. Prevalence of drinking when driving was similar across the 4 Summit County clusters.



#### Drove when drinking alcohol, among drivers



Overall, Summit County high school drivers were significantly less likely than Ohio high school drivers to have texted or e-mailed while driving, during the 30 days before completing the survey although similar to students nationally. Drivers in the North and South Suburbs clusters were more likely than drivers in the Akron clusters to have texted or e-mailed while driving in the 30 days before the survey.



Texted or e-mailed while driving, among drivers

Students in Summit County were asked if, in the past 12 months, they had suffered a blow or jolt to the head which caused them to get "knocked out", have memory problems, double or blurry vision, headaches, or "pressure" in the head, or nausea or vomiting. This data was not collected in the National YRBS survey in 2013, but below the results are shown for Ohio, Summit overall, and the 4 Summit County clusters. Prevalence estimates were similar across all regions and clusters. Additional analyses were conducted to investigate if there was an association of having suffered a blow or jolt to the head with sports team participation.



#### Suffered a blow or jolt to the head



Section 2 | Page 3

Additional analyses were conducted to investigate if there was an association of having suffered a blow or jolt to the head with sports team participation. The prevalence for having suffered a blow or jolt to the head among all students during the 12 months before the survey was 14.2%. The prevalence for having suffered a blow or jolt to the head among students who had played on one or more sports teams during the past 12 months was 15.9% compared to 11.3% for students who had not played on one or more sports teams. Prevalence was significantly higher among students who had participated in a sports team during the past 12 months than for students who had not engaged in sports team participation.



Blows or jolts to the head

The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering unintentional injury behaviors. When significant differences exist by gender, an arrow indicates the direction of significance; the prevalence estimates with confidence intervals are included. For example, the prevalence for rarely or never wearing a seat belt among Summit County male students was 13.2% which was significantly higher than the prevalence reported by Summit County female students (10.1%). For differences by grade level, an arrow indicates the prevalence estimate for the grade level that is significantly different from at least one other grade. For example, the prevalence for having texted or e-mailed while driving a car was significantly higher among 12<sup>th</sup> grade drivers than for 9<sup>th</sup>, 10<sup>th</sup> or 11<sup>th</sup> grade drivers. The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Rarely/never wore a seat belt	10.1 (9.3-11.1)	<b>1</b> 3.2 (12.2-14.2)				
Rode with a driver who had been drinking alcohol						
Drove when drinking alcohol (among drivers)	6.6 (5.7-7.7)	<b>1</b> 11.7 (10.6-13.0)				
Texted or e-mailed while driving (among drivers)			14.4 (11.9-17.4)	17.5 (15.4-19.8)	41.0 (38.1-43.9)	<b>†</b> 56.5 (53.8-59.1)
Suffered a blow or jolt to the head	12.9 (11.9-13.9)	<b>1</b> 5.4 (14.4-16.4)				



## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Rarely or never wore a seatbelt	11.7%
(When riding in a car driven by someone else.)	(11.0-12.4)
Rode with a driver who had been drinking alcohol	17.9%
(During the past 30 days.)	(17.1-18.7)
Drove when drinking alcohol	5.4%
(Among all students during the 30 days before the survey.)	(4.9-5.9)
<b>Drove when drinking alcohol</b>	9.3%
(Among students who had driven a vehicle during the 30 days before the survey.)	(8.5-10.2)
<b>Texted or e-mailed while driving</b>	20.1%
(Among all students during the 30 days before the survey.)	(18.6-21.6)
<b>Texted or e-mailed while driving</b>	37.3%
(Among students who had driven a vehicle during the 30 days before the survey.)	(35.3-39.3)
Suffered a blow or jolt to the head (Which caused memory problems, double or blurry vision, headaches or "pressure" in the head, or nausea or vomiting.)	14.2% (13.4-14.9)



## Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% Cl)
Rarely or never wore a seatbelt	11.7%	8.4%	7.6%
(When riding in a car driven by someone else.)	(11.0-12.4)	(6.4-11.0)	(6.4-9.1)
Rode with a driver who had been drinking alcohol	17.9%	17.4%	21.9%
(During the past 30 days.)	(17.1-18.7)	(14.7-20.6)	(20.0-23.9)
<b>Drove when drinking alcohol</b> (Among all students during the 30 days before the survey.)	5.4% (4.9-5.9)		
<b>Drove when drinking alcohol</b>	9.3%	4.0%	10.0%
(Among students who had driven a vehicle during the 30 days before the survey.)	(8.5-10.2)	(2.8-5.6)	(8.5-11.8)
<b>Texted or e-mailed while driving</b> (Among all students during the 30 days before the survey.)	20.1% (18.6-21.6)		
<b>Texted or e-mailed while driving</b>	37.3%	45.6%	41.4%
(Among students who had driven a vehicle during the 30 days before the survey.)	(35.3-39.3)	(39.7-51.6)	(38.2-44.7)
Suffered a blow or jolt to the head (Which caused memory problems, double or blurry vision, headaches or "pressure" in the head, or nausea or vomiting.)	14.2% (13.4-14.9)	12.4% (10.4-14.7)	



#### **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% CI)
Rarely or never wore a seatbelt (When riding in a car driven by someone else.)	16.5% (14.7-18.6)	20.5% (17.7-23.7)	8.1% (7.3-9.1)	11.6% (10.4-13.0)
Rode with a driver who had been drinking alcohol (During the 30 days before the survey.)	19.5% (17.9-21.3)	23.8% (21.2-26.7)	16.1% (14.9-17.3)	17.7% (16.2-19.3)
<b>Drove when drinking alcohol</b> (Among all students during the 30 days before the survey.)	4.7% (3.8-5.8)	5.8% (4.4-7.5)	5.5% (4.6-6.4)	5.5% (4.6-6.5)
<b>Drove when drinking alcohol</b> (Among students who had driven a vehicle during the 30 days before the survey.)	9.6% (7.9-11.6)	10.3% (8.0-13.2)	9.3% (8.0-10.7)	8.8% (7.5-10.3)
<b>Texted or e-mailed while driving</b> (Among all students during the 30 days before the survey.)	10.1% (8.5-11.9)	14.6% (12.5-17.1)	22.7% (20.1-25.6)	23.2% (20.5-26.2)
<b>Texted or e-mailed while driving</b> (Among students who had driven a vehicle during the 30 days before the survey.)	22.8% (19.8-26.1)	28.8% (25.1-32.7)	41.0% (37.9-44.2)	40.2% (36.7-43.7)
Suffered a blow or jolt to the head (Which caused memory problems, double or blurry vision, headaches or "pressure" in the head, or nausea or vomiting during the 12 months before the survey.)	13.8% (12.5-15.3)	15.9% (13.7-18.4)	13.2% (12.0-14.4)	15.4% (14.1-16.8)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Seatbelt use						
Category	%	CI				
Gender						
Female	10.1	9.3 -	11.1			
Male	13.2	12.2 -	14.2			
Race/Ethnic	ity					
White	8.3	7.6 -	9.1			
Black	20.2	18.2 -	22.2			
Asian	8.7	6.3 -	11.8			
Hispanic	20.7	17.2 -	24.7			
Other	16.5	14.0 -	19.3			
Grade						
9th	11.8	10.3 -	13.5			
10th	11.9	10.3 -	13.4			
11th	10.5	9.1 -	12.1			
12th	11.3	9.8 -	13.0			
Total	11.7	11.0 -	12.4			

#### Demographics

Rode with a driver who had been					
dri	nking alo	cohol			
Category	%	CI			
Gender					
Female	17.8	16.7 -	18.9		
Male	17.9	16.9 -	19.0		
Race/Ethnic	ity				
White	16.0	15.1 -	17.0		
Black	22.3	20.4 -	24.3		
Asian	15.2	12.1 -	18.9		
Hispanic	27.2	23.6 -	31.2		
Other	19.4	17.0 -	22.1		
Grade					
9th	16.6	15.3 -	18.1		
10th	17.9	16.5 -	19.3		
11th	16.9	15.2 -	18.8		
12th	19.0	17.2 -	21.0		
Total	17.9	17.1 -	18.7		

In Summit County, 11.7% of students rarely or never wore a seat belt when riding in a car driven by someone else. The prevalence of rarely or never wearing a seat belt was higher among male (13.2%) than female (10.1%) students. The prevalence of rarely or never wearing a seat belt was higher among Black, Hispanic and Other/Multiple (20.2%, 20.7%, 16.5%) students, than among White and Asian (8.3%, 8.7%) students. In Summit County, 17.9% of students had ridden in a car or other vehicle driven by someone else who had been drinking alcohol one or more times in the 30 days before the survey. The prevalence of having ridden with a driver who had been drinking alcohol was higher among Black (22.3%) and Hispanic (27.2%) students than both White (16.0%) and Asian (15.2%) students, respectively. The prevalence of having ridden with a driver who had been drinking alcohol was higher among Hispanic (27.2%) than Other/Multiple (19.4%) students.



Drove when drinking alcohol					
Category	%	CI			
Gender					
Female	3.7	3.2 -	4.3		
Male	7.0	6.2 -	7.8		
Race/Ethnic	ity				
White	4.2	3.7 -	4.9		
Black	6.1	5.0 -	7.3		
Asian	5.7	3.7 -	8.6		
Hispanic	15.3	12.3 -	18.9		
Other	6.0	4.6 -	7.9		
Grade					
9th	2.3	1.7 -	3.0		
10th	4.1	3.4 -	5.0		
11th	6.2	5.2 -	7.4		
12th	8.5	7.3 -	9.8		
Total	5.4	4.9 -	5.9		

In Summit County, 5.4% of all students had driven a car when they had been drinking alcohol one or more times in the 30 days prior to the survey. The prevalence of having driven when they had been drinking alcohol was higher among male (7.0%) than female (3.7%) The prevalence of having driven students. when they had been drinking alcohol was higher among Hispanic (15.3%) students than White (4.2%), Black (6.1%), Asian (5.7%) or Other/Multiple (6.0%) students. The prevalence of having driven when they had been drinking alcohol was higher among Black (6.1%) students than White (4.2%) students, respectively. The prevalence of having driven when they had been drinking alcohol was higher among  $11^{\text{th}}$  (6.2%) and  $12^{\text{th}}$  grade (8.5%) students, relative to 9<sup>th</sup> grade (2.3%) and 10<sup>th</sup> grade (4.1%) students. The prevalence of having driven when they had been drinking alcohol was higher among 10<sup>th</sup> grade (4.1%) students than 9<sup>th</sup> grade (2.3%) students, respectively.

Drove when drinking alcohol,						
among drivers						
Category	%	CI				
Gender						
Female	6.6	5.7 -	7.7			
Male	11.7	10.6 -	13.0			
Race/Ethnic	city					
White	7.1	6.3 -	8.1			
Black	11.0	9.3 -	13.1			
Asian	11.3	7.5 -	16.7			
Hispanic	25.5	20.7 -	31.0			
Other	11.7	8.9 -	15.1			
Grade						
9th	8.4	6.5 -	10.8			
10th	7.6	6.3 -	9.1			
11th	8.2	6.9 -	9.8			
12th	10.4	9.0 -	12.0			
Total	9.3	8.5 -	10.2			

In Summit County, of students who had driven a vehicle during the 30 days before the survey, 9.3% had driven a car when they had been drinking alcohol in those 30 days. The prevalence of having driven when they had been drinking for those who had driven in the past 30 days was higher among male (11.7%) than female (6.6%) students. The prevalence of having driven when they had been drinking for those who had driven in the past 30 days was higher among Black (11.0%), Hispanic (25.5%) students. and Other/Multiple (11.7%)respectively, than among White (7.1%) students. The prevalence of having driven when drinking for those who had driven in the past 30 days was higher for Hispanic (25.5%) students, than among Black (11.0%), Asian (11.3%) and Other/Multiple (11.7%) students, respectively.



Texted or e-mailed while driving						
Category	%	CI				
Gender						
Female	18.3	16.6 -	20.2			
Male	21.9	20.1 -	23.7			
Race/Ethnic	city					
White	22.5	20.5 -	24.5			
Black	14.4	12.8 -	16.2			
Asian	9.9	7.0 -	13.7			
Hispanic	23.8	20.3 -	27.6			
Other	14.4	11.8 -	17.3			
Grade						
9th	3.2	2.5 -	4.0			
10th	8.7	7.6 -	10.0			
11th	29.2	26.9 -	31.6			
12th	44.5	41.9 -	47.2			
Total	20.1	18.6 -	21.6			

In Summit County, 20.1% of all students had driven a car or vehicle while texting or emailing one or more times in the 30 days prior to the survey. The prevalence of having driven while texting or emailing was higher among White and Hispanic (22.5%, 23.8%) students than Black, Asian or Other/Multiple (14.4%, 9.9%, 14.4%) students, respectively. The prevalence of having driven while texting or emailing was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12th grade (8.7%, 29.2%, 44.5%) students than 9<sup>th</sup> grade (3.2%) students respectively. The prevalence of having driven while texting or emailing was higher among 11<sup>th</sup> and 12<sup>th</sup> grade (29.2%, 44.5%) students than 10<sup>th</sup> grade (8.7%) students, respectively, and the prevalence of having driven while texting or emailing was higher among 12<sup>th</sup> grade (44.5%) students than 11<sup>th</sup> grade (29.2%) students, respectively.

Texted or e-mailed while driving,							
among drivers							
Category	%	CI					
Gender							
Female	35.5	32.9 -	38.1				
Male	39.0	36.8 -	41.3				
Race/Ethnic	city						
White	40.0	37.6 -	42.4				
Black	29.3	26.5 -	32.3				
Asian	22.1	16.1 -	29.6				
Hispanic	43.6	38.0 -	49.4				
Other	30.5	25.2 -	35.2				
Grade	Grade						
9th	14.4	11.9 -	17.4				
10th	17.5	15.4 -	19.8				
11th	41.0	38.1 -	43.9				
12th	56.5	53.8 -	59.1				
Total	37.3	35.3 -	39.3				

In Summit County, of students who had driven a car or vehicle during the 30 days prior to the survey, 37.3% had driven while texting or emailing one or more times in the 30 days prior to the survey. Among those who drove, the prevalence of having driven while texting or emailing was higher among White and Hispanic (40.0%, 43.6%) students than Black, Asian, or Other/Multiple (29.3%, 22.1%, 30.5%) students, respectively. Among those who drove in the 30 days prior to the survey, the prevalence of having driven while texting or emailing was higher among 11<sup>th</sup> and 12<sup>th</sup> grade (41.0%, 56.5%) students than 9<sup>th</sup> grade and 10<sup>th</sup> grade (14.4%, 17.5%) students respectively. The prevalence of having driven while texting or emailing was higher among 12<sup>th</sup> grade (56.5%) students than 11<sup>th</sup> grade (41.0%) students, respectively.



Suffered a blow or jolt to the						
head						
Category	%	CI				
Gender						
Female	12.9	11.9 -	13.9			
Male	15.4	14.4 -	16.4			
Race/Ethnic	city					
White	13.8	12.9 -	14.6			
Black	12.9	11.3 -	14.7			
Asian	10.6	8.0 -	14.0			
Hispanic	21.5	18.1 -	25.4			
Other	17.2	14.5 -	20.2			
Grade						
9th	15.4	14.1 -	16.9			
10th	15.0	13.7 -	16.4			
11th	13.3	11.8 -	14.9			
12th	11.9	10.4 -	13.5			
Total	14.2	13.4 -	14.9			

In Summit County, 14.2% of students had suffered a blow or jolt to the head in the 12 months prior to the survey. The prevalence of having suffered a blow or jolt to the head was higher among male (15.4%) than female (12.9%) students. The prevalence of having suffered a blow or jolt to the head was higher among Hispanic (21.5%) students than White (13.8%), Black (12.9%), and Asian (10.6%) students, respectively. The prevalence of having suffered a blow or jolt to the head was higher among Other/Multiple (17.2%) students than among Asian (10.6%) students. The prevalence of having suffered a blow or jolt to the head was higher among 9<sup>th</sup> grade (15.4%) and 10<sup>th</sup> grade (15.0%) students, respectively, than among 12<sup>th</sup> grade (11.9%) students.



<sup>i</sup> Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

<sup>ii</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts, 2006 Data: Occupant Protection.* Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2007. Available at http://www-nrd.nhtsa.dot.gov/Pubs/810807.PDF. Accessed May 21, 2012.

<sup>III</sup> National Highway Traffic Safety Administration. Traffic Safety Facts, 2008 Data: Young Drivers. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2009. Available at http://wwwnrd.nhtsa.dot.gov/pubs/811169.pdf. Accessed May 21, 2012.



## Section 3: Behaviors that Contribute to Violence including Self-Injurious Behaviors

The 2013 Summit County High School YRBS asked students about violent behaviors, including behaviors against others and oneself. The items address issues of physical fighting, weapon carrying, bullying, and suicide. Adolescents can experience violence along a continuum that may begin with verbal harassment and advance into physical acts of violence.<sup>i</sup> Bullying and being bullied at school are associated with key violence-related behaviors including carrying weapons, fighting and sustaining injuries from fighting.<sup>ii</sup>

Persistent sadness and hopelessness are criteria for and predictors of clinical depression, though by themselves they are insufficient for a diagnosis of depression. Depressed youth are much more likely to use drugs or alcohol, drop out of school, or engage in promiscuous sex than a young person who is not depressed.<sup>iii</sup> Suicide was the second leading cause of death among teenagers ages 15-19 in 2011. Youth are much more likely to think about and attempt suicide if they are depressed.<sup>iv</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>IVP-34:</b> Reduce physical fighting among adolescents to no more than 28.4%.	25.5% of Summit County high school students reported being involved in at least one physical fight during the past 12 months.
<b>IVP-35:</b> Reduce bullying among adolescents to no more than 17.9%	29.6% of Summit County high school students reported being bullied on school property, away from school property or electronically during the past 12 months.
MHMP-2: Reduce suicide attempts by adolescents to no more than 1.7 per 100 population.	9.7% of Summit County middle school students attempted suicide one or more times during the 12 months before the survey.

Students in Summit County were asked how often they carried a weapon such as a gun, knife, or club in the past 30 days. The graph below depicts responses from students who said they carried a weapon on one or more days of the past 30 days. The prevalence for weapon carrying was significantly higher among students nationally than for Summit students. The prevalence for weapon carrying was significantly higher in the South Suburbs cluster than in the West Akron and North Suburbs clusters.



## **Carried** a weapon



Summit County students were also asked how easy they thought it would be for them to get a handgun if they wanted one. The responses below are for students who responded that it would be "sort of easy" or "very easy" for them to get a handgun. This question was not assessed in the national or Ohio YRBS survey in 2013. The prevalence of believing it would be "easy" or "very easy" to get a handgun was significantly higher for students in the West Akron cluster than for students in the East Akron and North Suburbs clusters. The prevalence of believing it would be "easy" or "very easy" to get a handgun was significantly higher for students in the South Suburbs cluster than for students in the North Suburbs cluster.



#### Found it easy to get a handgun

Summit County students were asked on how many days of the past 30 days they did not go to school because they felt unsafe at school or on their way to or from school. The graph below indicates students who did not go to school due to safety concerns for at least one day in the past 30. Overall, the prevalence of not going to school because of safety concerns was significantly higher among Summit County high school students than Ohio high school students. Students in the East and West Akron clusters were significantly more likely than students in the North and South Suburbs clusters to avoid school because of safety concerns.





#### Did not go to school because of safety concerns

The US, Ohio and Summit 2013 results shown in the graph below represent students who reported having been in at least one physical fight in the past 12 months. Overall, the prevalence of having been in a physical fight was significantly higher among Summit County students than other Ohio students. The prevalence of having been in a physical fight was significantly higher for the West Akron cluster than the North and South Suburbs clusters. The prevalence of having been in a physical fight was significantly higher for the East Akron cluster than the North Suburbs cluster.



## In a physical fight

Students in Summit were asked, if, in the past 12 months, they were ever intentionally hit, slapped, or physically hurt by their boyfriend or girlfriend. The graph below shows the results among all students; 8.4% of all Summit County high school students reported having been a victim of dating violence. This is comparable to 2013 Ohio data. The prevalence of having been a victim of dating violence among all students was significantly higher for the West Akron cluster than the North and South Suburbs clusters. The prevalence of having been a victim of dating will students was significantly higher for the North Suburbs cluster.





#### **Dating violence**

The graph below shows dating violence among students who reported that they were dating. The prevalence of having been a victim of dating violence among dating students was significantly higher among Summit County high school students than among high school students nationally. There was no significant difference in prevalence across Summit County clusters.



#### Dating violence, among dating students

In Summit County, 12.6% of students reported having been forced to do sexual things such as kissing, touching, or being physically forced to have sexual intercourse. There is no national or state comparison data. The prevalence for having been forced to do sexual things was significantly higher among students in the South Suburbs cluster than among students in the North Suburbs cluster.





## Forced to do sexual things



Additional analyses were conducted to examine associations among physical fighting and gender by Summit County cluster. Female students were significantly less likely than males overall and by cluster, to have been in a physical fight during the 12 months before completing the survey. Prevalence of physical fighting was significantly higher among female students in the East Akron, West Akron and South Suburbs clusters than among female students in the North Suburbs cluster. The prevalence of physical fighting was significantly higher among female students in the West Akron cluster than among female students in the South Suburbs cluster. Prevalence of physical fighting was significantly higher among male students in the East Akron, West Akron and South Suburbs clusters than among students in the South Suburbs cluster. Prevalence of physical fighting was significantly higher among male students in the East Akron, West Akron and South Suburbs clusters than among male students in the North Suburbs cluster.



## Physical fighting by gender and cluster

The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering behaviors that contribute to violence. When significant differences exist by gender, an arrow indicates the direction of significance; the prevalence with confidence intervals are included for all significant differences. For example, the prevalence for weapon carrying among Summit male students was 22.9% which was significantly higher than reported by female students (7.5%). For differences by grade level, an arrow indicates the prevalence estimate (with confidence interval) for the grade level that is significantly different from at least one other grade. For example, the prevalence for weapon carrying was significantly higher among 12<sup>th</sup> grade students (17.1%) than among 9<sup>th</sup> grade students (13.2%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

			-			
	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Carried a weapon	7.5 (6.8-8.4)	<b>122.9</b> (21.7-24.3)	13.2 (11.9-14.6)			<b>17.1</b> (15.3-19.0)
Found it easy to get a handgun	22.8 (21.5-24.1)	<b>↑ 37.0</b> (35.4-38.5)	23.7 (22.1-25.4)			<b>36.6</b> (34.3-38.9)
Did not go to school because of safety concerns						
In a physical fight	19.7 (18.5-21.0)	<b>↑31.2</b> (29.7-32.7)				
Dating violence (among dating students)			10.6 (9.1-12.2)		<b>14.1</b> (12.3-16.0)	
Forced into sexual acts	<b>18.2</b> (17.1-19.5)	6.0 (6.1-7.7)	10.1 (9.0-11.4)		<b>15.2</b> (13.3-17.3)	



Section 3 | Page 6

The following graph depicts the percentage of students who reported having been bullied on school property in the past 12 months. Variation in prevalence across US, State and Summit County was not significant. Students in the South Suburbs cluster were significantly more likely to report having been bullied on school property than were students in the East Akron cluster.



## **Bullied on school property**

Students were asked if they had been bullied away from school property in the past 12 months. Variation in prevalence across State and Summit County was not significant. Students in the South Suburbs cluster were significantly more likely to report having been bullied away from school property than were students in the East Akron, West Akron and North Suburbs clusters.



### Bullied away from school property



Summit County students were asked to report if they had been electronically bullied in the past 12 months. This was defined as being bullied through email, chat rooms, social media, instant messaging, websites or texting. Overall, the prevalence of having been electronically bullied was significantly higher among Summit County high school students than students nationally. Students in the South Suburbs cluster were significantly more likely to report having been electronically bullied than were students in the East Akron, West Akron and North Suburbs clusters.



**Electronically bullied** 

Summit County students were asked if they had been teased or name called during the 12 months before completing the survey for any of the reasons indicated in the graph below. They could select all that applied. While one third of students (33.2%) indicated that they were teased about their weight, the majority of students who reported being teased or name called indicated it was for some reason other than their weight, gender, race/ethnic background, sexual orientation, or religion.



#### Reasons for being teased or name-called



#### 2013 SUMMIT COUNTY HS YRBS: Violence

The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering behaviors that contribute to violence through bullying. When significant differences exist by gender, an arrow indicates the direction of significance; the prevalence estimates with confidence intervals are included. For example, the prevalence for having been bullied on school property among female students was 24.4% which was significantly higher than among male students (16.7%). For differences by grade level, an arrow indicates the prevalence estimate (with confidence interval) for the grade level that is significantly different from at least one other grade. For example, the prevalence for having been bullied on school property among 9<sup>th</sup> grade students was 25.6% which was significantly higher than among 10<sup>th</sup>, 11<sup>th</sup> or 12<sup>th</sup> grade students (21.7%, 18.5%, 14.8%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Bullied on school property	<b>1</b> 24.4 (23.1-25.6)	16.7 (15.6-17.8)	<b>1</b> 25.6 (23.9-27.4)	21.7 (20.2-23.3)	18.5 (16.9-20.3)	14.8 (13.2-16.5)
Bullied away from school property	<b>1</b> 20.2 (19.0-21.4)	11.8 (10.8-12.8)	<b>1</b> 9.4 (17.7-21.2)	15.1 (13.8-16.6)		11.9 (10.5-13.5)
Electronically bullied	<b>1</b> 23.4 (22.2-24.7)	10.7 (9.8-11.7)	<b>1</b> 9.5 (17.9-21.3)			14.1 (12.7-15.6)

Students in Summit County were asked how many times they had done something to purposely hurt themselves without wanting to die, such as cutting, or burning themselves, during the past 12 months. This data was not collected at the national level in 2013, but the graph below shows that results in Ohio in 2013 and the overall and regional results in Summit were all similar.







Section 3 | Page 9

The following three graphs represent questions associated with depressive sadness and suicide. The graph below represents students who reported that during the past 12 months they had felt so sad and hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities. Variation in prevalence across US, State and Summit County was not significant. Students in the East Akron, West Akron and South Suburbs clusters were significantly more likely to report having experienced depressive sadness than were students in the North Suburbs cluster.



**Depressive sadness** 

Students were asked if, over the past 12 months, they had ever seriously considered attempting suicide. Prevalence estimates across US, State and Summit County were similar. Prevalence estimates across the four Summit County clusters were similar.



#### Seriously considered attempting suicide



Section 3 |Page 10

Students were asked how many times over the past 12 months they actually did attempt suicide. Overall, in Summit County the prevalence for having attempted suicide was significantly higher than reported by US and State. The prevalence for having attempted suicide was significantly higher among East Akron and West Akron clusters than for North Suburbs and South Suburbs clusters.



**Attempted suicide** 

The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering the behaviors contributing to violence through self-harm, depressive sadness and suicide. When significant differences exist by gender, an arrow indicates the direction of significance; the prevalence estimates with confidence intervals are included. For example, the prevalence for having engaged in intentional self-harm among female students was 26.0% which is significantly higher than reported by male students (11.9%. For differences by grade level, an arrow indicates the prevalence estimate (with confidence interval) for the grade level that is significantly different from at least one other grade. For example, the prevalence for having engaged in intentional self-harm among 9<sup>th</sup> grade students was 21.6% which was significantly higher than among 12<sup>th</sup> grade students (14.7%). The demographic tables at the end of this section provide closer examination of grade level differences and prevalence by race/ethnicity.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Intentional self-harm	<b>1</b> 26.0 (24.6-27.4)	11.9 (11.1-12.8)	<b>1</b> 21.6 (19.9-23.5)			14.7 (13.1-16.3)
Depressive sadness	<b>1</b> 38.6 (37.2-40.0)	20.0 (18.9-21.2)				
Seriously considered attempting suicide	<b>1</b> 21.9 (22.2-24.7)	11.6 (10.8-12.6)	<b>1</b> 7.8 (16.2-19.5)			13.8 (12.4-15.4)
Attempted suicide	<b>1</b> 2.3 (11.4-13.4)	8.3 (7.6-9.1)	<b>1</b> 1.6 (10.3-13.0)			7.4 (6.3-8.7)


## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
<b>Carried a weapon</b>	15.3%
(Such as a gun, knife, or club; one or more times during the 30 days before the survey.)	(14.5-16.2)
Found it easy to get a handgun	29.9% (28.8-31.0)
<b>Did not go to school because of safety concerns</b>	7.5%
(One or more times during the 30 days before the survey.)	(7.0-8.1)
In a physical fight	25.5%
(One or more times during the 12 months before the survey.)	(24.5-26.6)
<b>Dating violence</b> (Such as being hit, slammed into something, or injured with an object or weapon; one or more times during the 12 months before the survey, among all students.)	8.4% (7.8-9.1)
<b>Dating violence</b>	13.1%
(Among dating students, such as being hit, slammed into something, or injured with an object or weapon; one or more times during the 12 months before the survey.)	(12.2-14.0)
<b>Forced into sexual acts</b>	12.6%
(Among dating students, such as kissing, touching, or being physically forced to have sexual intercourse; one or more times during the 12 months before the survey.)	(11.8-13.4)
Bullied on school property	20.6%
(During the 12 months before the survey.)	(19.8-21.6)
Bullied away from school property	16.0%
(During the 12 months before the survey.)	(15.2-16.9)
<b>Electronically bullied</b> (Such as through e-mail, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)	17.1% (16.3-17.9)
Intentional self-harm	19.0%
(Such as cutting or burning self; during 12 months before survey.)	(18.2-19.9)
<b>Depressive sadness</b>	29.4%
(Almost every day for two weeks or more in a row, during the 12 months before the survey.)	(28.5-30.4)
Seriously considered attempting suicide	16.9%
(During the 12 months before the survey.)	(16.1-17.7)
Attempted suicide	10.4%
(One or more times during the 12 months before the survey.)	(9.8-11.1)



# Summit County/State of Ohio/Nation

Risk Behavior	Summit County, 2013 (95% CI)	Ohio, 2013 (95% CI)	US, 2013 (95% CI)
Carried a weapon	15.2%	1/ 2%	10.7%
(Such as a gun, knife, or club; one or more times during the 30 days before the survey.)	(14.5-16.2)	(11.1-17.8)	(16.5-19.4)
Found it easy to get a handgun	29.9% (28.8-31.0)		
Did not go to school because of safety concerns	7.5%	5.1%	7.1%
(One or more times during the 30 days before the survey.)	(7.0-8.1)	(3.8-6.8)	(6.0-8.3)
In a physical fight (One or more times during the 12 months before the survey.)	25.5% (24.5-26.6)	19.8% (16.9-23.1)	24.7% (23.2-26.2)
<b>Dating violence</b> (Such as being hit, slammed into something, or injured with an object or weapon; one or more times during the 12 months before the survey, among all students.)	8.4% (7.8-9.1)	7.1% (5.6-9.0)	
Dating violence			
(Among dating students, such as being hit, slammed into something, or injured with an object or weapon; one or more times during the 12 months before the survey.)	13.1% (12.2-14.0)		10.3% (9.2-11.4)
Forced into sexual acts			
(Such as kissing, touching, or being physically forced to have sexual intercourse; one or more times during the 12 months before the survey, among all students.)	12.6% (11.8-13.4)		
Bullied on school property	20.6%	20.8%	19.6%
(During the 12 months before the survey.)	(19.8-21.6)	(18.1-23.9)	(18.6-20.8)
<b>Bullied away from school property</b> (During the 12 months before the survey.)	16.0% (15.2-16.9)	14.4% (11.8-17.5)	
<b>Electronically bullied</b> (Such as through e-mail, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)	17.1% (16.3-17.9)	15.1% (12.6-18.0)	14.8% (13.7-15.9)
Intentional self-harm (Such as cutting or burning self; during 12 months before survey.)	19.0% (18.2-19.9)	17.3% (14.6-20.3)	
<b>Depressive sadness</b> (Almost every day for two weeks or more in a row, during the 12 months before the survey.)	29.4% (28.5-30.4)	25.8% (23.2-28.5)	29.9% (28.3-31.6)
Seriously considered attempting suicide	16.9%	14.3%	17.0%
(During the 12 months before the survey.)	(16.1-17.7)	(12.2-16.7)	(15.8-18.2)
Attempted suicide (One or more times during the 12 months before the survey.)	10.4% (9.8-11.1)	6.2% (4.4-8.7)	8.0% (7.2-8.9)



Section 3 |Page 13

# **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% CI)	South Suburbs % (95% CI)
<b>Carried a weapon</b> (Such as a gun, knife, or club; one or more times during the 30 days before the survey.)	16.0% (14.2-18.0)	14.4% (12.3-16.7)	13.5% (12.3-14.8)	18.4% (16.9-20.0)
Found it easy to get a handgun	30.9% (28.7-33.3)	37.8% (34.6-41.0)	26.3% (24.6-28.0)	32.6% (30.5-34.7)
Did not go to school because of safety concerns (One or more times during the 30 days before the survey.)	10.0% (8.8-11.3)	11.1% (9.1-13.4)	5.9% (5.1-6.8)	7.6% (6.6-8.6)
In a physical fight (One or more times during the 12 months before the survey.)	30.5% (28.3-32.8)	35.0% (32.0-38.1)	21.2% (19.7-22.8)	26.5% (24.5-28.6)
Dating violence (Such as being hit, slammed into something, or injured with an object or weapon; one or more times during the 12 months before survey, among all students.)	9.9% (8.5-11.5)	11.7% (9.9-13.8)	7.1% (6.3-8.1)	8.5% (7.4-9.8)
Dating violence (Such as being hit, slammed into something, or injured with an object or weapon; one or more times during the 12 months before the survey, among the students dating.)	14.3% (12.5-16.3)	16.2% (13.7-18.9)	12.1% (10.7-13.7)	12.4% (10.9-14.2)
Forced into sexual acts (Such as kissing, touching, or being physically forced to have sexual intercourse; one or more times during the 12 months before the survey, among the students dating.)	12.2% (11.0-13.6)	13.8% (11.8-16.2)	11.3% (10.2-12.4)	14.7% (13.0-16.6)
<b>Bullied on school property</b> (During the 12 months before the survey.)	18.8% (17.1-20.8)	18.6% (16.3-21.2)	20.3% (19.0-21.7)	23.1% (21.2-25.0)
Bullied away from school property (During the 12 months before the survey.)	13.3% (12.1-14.7)	12.1% (10.1-14.5)	15.7% (14.5-17.0)	19.6% (17.8-21.5)
Electronically bullied (Such as through e-mail, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)	15.4% (14.0-16.9)	14.6% (12.5-16.9)	16.2% (15.0-17.5)	20.6% (19.0-22.3)



Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% CI)
Intentional self-harm (Such as cutting or burning self; during the 12 months before the survey.)	20.3% (18.5-22.3)	20.0% (17.8-22.5)	17.7% (16.5-19.0)	20.1% (18.4-22.0)
<b>Depressive sadness</b> (Almost every day for two weeks or more in a row, during the 12 months before the survey.)	33.3% (31.4-35.3)	33.7% (31.1-36.3)	26.2% (24.7-27.8)	31.1% (29.2-33.1)
Seriously considered attempting suicide (During the 12 months before the survey.)	18.1% (16.6-19.7)	19.4% (17.2-21.8)	15.6% (14.4-16.9)	17.5% (16.0-19.1)
Attempted suicide (One or more times during the 12 months before the survey.)	13.1% (11.4-15.0)	13.7% (11.6-16.0)	9.4% (5.4-10.4)	9.4% (8.3-10.6)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Carried a weapon			
Category	%	CI	
Gender			
Female	7.5	6.8 -	8.4
Male	22.9	21.7 -	24.3
Race/Ethnic	city		
White	15.4	14.4 -	16.4
Black	12.5	11.0 -	14.2
Asian	6.1	4.1 -	9.1
Hispanic	25.6	22.0 -	29.6
Other	17.0	14.7 -	19.6
Grade			
9th	13.2	11.9 -	14.6
10th	15.5	14.0 -	17.0
11th	14.6	13.0 -	16.4
12th	17.1	15.3 -	19.0
Total	15.3	14.5 -	16.2

#### Demographics

Found it easy to get a handgun			
Category	%	CI	
Gender			
Female	22.8	21.5 -	24.1
Male	37.0	35.4 -	38.5
Race/Ethnic	ity		
White	29.0	27.7 -	30.3
Black	32.3	30.0 -	34.8
Asian	14.9	11.1 -	19.7
Hispanic	34.9	30.7 -	39.4
Other	34.6	31.2 -	38.1
Grade			
9th	23.7	22.1 -	25.4
10th	28.7	26.7 -	30.7
11th	31.2	28.9 -	33.5
12th	36.6	34.3 -	38.9
Total	29.9	28.8 -	31.0

In Summit County, 15.3% of students had carried a weapon (e.g., gun, knife, or club) in the 30 days prior to the survey. The prevalence of weapon carrying was higher among male (22.9%) than female (7.5%) students. The prevalence of weapon carrying was higher for Hispanic (25.6%) students than White, Black, Asian or Other/Multiple (15.4%, 12.5%, 6.1%, 17.0%) students, respectively. The prevalence of weapon carrying was higher for White and Other/Multiple (15.4%, 17.0%) students than Black and Asian (12.5%, 6.1%) students, respectively. The prevalence of weapon carrying was higher among Black (12.5%) students than Asian (6.1%) students. The prevalence of weapon carrying was higher among 12<sup>th</sup> grade (17.1%) students than 9<sup>th</sup> grade (13.2%) students, respectively.

In Summit County, 29.9% of students found it to be "sort of easy" or "very easy" to get a handgun. The prevalence of finding it easy to get a handgun was higher among male (37.0%) than female (22.8%) students. The prevalence of finding it easy to get a handgun was higher for White, Black, Hispanic and Other/Multiple (29.0%, 32.3%, 34.9%, 34.6%) students, respectively, than among Asian (14.9%) students. The prevalence of finding it easy to get a handgun was higher for Hispanic and Other/Multiple (34.9%, 34.6%) students, respectively, than White (29.0%) students. The prevalence of finding it easy to get a handgun was higher among 12<sup>th</sup> grade (36.6%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (23.7%, 28.7%, 31.2%) students, respectively. The prevalence of finding it easy to get a handgun was higher among 11<sup>th</sup> grade (31.2%) students and 10<sup>th</sup> grade (28.7%) students than 9<sup>th</sup> grade (23.7%) students, respectively.



Did not go to school because of			
sat	fety cond	cerns	
Category	%	CI	
Gender			
Female	8.0	7.3 -	8.8
Male	6.9	6.2 -	7.6
Race/Ethnic	ity		
White	5.6	5.1 -	6.2
Black	10.2	8.8 -	11.8
Asian	11.8	8.7 -	15.7
Hispanic	14.1	11.3 -	17.3
Other	10.1	8.2 -	12.4
Grade			
9th	8.2	7.1 -	9.4
10th	8.5	7.3 -	9.7
11th	5.9	4.9 -	7.0
12th	5.9	4.8 -	7.2
Total	7.5	7.0 -	8.1

In Summit County, 7.5% of students did not go to school at least one day in the 30 days prior to the survey, because of concern for their safety on their way to, from or during school. The prevalence of missing school due to safety concerns was higher among Black, Asian, Hispanic, and Other/Multiple (10.2%, 11.8%, 14.1%, 10.1%) students, respectively, than White (5.6%) students. The prevalence of missing school due to safety concerns was higher among 9<sup>th</sup> grade (8.2%) and 10<sup>th</sup> grade (8.5%) students than the 11<sup>th</sup> grade (5.9%) students, respectively. The prevalence of missing school due to safety concerns was higher among 10<sup>th</sup> grade (8.5%) students than 12<sup>th</sup> grade (5.9%) students, respectively.

In a physical fight			
Category	%	CI	
Gender			
Female	19.7	18.5 -	21.0
Male	31.2	29.7 -	32.7
Race/Ethnic	city		
White	22.0	20.8 -	23.2
Black	35.5	33.1 -	37.9
Asian	13.7	10.6 -	17.4
Hispanic	37.8	33.5 -	42.3
Other	31.2	27.9 -	34.7
Grade			
9th	27.5	25.5 -	29.6
10th	26.7	24.7 -	28.8
11th	24.2	22.0 -	26.5
12th	21.3	19.4 -	23.4
Total	25.5	24.5 -	26.6

In Summit County, 25.5% of students were in a physical fight one or more times in the 12 months prior to the survey. The prevalence of physical fighting was higher among male (31.2%) than female (19.7%) students. The prevalence of physical fighting was higher for White, Black, Hispanic and Other/Multiple (22.0%, 35.5%, 37.8%, 31.2%) students, respectively, than for Asian (13.7%) students. The prevalence of physical fighting was higher among Black and Hispanic (35.5%, 37.8%) students than White (22.0%) students. The prevalence of physical fighting was higher among  $9^{th}$  grade (27.5%) and  $10^{th}$  grade (26.7%) students than 12<sup>th</sup> grade (21.3%) students, respectively.



Dating violence			
Category	%	CI	
Gender			
Female	8.4	7.7 -	9.3
Male	8.2	7.4 -	9.1
Race/Ethnic	ity		
White	7.0	6.4 -	7.8
Black	10.9	9.4 -	12.6
Asian	6.3	4.4 -	8.9
Hispanic	15.7	12.6 -	19.3
Other	10.3	8.2 -	12.8
Grade			
9th	6.2	5.3 -	7.2
10th	7.9	6.9 -	9.2
11th	9.5	8.3 -	10.9
12th	9.4	8.1 -	10.9
Total	8.4	7.8 -	9.1

In Summit County, 8.4% of students were hit, slapped, or physically hurt by their boyfriend or girlfriend (dating violence) in the 12 months prior to the survey. The prevalence of dating violence was higher among Black and Hispanic (10.9%, 15.7%) students than White and Asian (7.0%, 6.3%) students, respectively. The prevalence of dating violence was higher for Other/Multiple (10.3%) students than White (7.0%) students. The prevalence of dating violence was higher among 11<sup>th</sup> and 12<sup>th</sup> grade (9.5%, 9.4%) students than 9<sup>th</sup> grade (6.2%) students, respectively.

Dating violence among dating			
	student	ts	
Category	%	CI	
Gender			
Female	12.9	11.8 -	14.2
Male	12.9	11.7 -	14.3
Race/Ethnic	city		
White	11.0	10.0 -	12.1
Black	15.4	13.3 -	17.8
Asian	14.1	9.9 -	19.7
Hispanic	23.7	19.2 -	28.8
Other	15.4	12.3 -	19.0
Grade			
9th	10.6	9.1 -	12.2
10th	12.5	11.0 -	14.3
11th	14.1	12.3 -	16.0
12th	13.6	11.7 -	15.6
Total	13.1	12.2 -	14.0

In Summit County, among dating students, 13.1% of students were hit, slapped, or physically hurt by their boyfriend or girlfriend (dating violence) in the 12 months prior to the survey. The prevalence of dating violence was higher for Hispanic (23.7%) students than White, Black, Asian or Other/Multiple (11.0%, 15.4%, 14.1%, 15.4%) students, respectively. The prevalence of dating violence was higher for Black and Other/Multiple (15.4%, 15.4%) students, respectively, than White (11.0%) students. The prevalence of dating violence was higher among 11<sup>th</sup> grade (14.1%) students than 9<sup>th</sup> grade (10.6%) students, respectively.



Forced into sexual acts			
Category	%	CI	
Gender			
Female	18.2	17.1 -	19.5
Male	6.9	6.1 -	7.7
Race/Ethnic	ity		
White	11.7	10.9 -	12.6
Black	12.4	10.9 -	14.1
Asian	7.7	5.2 -	11.4
Hispanic	22.4	18.8 -	26.5
Other	14.6	12.2 -	17.4
Grade			
9th	10.1	9.0 -	11.4
10th	12.1	10.9 -	13.4
11th	15.2	13.3 -	17.3
12th	12.6	11.1 -	14.3
Total	12.6	11.8 -	13.4

In Summit County, 12.6% of students have been forced to participate in a sexual act that they did not want to do. The prevalence of having been forced into a sexual act was higher among females (18.2%) than male (6.9%) students. The prevalence of having been forced into a sexual act was higher among Hispanic (22.4%) students than White, Black, Asian or Other/Multiple (11.7%, 12.4%, 7.7% 14.6%) students, respectively. The prevalence of having been forced into a sexual act was higher among Other/Multiple (14.6%) students than for Asian (7.7%) students. The prevalence of having been forced into a sexual act by a significant other was higher among 11<sup>th</sup> grade (15.2%) students than 9<sup>th</sup> grade (10.1%) students, respectively.

Bullied on school property			
Category	%	CI	
Gender			
Female	24.4	23.1 -	25.6
Male	16.7	15.6 -	17.8
Race/Ethnic	ity		
White	21.5	20.4 -	22.7
Black	14.5	12.9 -	16.4
Asian	12.5	9.8 -	14.9
Hispanic	28.3	24.5 -	32.4
Other	23.5	20.8 -	26.4
Grade			
9th	25.6	23.9 -	27.4
10th	21.7	20.2 -	23.3
11th	18.5	16.9 -	20.3
12th	14.8	13.2 -	16.5
Total	20.6	19.8 -	21.6

In Summit County, 20.6% of students had been bullied on school property in the 12 months prior to the survey. The prevalence of having been bullied on school property was higher among female (24.4%) than male (16.7%) The prevalence of having been students. bullied on school property was higher among Hispanic and Other/Multiple (28.3%, 23.5%) students, respectively, than White, Black and (21.5%, 14.5%, 12.5%) Asian students, respectively. The prevalence of having been bullied was higher among White (21.5%) students than Black and Asian (14.5%, 12.5%) students, respectively. The prevalence of having been bullied was higher among 10<sup>th</sup> grade (21.7%) and 11<sup>th</sup> grade (18.5%) students than 12<sup>th</sup> grade (14.8%) students, respectively. The prevalence of having been bullied was higher among 9<sup>th</sup> grade (25.6%) students than 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (21.7%, 18.5%, 14.8%) students, respectively.



Bullied away from school					
	propert	:y			
Category	% CI				
Gender					
Female	20.2	19.0 -	21.4		
Male	11.8	10.8 -	12.8		
Race/Ethnic	city				
White	17.1	16.1 -	18.2		
Black	9.1	7.7 -	10.7		
Asian	11.6	9.0 -	14.9		
Hispanic	23.9	20.4 -	27.9		
Other	17.6	15.1 -	20.3		
Grade					
9th	19.4	17.7 -	21.2		
10th	15.1	13.8 -	16.6		
11th	16.4	14.7 -	18.1		
12th	11.9	10.5 -	13.5		
Total	16.0	15.2 -	16.9		

In Summit County, 16.0% of students had been bullied away from school property in the 12 months prior to the survey. The prevalence of having been bullied away from school property was higher among female (20.2%) than male (11.8%) students. The prevalence of having been bullied away from school property was higher among Hispanic (23.9%) students than White, Black, Asian and Other/Multiple (17.1%, 9.1%, 11.6%, 17.6%) students, respectively. The prevalence of having been bullied away from school property was higher among White and Other/Multiple (17.1%, 17.6%) students than Black and Asian (9.1%, 11.6%) students, respectively. The prevalence of having been bullied was higher among 10<sup>th</sup> and 11<sup>th</sup> grade (15.1% and 16.4%) students than 12<sup>th</sup> grade (11.9%) students, respectively. The prevalence of having been bullied was higher among 9<sup>th</sup> grade (19.4%) students than 10<sup>th</sup> and 12<sup>th</sup> grade (15.1%, 11.9%) students, respectively.

Electronically bullied				
Category	%	CI		
Gender				
Female	23.4	22.2 -	24.7	
Male	10.7	9.8 -	11.7	
Race/Ethnic	ity			
White	17.8	16.8 -	18.8	
Black	11.7	10.2 -	13.3	
Asian	11.6	8.8 -	15.1	
Hispanic	24.2	20.5 -	28.3	
Other	20.6	18.0 -	23.5	
Grade				
9th	19.5	17.9 -	21.3	
10th	17.1	15.7 -	18.4	
11th	16.7	15.1 -	18.5	
12th	14.1	12.7 -	15.6	
Total	17.1	16.3 -	17.9	

In Summit County, 17.1% of students were bullied electronically through e-mail, chat social media, instant messaging, rooms, websites, or texting, in the 12 months prior to the survey. The prevalence of having been bullied electronically was higher among female (23.4%) than male (10.7%) students. The prevalence of having been bullied electronically was higher among Hispanic (24.2%) students than White, Black and Asian (17.8%, 11.7%, 11.6%) students, respectively. The prevalence of having been electronically bullied was higher among White and Other/Multiple (17.8%, 20.6%) students than Black and Asian (11.7%, 11.6%) students, respectively. The prevalence of having been bullied was higher among 9th and 10<sup>th</sup> grade (19.5% and 17.1%) students than 12<sup>th</sup> grade (14.1%) students, respectively.



Intentional self-harm				
Category	%	CI		
Gender				
Female	26.0	24.6 -	27.4	
Male	11.9	11.1 -	12.8	
Race/Ethnic	city			
White	18.7	17.7 -	19.8	
Black	14.1	12.4 -	15.9	
Asian	15.4	12.0 -	19.4	
Hispanic	29.1	25.5 -	32.9	
Other	25.3	22.7 -	28.1	
Grade				
9th	21.6	19.9 -	23.5	
10th	19.3	17.9 -	20.7	
11th	18.8	17.1 -	20.6	
12th	14.7	13.1 -	16.3	
Total	19.0	18.2 -	19.9	

In Summit County, 19.0% of students engaged in intentional self-harm without wanting to die in the 12 months prior to the survey. The prevalence of having engaged in intentional self- harm was higher among female (26.0%) than male (11.9%) students. The prevalence of having engaged in intentional self-harm was higher among Hispanic and Other/Multiple (29.1%, 25.3%) students, than White, Black, and (18.7%, 14.1%, 15.4%) students, Asian respectively. The prevalence of having engaged in intentional self-harm was higher among White (18.7%) students than Black (14.1%) students. The prevalence of having engaged in intentional self-harm was higher among 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (21.6%, 19.3%, 18.8%) students than 12<sup>th</sup> grade (14.7%) students, respectively.

Depressive sadness				
Category	%	CI		
Gender				
Female	38.6	37.2 -	40.0	
Male	20.0	18.9 -	21.2	
Race/Ethnic	ity			
White	28.2	27.0 -	29.5	
Black	29.2	27.0 -	31.6	
Asian	24.5	20.9 -	28.5	
Hispanic	41.5	37.2 -	45.9	
Other	32.9	29.7 -	36.2	
Grade				
9th	29.3	27.5 -	31.2	
10th	29.3	27.4 -	31.2	
11th	30.4	28.3 -	32.6	
12th	28.0	26.1 -	30.0	
Total	29.4	28.5 -	30.4	

In Summit County, 29.4% of students had felt sad and hopeless almost every day for two weeks or more in a row such that they stopped doing some usual activities one or more times in the 12 months prior to the survey. The prevalence of having felt sad and hopeless was higher among female (38.6%) than male (20.0%) students. The prevalence of having felt sad and hopeless was higher among Hispanic (41.5%) students than White, Black, Asian and Other/Multiple (28.2%, 29.2%, 24.5%, 32.9%) students, respectively. The prevalence of having felt sad and hopeless was higher among Other/Multiple (32.9%) students than White and Asian (28.2%, 24.5%) students.



Seriously considered attempting						
	suicide	2				
Category	%	% CI				
Gender						
Female	21.9	20.7 -	23.2			
Male	11.6	10.8 -	12.6			
Race/Ethnic	city					
White	16.0	15.1 -	16.9			
Black	15.8	14.1 -	17.8			
Asian	11.6	8.4 -	15.8			
Hispanic	26.6	22.5 -	31.2			
Other	21.4	18.9 -	24.2			
Grade						
9th	17.8	16.2 -	19.5			
10th	17.1	15.7 -	18.5			
11th	17.7	16.0 -	19.5			
12th	13.8	12.4 -	15.4			
Total	16.9	16.1 -	17.7			

In Summit County, 16.9% of students seriously considered attempting suicide one or more times in the 12 months prior to the survey. The prevalence of having seriously considered suicide was higher among female (21.9%) than male (11.6%) students. The prevalence of having seriously considered suicide was higher among Hispanic and Other/Multiple (26.6%, 21.4%) students than White, Black and Asian (16.0%, 15.8%, 11.6%) students, respectively. The prevalence of seriously considering suicide was lower among 12<sup>th</sup> grade (13.8%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (17.8%, 17.1%, 17.7%) students, respectively.

Attempted suicide				
Category	%	CI		
Gender				
Female	12.3	11.4 -	13.4	
Male	8.3	7.6 -	9.1	
Race/Ethnic	ity			
White	8.8	8.1 -	9.5	
Black	11.9	10.3 -	13.8	
Asian	9.1	6.6 -	12.4	
Hispanic	19.0	15.9 -	22.6	
Other	14.8	12.6 -	17.4	
Grade				
9th	11.6	10.3 -	13.0	
10th	11.2	10.0 -	12.5	
11th	10.0	8.7 -	11.4	
12th	7.4	6.3 -	8.7	
Total	10.4	9.8 -	11.1	

In Summit County, 10.4% of students had attempted suicide one or more times in the 12 months prior to the survey. The prevalence of having attempted suicide was higher among female (12.3%) than male (8.3%) students. The prevalence of having attempted suicide was higher among Hispanic (19.0%) students than White, Black and Asian (8.8%, 11.9%, 9.1%) students, respectively. The prevalence of having attempted suicide was higher among Other/Multiple (14.8%) students than among White and Asian (8.8%, 9.1%) students, The prevalence of having respectively. attempted suicide was higher among Black (11.9%) students than White (8.8%) students. The prevalence of having attempted suicide was higher among 9<sup>th</sup> and 10<sup>th</sup> grade (11.6%, 11.2%) students than 12<sup>th</sup> grade (7.4%) students, respectively.



- <sup>i</sup> Ohio Department of Health. 2003. Ohio Youth Risk Behavior Survey. Columbus, OH: Ohio Department of Health.
- <sup>ii</sup> National Center for Education Statistics. 2007. *Indicators of School Crime and Safety: 2007.* Washington, DC: U.S. Department of Education.

<sup>III</sup> Child Trends Databank. (2014). *Adolescents who felt sad or hopeless*. Available at: http://www.childtrends.org/?indicators=adolescents-who-felt-sad-or-hopeless.

<sup>iv</sup> Child Trends Databank. (2014). *Suicidal teens*. Available at: http://www.childtrends.org/?indicators=suicidal-teens.



# Section 4: Tobacco Use

The 2013 Summit County High School YRBS asked students five questions about the usage of cigarettes, cigars, and smokeless tobacco. Using tobacco can have serious effects on long-term health. The use of cigarettes is the single leading preventable cause of death in the United States.<sup>i</sup> Almost 90% of adult smokers initiate use before or at age 18. Tobacco use in adolescence is associated with many other health risk behaviors, including higher-risk sexual behavior and use of alcohol or other drugs.<sup>ii</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>TU-2.2:</b> Reduce use of cigarettes by adolescents to no more than 16.0%.	13.5% of Summit County high school students reported using cigarettes in the past 30 days.
<b>TU-2.4:</b> Reduce use of cigars by adolescents to no more than 8.0%	16.2% of Summit County high school students reported using cigars in the past 30 days.*

\*The wording of the 2013 Summit County High School YRBS cigar use item differs from the item used to obtain the HP2020 Objective. For Summit County "cigar use" includes cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies.

Overall, the prevalence of having ever smoked a cigarette was lower among Summit County high school students than students nationally. The prevalence of having ever smoked a cigarette was significantly higher for students in the South Suburbs cluster than for students in the East Akron, West Akron and North Suburbs clusters.



## **Ever smoked cigarettes**



Summit County high school students were asked how old they were when they smoked a whole cigarette for the first time. The prevalence reported nationally and in Summit County were similar. The prevalence for having smoked a whole cigarette before the age of 13 was significantly higher for students in the East Akron and South Suburbs clusters than for students in the North Suburbs cluster.



Smoked a whole cigarette before the age of 13

Summit County high school students were asked on how many of the past 30 days they had smoked cigarettes (current cigarette use). Variation in prevalence of current cigarette use across US, State and Summit County was not significant. Students in the South Suburbs cluster were significantly more likely to report current cigarette use than were students in the East Akron, West Akron and North Suburbs clusters.



#### **Current cigarette use**



Summit County high school students were asked on how many of the past 30 days they had used chewing tobacco, snuff, or dip (current smokeless tobacco use). The variation in prevalence across US, State and Summit County is not significant. Students in the South Suburbs cluster were significantly more likely to report current smokeless tobacco use than were students in the East Akron, West Akron and North Suburbs clusters.



Summit County high school students were asked on how many days of the past 30 days they had smoked cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies (current cigar use). The addition of brand examples in the wording of the local item prevents comparison to US and State. Students in the East Akron, West Akron and South Suburbs clusters were significantly more likely to report current cigar use than were students in the North Suburbs cluster. Students in the West Akron cluster were significantly more likely than students in the South Suburbs cluster to report current cigar use.





Healthy Neighborhoods

Section 4 | Page 3

Over one in five of Summit County students reported having used any tobacco product in the past 30 days. The graph below shows the prevalence for current single product use (cigarettes only, cigars only, smokeless tobacco only) as well as current combustible use (cigarettes and/or cigars) and current use of any of the tobacco products. This graph demonstrates that Summit County high school students who report current tobacco use are likely to engage in multiple product use.



Among Summit County students who reported having used tobacco in the past 30 days, students were asked how they usually got their tobacco. The graph below shows the percent of students who reported that someone gave the tobacco to them. Variation in prevalence across Summit County clusters was not significant.



### Someone gave tobacco to them, among users



Section 4 |Page 4

Summit County students were asked how they usually obtained their tobacco products during the 30 days before they completed the survey. Nationally, those students who obtained their tobacco products by someone giving them to them are the sole prevalence reported. However, the pie chart below shows all responses from the Summit County high school students who reported current use of any tobacco product.



It is important to note that some respondents are of legal age to buy and use tobacco products. However, of students <u>who reported smoking a combustible tobacco product (cigarettes and/or cigars)</u> within the past 30 days, only 36.7% were 18 years or older. Similarly, 39.5% of students who reported using any tobacco product within the past 30 days were 18 years or older.

Summit County students were asked to identify their perception of how their parents/guardians feel about certain behaviors. The graph below depicts the percent of students who reported that their parents/guardians would feel it is "very wrong" for them to use tobacco. Students in the South Suburbs cluster were significantly less likely than students in the East Akron, West Akron and North Suburbs clusters to perceive that their parents would feel it is "very wrong" for them to use tobacco.



Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University

# Student perception of parents' belief that tobacco use is very wrong

#### 2013 SUMMIT COUNTY HS YRBS: Tobacco Use

The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering tobacco use behaviors. When significant differences exist, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for having ever smoked cigarettes among male students was 26.6% which is significantly higher than among female students (23.0%). For differences by grade level, an arrow indicates the population at highest risk (prevalence with confidence interval are included) that is significantly different from at least one other grade. For example, the prevalence for having ever smoked cigarettes among 12<sup>th</sup> grade students was 33.8% which is significantly higher than among 9<sup>th</sup>, 10<sup>th</sup> or 11<sup>th</sup> grade students (17.2%, 22.2%, 27.5%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Ever smoked cigarettes	23.0 (21.6-24.4)	<b>126.6</b> (25.3-28.2)	17.2 (15.5-19.2)	22.2 (20.5-24.0)	27.5 (25.3-29.9)	<b>↑ 33.8</b> (31.5-36.2)
Smoked a whole cigarette before the age of 13	7.5 (6.8-8.3)	<b>↑ 11.0</b> (10.1-12.0)				
Current cigarette use	12.3 (11.3-13.4)	<b>14.6</b> (13.5-15.7)	9.2 (7.8-10.9)	11.0 (9.8-12.4)	14.8 (13.1-16.8)	<b>19.5</b> (17.4-21.7)
Current smokeless tobacco use	3.4 (2.9-3.9)	<b>11.7</b> (10.7-12.8)	4.7 (3.9-5.7)	6.7 (5.8-7.8)	7.1 (6.0-8.5)	<b>11.6</b> (10.1-13.3)
Current cigar use	13.5 (12.5-14.6)	<b>18.9</b> (17.7-20.3)	10.9 (9.5-12.5)	15.2 (13.6-16.9)	16.4 (14.6-18.2)	<b>1 22.6</b> (20.6-24.7)
Someone gave tobacco to them	<b>1 29.7</b> (26.6-33.1)	18.5 (16.3-20.9)	<b>1 30.4</b> (26.0-35.2)			16.5 (13.5-19.9)
Student perception of parents' belief that tobacco use is very wrong	75.0 (73.6-76.3)	<b>68.1</b> (66.5-69.6)	79.0 (77.2-80.7)	74.6 (72.7-76.4)	70.8 (68.8-72.8)	<b>60.0</b> (57.7-62.3)



## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Ever smoked cigarettes	24.9% (23.8-26.0)
Smoked a whole cigarette before age 13 years	9.3% (8.7-10.0)
<b>Current cigarette use</b>	13.5%
(Smoked a cigarette on at least 1 day during the 30 days before the survey.)	(12.7-14.3)
<b>Current smokeless tobacco use</b>	7.6%
(Used chewing tobacco, snuff, or dip on at least 1 day during the 30 days before the survey.)	(7.0-8.2)
<b>Current cigar use</b>	16.2%
(Smoked a cigar, cigarillo, little cigar, or flavored cigar on at least 1 day during the 30 days before the survey.)	(15.4-17.1)
Someone gave tobacco to them	23.2%
(Among current tobacco users)	(21.3-25.3)
Students perceive that parents/guardians feel it would be very wrong for them to use tobacco	71.5% (70.4-72.5)



# Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% Cl)
Ever smoked cigarettes	24.9% (23.8-26.0)		41.1% (38.4-43.8)
Smoked a whole cigarette before age 13 years	9.3% (8.7-10.0)		9.3% (7.8-11.1)
<b>Current cigarette use</b> (Smoked a cigarette on at least 1 day during the 30 days before the survey.)	13.5% (12.7-14.3)	15.1% (11.5-19.6)	15.7% (13.5-18.1)
<b>Current smokeless tobacco use</b> (Used chewing tobacco, snuff, or dip on at least 1 day during the 30 days before the survey.)	7.6% (7.0-8.2)	8.6% (6.7-11.1)	8.8% (7.3-10.6)
<b>Current cigar use</b> (Smoked a cigar, cigarillo, little cigar, or flavored cigar on at least 1 day during the 30 days before the survey.)	16.2% (15.4-17.1)	11.5% (9.1-14.4)	12.6% (11.4-13.9)
Someone gave tobacco to them (Among current tobacco users)	23.2% (21.3-25.3)		
Students perceive that parents/guardians feel it would be very wrong for them to use tobacco	71.5% (70.4-72.5)		



Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% CI)
Ever smoked cigarettes	22.7% (20.8-24.8)	21.1% (19.0-23.4)	21.6% (20.0-23.2)	33.3% (31.2-35.5)
Smoked a whole cigarette before age 13 years	10.4% (9.2-11.8)	9.4% (7.7-11.3)	7.8% (6.9-8.7)	11.4% (10.1-12.7)
<b>Current cigarette use</b> (Smoked a cigarette on at least 1 day during the 30 days before the survey.)	11.9% (10.5-13.6)	12.1% (10.4-14.1)	11.1% (10.0-12.3)	19.1% (17.4-20.8)
Current smokeless tobacco use (Used chewing tobacco, snuff, or dip on at least 1 day during the 30 days before the survey.)	5.0% (4.1-6.1)	5.8% (4.5-7.4)	5.9% (5.2-6.7)	12.7% (11.2-14.4)
<b>Current cigar use</b> (Smoked a cigar, cigarillo, little cigar, or flavored cigar on at least 1 day during the 30 days before the survey.)	18.9% (16.8-21.2)	23.2% (20.3-26.4)	12.7% (11.5-13.9)	18.3% (16.5-20.1)
Someone gave tobacco to them (Among current tobacco users)	22.3% (18.8-26.3)	19.0% (14.6-24.4)	24.1% (20.7-27.9)	23.9% (20.8-27.4)
Students perceive that parents/guardians feel it would be very wrong for them to use tobacco	73.9% (71.9-75.9)	70.5% (67.1-73.7)	74.0% (72.4-75.5)	66.2% (64.1-68.2)

### **Regional Prevalence**

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ever smoked cigarettes				
Category	%	CI		
Gender				
Female	23.0	21.6-	24.4	
Male	26.7	25.3-	28.2	
Race/Ethnic	ity			
White	26.2	24.9-	27.6	
Black	18.0	16.1-	20.0	
Asian	13.4	10.4-	17.0	
Hispanic	35.2	30.9-	39.7	
Other	26.0	23.3-	28.9	
Grade				
9th	17.2	15.5-	19.2	
10th	22.2	20.5-	24.0	
11th	27.5	25.3-	29.9	
12th	33.8	31.5-	36.2	
Total	24.9	23.8-	26.0	

#### Demographics

Smoked a whole cigarette before				
t	he age of	f <b>13</b>		
Category	%	CI		
Gender				
Female	7.5	6.8 -	8.3	
Male	11.0	10.1 -	12.0	
Race/Ethnic	city			
White	8.4	7.7 -	9.1	
Black	9.0	7.7 -	10.5	
Asian	5.9	3.8 -	8.9	
Hispanic	20.9	17.5 -	24.8	
Other	11.2	9.4 -	13.2	
Grade				
9th	9.1	8.0 -	10.4	
10th	9.0	8.0 -	10.3	
11th	9.3	8.1 -	10.7	
12th	8.7	7.4 -	10.1	
Total	9.3	8.7 -	10.0	

In Summit County, 9.3% of students had smoked a whole cigarette before the age of 13. The prevalence of having smoked a whole cigarette before 13 was higher among male (11.0%) than female (7.5%) students. The prevalence of having smoked a whole cigarette before 13 was higher among Hispanic (20.9%) students than White, Black, Asian and Other/Multiple (8.4%, 9.0%, 5.9%, 11.2%) The prevalence of students, respectively. having smoked a whole cigarette before 13 was higher among Other/Multiple (11.2%) students than among White or Asian (8.4%, 5.9%) students, respectively.

In Summit County, 24.9% of students had ever
smoked a cigarette, even one or two puffs. The
prevalence of having ever smoked cigarettes
was higher among males (26.7%) than females
(23.0%). The prevalence of having ever smoked
cigarettes was higher among Hispanic (35.2%)
students than White, Black, Asian and
Other/Multiple (26.2%, 18.0%, 13.4%, 26.0%)
students, respectively. The prevalence of having
ever smoked cigarettes was higher among
White and Other/Multiple (26.2%, 26.0%)
students than among Black or Asian (18.0%,
13.4%) students, respectively. The prevalence
of having ever smoked cigarettes was higher
among 12 <sup>th</sup> grade students (33.8%) than 9 <sup>th</sup> , 10 <sup>th</sup>
and 11 <sup>th</sup> grade (17.2%, 22.2%, 27.5%) students,
respectively. The prevalence of having ever
smoked cigarettes was higher among 11 <sup>th</sup> grade
(27.5%) students than among 9 <sup>th</sup> and 10 <sup>th</sup> grade
(17.2%, 22.2%) students, respectively. The
prevalence of having ever smoked cigarettes
was higher among 10 <sup>th</sup> grade (22.2%) students
than among 9 <sup>th</sup> grade (17.2%) students.



Current cigarette use				
Category	%	CI		
Gender				
Female	12.3	11.3 -	13.4	
Male	14.6	13.5 -	15.7	
Race/Ethnic	city			
White	14.1	13.2 -	15.1	
Black	9.2	7.8 -	10.9	
Asian	7.3	5.0 -	10.6	
Hispanic	22.5	18.9 -	26.5	
Other	14.6	12.4 -	17.1	
Grade				
9th	9.2	7.9 -	10.5	
10th	11.0	9.8 -	12.4	
11th	14.8	13.1 -	16.8	
12th	19.5	17.4 -	21.7	
Total	13.5	12.7 -	14.3	

In Summit County, 13.5% of students had smoked a cigarette on at least 1 day during the 30 days prior to the survey (i.e., current cigarette use). The prevalence of current cigarette use was higher among male (14.6%) than female (12.3%) students. The prevalence of current cigarette use was higher among Hispanic (22.5%) students than White, Black, Asian and Other/Multiple (14.1%, 9.2%, 7.3%, 14.6%) students, respectively. The prevalence of current cigarette use was higher among White and Other/Multiple (14.1%, 14.6%) students, than among Black and Asian (9.2%, 7.3%) students, respectively. The prevalence of current cigarette use was higher among 11th grade (14.8%) students than 9<sup>th</sup> and 10<sup>th</sup> grade (9.2%, 11.0%) students, respectively. The prevalence of current cigarette use was higher among 12<sup>th</sup> grade (19.5%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (9.2%, 11.0%, 14.8%) students respectively.

Current smokeless tobacco use				
Category	%	CI		
Gender				
Female	3.4	2.9 -	3.9	
Male	11.7	10.7 -	12.8	
Race/Ethnic	ity			
White	7.5	6.8 -	8.3	
Black	5.3	4.3 -	6.6	
Asian	4.1	2.4 -	6.7	
Hispanic	15.4	12.5 -	18.8	
Other	8.4	6.5 -	10.8	
Grade				
9th	4.7	3.9 -	5.7	
10th	6.7	5.8 -	7.8	
11th	7.1	6.0 -	8.5	
12th	11.6	10.1 -	13.3	
Total	7.6	7.0 -	8.2	

In Summit County, 7.6% of students had used chewing tobacco, snuff, or dip on at least 1 day during the 30 days prior to the survey (i.e., current smokeless tobacco use). The prevalence of current smokeless tobacco use was higher among male (11.7%) than female (3.4%) students. The prevalence of current smokeless tobacco use was higher among Hispanic (15.4%) students than White, Black, Asian and Other/Multiple (7.5%, 5.3%, 4.1%, 8.4%) students, respectively. The prevalence of current smokeless tobacco use was higher among White (7.5%) students than Black and Asian (5.3%, 4.1%) students, respectively. The prevalence of having used smokeless tobacco was higher among 12<sup>th</sup> grade (11.6%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (4.7%, 6.7%, 7.1%) The prevalence of students, respectively. current smokeless tobacco use was higher among 10<sup>th</sup> and 11<sup>th</sup> grade (6.7%, 7.1%) students than 9<sup>th</sup> grade (4.7%) students, respectively.



Current cigar use				
Category	%	CI		
Gender				
Female	13.5	12.5 -	14.6	
Male	18.9	17.7 -	20.3	
Race/Ethnic	city			
White	14.2	13.2 -	15.3	
Black	21.4	19.3 -	23.6	
Asian	7.0	5.0 -	9.7	
Hispanic	26.9	23.2 -	30.8	
Other	20.1	17.5 -	23.0	
Grade				
9th	10.9	9.5 -	12.5	
10th	15.2	13.6 -	16.9	
11th	16.4	14.6 -	18.2	
12th	22.6	20.6 -	24.7	
Total	16.2	15.4 -	17.1	

In Summit County, 16.2% of students had smoked a cigar, cigarillo, little cigar, or flavored cigar on at least 1 day during the 30 days prior to the survey (i.e., current cigar use). The prevalence of current cigar use was higher among male (18.9%) than female (13.5%) students. The prevalence of current cigar use was higher among Black, Hispanic and Other/Multiple (21.4%, 26.9%, 20.1%) students than White and Asian (14.2%, 7.0%) students, respectively. The prevalence of current cigar use was higher among White (14.2%) students than Asian (7.0%) students. The prevalence of current cigar use was higher among 10<sup>th</sup> and 11<sup>th</sup> grade (15.2%, 16.4%) students than 9<sup>th</sup> grade (10.9%) students, respectively. The prevalence of current cigar use was higher among 12<sup>th</sup> grade (22.6%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (10.9%, 15.2%, 16.4%) students, respectively.

Someone game tobacco to them				
Category	%	CI		
Gender				
Female	29.7	26.6 -	33.1	
Male	18.5	16.3 -	20.9	
Race/Ethnie	city			
White	24.9	22.5 -	27.5	
Black	19.6	15.2 -	24.8	
Asian	32.4	18.3 -	50.6	
Hispanic	13.4	9.2 -	19.1	
Other	22.6	17.3 -	29.0	
Grade				
9th	30.4	26.0 -	35.2	
10th	27.3	23.7 -	31.2	
11th	24.4	20.4 -	28.9	
12th	16.5	13.5 -	19.9	
Total	23.2	21.3 -	25.3	

In Summit County, among students who used tobacco in the 30 days prior to the survey, 23.2% had got the tobacco they used from someone who gave it to them. The prevalence of having been given tobacco from someone else was higher among female (29.7%) than male (18.5%) students. The prevalence of having been given tobacco from someone else was higher among White (24.9%) students than Hispanic (13.4%) students, respectively. The prevalence of having been given tobacco from someone else was higher among 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade (30.4%, 27.3%, 24.4%) students than 12<sup>th</sup> grade (16.5%) students, respectively.



Student perception of parents' belief that tobacco use is very wrong				
Category	%	CI		
Gender				
Female	75.0	73.6 -	76.3	
Male	68.1	66.5 -	69.6	
Race/Ethni	icity			
White	70.0	68.7 -	71.3	
Black	76.1	73.6 -	78.4	
Asian	83.5	79.1 -	87.1	
Hispanic	69.1	64.8 -	73.1	
Other	71.6	68.2 -	74.7	
Grade				
9th	79.0	77.2 -	80.7	
10th	74.6	72.7 -	76.4	
11th	70.8	68.8 -	72.8	
12th	60.0	57.7 -	62.3	
Total	71.5	70.4 -	72.5	

In Summit County, 71.5% of students perceive that their parents believe it is very wrong for them to use tobacco. The prevalence of perception that their parents believe it is very wrong to use tobacco was higher among female (75.0%) than male (68.1%) students. The prevalence of perception that their parents believe it is very wrong to use tobacco was higher among Black and Asian (76.1%, 83.5%) students, respectively, than White (70.0%) students. The prevalence of perception that their parents believe it is very wrong to use tobacco was higher among Black (76.1%) students than Hispanic (69.1%) students, respectively. The prevalence of perception that their parents believe it is very wrong to use tobacco was higher among 9<sup>th</sup> grade (79.0%) students than 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade (74.6%, 70.8%, 60.0%) students, respectively. The prevalence of perception that their parents believe it is very wrong to use tobacco was higher among 10<sup>th</sup> and 11<sup>th</sup> (74.6%, 70.8%) students than 12<sup>th</sup> grade (60.0%) students, respectively.



- <sup>i</sup> U.S. Department of Health and Human Services. 2004. *The Health Consequences of Smoking: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- <sup>ii</sup> U.S. Department of Health and Human Services. 1994. *Preventing Tobacco Use among Young People: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.



# Section 5: Alcohol Use

The 2013 Summit County High School YRBS asked students six questions about alcohol consumption. Alcohol use among youth has been linked to unintentional injuries, physical fights, academic problems, job problems and illegal behavior.<sup>1</sup> Alcohol use has been identified as a major contributing factor in approximately one-third of all unintentional injury deaths, homicides and suicides, which are the leading causes of death and disability among young people.<sup>11</sup> More young people use alcohol than tobacco or illicit drugs in the United States. Teens that begin drinking before age 15 are five times more likely to develop alcohol dependence than those who begin drinking at age 21.<sup>111</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>SA-13.1:</b> Reduce the proportion of adolescents reporting use of alcohol or any illicit drugs during the past 30 days to no more than 16.6%.	36.4% of Summit County high school students reported using alcohol or marijuana in the past 30 days.
<b>SA-14.4:</b> Reduce the proportion of adolescents aged 12 to 17 years engaging in binge drinking during the past month to no more than 8.5%.	16.5% of Summit County high school students reported that they had five or more drinks of alcohol in a row, within a couple of hours, on at least one day in the month preceding the survey.

Students in Summit County were asked if they had ever drank alcohol. Overall, the prevalence of having ever drank alcohol was significantly higher at the US level than for Summit County. The prevalence for having ever drank alcohol was significantly higher among students in the West Akron and South Suburbs clusters than for students in the East Akron and North Suburbs clusters.



## **Ever drank alcohol**



Students in Summit County were asked how old they were when they had their first drink of alcohol other than a few sips. Overall, the prevalence of having drank alcohol before the age of 13 was significantly higher nationally than for the State and Summit County. The prevalence of having drank alcohol before the age of 13 was significantly higher among students in the East Akron and West Akron clusters than among students in the North Suburbs and South Suburbs clusters.



Drank alcohol before age of 13

Students in Summit County were asked on how many days of the past 30 days they had at least one drink of alcohol (current alcohol use). Overall, the prevalence of current alcohol use was significantly higher nationally than for Summit County. The prevalence of current alcohol use was significantly higher among students in the West Akron, North Suburbs and South Suburbs clusters than among students in the East Akron clusters. The prevalence of current alcohol use was significantly higher among students clusters than among students in the South Suburbs cluster than among students in the North Suburbs cluster.



## **Current alcohol use**



Students in Summit County were asked on how many days during the past 30 days they drank 5 or more drinks of alcohol in a row (binge drinking). Overall, the prevalence of binge drinking was significantly higher among students nationally than for students in Summit County. The prevalence of binge drinking was significantly higher among students in the West Akron and South Suburbs clusters than for students in the East Akron and North Suburbs clusters.



Students in Summit County were asked on how many days during the past 30 days they drank 10 or more drinks of alcohol in a row (extreme binge drinking). Overall, the prevalence of extreme binge drinking was significantly higher among students nationally than for students in the State and in Summit County. The prevalence of extreme binge drinking was significantly higher among students in the South Suburbs cluster than for students in the East Akron, West Akron and North Suburbs clusters.



## **Extreme binge drinking**



Students in Summit County were asked how they usually got their alcohol during the past 30 days. Of the 30.3% of Summit County students who reported current alcohol use, 41.8% of them got their alcohol from someone who gave it to them. The variation in prevalence across US, State and Summit County was not significant. The prevalence of having gotten the alcohol they drank by someone giving it to them was significantly higher among students in the North Suburbs cluster than among students in the West Akron cluster.



Students in Summit County were asked how they usually got the alcohol they drank during the thirty days before the survey. Nationally, those students who obtained their alcohol by someone giving it to them are the sole prevalence reported. However, the pie chart below shows all responses from the Summit County students who had consumed alcohol during that time.





Students in Summit county were asked how often during the past 30 days they had been to a party or gathering in a home where parents permitted underage alcohol use. This item was not asked of students nationally or across the state of Ohio. The graph below depicts the prevalence of having been to at least one party or gathering where parents permitted underage alcohol use for Summit County overall and across the four clusters. The prevalence of having been to a party or gathering where parents permitted underage alcohol use for Summit County overall and across the four clusters. The prevalence of having been to a party or gathering where parents permitted underage alcohol use was significantly higher for students in the South Suburbs cluster than for students in the East Akron and North Suburbs clusters.



# Attended a party/gathering where parents permitted underage alcohol use

Summit County students were asked to identify how wrong their parents/guardians would feel it is for them to drink alcohol. Overall, 54.3% of Summit County students perceived that their parents believed it would be "very wrong" for them to drink alcohol. Students in the West Akron, North Suburbs, and South Suburbs clusters were significantly less likely than students in the East Akron cluster to perceive that their parents believed it would be "very wrong" for them to drink alcohol.



# Student perception of parents' belief that alcohol use is very wrong



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering alcohol use behaviors. When significant differences exist, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for having consumed alcohol for the first time before the age of 13 among male students was 18.5% which is significantly higher than among female students (13.8%). For differences by grade level, an arrow indicates the population at highest risk (prevalence with confidence interval are included) that is significantly different from at least one other grade. For example, the prevalence for having consumed alcohol for the first time before the age of 13 among 9<sup>th</sup> grade students was 18.8% which is significantly higher than among 11<sup>th</sup> or 12<sup>th</sup> grade students (13.8%, 13.7%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Ever drank alcohol			41.4 (39.1-43.7)	53.9 (51.6-56.2)	64.1 (61.6-66.4)	<b>† 72.0</b> (69.7-74.3)
Drank alcohol before age of 13	13.8% (12.8-14.9)	<b>18.5</b> (17.3-19.6)	<b>18.8</b> (17.1-20.6)		13.8 (12.3-15.5)	13.7 (12.1-15.5)
Current alcohol use			18.1 (16.5-19.9)	28.6 (26.5-30.7)	33.0 (30.6-35.4)	<b>43.6</b> (41.2-46.1)
Binge drinking			9.1 (8.0-10.4)	14.5 (13.0-16.2)	17.9 (16.1-19.9)	<b>1 25.3</b> (23.3-27.4)
Extreme binge drinking	2.2 (1.8-2.7)	<b>↑ 5.9</b> (5.2-6.6)	1.6 (1.2-2.2)	3.4 (2.8-4.2)	4.4 (3.7-5.3)	<b>6.8</b> (5.7-8.0)
Someone gave alcohol to them	<b>1 48.5</b> (46.1-51.0)	34.8 (32.2-37.5)				
Attended a party/gathering where parents permitted underage alcohol use	<b>↑ 23.3</b> (22.0-24.7)	20.3 (19.0-21.6)	14.0 (12.7-15.5)	20.1 (18.5-21.9)	24.4 (22.2-26.6)	<b>30.0</b> (28.1-31.9)
Student perception of parents' belief that alcohol use is very wrong			65.4 (63.5-67.2)	56.7 (54.7-58.6)	50.4 (48.3-52.4)	<b>42.5</b> (40.3-44.7)



# **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Ever drank alcohol	57.0% (55.6-58.5)
Drank alcohol before age 13 years	16.2%
(Other than a few sips.)	(15.4-17.0)
<b>Current alcohol use</b>	30.3%
(Had at least one drink of alcohol on at least 1 day during the 30 days before the survey.)	(29.1-31.6)
<b>Binge drinking</b>	16.5%
(Had 5 or more drinks of alcohol in a row within a couple of hours, on one or more days during the 30 days before the survey.)	(15.5-17.5)
<b>Extreme binge drinking</b>	4.1%
(Had 10 or more drinks of alcohol in a row within a couple hours, during the 30 days before the survey.)	(3.6-4.5)
Someone gave alcohol to them	41.8%
(During the past 30 days before the survey among current drinkers.)	(39.9-43.6)
Attended a party/gathering where parents permitted underage alcohol use	21.8%
(During the past 30 days before the survey.)	(20.9-22.9)
Student perception of parents' belief that alcohol use is very wrong	54.3% (53.1-55.5)



# Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% CI)
Ever drank alcohol	57.0% (55.6-58.5)		66.2% (63.7-68.5)
Drank alcohol before age 13 years	16.2%	12.7%	18.6%
(Other than a few sips.)	(15.4-17.0)	(10.0-15.9)	(17.2-20.0)
<b>Current alcohol use</b> (Had at least one drink of alcohol on at least 1 day during the 30 days before the survey.)	30.3% (29.1-31.6)	29.5% (25.1-34.2)	34.9% (32.8-37.1)
Binge drinking			
(Had 5 or more drinks of alcohol in a row within a couple of hours, on one or more days during the 30 days before the survey.)	16.5% (15.5-17.5)	16.1% (13.1-19.7)	20.8% (19.1-22.7)
<b>Extreme binge drinking</b> (Had 10 or more drinks of alcohol in a row within a couple hours, during the 30 days before the survey.)	4.1% (3.6-4.5)	3.7% (2.8-4.8)	6.1% (5.2-7.1)
Someone gave alcohol to them (During the past 30 days before the survey among current drinkers.)	41.8% (39.9-43.6)	37.9% (31.8-44.4)	41.8% (39.4-44.1)
Attended a party/gathering where parents permitted underage alcohol use (During the past 30 days before the survey.)	21.8% (20.9-22.9)		
Student perception of parents' belief that alcohol use is very wrong	54.3% (53.1-55.5)		



## **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% CI)
Ever drank alcohol	52.6% (50.1-55.2)	61.4% (58.1-65.6)	53.6% (51.2-56.0)	64.0% (61.2-66.7)
Drank alcohol before age 13 years (Other than a few sips.)	19.1% (17.5-20.8)	22.9% (20.5-25.5)	14.3% (13.0-15.6)	15.3% (13.9-16.9)
<b>Current alcohol use</b> (Had at least one drink of alcohol on at least 1 day during the 30 days before the survey.)	24.2% (21.9-26.7)	31.6% (28.9-34.3)	29.1% (27.1-31.2)	35.6% (33.2-38.2)
<b>Binge drinking</b> (Had 5 or more drinks of alcohol in a row within a couple of hours, on one or more days during the 30 days before the survey.)	12.1% (10.6-13.7)	16.4% (14.2-18.9)	15.5% (14.1-17.1)	20.6% (18.8-22.6)
<b>Extreme binge drinking</b> (Had 10 or more drinks of alcohol in a row within a couple hours, during the 30 days before the survey.)	2.7% (2.0-3.7)	2.6% (1.8-3.8)	3.4% (2.9-4.1)	6.4% (5.5-7.4)
Someone gave alcohol to them (During the 30 days before the survey among current drinkers.)	39.6% (35.6-43.8)	34.7% (29.9-39.8)	43.7% (40.9-46.6)	42.1% (38.7-45.6)
Attended a party/gathering where parents permitted underage alcohol use (During the 30 days before the survey.)	19.0% (16.9-21.3)	22.2% (20.0-24.6)	20.7% (19.2-22.3)	25.3% (23.4-27.3)
Student perception of parents' belief that alcohol use is very wrong	61.5% (59.2-63.8)	55.4% (52.2-58.5)	53.9% (52.0-55.7)	51.0% (48.0-53.2)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ever drank alcohol				
Category	%	CI		
Gender				
Female	58.0	56.1-	59.8	
Male	56.0	54.2-	57.9	
Race/Ethnicity				
White	57.9	56.1-	59.7	
Black	56.6	54.0-	59.2	
Asian	29.8	25.3-	34.8	
Hispanic	63.8	59.5-	68.0	
Other	61.6	58.2-	64.8	
Grade				
9th	41.4	39.1-	43.7	
10th	53.9	51.6-	56.2	
11th	64.1	61.6-	66.4	
12th	72.0	69.7-	74.3	
Total	57.0	55.6-	58.5	

### Demographics

Drank alcohol before age of 13					
Category	%	CI			
Gender					
Female	13.8	12.8 -	14.9		
Male	18.5	17.3 -	19.6		
Race/Ethnicity					
White	13.7	12.8 -	14.6		
Black	21.7	19.8 -	23.7		
Asian	8.3	5.9 -	11.7		
Hispanic	32.2	28.5 -	36.2		
Other	20.1	17.8 -	22.7		
Grade					
9th	18.8	17.1 -	20.6		
10th	16.7	15.2 -	18.2		
11th	13.8	12.3 -	15.5		
12th	13.7	12.1 -	15.5		
Total	16.2	15.4 -	17.0		

In Summit County, 57.0% of students had ever drank alcohol. The prevalence of ever having drank alcohol was higher among White, Black, Hispanic and Other/Multiple students (57.9%, 56.6%, 63.8%, 61.6%), respectively, than among Asian (29.8%) students. The prevalence of ever having drank alcohol was higher among Hispanic students (63.8%) than among Black students (56.6%). The prevalence of ever having drank alcohol was higher among 12<sup>th</sup> grade students (72.0%) than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (41.4%, 53.9%, 64.1%) students, respectively. The prevalence of ever having drank alcohol was higher among 11<sup>th</sup> grade students (64.1%) than for 9<sup>th</sup> and 10<sup>th</sup> grade (41.4%, 53.9%) students, respectively. The prevalence of ever having drank alcohol was higher for 10<sup>th</sup> grade students (53.9%) than for 9<sup>th</sup> grade students (41.4%).

In Summit County, 16.2% of students drank alcohol before the age of 13. The prevalence of having drunk alcohol before 13 was higher among male (18.5%) than female (13.8%) The prevalence of having drunk students. alcohol before 13 was higher among Hispanic (32.2%) students than White, Black, Asian and Other/Multiple (13.7%, 21.7%, 8.3%, 20.1%) students, respectively. The prevalence of having drunk alcohol before age 13 was higher among Black and Other/Multiple (21.7%, 20.1%) students than White and Asian (13.7%, 8.3%) students, respectively. The prevalence of having drunk alcohol before age 13 was higher for 9<sup>th</sup> grade (18.8%) students than 11<sup>th</sup> and 12<sup>th</sup> grade (13.8%, 13.7%) students, respectively.


Current alcohol use				
Category	%	CI		
Gender				
Female	30.3	28.8 -	32.0	
Male	30.2	28.5 -	31.9	
Race/Ethnic	city			
White	31.7	30.1 -	33.3	
Black	25.7	23.5 -	27.9	
Asian	15.3	12.2 -	19.1	
Hispanic	39.3	35.1 -	43.6	
Other	31.0	27.9 -	34.3	
Grade				
9th	18.1	16.5 -	19.9	
10th	28.6	26.5 -	30.7	
11th	33.0	30.6 -	35.4	
12th	43.6	41.2 -	46.1	
Total	30.3	29.1 -	31.6	

In Summit County, 30.3% of students had at least one drink of alcohol on at least 1 day in the 30 days prior to the survey (i.e., current alcohol use). The prevalence of current alcohol use was higher for Hispanic (39.3%) students than White, Black, Asian, and Other/Multiple (31.7%, 25.7%, 15.3%, 31.0%) students, respectively. The prevalence of current alcohol use was higher among White and Other/Multiple (31.7%, 31.0%) students than Black and Asian (25.7%, 15.3%) students, respectively. The prevalence of current alcohol use was higher for Black (25.7%) than Asian (15.3%) students. The prevalence of current alcohol use was higher among 10<sup>th</sup> and 11<sup>th</sup> grade (28.6%, 33.0%) students than 9<sup>th</sup> grade (18.1%) students, respectively. The prevalence of current alcohol use was higher among 12<sup>th</sup> grade (43.6%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (18.1%, 28.6%, 33.0%) students, respectively.

Binge drinking				
Category	%	CI		
Gender				
Female	15.2	14.1 -	16.4	
Male	17.7	16.4 -	19.1	
Race/Ethnic	ity			
White	17.2	16.1 -	18.5	
Black	12.7	11.0 -	14.7	
Asian	6.3	4.5 -	8.8	
Hispanic	26.1	22.5 -	30.1	
Other	16.1	13.6 -	18.8	
Grade				
9th	9.1	8.0 -	10.4	
10th	14.5	13.0 -	16.2	
11th	17.9	16.1 -	19.9	
12th	25.3	23.3 -	27.4	
Total	16.5	15.5 -	17.5	

In Summit County, 16.5% of students had 5 or more drinks of alcohol in a row within a couple of hours, on 1 or more days during the 30 days prior to the survey (episodic heavy drinking). The prevalence of episodic heavy drinking was higher among Hispanic (26.1%) students than White, Black, Asian or Other/Multiple (17.2%, 12.7%, 6.3%, 16.1%) students, respectively. The prevalence of episodic heavy drinking was higher among White (17.2%) students than Black and Asian (12.7%, 6.3%) students, respectively. The prevalence of episodic heavy drinking was higher among Other/Multiple (16.1%) than Asian (6.3%) students. The prevalence of episodic heavy drinking was higher among 10<sup>th</sup> and 11<sup>th</sup> grade (14.5%, 17.9%) students than 9<sup>th</sup> grade (9.1%) students, respectively. The prevalence of episodic heavy drinking was higher among 12<sup>th</sup> grade (25.3%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (9.1%, 14.5%, 17.9%) students, respectively.



Extreme binge drinking				
Category	%	C	<u>.</u>	
Gender				
Female	2.2	1.8 -	2.7	
Male	5.9	5.2 -	6.6	
Race/Ethnicit	ty			
White	4.1	3.6 -	4.6	
Black	2.3	1.7 -	3.2	
Asian	1.9	1.0 -	3.7	
Hispanic	9.3	7.0 -	12.3	
Other	4.3	3.0 -	6.3	
Grade				
9th	1.6	1.2 -	2.2	
10th	3.4	2.8 -	4.2	
11th	4.4	3.7 -	5.3	
12th	6.8	5.7 -	8.0	
Total	4.1	3.6 -	4.5	

In Summit County, 4.1% of students had 10 or more drinks of alcohol in a row within a couple of hours, on 1 or more days during the 30 days prior to the survey (extreme binge drinking). The prevalence of extreme binge drinking was higher for male (5.9%) students than female (2.2%) students. The prevalence of extreme binge drinking was higher among Hispanic (9.3%) students than White, Black, Asian or Other/Multiple (4.1%, 2.3%, 1.9%, 3.6%) students, respectively. The prevalence of extreme binge drinking was higher among White (4.1%) students than Black (2.3%) students. The prevalence of extreme binge drinking was higher among 10<sup>th</sup> and 11<sup>th</sup> grade (3.4%, 4.4%) students than 9<sup>th</sup> grade (1.6%) students, respectively. The prevalence of extreme binge drinking was higher among 12<sup>th</sup> grade (6.8%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (1.6%, 3.4%, 4.4%) students, respectively.

Someone gave alcohol to them				
Category	%	CI		
Gender				
Female	48.5	46.1 -	51.0	
Male	34.8	32.2 -	37.5	
Race/Ethnic	city			
White	44.0	41.8 -	46.3	
Black	33.3	28.9 -	38.2	
Asian	36.2	23.9 -	50.6	
Hispanic	30.8	24.5 -	37.9	
Other	44.9	38.7 -	51.2	
Grade				
9th	45.1	40.1 -	50.2	
10th	40.9	37.6 -	44.3	
11th	43.8	40.1 -	47.6	
12th	40.6	37.2 -	44.1	
Total	41.8	39.9 -	43.6	

In Summit County, among students who drank alcohol in the 30 days prior to the survey, 41.8% got the alcohol they drank from someone who gave it to them. The prevalence of having been given alcohol from someone else was higher among female (48.5%) students than male (34.8%) students. The prevalence of having been given alcohol from someone else was higher among White and Other/Multiple (44.0%, 44/9%) students than Black and Hispanic (33.3%, 30.8%) students, respectively.



Attended a party/gathering where parents permitted						
unde	rage alco	ohol use				
Category % CI						
Gender						
Female	23.3	22.0 -	24.7			
Male	20.3	19.0 -	21.6			
Race/Ethnic	city					
White	22.3	21.1 -	23.6			
Black	20.4	18.5 -	22.5			
Asian	11.1	8.5 -	14.4			
Hispanic	29.1	25.1 -	33.5			
Other	21.5	18.9 -	24.4			
Grade						
9th	14.0	12.7 -	15.5			
10th	20.1	18.5 -	21.9			
11th	24.4	22.2 -	26.6			
12th	30.0	28.1 -	31.9			
Total	21.8	20.9 -	22.9			

In Summit County, 21.8% of students had attended a party or gathering 1 or more times in the 30 days prior to the survey, in a home where parents permitted students to use alcohol. The prevalence of attending gatherings or parties where parents permitted alcohol use was higher among female (23.3%) than male (20.3%) students. The prevalence of attending gatherings or parties where parents permitted alcohol use was higher among Hispanic (29.1%) than White, Black, Asian or Other/Multiple (22.3%, 20.4%, 11.1%, 21.5%) students, respectively. The prevalence of attending gatherings or parties where parents permitted alcohol use was higher among White and Other/Multiple (22.3%, 21.5%) students than Asian (11.1%) students. The prevalence of attending gatherings or parties where parents permitted alcohol use was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (20.1%, 24.4%, 30.0%) than 9<sup>th</sup> grade (14.0%) students; higher among 11<sup>th</sup> and 12<sup>th</sup> grade (24.4%, 30.0%) than 10<sup>th</sup> grade (20.1%) students; and higher among 12<sup>th</sup> grade (30.0%) students than 11<sup>th</sup> grade (24.4%) students, respectively.

Student perception of parents' belief that alcohol use is very							
	wror	ıg					
Category	Category % Cl						
Gender	_						
Female	55.4	53.8 -	57.0				
Male	53.3	51.8 -	54.9				
Race/Ethni	city						
White	51.0	49.5 -	52.4				
Black	64.9	62.2 -	67.5				
Asian	69.0	63.7 -	73.8				
Hispanic	52.8	48.1 -	57.5				
Other	56.8	53.2 -	60.4				
Grade							
9th	65.4	63.5 -	67.2				
10th	56.7	54.7 -	58.6				
11th	50.4	48.3 -	52.4				
12th	42.5	40.3 -	44.7				
Total	54.3	53.1 -	55.5				

In Summit County, 54.3% of students perceive that their parents believe that it is very wrong for them to use alcohol. The prevalence of perception that their parents believe it is very wrong for them to use alcohol was higher among Black and Asian (64.9%, 69.0%) students than White, Hispanic and Other/Multiple (51.0%, 52.8%, 56.8%) students, respectively. The prevalence of perception that their parents believe it is very wrong for them to use alcohol was higher among 9<sup>th</sup> grade (65.4%) students than 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade (56.7%, 50.4%, 42.5%) students, respectively. The prevalence of perception that their parents believe it is very wrong for them to use alcohol was higher among 10<sup>th</sup> grade (56.7%) students than 11<sup>th</sup> and 12<sup>th</sup> grade (50.4%, 42.5%) students, respectively. The prevalence of perception that their parents believe it is very wrong to use alcohol was higher among 11<sup>th</sup> grade (50.4%) students than 12<sup>th</sup> grade (42.5%) students, respectively.



- <sup>i</sup> Substance Abuse and Mental Health Services Administration. 1999. *The relationship between mental health and substance abuse among adolescents*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- <sup>ii</sup> Hingson, R., Kenkel, D. 2004. Social, Health, and Economic Consequences of Underage Drinking. Reducing Underage Drinking: A Collective Responsibility. Washington, DC: The National Academy of Sciences.
- <sup>III</sup> U.S. Department of Health and Human Services. 2007. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. U.S. Department of Health and Human Services, Office of the Surgeon General.



# Section 6: Marijuana and Other Drug Use

The 2013 Summit County High School YRBS asked students about marijuana use, illicit drug use, prescription drug abuse, and whether they had been offered, sold, or given drugs on school property. Illegal drug use can lead to unhealthy behaviors and negative consequences. Drug abuse may contribute to depression and suicide, unintended pregnancy, school failure, violent behavior, delinquency, and transmission of sexually transmitted diseases, including HIV.<sup>1</sup>

Marijuana is used for the intoxication or high that it gives most users. For most youth, marijuana is not difficult to obtain.<sup>II</sup> Many think marijuana is not as harmful as other illicit drugs; however, it has both short- and long-term health effects. The short-term effects include memory problems, loss of coordination, anxiety attacks, and increased heart rate.<sup>III</sup> Possible long-term effects include respiratory problems, a weakened immune system, and cognitive deficits. <sup>IV</sup> While causation is complex, teens who use marijuana, are also more likely to have lower achievement, more delinquent behavior and aggression, and weaker relationships with parents than non-users.<sup>VIII</sup>

Prescription drug abuse is reaching prevalence levels near the use of marijuana among adolescents. Nine percent (9.1%) of teens aged 12-17 misused prescription drugs in 2005. In 2006, there were as many new abusers of prescription drugs as there were new users of marijuana. <sup>v</sup> Prescription and over the counter medications are widely available, free or inexpensive, and falsely believed to be safer than illicit drugs. In 2006, 2.1 million teens abused prescription drugs and an additional 2.1 million had misused over the counter cough and cold medications at least once in their lifetime. <sup>vi</sup>

Inhalant use, the deliberate inhalation of toxic substances to induce a psychoactive or mind-altering effect, tends to occur among younger teens and can be highly toxic and even lethal. <sup>vii</sup> The 2006 "Monitoring the Future" study indicated that 8th graders have tried inhalants in their lifetime more so than any other illicit drug. <sup>viii</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>SA-13.1:</b> Reduce the proportion of adolescents reporting use of alcohol or any illicit drugs during the past 30 days to no more than 16.6%.	36.4% of Summit County high school students reported using alcohol or marijuana in the past 30 days.
<b>AH-7:</b> Reduce the proportion of adolescents who have been offered, sold, or given an illegal drug on school property to no more than 20.4%	21.0% of Summit County high school students reported being offered, sold, or given an illegal drug on school property.
<b>SA-13.2:</b> Reduce the proportion of adolescents reporting use of marijuana during the past 30 days to no more than 6.0%	21.1% of Summit County high school students reported using marijuana at least once during the past 30 days.



Students in Summit County were asked how many times in their life they had used marijuana. The variation in prevalence across US, State and Summit County was not significant. The prevalence for having ever used marijuana was significantly higher among students in the West Akron cluster than among students in the East Akron, North Suburbs and South Suburbs clusters. The prevalence for having ever used marijuana was significantly higher among students in the East Akron and South Suburbs clusters than for students in the North Suburbs cluster.



Ever used marijuana

Students in Summit County were asked to identify how old they were when they tried marijuana for the first time. The graph below shows students who tried marijuana before the age of 13. The prevalence for having tried marijuana before the age of 13 was significantly higher among Summit County students than for students statewide. The prevalence for having tried marijuana before the age of 13 was significantly higher among students in the East Akron and West Akron clusters than for students in the North Suburbs and South Suburbs clusters.



## Tried marijuana before age of 13



Students in Summit County were asked how many times in the past 30 days they had used marijuana (current marijuana use). The variation in prevalence for current marijuana use across US, State and Summit County was not significant. The prevalence for current marijuana use was significantly higher among students in the West Akron cluster than for students in the East Akron, North Suburbs and South Suburbs clusters. The prevalence for current marijuana use was significantly higher among students in the Fast Akron cluster than for students in the East Akron, North Suburbs and South the East Akron cluster than for students in the North Suburbs cluster.



Current marijuana use

Students in Summit County were asked to identify their perception of how wrong their parents/guardians would feel about them using marijuana. Overall, 74.3% of Summit County high school students perceived that their parents/guardians would believe it was "very wrong" for them to use marijuana. The prevalence of students perceiving their parents would believe it was "very wrong" for them to use marijuana was significantly lower among the students in the West Akron cluster than for students in the East Akron, North Suburbs and South Suburbs clusters. The prevalence of students perceiving their parents would believe it was lower among students in the East Akron cluster than for students in the East Akron cluster than for students in the North Suburbs cluster.



# Student perception of parents' belief that marijuana use is very wrong



Students in Summit County were asked if they had ever used any of eight types of illicit drugs: cocaine, heroin, methamphetamines, hallucinogenic drugs, steroid pills or shots, inhalants, synthetic or designer drugs, or prescription pain relievers without a doctor's prescription. Additional analysis was conducted to characterize the amount of illicit drug use occurring among Summit County high school students. While the majority of students reported no illicit drug use (77.4%), the graph below shows that 47.6% of students who reported any illicit drug use, had used one type of drug. 26.2% of students who reported any illicit drug use had used two or three types of drugs. 26.1% of students who reported any illicit drug use had used four or more types of drugs.



## Number of illicit drugs ever used

Students in Summit County were asked how many times they had ever used any form of cocaine. Overall, the prevalence for ever having used cocaine was significantly higher among Summit County students than students statewide. The variation in prevalence across Summit County clusters was not significant.





Students in Summit County were asked how many times they had ever used heroin. Overall, the prevalence for ever having used heroin was significantly higher among Summit County students than among students across the US and State. The prevalence for having ever used heroin was significantly higher among students in the West Akron cluster than for students in the South Suburbs cluster.



Students in Summit County were asked how many times they had ever used methamphetamines. Overall, the prevalence for ever having used methamphetamines was significantly higher among Summit County students than for students across the US. The variation in prevalence across Summit County clusters was not significant.



# **Ever used methamphetamines**



Students in Summit County were asked how many times they had ever used hallucinogenic drugs such as LSD, acid, PCP, ecstasy, angel dust, mescaline or mushrooms. The variation in prevalence across US, State and Summit County was not significant. The variation in prevalence across Summit County clusters was not significant.



Ever used hallucinogenic drugs

Students in Summit County were asked how many times they had ever taken steroid pills or shots without a doctor's prescription. Overall, the prevalence for having ever taken steroid pills or shots without a doctor's prescription was significantly higher for students in Summit County than for students across the US and State. The variation in prevalence for having ever taken steroid pills or shots without a doctor's prescription across the Summit County clusters was not significant.



#### Ever took steroids without a doctor's prescription



Students in Summit County were asked how many times they had sniffed glue, breathed the contents of aerosol spray cans or inhaled any paints or sprays to get high (ever used inhalants). The variation in prevalence for having ever used inhalants across US, State and Summit County was not significant.



**Ever used inhalants** 

Students in Summit County were asked how many times they had ever taken synthetic or designer drugs such as bath salts, K2, or spice, to get high. This item was not included in the national or state surveys. Overall, 8.0% of Summit County high school students had taken synthetic or designer drugs at least one time. The variation in prevalence across the four Summit County clusters was not significant.



# Ever used synthetic or designer drugs



Students in Summit County were asked how many times they had ever used prescription pain relievers or painkillers without a doctor's prescription. Overall, the prevalence for having ever used prescription pain relievers or painkillers without a doctor's prescription was significantly higher among students in the US than for the State and similar to Summit County. The variation in prevalence for having ever used prescription pain relievers or painkillers without a doctor's prescription across the Summit County clusters was not significant.



# Ever took prescription pain medication without a prescription

Students in Summit County were asked to report what types of prescription drugs they had ever taken without a doctor's prescription. Students were able to select multiple answers to indicate their lifetime use of each type of drug without a doctor's prescription. These results are indicated in the graph below.



# Types of prescription drug abuse



Additional analysis of the "Types of prescription drugs abused" item reveals that the majority of the students who reported having used a prescription drug without a doctor's prescription, had used one type of drug. The chart below further describes the number of types of drugs abused by Summit County high school students.



Number of types of prescription drugs abused

Students in Summit County were asked if they had been offered, sold or given an illegal drug on school property during the 12 months before the survey. The variation in prevalence of having been offered, sold or given an illegal drug on school property across US, State and Summit County was not significant. The prevalence for having been offered, sold or given an illegal drug on school property was significantly higher for students in the West Akron cluster than for students in the East Akron, North Suburbs and South Suburbs clusters. The prevalence for having been offered, sold or given an illegal drug on school property was significantly higher for students in the East Akron cluster than for students in the South Suburbs clusters.



# Offered, sold or given an illegal drug on school property



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering marijuana and other drug use behaviors. When significant differences exist, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for having ever used marijuana among male students was 38.6% which is significantly higher than among female students (34.7%). For differences by grade level, an arrow indicates the population at highest risk (prevalence with confidence interval are included) that is significantly different from at least one other grade. For example, the prevalence for having ever used marijuana among 12<sup>th</sup> grade students was 48.3% which is significantly higher than among 9<sup>th</sup>, 10<sup>th</sup> or 11<sup>th</sup> grade students (23.1%, 34.5%, 42.5%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Ever used marijuana	34.7 (33.0-36.4)	<b>1 38.6</b> (36.0-40.2)	23.1 (21.0-25.4)	34.5 (32.1-36.9)	42.5 (39.8-45.2)	<b>48.3</b> (46.0-50.6)
Tried marijuana before age of 13	6.6 (5.9-7.3)	<b>11.8</b> (10.8-12.8)				
Current marijuana use	19.0 (17.7-20.3)	<b>23.1</b> (21.8-24.5)	13.9 (12.3-15.6)	19.8 (18.0-21.7)		<b>26.8</b> (24.9-28.8)
Student perception of parents' belief that marijuana use is very wrong	76.3 (75.0-77.6)	<b>72.3</b> (70.9-73.7)	80.8 (79.1-82.3)	75.4 (73.5-77.2)		<b>↑68.3</b> (66.3-70.2)
Ever used cocaine	4.1 (3.6-4.7)	<b>↑ 7.5</b> (6.8-8.3)	3.6 (2.9-4.4)			<b>7.5</b> (6.4-8.7)
Ever used heroin	2.5 (2.1-3.0)	<b>↑ 5.6</b> (4.9-6.4)	2.3 (1.8-3.0)			<b>1.6</b> (3.7-4.6)
Ever used methamphetamines	3.5 (3.0-4.1)	<b>6.4</b> (5.7-7.1)	3.3 (2.6-4.1)		<b>↑ 5.3</b> (4.4-6.5)	
Ever used hallucinogenic drugs	6.7 (6.0-7.5)	<b>11.1</b> (10.2-12.2)	5.7 (4.9-6.7)		<b>1</b> 9.4 (7.9-11.0)	4.6 (3.7-5.7)
Ever took steroids without a doctor's prescription	3.5 (3.0-4.0)	<b>↑ 5.9</b> (5.2-6.7)				
Ever used inhalants						
Ever used synthetic or designer drugs	5.9 (5.2-6.6)	<b>10.0</b> (9.1-11.0)	5.1 (4.3-6.1)	6.9 (5.9-8.1)	8.2 (6.9-9.6)	<b>11.3</b> (9.9-12.8)
Ever took prescription pain medication without a doctor's prescription			10.5 (9.3-11.9)	15.4 (13.9-17.0)		<b>19.3</b> (17.5-21.3)
Offered, sold or given an illegal drug on school property	18.1 (17.0-19.2)	<b>1 23.9</b> (22.7-25.2)				



## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
<b>Ever used marijuana</b>	36.6%
(Used marijuana one or more times during their life.)	(35.3-38.0)
Tried marijuana before age 13 years	9.2% (8.6-9.9)
<b>Current marijuana use</b>	21.1%
(Used marijuana one or more times during the 30 days before the survey.)	(20.1-22.1)
<b>Ever used cocaine</b>	5.8%
(Used cocaine one or more times during their life.)	(5.4-6.4)
<b>Ever used heroin</b>	4.1%
(Used heroin one or more times during their life.)	(3.7-4.6)
Ever used methamphetamines	5.0%
(Used methamphetamines one or more times during their life.)	(4.5-5.5)
Ever used hallucinogenic drugs	8.9%
(Used hallucinogenic drugs one or more times during their life.)	(8.3-9.6)
<b>Ever took steroids without a doctor's prescription</b>	4.7%
(Used steroid pills or shots without a doctor's prescription one or more times during their life.)	(4.3-5.2)
<b>Ever used inhalants</b>	8.4%
(Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays one or more times during their life.)	(7.8-9.1)
Ever used synthetic or designer drugs	8.0%
(Used synthetic or designer drugs one or more times during their life.)	(7.4-8.6)
<b>Ever took prescription pain medication without a doctor's prescription</b>	15.6%
(Used prescription pain relievers or painkillers without a doctor's prescription one or more times during their life.)	(14.7-16.4)
<b>Offered, sold, or given an illegal drug on school property</b>	21.0%
(One or more times during the 12 months before the survey.)	(20.2-21.9)
Student perception of parents' belief that marijuana use is very wrong	74.3% (73.2-75.3)



# Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% CI)
<b>Ever used marijuana</b> (Used marijuana one or more times during their life.)	36.6% (35.3-38.0)	35.7% (29.9-42.0)	40.7% (37.9-43.5)
Tried marijuana before age 13 years	9.2% (8.6-9.9)	5.8% (4.2-7.9)	8.6% (7.4-10.1)
<b>Current marijuana use</b> (Used marijuana one or more times during the 30 days before the survey.)	21.1% (20.1-22.1)	20.7% (16.3-25.8)	23.4% (21.3-25.7)
<b>Ever used cocaine</b> (Used cocaine one or more times during their life.)	5.8% (5.4-6.4)	3.8% (2.9-5.1)	5.5% (4.7-6.6)
<b>Ever used heroin</b> (Used heroin one or more times during their life.)	4.1% (3.7-4.6)	2.0% (1.2-3.1)	2.2% (1.7-2.8)
<b>Ever used methamphetamines</b> (Used methamphetamines one or more times during their life.)	5.0% (4.5-5.5)		3.2% (2.7-3.6)
<b>Ever used hallucinogenic drugs</b> (Used hallucinogenic drugs one or more times during their life.)	8.9% (8.3-9.6)	7.8% (6.1-9.8)	7.1% (6.0-8.4)
<b>Ever took steroids without a doctor's prescription</b> (Used steroid pills or shots without a doctor's prescription one or more times during their life.)	4.7% (4.3-5.2)	2.7% (1.8-4.0)	3.2% (2.7-3.6)
<b>Ever used inhalants</b> (Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays one or more times during their life.)	8.4% (7.8-9.1)	8.8% (7.1-10.8)	8.9% (7.9-10.1)
<b>Ever used synthetic or designer drugs</b> (Used synthetic or designer drugs one or more times during their life.)	8.0% (7.4-8.6)		
Ever took prescription pain medication without a doctor's prescription (Used prescription pain relievers or painkillers without a doctor's prescription one or more times during their life.)	15.6% (14.7-16.4)	12.8% (11.0-14.9)	17.8% (15.9-19.9)
Offered, sold, or given an illegal drug on school property (One or more times during the 12 months before the survey.)	21.0% (20.2-21.9)	19.9% (17.1-23.0)	22.1% (20.2-24.1)
Student perception of parents' belief that marijuana use is very wrong	74.3% (73.2-75.3)		



Risk Behavior	East Akron % (95% CI)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% CI)
<b>Ever used marijuana</b> (Used marijuana one or more times during their life.)	39.2% (36.1-42.4)	47.6% (43.7-51.5)	32.3% (30.2-34.4)	38.7% (36.5-41.0)
Tried marijuana before age 13 years	12.6% (11.2-14.2)	15.2% (12.8-17.9)	7.0% (6.2-8.0)	8.9% (7.9-10.1)
<b>Current marijuana use</b> (Used marijuana one or more times during the 30 days before the survey.)	23.1% (20.8-25.6)	29.9% (26.8-33.3)	18.7% (17.2-20.3)	21.0% (19.1-23.0)
Ever used cocaine (Used cocaine one or more times during their life.)	5.5% (4.6-6.5)	6.4% (5.1-6.7)	5.8% (5.1-6.7)	5.9% (5.0-6.9)
Ever used heroin (Used heroin one or more times during their life.)	4.1% (3.3-5.2)	5.3% (3.9-7.1)	4.5% (3.8-5.3)	3.0% (2.4-3.8)
<b>Ever used methamphetamines</b> (Used methamphetamines one or more times during their life.)	4.9% (4.0-5.9)	6.3% (4.9-8.2)	5.0% (4.3-5.8)	4.4% (3.6-5.4)
<b>Ever used hallucinogenic drugs</b> (Used hallucinogenic drugs one or more times during their life.)	7.4% (6.2-8.7)	8.8% (7.3-10.7)	9.2% (8.2-10.3)	9.5% (8.2-10.8)
<b>Ever took steroids without a doctor's prescription</b> (Used steroid pills or shots without a doctor's prescription one or more times during their life.)	4.7% (3.8-5.8)	6.8% (5.2-8.8)	4.4% (3.8-5.2)	4.5% (3.7-5.5)
<b>Ever used inhalants</b> (Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays one or more times during their life.)	9.9% (8.6-11.3)	10.3% (8.7-12.3)	7.9% (7.0-8.8)	7.9% (6.7-9.3)
<b>Ever used synthetic or designer drugs</b> (Used synthetic or designer drugs one or more times during their life.)	7.1% (5.9-8.5)	7.8% (6.1-10.0)	7.9% (7.0-8.8)	8.8% (7.7-10.2)
Ever took prescription pain medication without a doctor's prescription (Used prescription pain relievers or without a doctor's prescription one or more times during their life.)	15.2% (13.5-17.1)	17.4% (15.5-19.5)	14.4% (13.0-15.8)	17.1% (15.7-18.7)
Offered, sold, or given an illegal drug on school property (One or more times during the 12 months before the survey.)	22.7% (20.8-24.6)	28.9% (26.3-31.7)	20.8% (19.6-22.1)	17.7% (16.1-19.3)
Student perception of parents' belief that marijuana use is very wrong	72.5% (70.4-74.5)	65.8% (62.5-68.9)	76.8% (75.2-78.3)	73.6% (71.6-75.6)

#### **Regional Prevalence**

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ever used marijuana				
Category	%	CI		
Gender				
Female	34.7	33.0 -	36.4	
Male	38.6	36.9 -	40.2	
Race/Ethnic	city			
White	34.4	32.9 -	36.0	
Black	46.0	43.3 -	48.7	
Asian	13.8	10.8 -	17.6	
Hispanic	44.9	40.2 -	49.6	
Other	42.3	39.0 -	45.8	
Grade				
9th	23.1	21.0 -	25.4	
10th	34.5	32.1 -	36.9	
11th	42.5	39.8 -	45.2	
12th	48.3	46.0 -	50.6	
Total	36.6	35.3 -	38.0	

#### Demographics

Tried marijuana before age of 13				
Category	%	CI		
Gender				
Female	6.6	5.9 -	7.3	
Male	11.8	10.8 -	12.8	
Race/Ethnic	city			
White	7.0	6.3 -	7.7	
Black	14.2	12.5 -	16.2	
Asian	4.0	2.5 -	6.3	
Hispanic	19.7	16.5 -	23.3	
Other	13.7	11.7 -	16.0	
Grade				
9th	8.9	7.7 -	10.2	
10th	10.3	9.0 -	11.6	
11th	8.1	6.9 -	9.4	
12th	8.4	7.3 -	9.7	
Total	9.2	8.6 -	9.9	

In Summit County, 36.6% of students had used marijuana in their lifetime. The prevalence of ever marijuana use was higher among male (38.6%) than female (34.7%) students. The prevalence of ever marijuana use was higher among Black, Hispanic and Other/Multiple (46.0%, 44.9%, 42.3%) students than White and Asian (34.4%, 13.8%) students, respectively. The prevalence of ever marijuana use was higher among White (34.4%) students than Asian (13.8%) students. The prevalence of ever marijuana use was higher among 10<sup>th</sup> grade (34.5%) students than 9<sup>th</sup> grade (23.1%) students, respectively. The prevalence of ever marijuana use was higher among 11<sup>th</sup> grade (42.5%) students than 9<sup>th</sup> and 10<sup>th</sup> grade (23.1%)34.5%) students, respectively. The prevalence of ever marijuana use was higher among 12<sup>th</sup> grade (48.3%) students than 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade (23.1%, 34.5%, 42.5%) students, respectively.

In Summit County, 9.2% of students had tried marijuana before the age of 13. The prevalence of having tried marijuana before 13 was higher among male (11.8%) than female (6.6%) students. The prevalence of having tried marijuana before 13 was higher among Hispanic (19.7%) students than White, Black, Asian, and Other/Multiple (7.0%, 14.2%, 4.0%, 13.7%) students, respectively. The prevalence of having tried marijuana before the age of 13 was higher among Black and Other/Multiple (14.2%. 13.7%) students than White or Asian (7.0%, 4.0%) students, respectively.



Current marijuana use				
Category	%			
Gender	70			
Female	19.0	17.7 -	20.3	
Male	23.1	21.8 -	24.5	
Race/Ethnic	city			
White	, 19.5	18.3 -	20.8	
Black	27.0	24.8 -	29.5	
Asian	8.0	5.7 -	11.1	
Hispanic	29.6	25.6 -	33.9	
Other	23.9	20.9 -	27.2	
Grade				
9th	13.9	12.3 -	15.6	
10th	19.8	18.0 -	21.7	
11th	24.1	21.9 -	26.5	
12th	26.8	24.9 -	28.8	
Total	21.1	20.1 -	22.1	

In Summit County, 21.1% of students had used marijuana at least once during the 30 days prior to the survey (i.e., current marijuana use). The prevalence of current marijuana use was higher for male (23.1%) students than female (19.0%) students. The prevalence of current marijuana use was higher for Black, Hispanic and Other/Multiple (27.0%, 29.6%, 23.9%) students than White and Asian (19.5%, 8.0%) students, respectively. The prevalence of current marijuana use was higher among White (19.5%) than Asian (8.0%) students. The prevalence of current marijuana use was higher among 10<sup>th</sup> grade (19.8%) students than 9<sup>th</sup> grade (13.9%) students, respectively. The prevalence of current marijuana use was higher among 11<sup>th</sup> and 12<sup>th</sup> grade (24.1%, 26.8%) students than 9<sup>th</sup> and 10<sup>th</sup> grade (13.9%, 19.8%) students, respectively.

Student perception of parents' belief that marijuana use is very			
	wror	ng	
Category	%	CI	
Gender			
Female	76.3	75.0 -	77.6
Male	72.3	70.9 -	73.7
Race/Ethni	icity		
White	75.4	74.2 -	76.6
Black	71.5	74.2 -	76.6
Asian	85.0	81.7 -	89.2
Hispanic	68.2	63.8 -	72.3
Other	68.1	64.8 -	71.3
Grade			
9th	80.8	79.1 -	82.3
10th	75.4	73.5 -	77.2
11th	72.3	69.9 -	74.5
12th	68.3	66.3 -	70.2
Total	74.3	73.2 -	75.3

In Summit County, 74.3% of students perceive that their parents believe it is very wrong for them to use marijuana. The prevalence of perception that parents believe it is very wrong for them to use marijuana was higher among female (76.3%) than male (72.3%) students. The prevalence of perception that parents believe it is very wrong for them to use marijuana was higher among White, Asian and Black (75.4%, 85.0%, 71.5%) students than Hispanic and Other/Multiple (68.2%, 68.1%) students, respectively. The prevalence of perception that parents believe it is very wrong for them to use marijuana was higher among Asian (85.0%) students than White and Black (75.4%, 71.5%) students. The prevalence of perception that parents believe it is very wrong for them to use marijuana was higher among 9<sup>th</sup> grade (80.8%) students than 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (75.4%, 72.3%, 68.3%) students, respectively. The prevalence of perception that parents believe it is very wrong for them to use marijuana was higher among 10<sup>th</sup> grade (75.4%) students than 12<sup>th</sup> grade (68.3%) students.



#### 2013 SUMMIT COUNTY HS YRBS: Marijuana and Other Drugs

Ever used cocaine				
Category	%	CI		
Gender				
Female	4.1	3.6 -	4.7	
Male	7.5	6.8 -	8.3	
Race/Ethni	city			
White	5.0	4.4 -	5.6	
Black	5.5	4.5 -	6.7	
Asian	5.5	3.6 -	8.1	
Hispanic	15.9	12.9 -	19.4	
Other	6.6	5.2 -	8.4	
Grade				
9th	3.6	2.9 -	4.4	
10th	5.7	4.8 -	6.7	
11th	6.1	5.1 -	7.2	
12th	7.5	6.4 -	8.7	
Total	5.8	5.4 -	6.4	

In Summit County, 5.8% of students had used cocaine one or more times in their lifetime. The prevalence of ever cocaine use was higher among male (7.5%) than female (4.1%) students. The prevalence of ever cocaine use was higher among Hispanic (15.9%) students than White, Black, Asian and Other/Multiple (5.0%, 5.5%, 5.5%, 6.6%) students, respectively. The prevalence of ever cocaine use was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (5.7%, 6.1%, 7.5%) students, than 9<sup>th</sup> grade (3.6%) students, respectively.

Ever used heroin				
Category	%	CI		
Gender				
Female	2.5	2.1 -	3.0	
Male	5.6	4.9 -	6.4	
Race/Ethni	city			
White	2.8	2.3 -	3.3	
Black	5.4	4.3 -	6.6	
Asian	4.1	2.5 -	6.4	
Hispanic	15.1	12.2 -	18.6	
Other	5.0	3.7 -	6.8	
Grade				
9th	2.3	1.8 -	3.0	
10th	4.2	3.4 -	5.1	
11th	4.5	3.6 -	5.5	
12th	4.6	3.7 -	5.7	
Total	4.1	3.7 -	4.6	

In Summit County, 4.1% of students had used heroin one or more times in their lifetime. The prevalence of ever heroin use was higher among male (5.6%) than female (2.5%) students. The prevalence of ever heroin use was higher among Hispanic (15.1%) students than White, Black, Asian and Other/Multiple (2.8%, 5.4%, 4.1%, 5.0%) students, respectively. The prevalence of ever heroin use was higher among Black and Other/Multiple (5.4%, 5.0%) students. The prevalence of ever heroin use was higher among Black and Other/Multiple (5.4%, 5.0%) students. The prevalence of ever heroin use was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (4.2%, 4.5%, 4.6%) students, than 9<sup>th</sup> grade (2.3%) students, respectively.



Ever used methamphetamines				
Category	%	CI		
Gender				
Female	3.5	3.0 -	4.1	
Male	6.4	5.7 -	7.1	
Race/Ethni	city			
White	3.8	3.3 -	4.4	
Black	5.4	4.3 -	6.7	
Asian	5.3	3.5 -	7.9	
Hispanic	15.6	12.6 -	19.2	
Other	5.7	4.3 -	7.4	
Grade				
9th	3.3	2.6 -	4.1	
10th	5.0	4.2 -	6.0	
11th	5.3	4.4 -	6.5	
12th	4.6	3.7 -	5.7	
Total	5.0	4.5 -	5.5	

In Summit County, 5.0% of students had used methamphetamines one or more times in their lifetime. The prevalence of ever methamphetamine use was higher among male (6.4%) than female (3.5%) students. The prevalence of ever methamphetamine use was higher among Hispanic (15.6%) students than White, Black, Asian and Other/Multiple (3.8%, 5.4%, 5.3%, 5.7%) students, respectively. The prevalence of ever methamphetamine use was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (5.0%, 5.3%, 5.5%) students, than 9<sup>th</sup> grade (3.3%) students, respectively.

Ever used hallucinogenic drugs				
Category	%	CI		
Gender				
Female	6.7	6.0 -	7.5	
Male	11.1	10.2 -	12.2	
Race/Ethni	city			
White	8.6	7.9 -	9.4	
Black	6.7	5.6 -	8.1	
Asian	6.3	4.3 -	9.2	
Hispanic	19.8	16.3 -	23.8	
Other	9.6	7.8 -	11.8	
Grade				
9th	5.7	4.9 -	6.7	
10th	8.5	7.5 -	9.6	
11th	9.4	7.9 -	11.0	
12th	4.6	3.7 -	5.7	
Total	8.9	8.3 -	9.6	

In Summit County, 8.9% of students had used hallucinogenic drugs such as LSD, acid, PCP, ecstasy, angel dust, mescaline, or mushrooms one or more times in their lifetime. The prevalence of ever hallucinogenic drug use was higher among male (11.1%) than female (6.7%) students. The prevalence of ever hallucinogenic drug use was higher among Hispanic (19.8%) students than White, Black, Asian and Other/Multiple (8.6%, 6.7%, 6.3%, 9.6%) students, respectively. The prevalence of ever hallucinogenic drug use was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (8.5%, 9.4%, 4.6%) students, than 9<sup>th</sup> grade (5.7%) students, respectively. The prevalence of ever hallucinogenic drug use was higher among 12<sup>th</sup> grade (4.6%) students than 10<sup>th</sup> grade (8.5%) students, respectively.



#### 2013 SUMMIT COUNTY HS YRBS: Marijuana and Other Drugs

Ever took steroids without a			
doct	or's pre	scription	1 I
Category	%	CI	
Gender			
Female	3.5	3.0 -	4.0
Male	5.9	5.2 -	6.7
Race/Ethni	city		
White	3.6	3.1 -	4.2
Black	5.6	4.5 -	6.9
Asian	4.8	3.1 -	7.5
Hispanic	13.5	10.6 -	16.9
Other	5.7	4.3 -	7.4
Grade			
9th	4.0	3.3 -	4.9
10th	4.1	3.4 -	4.9
11th	5.0	4.0 -	6.2
12th	5.1	4.1 -	6.3
Total	4.7	4.3 -	5.2

In Summit County, 4.7% of students had taken steroid pills or shots without a doctor's prescription one or more times in their lifetime. The prevalence of ever steroid use was higher among male (5.9%) than female (3.5%) students. The prevalence of ever steroid use was higher among Hispanic (13.5%) students than White, Black, Asian and Other/Multiple (3.6%, 5.6%, 4.8%, 5.7%) students, respectively. The prevalence of ever steroid use was higher among Black and Other/Multiple (5.6%, 5.7%) students than White (3.6%) students, respectively.

Ever used inhalants				
Category	%	CI		
Gender				
Female	8.3	7.5 -	9.2	
Male	8.5	7.7 -	9.4	
Race/Ethni	icity			
White	7.2	6.5 -	7.9	
Black	8.7	7.4 -	10.3	
Asian	7.1	5.0 -	10.1	
Hispanic	18.1	14.8 -	22.0	
Other	11.4	9.4 -	13.9	
Grade				
9th	8.3	7.3 -	9.6	
10th	8.0	7.0 -	9.2	
11th	8.5	7.2 -	9.9	
12th	7.7	6.7 -	9.0	
Total	8.4	7.8 -	9.1	

In Summit County, 8.4% of students had sniffed glue, breathed the contents of aerosol or spray cans, on inhaled any paints or sprays to get high, one or more times during their lifetime. The prevalence of ever inhalant use was higher among Hispanic (18.1%) students than White, Black, Asian and Other/Multiple (7.2%, 8.7%, 7.1%, 11.4%) students, respectively. The prevalence of ever inhalant use was higher among Other/Multiple (11.4%) students than White (7.2%) students, respectively.



Ever used synthetic or designer drugs				
Category	%	CI		
Gender				
Female	5.9	5.2 -	6.6	
Male	10.0	9.1 -	11.0	
Race/Ethni	icity			
White	7.7	7.0 -	8.4	
Black	6.7	5.5 -	8.1	
Asian	4.1	2.6 -	6.3	
Hispanic	16.4	13.3 -	20.2	
Other	8.4	6.7 -	10.4	
Grade				
9th	5.1	4.3 -	6.1	
10th	6.9	5.9 -	8.1	
11th	8.2	6.9 -	9.6	
12th	11.3	9.9 -	12.8	
Total	8.0	7.4 -	8.6	

In Summit County, 8.0% of students had used synthetic or designer drugs (bath salts, K2, or spice) to get high one or more times in their lifetime. The prevalence of ever synthetic or designer drug use was higher among male (10.0%) than female (5.9%) students. The prevalence of ever synthetic or designer drug use was higher among Hispanic (16.4%) students than White, Black, Asian and Other/Multiple (7.7%, 6.7%, 4.1%, 8.4%) students, respectively. The prevalence of ever synthetic or designer drug use was higher among White and Other/Multiple (7.7%, 8.4%) students than Asian (4.1%) students. The prevalence of ever synthetic or designer drug use was higher among 11<sup>th</sup> and 12<sup>th</sup> grade (8.2%, 11.3%) students, than 9<sup>th</sup> grade (5.1%) students, respectively. The prevalence of ever synthetic or designer drug use was higher among 12<sup>th</sup> grade (11.3%) students than 10<sup>th</sup> and 11<sup>th</sup> grade (6.9%, 8.2%) students respectively.

Ever used prescription pain medication without a doctor's			
	prescrip	tion	
Category	%	CI	
Gender			
Female	15.0	14.0 -	16.1
Male	16.1	14.9 -	17.3
Race/Ethni	city		
White	15.2	14.2 -	16.2
Black	14.4	12.8 -	16.2
Asian	7.9	5.7 -	11.0
Hispanic	23.3	19.8 -	27.4
Other	18.8	16.3 -	21.6
Grade			
9th	10.5	9.3 -	11.9
10th	15.4	13.9 -	17.0
11th	16.6	14.9 -	18.4
12th	19.3	17.5 -	21.3
Total	15.6	14.7 -	16.4

In Summit County, 15.6% of students had used prescription pain medication without a doctor's prescription one or more times in their lifetime. The prevalence of ever pain medication abuse was higher among Hispanic and Other/Multiple (23.3%, 18.8%) students than White, Black and 14.4%, Asian (15.2%, 7.9%) students, respectively. The prevalence of ever pain medication abuse was higher among White and Black (15.2%, 14.4%) students than among Asian (7.9%) students. The prevalence of ever pain medication abuse was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (15.4%, 16.6%, 19.3%) students than 9<sup>th</sup> grade (10.5%) students, respectively. The prevalence of ever pain medication abuse was higher among 12<sup>th</sup> grade (19.3%) students than 10<sup>th</sup> grade (15.4%) students respectively.



Offered, sold or given an illegal			
drug o	on schoo	ol proper	ty
Category	%	C	
Gender			
Female	18.1	17.0 -	19.2
Male	23.9	22.7 -	25.2
Race/Ethni	icity		
White	19.3	18.3 -	20.3
Black	24.4	22.4 -	26.5
Asian	16.5	13.3 -	20.3
Hispanic	31.3	27.2 -	35.7
Other	23.6	20.9 -	26.4
Grade			
9th	19.5	17.8 -	21.2
10th	22.8	21.1 -	24.5
11th	21.3	19.6 -	23.2
12th	19.4	17.6 -	21.3
Total	21.0	20.2 -	21.9

In Summit County, 21.0% of students had been offered, sold or given drugs on school property. The prevalence of having been offered, sold or given drugs on school property was higher among male (23.9%) than female (18.1%) students. The prevalence of having been offered, sold or given drugs on school property was higher among Hispanic (31.3%) students than White, Black, Asian and Other/Multiple (19.3%, 24.4%, 16.5%, 23.6%) students, respectively. The prevalence of having been offered, sold or given drugs on school property was higher among Black (24.4%) students than White and Asian (19.3%, 16.5%) students respectively.



- <sup>i</sup> Wu, W., Khan, A. 2005. Adolescent Illicit Drug Use: Understanding and Addressing the Problem. *Medscape Public Health & Prevention.* 3(2).
- <sup>ii</sup> Substance Abuse and Mental Health Services Administration. 2001. *The NHSDA Report: Obtaining Marijuana Easy for Youths*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- <sup>III</sup> National Institute on Drug Abuse. NIDA InfoFacts: Marijuana. National Institute on Drug Abuse Web site. Available at http://www.nida.nih.gov/Infofax/marijuana.html. Accessed on July 24, 2008.
- <sup>iv</sup> Hubbard, J., Franco, S., Onaivi, E. 1999. Marijuana: Medical Implications. *The American Academy of Family Physicians*. 60:2583-93.
- <sup>v</sup> Substance Abuse and Mental Health Services Administration. 2006. *Misuse of Prescription Drugs, 2005*. Available at http://www.oas.samhsa.gov/prescription/toc.htm. Accessed on June 1, 2009.
- <sup>vi</sup> Substance Abuse and Mental Health Services Administration. 2007. Results from the 2006 National Survey on Drug Use and Health: National Findings. Office of Applied Studies, NSDUH Series H-32, DHHS Publication No. SMA 07-4293. Rockville, MD.
- <sup>vii</sup> Volkow, N. 2005. Inhalant abuse: Danger under the kitchen sink. *NIDA Notes*. 20(3).
- viii Johnston, L., O'Malley, P., Bachman, J., Schulenberg, J. 2007. *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2006*. Bethesda, MD: National Institute on Drug Abuse.



# Section 7: Gambling Behaviors

The 2013 Summit County High School YRBS included seven items about gambling. Problem gambling is widespread. It is estimated that in Ohio 264,000 adults and approximately 38,000 adolescents exhibit problem gambling behaviors.<sup>i</sup>

Little is known about the course and outcomes of adolescent gambling. A review of 26 gambling prevalence studies conducted in the US and Canada shows both a high level of adolescent involvement in gambling activities and an increase in participation in recent years.<sup>ii</sup> Estimates of problem gambling or pathological gambling range between two and four times higher than the adult population, with 4 to 8 percent suffering serious problems and an additional 10 to 14 percent at risk for gambling problems.<sup>iii,iv,v</sup>

Healthy People 2020 Objectives	Summit County 2013
There are no HP2020 objectives that relate directly to questions asked in the 2013 Summit County YRBS	

Students in Summit County were asked to report how often, over the past 12 months, they had gambled money or personal items while playing cards, betting on personal skills or sports teams, buying lottery tickets or scratch-offs, using the internet, or doing anything else. Variation in prevalence across State and Summit County is not significant.



# Gambled money or personal items



#### 2013 SUMMIT COUNTY HS YRBS: Gambling



Students in Summit County were asked to select all that applied from a list of possible gambling products/methods that they had used to gamble in the 30 days before the survey. Of the Summit County high school students who reported that they had gambled in the 30 days before the survey, there appears to be variability in the products/methods they used.



Type of gambling

Students in Summit County were asked to select all that applied from a list of possible gambling locations where they had gambled in the 30 days before the survey. Of the Summit County high school students who reported that they had gambled in the 30 days before the survey, students were most likely to have gambled in their own home or in another person's home.



### **Gambling locations**

Section 7 | Page 3

Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University

Students in Summit County were asked how often they felt bad about the amount they bet; if they felt they'd like to stop betting but didn't feel they could; how often they had lied about gambling; and how often they had bet or gambled more than they wanted. The chart below shows the prevalence for these behaviors among the Summit County high school students who reported that they had gambled in the 30 days before the survey.



## Gambling behaviors among current gamblers

#### **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Gambled money or personal items	24.4%
(During the past 12 months.)	(23.4-25.4)
Felt bad about betting or gambling	2.3%
(During the past 30 days before the survey; always or most of the time.)	(2.0-2.6)
Wanted to stop betting money but did not think they could	2.5%
(During the past 30 days before the survey; always or most of the time.)	(2.2-2.8)
Lied about betting or gambling	1.6%
(During the past 30 days before the survey; always or most of the time.)	(1.4-2.0)
Bet or gambled more than intended	1.6%
(During the past 30 days before the survey; always or most of the time.)	(1.4-1.9)



#### Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% Cl)
Gambled money or personal items (During the past 12 months.)	24.4% (23 4-25 4)	26.6% (23.5-29.9)	
Felt bad about betting or gambling (During the past 30 days before the survey; always or most of the time.)	2.3% (2.0-2.6)		
Wanted to stop betting money but did not think they could (During the past 30 days before the survey; always or most of the time.)	2.5% (2.2-2.8)		
<b>Lied about betting or gambling</b> (During the past 30 days before the survey; always or most of the time.)	1.6% (1.4-2.0)		
<b>Bet or gambled more than intended</b> (During the past 30 days before the survey; always or most of the time.)	1.6% (1.4-1.9)		

### **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% Cl)
Gambled money or personal items	24.2%	29.5%	24.1%	23.2%
(During the 12 months before the	(22.1-26.4)	(26.7-32.4)	(22.8-25.5)	(21.2-25.3)
survey.)		. ,	. ,	. ,
Felt bad about betting or gambling	2.0%	2.9%	2.2%	2.3%
(During the 30 days before the survey;	(1 5-2 6)	(2 1-4 0)	(1 8-2 7)	(1 7-3 1)
always or most of the time.)	(1.5 2.6)	(2.1 1.0)	(1.0 2.7)	(1.7 5.1)
Wanted to stop betting money but did				
not think they could	3.1%	3.6%	2.3%	2.0%
(During the 30 days before the survey;	(2.5-3.8)	(2.6-4.9)	(1.9-2.8)	(1.5-2.7)
always or most of the time.)				
Lied about betting or gambling	2 10/	2 00/	1 50/	1 70/
(During the 30 days before the survey;	$(1 \in 2.0)$			
always or most of the time.)	(1.0-2.8)	(2.0-4.0)	(1.1-2.0)	(0.8-1.8)
<b>Bet or gambled more than intended</b> (During the 30 days before the survey; always or most of the time.)	1.7% (1.2-2.4)	2.8% (2.0-3.8)	1.6% (1.2-2.1)	1.3% (0.9-1.9)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Gambled money or personal			
items			
Category	%	CI	
Gender			
Female	14.2	13.3 -	15.3
Male	34.8	33.3 -	36.3
Race/Ethni	city		
White	23.5	22.4 -	24.7
Black	29.1	26.6 -	31.7
Asian	13.1	10.1 -	16.9
Hispanic	31.1	27.1 -	35.5
Other	23.4	20.6 -	26.5
Grade			
9th	22.2	20.6 -	23.9
10th	24.2	22.5 -	26.0
11th	23.8	21.7 -	26.0
12th	26.9	24.8 -	29.0
Total	24.4	23.4 -	25.4

#### Demographics

Felt bad about betting or			
gambling			
Category	%	CI	
Gender			
Female	1.6	1.3 -	2.0
Male	2.9	2.4 -	3.4
Race/Ethni	city		
White	1.7	1.4 -	2.1
Black	2.6	1.9 -	3.5
Asian	2.4	1.2 -	4.5
Hispanic	7.0	5.0 -	9.7
Other	2.9	2.0 -	4.3
Grade			
9th	1.8	1.4 -	2.4
10th	2.5	1.9 -	3.2
11th	2.1	1.6 -	2.7
12th	2.3	1.7 -	3.2
Total	2.3	2.0 -	2.6

Felt b

In Summit County, 24.4% of students had gambled money or personal items in the 12 months prior to the survey. The prevalence of having gambled money or personal items was higher among male (34.8%) than female (14.2%) students. The prevalence of having gambled money or personal items was higher for Black and Hispanic (29.1%, 31.1%) students than White, Asian and Other/Multiple (23.5%, 13.1%, 23.4%) students, respectively. The prevalence of having gambled money or personal items was higher for White and Other/Multiple (23.5%, 23.4%) students than for Asian (13.1%) students. The prevalence of having gambled money or personal items was higher among 12<sup>th</sup> grade (26.9%) students than 9<sup>th</sup> grade (22.2%) students.

In Summit County, 2.3% of students had felt bad about the amount they bet or what happened when they bet in the 30 days prior to the survey. The prevalence of having felt bad about gambling was higher among male (2.9%) than female (1.6%) students. The prevalence of having felt bad about gambling was higher for Hispanic (7.0%) students than White, Black, Asian and Other/Multiple (1.7%, 2.6%, 2.4%, 2.9%) students, respectively.



#### 2013 SUMMIT COUNTY HS YRBS: Gambling

Wanted to stop betting money but did not think they could			
Category	%	CI	
Gender			
Female	1.7	1.4 -	2.1
Male	3.2	2.7 -	3.7
Race/Ethni	city		
White	1.6	1.3 -	2.0
Black	3.5	2.6 -	4.6
Asian	2.7	1.5 -	4.7
Hispanic	6.5	4.7 -	9.1
Other	3.8	2.7 -	5.5
Grade			
9th	2.3	1.7 -	2.9
10th	3.0	2.4 -	3.6
11th	1.9	1.4 -	2.6
12th	2.3	1.7 -	3.2
Total	2.5	2.2 -	2.8

In Summit County, in the 30 days prior to the survey, 2.5% of students felt that they wanted to stop betting money but did not feel that they could. The prevalence of having felt that they wanted to stop betting money was higher among male (3.2%) than female (1.7%) students. The prevalence of having felt that they wanted to stop betting money was higher among Black, Hispanic, and Other/Multiple (3.5%, 6.5%, 3.8%) students, respectively, than White (1.6%) students. The prevalence of having felt that they wanted to stop betting money was higher among Hispanic (6.5%) students than Black (3.5%) students.

Lied about betting or gambling			
Category	%	CI	
Gender			
Female	1.0	0.7 -	1.3
Male	2.3	2.0 -	2.8
Race/Ethni	icity		
White	0.9	0.7 -	1.1
Black	2.4	1.8 -	3.3
Asian	2.0	1.0 -	4.0
Hispanic	7.2	5.1 -	10.1
Other	3.0	1.9 -	4.6
Grade			
9th	1.1	0.8 -	1.6
10th	1.9	1.4 -	2.6
11th	1.4	0.9 -	2.0
12th	1.6	1.1 -	2.2
Total	1.6	1.4 -	2.0

In Summit County, in the 30 days prior to the survey, 1.6% of students had lied to someone about betting or gambling. The prevalence of having lied about betting or gambling was higher among male (2.3%) than female (1.0%) students. The prevalence of having lied about betting or gambling was higher among Black, Hispanic, and Other/Multiple (2.4%, 7.2%, 3.0%) students. The prevalence of having lied about betting or gambling was higher among Black, Hispanic, and Other/Multiple (2.4%, 7.2%, 3.0%) students. The prevalence of having lied about betting or gambling was higher among Hispanic (7.2%) students than Black, Asian and Other/Multiple (2.4%, 2.0%, 3.0%) students, respectively.



Bet or gambled more than			
Category	%	CI	
Gender			
Female	1.0	0.7 - 1.3	
Male	2.2	1.8 - 2.7	
Race/Ethni	city		
White	0.8	0.6 - 1.1	
Black	2.8	2.1 - 3.8	
Asian	2.7	1.4 - 5.0	
Hispanic	6.1	4.2 - 8.8	
Other	1.7	1.0 - 3.0	
Grade			
9th	0.8	0.5 - 1.2	
10th	1.6	1.2 - 2.2	
11th	2.0	1.4 - 2.8	
12th	1.8	1.3 - 2.6	
Total	1.6	1.4 - 1.9	

In Summit County, in the 30 days prior to the survey, 1.6% of students felt that they bet or gambled more than they intended. The prevalence of having bet or gambled more than they intended was higher among male (2.2%) than female (1.0%) students. The prevalence of having bet or gambled more than they intended was higher among Black, Asian and Hispanic (2.8%, 2.7%, 6.1%) students, respectively, than White (0.8%) students. The prevalence of having bet or gambled more than they intended was higher among Hispanic (6.1%) students than Black and Other/Multiple (2.8%, 1.7%) students, respectively. The prevalence of having bet or gambled more than they wanted was higher among 11<sup>th</sup> and 12<sup>th</sup> grade (2.0%, 1.8%) students than 9<sup>th</sup> grade (0.8%) students, respectively.



<sup>i</sup> "Ohio Problem Gambling." Prevention. Ohio Department of Mental Health and Addiction Service, n.d. Web. 9 Sep 2013. <a href="http://mha.ohio.gov/Default.aspx?tabid=505">http://mha.ohio.gov/Default.aspx?tabid=505</a>>.

<sup>ii</sup> Jacobs DF. Youth gambling in North America: Long-term trends and future prospects. In: Derevensky JL, Gupta R, editors. Gambling Problems in Youth: Theoretical and Applied Perspectives. New York, NY: Klewer Academic/Plenum Publishers; 2004. pp.1-24.

<sup>iii</sup> Gupta R, Derevensky JL. Adolescent gambling behavior: A prevalence study and examination of the correlates associated with problem gambling. J Gambl Stud. 1998;14(4):319-45.

<sup>iv</sup> Shaffer HJ, Hall MN. Estimating the prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. J Gaml Stud. 1996;12(2):193-214

<sup>v</sup> Shaffer HJ, Hall MN. Updating and refining prevalence estimated of disordered gambling behavior in the United States and Canada. Can J Public Health. 2001;92(3):168-72



# Section 8: Sexual Behaviors

The 2013 Summit County high school YRBS asked students whether they had ever had sexual intercourse and whether they or their partner used a condom the last time they had sexual intercourse. Early sexual activity is associated with a high number of sexual partners, <sup>i, ii</sup> STI contraction, teenage pregnancy, and greater risk for unwanted sex. <sup>iii</sup> Since 1990, teen pregnancy and birth rates in the United States have declined significantly. Researchers cite two main factors: fewer teens are having sex, and among those who are, more are using contraceptives.<sup>iv</sup> While this is a positive trend, there are still risks for teens who are entering into sexual relationships during their adolescent years.<sup>ii</sup>

While conducting analyses for the sexual behavior category of survey items, researchers noticed a sizeable proportion of missing responses. Missing data were more common among males and minority students and decreased by grade. The stability of the data examined in this section must be considered and caution used in interpretation.

Healthy People 2020 Objectives	Summit County 2013
<b>FP-9:</b> Increase the proportion of adolescents aged 17 years and under who have never had sexual intercourse.	58.0% of Summit County high school students reported that they have never had sexual intercourse.
<b>FP-8:</b> Reduce pregnancies among adolescent females.	4.2% of Summit County female high school students reported that they have been pregnant at least once in their life.

In Summit County, students were asked if they had ever had sexual intercourse. The variation in prevalence across US, State and Summit County was not significant. The prevalence of having ever had sexual intercourse was significantly higher among students in the East Akron, West Akron and South Suburbs clusters than among students in the North Suburbs cluster.



## Ever had sexual intercourse



Students in Summit County were asked how old they were the first time they had sexual intercourse. The graph below depicts students that reported having had sexual intercourse before the age of 13 years. The prevalence of having had first sexual intercourse before age 13 was significantly higher among Summit County students than for the State. The prevalence of having had first sexual intercourse before age 13 was significantly higher among students in the East Akron and West Akron clusters than for students in the North Suburbs and South Suburbs clusters.



### Had first sexual intercourse before age 13 years

Students in Summit County were asked, during the past three months, with how many people had they had sexual intercourse (current sexual activity). The graph below represents students who reported having had sex with at least one person in the three months prior to the survey. The variation in prevalence for being currently sexually active across US, State and Summit County was not significant. The prevalence for being currently sexually active was significantly higher among students in the East Akron, West Akron and South Suburbs clusters than for students in the North Suburbs cluster. The prevalence for being currently sexually active was significantly higher among students in the South Suburbs cluster than for students in the East Akron cluster.



at Case Western Reserve University

# **Currently sexually active**
In Summit County, over half of currently sexually active students reported having used a condom (most of the time, always) when they had sexual intercourse during the past 3 months. The variation in prevalence across the four Summit County clusters was not significant.



Condom use

Students in Summit County were asked if, prior to their most recent sexual intercourse, they had used alcohol or drugs. The following graph depicts responses among sexually active students only. The variation in prevalence for having drank alcohol or used drugs during last sexual intercourse, across US, State and Summit County was not significant. The variation in prevalence for having drank alcohol or used drugs during last sexual intercourse, across the four Summit County clusters was not significant.



# Drank alcohol or used drugs during last sexual



Section 8 | Page 3

Students in Summit County were asked if they had ever been pregnant or had ever gotten someone pregnant. The prevalence for having been or gotten someone pregnant was significantly higher among students in the East Akron and West Akron clusters than for students in the North Suburbs cluster. The prevalence for having been or gotten someone pregnant was significantly higher among students in the West Akron cluster than for students in the South Suburbs cluster.



Have been or gotten someone pregnant

Students in Summit County were asked if they had ever been taught about AIDS or HIV in school. The variation in prevalence reported across US, State and Summit County was not significant. The prevalence of having ever been taught about AIDS or HIV infection in school was significantly lower among students in the East Akron cluster than among students in the North Suburbs and South Suburbs clusters. The prevalence of having ever been taught about AIDS or HIV infection in school was significantly lower is significantly lower among students in the West Akron and North Suburbs clusters than among students in the South Suburbs cluster.



## Taught about AIDS or HIV infection in school



Section 8 | Page 4

Students in Summit County were asked if they had ever talked with their parents or other family members about AIDS or HIV infection. The variation in prevalence for having ever talked with parents or other family members about AIDS or HIV infection across State and Summit County was not significant. The prevalence for having ever talked with parents or other family members about AIDS or HIV infection was significantly lower among students in the North Suburbs cluster than for students in the East Akron, West Akron and South Suburbs clusters. The prevalence for having ever talked with parents or other family members about AIDS or HIV infection was significantly lower among students in the East Akron, West Akron and South Suburbs clusters. The prevalence for having ever talked with parents or other family members about AIDS or HIV infection was significantly lower among students in the South Suburbs cluster than for students in the East Akron and West Akron clusters.



# Talked about AIDS or HIV infection with parents or other adults in family



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering sexual behaviors. When significant differences exist, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for having had sexual intercourse before the age of 13 among male students was 10.2% which is significantly higher than among female students (3.5%). For differences by grade level, an arrow indicates the population at highest risk (prevalence and confidence intervals are included) that is significantly different from at least one other grade. For example, the prevalence for having ever had sexual intercourse among 12<sup>th</sup> grade students was 61.4% which is significantly higher than among 9<sup>th</sup>, 10<sup>th</sup> or 11<sup>th</sup> grade students (21.8%, 37.9%. 49.9%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Ever had sexual intercourse			21.8 (19.5-24.2)	37.9 (35.2-40.6)	49.9 (47.3-52.5)	<b>161.4</b> (58.6-64.2)
Had first sexual intercourse before age 13 years	3.5 (3.0-4.1)	<b>10.2</b> (9.2-11.2)				
Currently sexually active			14.5 (12.7-16.5)	26.6 (24.3-29.9)	37.1 (34.6-39.7)	<b>47.5</b> (44.7-50.4)
Condom use						
Drank alcohol or used drugs before most recent sexual intercourse, among sexually active students	17.2 (15.5-19.1)	<b>1 23.5</b> (21.5-25.7)				
Have been or gotten someone pregnant	3.9 (3.3-4.6)	<b>↑ 5.6</b> (4.9-6.4)	2.1 (1.6-2.8)	4.0 (3.3-4.8)		<b>1.6</b> (3.7-4.6)
Were taught about AIDS or HIV infection in school			<b>个 79.6</b> (77.2-81.7)	85.3 (83.0-87.4)	88.9 (87.6-90.1)	87.8 (86.1-89.4)
Talked about AIDS or HIV infection with parents or other adults in family						



## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Ever had sexual intercourse	42.0% (40.4-43.7)
Had first sexual intercourse before age 13 years	6.8% (6.3-7.4)
Currently sexually active	30.7%
(Had sexual intercourse at least once during the past 3 months.)	(29.2-32.1)
<b>Condom use</b> (Used a condom most of the time or always during the past 3 months, among currently sexually active students)	58.2% (56.2-60.1)
Drank alcohol or used drugs before most recent sexual intercourse	8.3%
(Among all students.)	(7.6-8.9)
<b>Drank alcohol or used drugs before most recent sexual intercourse</b> (Among currently sexually active students.)	20.5% (19.2-21.9)
Been pregnant or gotten someone pregnant	4.2%
(One or more times during their life.)	(3.8-4.7)
Were taught in school about AIDS or HIV infection	84.9% (83.9-85.9)
Talked about AIDS or HIV infection with parents or other adults in family	42.3% (41.3-43.4)



# Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% Cl)
Ever had sexual intercourse	42.0% (40.4-43.7)	42.7% (36.0-49.7)	46.8% (43.7-49.8)
Had first sexual intercourse before age 13 years	6.8% (6.3-7.4)	3.7% (2.6-5.1)	5.6% (4.9-6.5)
<b>Currently sexually active</b> (Had sexual intercourse at least once during the past 3 months.)	30.7% (29.2-32.1)	30.8% (24.8-37.4)	34.0% (31.6-36.5)
<b>Condom use</b> (Used a condom most of the time or always during the past 3 months, among currently sexually active students)	58.2% (56.2-60.1)	N/A	N/A
Drank alcohol or used drugs before most recent sexual intercourse (Among all students.)	8.3% (7.6-8.9)		
Drank alcohol or used drugs before most recent sexual intercourse (Among currently sexually active students.)	20.5% (19.2-21.9)	18.4% (13.4-24.7)	22.4% (20.7-24.3)
<b>Been pregnant or gotten someone pregnant</b> (One or more times during their life.)	4.2% (3.8-4.7)		
Were taught in school about AIDS or HIV infection	84.9% (83.9-85.9)	87.2% (84.5-89.6)	85.3% (83.0-87.4)
Talked about AIDS or HIV infection with parents or other adults in family	42.3% (41.3-43.4)	46.0% (41.6-50.4)	



#### **Regional Prevalence**

Risk Behavior	East Akron % (95% CI)	West Akron % (95% CI)	North Suburbs* % (95% Cl)	South Suburbs % (95% Cl)
Ever had sexual intercourse	44.2% (40.9-47.5)	50.9% (46.3-55.5)	35.6% (32.9-38.4)	46.2% (43.4-49.0)
Had first sexual intercourse before age 13 years	10.3% (9.1-11.7)	12.6% (10.5-15.1)	4.8% (4.1-5.7)	5.5% (4.6-6.6)
<b>Currently sexually active</b> (Had sexual intercourse at least once during the past 3 months.)	30.0% (27.2-33.0)	36.6% (32.8-40.6)	25.3% (23.0-27.8)	35.9% (33.2-38.6)
Condom use (Used a condom most of the time or always during the past 3 months, among currently sexually active students)	56.9% (53.5-60.2)	60.0% (54.3-65.5)	56.9% (52.9-60.7)	59.3% (56.4-62.1)
Drank alcohol or used drugs before most recent sexual intercourse (Among all students.)	7.3% (6.2-8.6)	9.7% (8.0-11.7)	7.5% (6.5-8.6)	9.3% (8.1-10.6)
Drank alcohol or used drugs before most recent sexual intercourse (Among currently sexually active students.)	17.6% (15.2-20.3)	20.1% (17.1-23.4)	21.9% (19.5-24.6)	20.7% (18.3-23.2)
Been pregnant or gotten someone pregnant (One or more times during their life.)	5.4% (4.4-6.5)	7.6% (6.1-9.5)	2.9% (2.4-3.6)	4.2% (3.3-5.2)
Were taught in school about AIDS or HIV infection	78.4% (74.9-81.6)	82.6% (79.3-85.4)	84.9% (83.6-86.2)	89.1% (87.3-90.8)
Talked about AIDS or HIV infection with parents or other adults in family	48.4% (46.0-50.7)	53.3% (50.6-55.9)	38.4% (36.9-40.0)	42.3% (40.5-44.1)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ever had sexual intercourse					
Category	%	CI			
Gender					
Female	42.0	40.4-	43.7		
Male	39.7	37.6-	41.8		
Race/Ethni	city				
White	39.2	37.3-	41.2		
Black	53.3	50.0-	56.5		
Asian	22.0	17.5-	27.3		
Hispanic	52.4	47.2-	57.6		
Other	47.0	43.2-	50.8		
Grade					
9th	21.8	19.5-	24.2		
10th	37.9	35.2-	40.6		
11th	49.9	47.3-	52.5		
12th	61.4	58.6-	64.2		
Total	42.0	40.4-	43.7		

#### **Demographics**

In Summit County, 42.0% of students had had sexual intercourse at least once in their life. The prevalence of ever having sexual intercourse was higher among White, Black, Hispanic and Other/Multiple (39.2%, 53.3%, 52.4%, 47.0%) students, respectively, than Asian The prevalence of ever (22.0%) students. having sexual intercourse was higher among Black, Hispanic and Other/Multiple (53.3%, 52.4%, 47.0%) students, respectively, than among White (39.2%) students. The prevalence of ever having sexual intercourse was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (37.9%, 49.9%, 61.4%) students, respectively, than 9<sup>th</sup> grade (21.8%) students. The prevalence of ever having sexual intercourse was higher among 11<sup>th</sup> and  $12^{th}$ grade (49.9%, 61.4%) students. respectively, than 10<sup>th</sup> grade (37.9%) students. The prevalence of ever having sexual intercourse was higher among 12<sup>th</sup> grade (61.4%) students than 11<sup>th</sup> grade (49.9%) students.

Had first sexual intercourse							
	Cotogory % Cl						
Gender	70	Ci					
Female	3.5	3.0 -	4.1				
Male	10.2	9.2 -	11.2				
Race/Ethni	city						
White	4.3	3.8 -	4.9				
Black	14.3	12.5 -	16.2				
Asian	5.2	3.2 -	8.2				
Hispanic	16.4	12.9 -	20.6				
Other	8.1	6.3 -	10.3				
Grade							
9th	6.6	5.5 -	7.8				
10th	7.1	6.1 -	8.3				
11th	6.4	5.3 -	7.7				
12th	6.4	5.4 -	7.7				
Total	6.8	6.3 -	7.4				

In Summit County, 6.8% of students had had sexual intercourse before the age of 13. The prevalence of first sexual intercourse before the age of 13 was higher among male (10.2%) than female (3.5%) students. The prevalence of first sexual intercourse before the age of 13 was among Black, Hispanic, higher and Other/Multiple (14.3%, 16.4%, 8.1%) students than White and Asian (4.3%. 5.2%) students, respectively. The prevalence of first sexual intercourse before the age of 13 was higher among Black and Hispanic (14.3%, 16.4%) students than Other/Multiple (8.1%) students, respectively.



Currently sexually active				
Category	%	CI		
Gender				
Female	30.6	28.8 -	32.4	
Male	30.6	28.7 -	32.5	
Race/Ethni	city			
White	29.5	27.7 -	31.3	
Black	36.5	33.7 -	39.4	
Asian	12.1	9.0 -	16.0	
Hispanic	37.3	32.5 -	42.4	
Other	34.7	31.3 -	38.2	
Grade				
9th	14.5	12.7 -	16.5	
10th	26.6	24.3 -	29.0	
11th	37.1	34.6 -	39.7	
12th	47.5	44.7 -	50.4	
Total	30.7	29.2 -	32.1	

In Summit County, 30.7% of students had had sexual intercourse at least once during the 30 days prior to the survey (currently sexually active). The prevalence of being currently sexually active was higher among Black, Hispanic and Other/Multiple (36.5%, 37.3%, 34.7%) students, respectively, than Asian (12.1%) students. The prevalence of being currently sexually active was higher among Black and Hispanic (36.5%, 37.3%) students, respectively, than among White (29.5%) students. The prevalence of being currently sexually active was higher among 10<sup>th</sup> grade (26.6%) students than 9<sup>th</sup> grade (14.5%) students, respectively. The prevalence of being currently sexually active was higher among 11<sup>th</sup> grade (37.1%) students than 9<sup>th</sup> and 10<sup>th</sup> grade (14.5%, 26.6%) students, respectively. The prevalence of being currently sexually active was higher among 12<sup>th</sup> grade (47.5%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (14.5%, 26.6%, 37.1%) students, respectively.

Condom use					
Category	%	CI			
Gender					
Female	56.0	53.3-	58.6		
Male	60.4	57.7-	63.2		
Race/Ethni	city				
White	59.5	57.1-	61.8		
Black	56.0	51.7-	60.3		
Asian	58.3	43.2-	71.9		
Hispanic	52.3	45.0-	59.5		
Other	57.6	51.6-	63.4		
Grade					
9th	63.1	58.4-	67.5		
10th	59.4	55.5-	63.1		
11th	57.6	53.8-	61.2		
12th	56.5	53.2-	59.8		
Total	58.2	56.3-	60.1		

In Summit County, among sexually active students, 58.2% used a condom most of the time or always during the past 3 months.



Drank alcohol or used drugs before most recent sexual				
	interco	urse		
Category	%	CI		
Gender				
Female	6.6	5.9 -	7.4	
Male	9.9	8.9 -	11.0	
Race/Ethni	icity			
White	7.3	6.6 -	8.1	
Black	10.4	8.8 -	12.3	
Asian	3.9	2.2 -	6.9	
Hispanic	14.9	11.7 -	18.7	
Other	8.5	6.7 -	10.6	
Grade				
9th	4.3	3.5 -	5.2	
10th	7.8	6.8 -	9.0	
11th	8.1	6.8 -	9.6	
12th	12.8	11.4 -	14.5	
Total	8.3	7.6 -	8.9	

In Summit County, 8.3% of students used alcohol or drugs before their most recent sexual intercourse. The prevalence of drinking or using drugs during their last sexual intercourse was higher among male (9.9%) than female (6.6%) students. The prevalence of using alcohol or drugs during their last sexual intercourse was higher among Hispanic (14.9%) students than White, Asian and Other/Multiple (7.3%, 3.9%, 8.5%) students, respectively. The prevalence of using alcohol or drugs during their last sexual intercourse was higher among Black (10.4%) students than White or Asian (7.3%, 3.9%) students, respectively. The prevalence of using alcohol or drugs during their last sexual intercourse was higher among 10<sup>th</sup> and 11<sup>th</sup> grade (7.8%, 8.1%) students than 9<sup>th</sup> grade (4.3%) students, respectively. The prevalence of using alcohol or drugs during their last sexual intercourse was higher among 12<sup>th</sup> grade (12.8%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (4.3%, 7.8%, 8.1%) students, respectively.

Drank alcohol or used drugs before most recent sexual				
intercou	irse, am	ong sexu	ually	
Category	%	Cl		
Gender				
Female	17.2	15.5 -	19.1	
Male	23.5	21.5 -	25.7	
Race/Ethni	city			
White	19.3	17.6 -	21.1	
Black	20.6	17.7 -	23.8	
Asian	20.4	11.8 -	33.0	
Hispanic	29.9	24.0 -	36.6	
Other	19.1	15.3 -	23.4	
Grade				
9th	21.1	17.9 -	24.8	
10th	21.4	19.0 -	24.1	
11th	16.8	14.2 -	19.8	
12th	21.6	19.1 -	24.3	
Total	20.5	19.2 -	21.9	

In Summit County, among sexually active students, 20.5% had used alcohol or drugs before their most recent sexual intercourse. The prevalence of using alcohol or drugs during their last sexual intercourse among sexually active students was higher among male (23.5%) than female (17.2%) students. The prevalence of using alcohol or drugs during their last sexual intercourse among sexually active students was higher among Hispanic (29.9%) students than White, Black and Other/Multiple (19.3%, 20.6%, 19.1%) students, respectively.



Have been or gotten someone				
	pregna	int		
Category	%	CI		
Gender				
Female	3.9	3.3-	4.6	
Male	4.5	3.9-	5.3	
Race/Ethni	icity			
White	3.1	2.7-	3.7	
Black	7.2	5.9-	8.8	
Asian	2.2	1.3-	4.9	
Hispanic	11.1	8.3-	14.8	
Other	4.6	3.2-	6.4	
Grade				
9th	2.1	1.6-	2.8	
10th	4.0	3.3-	4.8	
11th	4.5	3.5-	5.7	
12th	6.4	5.3-	7.7	
Total	4.2	3.8-	4.7	

In Summit County, 4.2% of students had been pregnant or had gotten someone pregnant at least one time in their life. The prevalence of having been or gotten someone pregnant was higher among Black and Hispanic (7.2%, 11.1%) students, respectively, than among White and Asian (3.1%, 2.2%) students, respectively. The prevalence of having been or gotten someone pregnant was higher among Hispanic (11.1%) students than among Other/Multiple (4.6%) students. The prevalence of having been or gotten someone pregnant was higher among 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade (4.0%, 4.5%, 6.4%) students, respectively, than among 9<sup>th</sup> grade (2.1%) students. The prevalence of having been or gotten someone pregnant was higher among 12<sup>th</sup> grade (6.4%) students than among 10<sup>th</sup> grade (4.0%) students.

Were taught about AIDS or HIV infection in school					
Category	%	CI			
Gender					
Female	85.0	83.7 -	86.2		
Male	85.0	83.6 -	86.3		
Race/Ethni	icity				
White	87.2	86.0 -	88.2		
Black	82.7	80.3 -	84.8		
Asian	67.6	62.2 -	72.6		
Hispanic	80.0	76.0 -	83.5		
Other	82.9	79.8 -	85.5		
Grade					
9th	79.6	77.2 -	81.7		
10th	85.3	83.0 -	87.4		
11th	88.9	87.6 -	90.1		
12th	87.8	86.1 -	89.4		
Total	84.9	83.9 -	85.9		

In Summit County, 84.9% of students had ever been taught in school about AIDS or HIV infection. The prevalence of having been taught in school about AIDS or HIV infection was higher among White (87.2%) students than Black, Asian, Hispanic, and Other/Multiple 80.0%, 82.9%) students, (82.7%, 67.6%, respectively. The prevalence of having been taught in school about AIDS or HIV infection was higher among Black, Hispanic and Other/Multiple (82.7%, 80.0%, 82.9%) students, respectively, than among Asian (67.6%) students. The prevalence of having been taught in school about AIDS or HIV infection was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (85.3%, 88.9%, 87.8%) students than 9<sup>th</sup> grade (79.6%) students, respectively. The prevalence of having been taught in school about AIDS or HIV infection was higher among 11<sup>th</sup> grade (88.9%) students than 10<sup>th</sup> grade (85.3%) students, respectively.



Talked about AIDS or HIV infection with parents or other					
a	dults in	family			
Category	%	CI			
Gender					
Female	42.2	40.7 -	43.7		
Male	42.4	41.0 -	43.9		
Race/Ethni	icity				
White	38.5	37.3 -	39.7		
Black	60.6	58.1 -	62.9		
Asian	24.9	20.7 -	29.7		
Hispanic	49.4	45.1 -	53.7		
Other	47.9	44.5 -	51.3		
Grade					
9th	40.3	38.0 -	42.5		
10th	42.7	40.9 -	44.5		
11th	43.8	41.7 -	45.9		
12th	43.2	40.9 -	45.5		
Total	42.3	41.3 -	43.4		

In Summit County, 42.3% of students had ever talked about AIDS or HIV infection with their parents or other adults in their family. The prevalence of having talked about AIDS or HIV infection with their parents or other adults in their family was higher among Black (60.6%) students than White, Asian, Hispanic, and Other/Multiple (38.5%, 24.9%, 49.4%, 47.9%) students, respectively. The prevalence of having talked about AIDS or HIV infection with their parents or other adults in their family was higher among Hispanic (49.4%) students than White and Asian (38.5%, 24.9%) students, respectively. The prevalence of having talked about AIDS or HIV with their parents or other adults in their family was higher among Other/Multiple (47.9%) students than White and Asian (38.5%, 24.9%) students, respectively. The prevalence of having talked about AIDS or HIV with their parents or other adults in their family was higher among White (38.5%) students than Asian (24.9%) students.



- <sup>i</sup> Smith, C. 1997. Factors associated with early sexual activity among urban adolescents. *Social Work*. 42(4):334-346.
- <sup>ii</sup> Santelli, J., Brener, N., Lowry, R., Bhatt, A., Zabin, L. 1998. Multiple sexual partners among U.S. adolescents and young adults. *Family Planning Perspectives*. 30(6):271-275.
- <sup>III</sup> Moore, K., Manlove, J., Glei, D., Morrison, D. 1998. Nonmarital school-age motherhood: family, individual, and school characteristics. *Journal of Adolescent Research*. 13(4):433-457.
- <sup>iv</sup> Martin, J., Hamilton, B., Sutton, P., Ventura, S., Menacker, F., Kirmeyer, S., Munson, M. 2007. Births: final data for 2005. *National Vital Statistics Reports*. 56(6).



# Section 9: Obesity, Overweight, and Weight Control

Obesity has reached epidemic proportions. In the past 20 years, the prevalence of obesity has increased by more than 60% among adults and tripled in children and adolescents. <sup>i</sup> Overweight adolescents often become overweight adults with an increased risk for a wide variety of poor health outcomes including diabetes, stroke, heart disease, arthritis and certain cancers. <sup>ii, iii</sup> Obesity during adolescence is associated with negative psychological and social consequences and health problems such as type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome. <sup>iv</sup>

The 2013 Summit County high school YRBS asked students about their height and weight in order to calculate the student's Body Mass Index (BMI). Additionally, students were asked how they describe their own weight and what (if anything) they were currently trying to do about their weight.

The Summit County Adolescent Health Consortium was particularly interested in these topics and requested analysis that explored more fully the concordance between calculated BMI status with perception of weight, what students were trying to do about their weight, dietary behaviors and levels of physical activity. For this reason this chapter contains far more detailed and specific analyses.

Healthy People 2020 Objectives	Summit County 2013
<b>NWS-10.3:</b> Reduce the proportion of adolescents aged 12 to 19 years who are considered obese to no more than 16.1%	12.9% of Summit County high school students were considered obese.

In Summit County, students were asked about their height and weight in order to calculate a Body Mass Index (BMI). Overweight was defined as a BMI of  $\geq$ 85th percentile and <95th percentile for age and sex. The variation in prevalence across US, State and Summit County was not significant. The prevalence of being overweight was significantly higher among students in the West Akron cluster than among students in the North Suburbs cluster.





In Summit County, students were asked about their height and weight in order to calculate a Body Mass Index (BMI). Obese was defined as a BMI of  $\geq$ 95<sup>th</sup> percentile for age and sex. The prevalence of being obese was significantly higher among students in the East Akron, West Akron and South Suburbs clusters than among students in the North Suburbs cluster.



In Summit County, students were asked how they described their weight. The variation in prevalence describing oneself as slightly or very overweight across US, State and Summit County was not significant. The prevalence of describing oneself as slightly or very overweight was significantly higher among students in the South Suburbs cluster than among students in the West Akron and North Suburbs clusters.



## Describes self as slightly or very overweight



In Summit County students were asked what they were trying to do about their weight. The variation in prevalence across State and Summit County was not significant. The prevalence of trying to lose weight was significantly higher among students in the South Suburbs cluster than among students in the North Suburbs cluster.



In Summit County, students were asked to choose all that applied from a list of weight loss and/or weight control options that they engaged in during the 30 days before completing the survey. Of the students who were trying to lose weight, the graph below shows their responses for each option listed. Nearly half of those students reported that they exercised to lose weight or to keep from gaining weight during the 30 days before completing the survey.



## **Current weight loss/control efforts**



Section 9 | Page 3

Additional analyses were completed to examine possible gender differences in weight loss/control efforts. Female students were significantly more likely than male students to report that they exercised; ate less; fasted; used diet pills, powders or liquids; or vomited or took laxatives; to try to lose or keep from gaining weight.



## Current weight loss/control efforts by gender

The following chart depicts the distribution of Body Mass Index (BMI) classifications among Summit County High School students. Obese was defined as a BMI of  $\geq$ 95th percentile for age and sex. Overweight was defined as a BMI of  $\geq$ 85th percentile and <95th percentile for age and sex. Normal weight was defined as a BMI of  $\geq$ 5th percentile and <85th percentile for age and sex. Underweight was defined as a BMI of <5th percentile for age and sex.

Thirty-two percent of Summit County students had a BMI for their age and sex that put them into a category of risk (underweight, overweight, or obese). In addition, male students were significantly more likely than female students to have BMI's that put them into a risk category. It is important to note that BMI is calculated using self-reported height and weight and, therefore, may underestimate the actual prevalence of overweight and obese.



Section 9 | Page 4



BMI categories of Underweight, Normal weight and Overweight/Obese were further examined by gender, race/ethnicity, grade level and Summit County cluster. The graphs below depict these analyses.

• Female students were more likely than male students to be of normal weight. Male students were more likely than female students to be underweight and overweight/obese.



**BMI categories by gender** 

• Black students were least likely to be of normal weight and most likely to be overweight/obese. Asian students were most likely to be of normal weight and least likely to be overweight/obese.



## **BMI categories by race/ethnicity**

- There were no significant differences reported by grade level in BMI categories of Underweight, Normal Weight, and Overweight/Obese.
- Students in the North Suburbs cluster were most likely to be of normal weight and least likely to be overweight/obese.



## **BMI categories by cluster**

BMI categories of Underweight, Normal weight and Overweight/Obese were further examined for possible associations with dietary behaviors, physical activity behaviors and perceptions of weight. The graphs below depict these analyses.

BMI Category by Dietary Behaviors:

- The prevalence of having eaten five or more servings of fruits and vegetables daily during the week before completing the survey was similar for the three BMI categories.
- The prevalence of not eating breakfast every day during the week before completing the survey was higher among overweight/obese students than among underweight and normal weight students.
- The prevalence for having eaten food from a fast food restaurant at least once during the week before completing the survey was similar for the three BMI categories.



## BMI category by dietary behaviors



#### BMI Category by Physical Activity Behaviors:

- The prevalence of <u>not</u> having engaged in physical activity (that increased one's heart rate and made one breathe hard some of the time) for a total of at least 60 minutes per day on 5 or more of the 7 days before completing the survey was similar for the three BMI categories.
- The prevalence of having engaged in physical activity (that increased one's heart rate and made one breathe hard some of the time) for a total of at least 60 minutes per day on 5 or more of the 7 days before completing the survey was significantly lower among overweight/obese students than among normal weight students.
- The prevalence of watching 3+ hours of television per day on an average school day was significantly higher among overweight/obese students than among normal weight students.
- The prevalence of playing video or computer games or using a computer for something that was not school work for 3+ hours on an average school day was significantly higher among overweight/obese students than among normal weight students.



## BMI category by physical activity behavior



#### BMI Category by Sedentary Behavior:

- The prevalence of engaging in fewer than 3 hours of sedentary behavior on an average school day (television watching or using a computer for something that was not school work) was significantly higher among normal weight students than among overweight/obese students.
- The prevalence of engaging in 3 6 hours of sedentary behavior on an average school day (television watching or using a computer for something that was not school work) was significantly higher among overweight/obese students than among normal weight students.
- The prevalence of engaging in 6 or more hours of sedentary behavior on an average school day (television watching or using a computer for something that was not school work) was significantly higher among underweight and overweight/obese students than among normal weight students.



## Sedentary behavior by BMI category



#### Concordance of BMI Category by Perception of Weight: Females

Among female high school students in Summit County discordance existed for 25% - 35% of students in each BMI category (Underweight, Normal Weight, Overweight/Obese) when examining self-reported BMI and self-perception of weight.

- 69.3% of female students whose self-reported weight and height placed them in the Underweight BMI category considered themselves to be Underweight.
- Discordance existed among the 25.5% of female students whose self-reported weight and height placed them in the Underweight BMI category but they considered themselves to be of Normal Weight.
- Discordance was further evident among the 5.3% of female students whose self-reported weight and height placed them in the Underweight BMI category but they considered themselves to be Overweight/Obese.
- Discordance existed among the 15.6% of female students whose self-reported weight and height placed them in the Normal Weight BMI category but they considered themselves to be Underweight.
- 63.7% of female students whose self-reported weight and height placed them in the Normal Weight BMI category considered themselves to be of Normal Weight.
- Discordance was further evident among the 20.7% of female students whose self-reported weight and height placed them in the Normal Weight BMI category but they considered themselves to be Overweight/Obese.
- Discordance existed among the 3.0% of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category but they considered themselves to be Underweight.
- Discordance was further evident among the 21.4% of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category but they considered themselves to be of Normal Weight.
- 75.6% of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category considered themselves to be Overweight/Obese.



## Female BMI category by perception of weight



#### Section 9 | Page 9

#### Concordance of BMI Category by Perception of Weight: Males

Among male high school students in Summit County discordance existed for 30% - 40% of students in each BMI category (Underweight, Normal Weight, Overweight/Obese) when examining self-reported BMI and self-perception of weight.

- 69.9% of male students whose self-reported weight and height placed them in the Underweight BMI category considered themselves to be Underweight.
- Discordance existed among the 23.2% of male students whose self-reported weight and height placed them in the Underweight BMI category but they considered themselves to be of Normal Weight.
- Discordance was further evident among the 6.9% of male students whose self-reported weight and height placed them in the Underweight BMI category but they considered themselves to be Overweight/Obese.
- Discordance existed among the 28.6% of male students whose self-reported weight and height placed them in the Normal Weight BMI category but they considered themselves to be Underweight.
- 64.0% of male students whose self-reported weight and height placed them in the Normal Weight BMI category considered themselves to be of Normal Weight.
- Discordance was further evident among the 7.3% of male students whose self-reported weight and height placed them in the Normal Weight BMI category but they considered themselves to be Overweight/Obese.
- Discordance existed among the 5.1% of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category but they considered themselves to be Underweight.
- Discordance was further evident among the 36.9% of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category but they considered themselves to be of Normal Weight.
- 58.0% of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category considered themselves to be Overweight/Obese.



## Male BMI category by perception of weight

Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University Section 9 |Page 10

#### Concordance of BMI Category by "Trying to do about weight": Females

Among female high school students in Summit County discordance existed for a varying proportion of students in each BMI category (Underweight, Normal Weight, Overweight/Obese) when examining self-reported BMI and weight loss/control efforts.

- Seventy percent of Underweight female students expressed some level of discord with regard to
  weight status and weight loss efforts: 22.4% of female students whose self-reported weight and
  height placed them in the Underweight BMI category were trying to lose weight, 13.5% were
  trying to stay the same weight while 33.9% reported not trying to do anything about their
  weight.
- 30% of female students whose self-reported weight and height placed them in the Underweight BMI category expressed concordance by indicating that they were trying to gain weight.
- Half of female students whose self-reported weight and height placed them in the Normal Weight BMI category registered discordance by reporting that they were trying to lose weight.
- Discordance was further evident among the 7.5%% of female students whose self-reported weight and height placed them in the Normal Weight BMI category but they reported that they were trying to gain weight.
- Forty percent of female students whose self-reported weight and height placed them in the Normal Weight BMI category expressed concordance by indicating that they were trying to stay the same weight or that they were not trying to do anything about their weight.
- 75.6% of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category expressed concordance by indicating that they were trying to lose weight.
- Sixteen percent of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category registered discordance by reporting that they were trying to gain weight, trying to stay the same weight, or not trying to do anything about their weight.



## Female BMI category by trying to do about weight



#### Concordance of BMI Category by "Trying to do about weight": Males

Among male high school students in Summit County discordance existed for a varying proportion of students in each BMI category (Underweight, Normal Weight, Overweight/Obese) when examining self-reported BMI and weight loss/control efforts.

- More than fifty percent of Underweight male students expressed some level of discord with
  regard to weight status and weight loss efforts: 5.9% of male students whose self-reported
  weight and height placed them in the Underweight BMI category were trying to lose weight,
  9.8% were trying to stay the same weight while 36.7% reported not trying to do anything about
  their weight.
- 47.6% of male students whose self-reported weight and height placed them in the Underweight BMI category expressed concordance by indicating that they were trying to gain weight.
- Half of male students whose self-reported weight and height placed them in the Normal Weight BMI category registered discordance by reporting that they were trying to lose weight or trying to gain weight.
- Fifty percent of male students whose self-reported weight and height placed them in the Normal Weight BMI category expressed concordance by indicating that they were trying to stay the same weight or that they were not trying to do anything about their weight.
- 57.9% of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category expressed concordance by indicating that they were trying to lose weight.
- More than forty percent of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category registered discordance by reporting that they were trying to gain weight, trying to stay the same weight, or not trying to do anything about their weight.



## Male BMI category by trying to do about weight



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering obesity, overweight and weight control behaviors. When significant differences exist, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for describing oneself as slightly or very overweight among female students was 36.4% which is significantly higher than among male students (24.4%). For differences by grade level, an arrow indicates the population at highest risk (with prevalence and confidence interval) that is significantly different from at least one other grade. In this category there were no significant grade level differences. The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Describes self as slightly or very overweight	<b>1 36.4</b> (35.1-37.8)	24.4 (23.1-25.7)				
Were trying to lose weight	<b>↑59.5</b> (58.1-60.8)	29.3 (28.0-30.8)				

## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Described themselves as overweight	30.5%
(Reported as slightly or very overweight)	(29.5-31.5)
Were trying to lose weight	44.6% (43.5-45.7)
<b>Overweight</b> (Having a BMI >85 <sup>th</sup> percentile and <95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)	16.3% (15.6-17.1)
<b>Obese</b> (Having a BMI of >95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)	12.9% (12.2-13.7)



Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% Cl)
Described themselves as overweight	30.5%	28.2%	31.1%
(Reported as slightly or very overweight)	(29.5-31.5)	(25.4-31.2)	(29.8-32.5)
Were trying to lose weight	44.6% (43.5-45.7)	47.2% (43.9-50.5)	
<b>Overweight</b> (Having a BMI >85 <sup>th</sup> percentile and <95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)	16.3% (15.6-17.1)	15.9% (14.0-17.9)	16.6% (15.4-17.8)
<b>Obese</b> (Having a BMI of >95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)	12.9% (12.2-13.7)	13.0% (10.8-15.5)	13.7% (12.6-14.9)

## Summit County/State of Ohio/Nation

### **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% Cl)
Described themselves as overweight	31.5%	27.2%	28.6%	34.4%
(Reported as slightly or very overweight)	(29.1-33.9)	(24.6-29.9)	(27.2-30.0)	(32.6-36.3)
Were trying to lose weight	46.0% (43.5-48.6)	45.3% (42.3-48.3)	41.9% (40.3-43.6)	48.2% (46.0-50.4)
<b>Overweight</b> (Having a BMI >85 <sup>th</sup> percentile and <95 <sup>th</sup> percentile for age and sex. Calculated from self- reported height and weight, adjusted for sex and age.)	16.1% (14.4-18.0)	18.8% (16.5-21.2)	15.2% (14.1-16.4)	17.4% (16.0-19.0)
<b>Obese</b> (Having a BMI of >95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)	14.9% (13.2-16.7)	15.7% (13.7-17.9)	9.9% (8.9-10.9)	16.1% (14.6-17.7)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Describes themselves as							
	overwe	eight					
Category % CI							
Gender							
Female	36.4	35.1 -	37.8				
Male	24.4	23.1 -	25.7				
Race/Ethni	city						
White	31.7	30.4 -	32.9				
Black	27.0	24.6 -	29.4				
Asian	27.5	23.2 -	32.2				
Hispanic	29.7	25.7 -	34.0				
Other	29.2	26.2 -	32.3				
Grade							
9th	28.8	27.0 -	30.7				
10th	29.9	28.2 -	31.7				
11th	31.2	29.1 -	33.4				
12th	32.2	30.2 -	34.2				
Total	30.5	29.5 -	31.5				

## Demographics

11th31.229.1 -33.412th32.230.2 -34.2Total30.529.5 -31.5

Were trying to lose weight						
Category	%	CI				
Gender						
Female	59.5	58.1 -	60.8			
Male	29.3	28.0 -	30.8			
Race/Ethni	city					
White	44.9	43.5 -	46.4			
Black	43.8	41.3 -	46.2			
Asian	38.9	34.1 -	43.9			
Hispanic	43.7	39.2 -	48.3			
Other	46.8	46.8 43.3 - 5				
Grade						
9th	45.1	43.0 -	47.3			
10th	44.8	42.8 -	46.9			
11th	44.6	42.3 -	46.9			
12th	44.3	41.9 -	46.8			
Total	44.6	43.5 -	45.7			

In Summit County, 44.6% of students were trying to lose weight. The prevalence of trying to lose weight was higher among female (59.5%) than male (29.3%) students. There were no differences by race/ethnicity or grade.



Overweight						
Category	%	CI				
Gender						
Female	15.8	14.8 -	16.9			
Male	16.8	15.7 -	18.0			
Race/Ethni	city					
White	15.6	14.7 -	16.5			
Black	19.1	17.1 -	21.2			
Asian	11.7	8.7 -	13.4			
Hispanic	18.6	15.3 -	22.6			
Other	18.6	16.0 -	21.6			
Grade						
9th	16.0	14.6 -	17.6			
10th	16.7	15.3 -	18.1			
11th	15.8	14.4 -	17.3			
12th	16.8	15.1 -	18.6			
Total	16.3	15.6 -	17.1			

In Summit County, 16.3% of students were overweight. The prevalence of overweight was higher among Black (19.1%) students than White (15.6%) students, respectively. The prevalence of overweight was higher among White, Black, Hispanic and Other/Multiple (15.6%, 19.1%, 18.6%, 18.6%) students, respectively, than among Asian (11.7%) students. There were no differences by gender or grade.

Obese						
Category	%	CI				
Gender						
Female	10.1	9.2 -	11.1			
Male	15.7	14.7 -	16.7			
Race/Ethni	city					
White	11.9	11.0 -	12.8			
Black	18.1	16.1 -	20.4			
Asian	6.5	4.3 -	9.6			
Hispanic	12.8	9.8 -	16.7			
Other	15.6	13.0 -	18.6			
Grade						
9th	11.5	10.3 -	12.9			
10th	12.0	10.7 -	13.3			
11th	14.9	13.2 -	16.7			
12th	13.5	11.8 -	15.4			
Total	12.9	12.2 -	13.7			

In Summit County, 12.9% of students were obese. The prevalence of obesity was higher among male (15.7%) than female (10.1%) students. The prevalence of obesity was higher among Black (18.1%) students, than White, and Asian (11.9%, 6.5%) students, respectively. The prevalence of obesity was higher among White, Hispanic and Other/Multiple (11.9%, 12.8%, 15.6%) students, respectively, than among Asian (6.5%) students. The prevalence of obesity was higher among 11<sup>th</sup> grade (14.9%) students than 9<sup>th</sup> grade (11.5%) students, respectively.



- <sup>i</sup> National Center for Health Statistics. Prevalence of Overweight among Children and Adolescents: United States, 1999-2002. National Center for Health Statistics Web site. Available at http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm. Accessed July 24, 2008.
- <sup>ii</sup> Ferraro, K., Thorpe, R., Wilkinson, J. 2003. The life course of severe obesity: Does childhood overweight matter? *Journal of Gerontology*. 58B(2):S110-S119.
- <sup>III</sup> Mokdad, A., Ford, E., Bowman, B., et al. 2003. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *Journal of the American Medical Association*. 289(1):76-79.
- <sup>iv</sup> Freedman, D., Khan, L., Serdula, M., Dietz, W., Srinivasan, S., Berenson, G. 2005. The relation of childhood BMI to adult adiposity: The Bogalusa Heart Study. *Pediatrics*. 115(1):22-27.



## Section 10: Dietary Behaviors

The 2013 Summit County high school YRBS asked students about their consumption of fruits and vegetables, milk, breakfast, and fast food. Diet and nutrition have important links to adolescent health and well-being, as well as to major causes of morbidity and mortality later in life. Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. There is probable evidence to suggest that dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer, <sup>i, ii, iii</sup> cardiovascular disease, <sup>iv</sup> and stroke. <sup>v</sup> Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.

Milk is an important source of calcium for adolescents.<sup>vi, vii</sup> Calcium is essential for forming and maintaining healthy bones and low calcium intake during the first two to three decades of life is an important risk factor in developing osteoporosis.<sup>viii</sup> Although the recommended intake of calcium is 1,300 mg/day, most adolescents consume far less.<sup>ix</sup> National data indicate that the average calcium intake per day among persons aged 14 to 18 years was 1,266 mg/day (among males) and 876 mg/day (among females).

Eating breakfast every day may reduce the risk for obesity and insulin resistance syndrome — an early sign of developing diabetes, by as much as 35 to 50 percent.<sup>x</sup> Breakfast eaters tend to eat fewer calories, less saturated fat and cholesterol and have better overall nutritional status than breakfast skippers. <sup>xi</sup>

Healthy People 2020 Objectives	Summit County 2013
There are no HP2020 objectives that relate directly to questions asked in the 2013 Summit County YRBS	



In Summit County, students were asked how many times during the past seven days had they drank 100% fruit juice, eaten fruit, green salad, potatoes, carrots, or other vegetables. The graph below shows the percentage of students who reported having eaten five or more fruits or vegetables per day over the seven days prior to the survey. The variation in prevalence across State and Summit County was not significant. The prevalence for having eaten five or more fruits or vegetables per day over the seven days prior to the survey was significantly lower among students in the South Suburbs cluster than among students in the West Akron cluster.



## Ate fruits or vegetables five or more times/day

In Summit County, students were asked how many times they drank a can, bottle, or glass of soda or pop during the seven days before completing the survey. The chart below shows the students who reported having had at least one can, bottle, or glass of soda or pop every day during the 7 days before completing the survey. Students were instructed not to include consumption of diet soda or diet pop. The prevalence for having at least one can, bottle, or glass of soda or pop every day during the 7 days before the survey was significantly higher among US students than among students in Summit County. The prevalence for having at least one can, bottle, or glass of soda or pop every day during the 7 days before the survey was significantly higher among Students in the East Akron, West Akron and South Suburbs clusters than among students in the North Suburbs cluster.



## Drank soda or pop one or more times/day



In Summit County, students were asked to report how often they consumed a beverage that was high in caffeine, including beverages such as coffee, espresso, or energy drinks, in the seven days prior to the survey. The graph below shows the students who reported having at least one drink high in caffeine every day during the seven days before completing the survey. The variation in prevalence for having consumed at least one beverage that was high in caffeine daily during the seven days before the survey across State and Summit County was not significant. The variation in prevalence for having consumed at least one beverage that was high in caffeine daily during the seven days before the survey across State and Summit County was not significant.



Drank beverages high in caffeine one or more times/day

In Summit County, students were asked how many times they drank milk during the week prior to completing the survey. The graph below depicts those students who reported that they drank milk at least once daily during the seven days before the survey. The variation in prevalence for daily milk consumption across State and Summit County was not significant. The prevalence for daily milk consumption was significantly lower among students in the East Akron cluster than among students in the North Suburbs and South Suburbs clusters.



## Drank milk one or more times per day



Section 10 | Page 3

In Summit County, students were asked on how many of the seven days before completing the survey, they had eaten breakfast. The graph below depicts those students who reported that they had not eaten breakfast every day during the week prior to the survey. The prevalence for not having eaten breakfast every day during the week before completing the survey was significantly higher among Summit County students than among US students. The prevalence for not having eaten breakfast every day during the survey was significantly higher among for not having eaten breakfast every day during the survey was significantly higher among the students in the East Akron, West Akron and South Suburbs clusters than among students in the North Suburbs cluster.



## Did not eat breakfast every day

In Summit County, students were asked on how many days they had eaten at least one meal or snack from a fast food restaurant, such as McDonalds, Taco Bell, or KFC. The graph below depicts those students who reported having eaten at least one meal or snack from a fast food restaurant in the week before completing the survey. The prevalence for having eaten fast food one or more times in the week before the survey was significantly higher among students in the East Akron, West Akron and South Suburbs clusters than for students in the North Suburbs cluster.



## Ate fast food one or more times/week



Section 10 | Page 4

The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering dietary behaviors. When significant differences exist, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for having eaten fruits and vegetables five or more times per day during the past 7 days among female students was 17.0% which is significantly lower than among male students (20.3%). In this case female students are at greater risk for negative health outcomes than are male students. For differences by grade level, an arrow indicates the population at highest risk (with prevalence and confidence interval) that is significantly different from at least one other grade. For example, the prevalence for having drank beverages high in caffeine one or more times per day during the past 7 days among 12<sup>th</sup> grade students was 16.1% which is significantly higher than among 9<sup>th</sup>, 10<sup>th</sup> or 11<sup>th</sup> grade students (10.3%, 12.1%, 12.7%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Ate fruits and vegetables five or more times/day	<b>17.0</b> (15.9-18.1)	20.3 (19.2-21.5)				
Drank soda or pop one or more times/day	18.8 (17.0-19.2)	<b>125.5</b> (24.1-26.9)				
Drank beverages high in caffeine one or more times/day	11.6 (10.7-12.6)	<b>14.1</b> (13.0-15.2)	10.3 (9.1-11.6)	12.1 (10.9-13.4)	12.7 (11.4-14.2)	<b>1</b> 6.1 (14.6-17.6)
Drank milk one or more times/day	<b>135.7</b> (34.2-37.2)	52.9 (51.4-54.4)	46.9 (44.6-49.2)			<b>11.4</b> (39.2-43.8)
Ate fast food one or more times/week						
Did not eat breakfast every day	<b>†71.2</b> (69.9-64.7)	63.1 (61.6-64.7)	64.7 (62.5-66.9)			<b>个 70.0</b> (67.5-72.5)



## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Ate fruits and vegetables five or more times/day	18.6%
(During the 7 days before the survey.)	(17.8-19.5)
Drank soda or pop one or more times/day	21.7%
(Not including diet soda or diet pop, during the 7 days before the survey.)	(20.8-22.6)
Drank beverages high in caffeine one or more times/day	12.9%
(During the 7 days before the survey.)	(12.2-13.6)
Drank milk one or more times/day	44.2%
(During the 7 days before the survey.)	(43.0-45.3)
Ate fast food one or more times/week	69.6%
(During the 7 days before the survey.)	(68.5-70.6)
Did not eat breakfast every day	67.2%
(During the 7 days before the survey.)	(66.2-68.3)

# Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% Cl)
Ate fruits and vegetables five or more times/day (During the 7 days before the survey.)	18.6% (17.8-19.5)	19.3% (17.5-21.2)	
Drank soda or pop one or more times/day (Not including diet soda or diet pop, during the 7 days before the survey.)	21.7% (20.8-22.6)	20.5% (17.5-24.0)	27.0% (23.8-30.5)
Drank beverages high in caffeine one or more times/day (During the 7 days before the survey.)	12.9% (12.2-13.6)	11.2% (9.0-13.8)	
<b>Drank milk one or more times/day</b> (During the 7 days before the survey.)	44.2% (43.0-45.3)	43.0% (39.4-46.6)	
Ate fast food one or more times/week (During the 7 days before the survey.)	69.6% (68.5-70.6)		
<b>Did not eat breakfast every day</b> (During the 7 days before the survey.)	67.2% (66.2-68.3)	63.7% (60.1-67.1)	61.9% (60.3-63.5)


Risk Behavior	East Akron % (95% CI)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% CI)
Ate fruits and vegetables five or	10.00/	22.20/	10.00/	10 70/
(During the 7 days before the survey.)	(16.8-21.0)	(20.1-24.5)	(17.7-20.4)	(15.3-18.3)
Drank soda or pop one or more times/day (Not including diet soda or diet pop, during the 7 days before the survey.)	26.4% (24.2-28.8)	24.0% (21.3-26.8)	16.9% (15.9-18.1)	26.5% (24.7-28.4)
Drank beverages high in caffeine one or more times/day (During the 7 days before the survey.)	13.7% (12.2-15.4)	13.5% (11.8-15.3)	12.3% (11.3-13.5)	13.2% (11.8-14.6)
Drank milk one or more times/day (During the 7 days before the survey.)	39.7% (37.2-42.3)	41.4% (37.9-45.1)	45.0% (43.2-46.7)	46.0% (44.2-47.8)
Ate fast food one or more times/week (During the 7 days before the survey.)	71.9% (69.4-74.2)	71.2% (68.4-73.9)	65.1% (63.6-66.6)	75.4% (73.3-77.3)
<b>Did not eat breakfast every day</b> (During the 7 days before the survey.)	73.4% (71.6-75.1)	70.5% (67.5-73.3)	62.1% (60.5-63.8)	71.6% (69.9-73.2)

#### **Regional Prevalence**

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ate fruits and vegetables five or						
moi	re times	per day				
Category	%	CI				
Gender						
Female	17.0	15.9 -	18.1			
Male	20.3	19.2 -	21.5			
Race/Ethni	city					
White	16.9	15.9 -	18.0			
Black	21.3	19.2 -	23.5			
Asian	21.0	17.2 -	25.5			
Hispanic	25.3	21.7 -	29.3			
Other	21.6	19.0 -	24.5			
Grade						
9th	17.5	16.0 -	19.1			
10th	18.7	17.2 -	20.2			
11th	19.4	17.7 -	21.1			
12th	18.5	16.7 -	20.5			
Total	18.6	17.8 -	19.5			

#### Demographics

Drank soda or pop one or more								
	times/	day						
Category % CI								
Gender								
Female	18.0	17.0 -	19.2					
Male	25.5	24.1 -	26.9					
Race/Ethni	city							
White	21.2	20.2 -	22.3					
Black	22.6	20.6 -	24.7					
Asian	15.4	12.3 -	19.1					
Hispanic	28.6	24.7 -	32.9					
Other	23.0	20.1 -	26.2					
Grade								
9th	19.8	18.3 -	21.4					
10th	21.3	19.7 -	23.1					
11th	22.5	20.7 -	24.5					
12th	22.7	20.3 -	25.3					
Total	21.7	20.8 -	22.6					

In Summit County, 18.6% of students at fruit and vegetables five or more times per day during the 7 days prior to the survey. The prevalence of having eaten fruit and vegetables  $\geq$ 5 times per day was higher among male (20.3%) than female (17.0%) students. The prevalence of having eaten fruit and vegetables  $\geq$ 5 times per day was lower among White (16.9%) students than Black, Hispanic, and Other/Multiple (21.3%, 25.3%, 21.6%) students, respectively.

In Summit County, 21.7% of students had drunk a can, bottle, or glass of soda or pop (not including diet soda or pop) one or more times/day during the 7 days prior to the survey. The prevalence of having drunk soda or pop daily was higher among male (25.5%) than female (18.0%) students. The prevalence of having drunk soda or pop daily was higher among White, Black, Hispanic and Other/Multiple (21.2%, 22.6%, 28.6%, 23.0%) students, respectively, than among Asian (15.4%) students. The prevalence of having drunk soda or pop daily was higher among Hispanic (28.6%) students than White (21.1%).



#### 2013 SUMMIT COUNTY HS YRBS: Dietary Behaviors

Drank beverages high in caffeine							
one o	r more	times/da	iy				
Category	%	CI					
Gender							
Female	11.6	10.7 -	12.6				
Male	14.1	13.0 -	15.2				
Race/Ethni	city						
White	12.8	12.0 -	13.7				
Black	10.9	9.4 -	12.5				
Asian	9.3	6.8 -	12.6				
Hispanic	20.0	16.6 -	23.8				
Other	13.4	11.2 -	16.1				
Grade	Grade						
9th	10.3	9.1 -	11.6				
10th	12.1	10.9 -	13.4				
11th	12.7	11.4 -	14.2				
12th	16.1	14.6 -	17.6				
Total	12.9	12.2 -	13.6				

In Summit County, 12.9% of students had had a drink that was high in caffeine (not including soda, pop, or tea) one or more times/day during the 7 days prior to the survey. The prevalence of having had a drink that was high in caffeine daily was higher among male (14.1%) than female (11.6%) students. The prevalence of having had a drink that was high in caffeine daily was higher among Hispanic (20.0%) students than White, Black, Asian, and Other/Multiple (12.8%, 10.9%, 9.3%, 13.4%) students, respectively. The prevalence of having had a drink that was high in caffeine was higher among 12<sup>th</sup> grade (16.1%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (10.3%, 12.1%, 12.7%) students, respectively.

Drank milk one or more								
	times/	day						
Category % CI								
Gender								
Female	35.7	34.2 -	37.2					
Male	52.9	51.4 -	54.4					
Race/Ethni	city							
White	47.4	46.1 -	48.8					
Black	30.7	28.4 -	33.1					
Asian	40.1	35.3 -	45.1					
Hispanic	46.8	42.2 -	51.4					
Other	41.7	38.3 -	45.1					
Grade								
9th	46.9	44.6 -	49.2					
10th	44.2	42.0 -	46.4					
11th	43.3	41.3 -	45.3					
12th	41.4	39.2 -	43.8					
Total	44.2	43.0 -	45.3					

In Summit County, 44.2% of students had drunk milk one or more times/day during the 7 days prior to the survey. The prevalence of having drunk milk daily was higher among male (52.9%) than female (35.7%) students. The prevalence of having drunk milk daily was higher among White, Asian, Hispanic, and Other/Multiple (47.4%, 40.1%, 46.8%, 41.7%) students, respectively, than among Black (30.7%) students. The prevalence of having drunk milk daily was higher among White (47.4%) students than Asian and Other/Multiple (40.1%, 41.7%) students, respectively. The prevalence of having drunk milk was higher among 9<sup>th</sup> grade (46.9%) students than 12<sup>th</sup> grade (41.4%) students, respectively.



Did not eat breakfast every day					
Category	%	CI			
Gender					
Female	71.2	69.9 -	72.6		
Male	63.1	61.6 -	64.7		
Race/Ethni	city				
White	64.9	63.5 -	66.1		
Black	74.3	72.0 -	76.5		
Asian	62.9	52.8 -	67.7		
Hispanic	73.8	69.8 -	77.4		
Other	71.8	68.4 -	74.9		
Grade					
9th	64.7	62.5 -	66.9		
10th	66.9	65.0 -	68.7		
11th	67.7	65.1 -	70.1		
12th	70.0	67.5 -	72.5		
Total	67.2	66.2 -	68.3		

In Summit County, 67.2% of students did not eat breakfast every day in the 7 days prior to the survey. The prevalence of not eating breakfast everyday was higher among female (71.2%) than male (63.1%) students. The prevalence of not eating breakfast everyday was higher among Black, Hispanic and Other/Multiple (74.3%, 73.8%, 71.8%) students, than White and Asian (64.9%, 62.9%) students, respectively. The prevalence of not eating breakfast every day was higher among 12<sup>th</sup> grade (70.0%) students than 9<sup>th</sup> grade (64.7%) students, respectively.

Ate fast food one or more							
	times/v	veek					
Category % Cl							
Gender							
Female	68.9	67.5 -	70.3				
Male	70.2	68.7 -	71.6				
Race/Ethni	city						
White	69.3	68.1 -	70.5				
Black	73.3	70.8 -	75.6				
Asian	54.4	49.1 -	59.6				
Hispanic	70.6	66.0 -	74.8				
Other	72.6	69.4 -	75.6				
Grade							
9th	69.4	67.2 -	71.5				
10th	67.2	65.2 -	69.1				
11th	71.1	69.0 -	73.1				
12th	70.8	68.5 -	72.9				
Total	69.6	68.5 -	70.6				

In Summit County, 69.6% of students had eaten food from a fast food restaurant (e.g., McDonalds, Taco Bell, or KFC) one or more days during the 7 days prior to the survey. The prevalence of having eaten fast food was higher among White, Black, Hispanic and Other/Multiple (69.3%, 73.3%, 70.6%, 72.6%) students, respectively, than among Asian (54.4%) students. The prevalence of having eaten fast food was higher among Black (73.3%) students than White (69.3%) students.



- <sup>i</sup> Key, T., Schatzkin, A., Willet, W., Allen, N., Spencer, E., Travis, R. 2004. Diet, nutrition, and the prevention of cancer. *Public Health Nutrition*. 7(1A):187-200.
- <sup>ii</sup> Kushi, L., Byers, T., Doyle, C., Bandera, E., McCullough, M., McTiernan, A., Gansler, T., Andrews, K., Thun, M. 2006. American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention: reducing the risk of cancer with healthy food choices and physical activity. *CA: A Cancer Journal for Clinicians.* 56:254-281.
- <sup>III</sup> Vainio, H., Weiderpass, E. 2006. Fruit and vegetables in cancer prevention. *Nutrition and Cancer*. 54(1):111-42.
- <sup>iv</sup> Bazzano, L., He, J., Ogden, L., Loria, C., Vupputuri, S., Myers, L., Whelton, P. 2002. Fruit and vegetable intake and risk of cardiovascular disease in US adults: the first National Health and Nutrition Examination Survey Epidemiologic Follow-up Study. *American Journal of Clinical Nutrition*. 76(1):93-99.
- <sup>v</sup> He, F., Nowson, C., MacGregor, G. 2006. Fruit and vegetable consumption and stroke: meta-analysis of cohort studies. *Lancet.* 367(9507):320-326.
- <sup>vi</sup> U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2005. *Dietary Guidelines for Americans, 2005*. Washington, DC: U.S. Government Printing Office.
- <sup>vii</sup> Bailey, R., Dodd, K;, Goldman, J., Gahche, J., Dwyer, J., Moshfegh, A., Sempos, C., Picciano. 2010. Estimation of total calcium and vitamin D intakes in the United States. *Journal of Nutrition*. 140(4): 817-822.
- viii NIH Consensus Development on Optimal Calcium Intake. 1994. Optimal calcium intake. *Journal of the American Medical Association*. 272:1942-1948.
- <sup>ix</sup> Institute of Medicine, Food and Nutrition Board. 1997. *Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride.* Washington, DC: National Academy Press.
- \* Pereira, M., Kartashov, A., Ebbeling, C., Van Horn, L., Slattery, M., Jacobs, D., Ludwig, D. 2005. Fast-food habits, weight gain, and insulin resistance (the CARDIA study): 15-year prospective analysis. *The Lancet*. 365(9453):36–42.
- <sup>xi</sup> Wyatt HR, Grunwald OK, Mosca CL, Klem ML, Wing RR, Hill JO (2002). Long-term weight loss and breakfast in subjects in the National Weight Control Registry. *Obesity Research*; 10:78-82.



## Section 11: Physical Activity

The 2013 Summit County high school YRBS asked students about their computer/video game usage and television watching habits, along with how many days during the 7 days before the survey they had engaged in 60 minutes or more of physical activity. Television (TV) viewing, computer usage, and video/DVD usage are all considered sedentary behaviors. Child and adolescent TV viewing, in particular, is associated with childhood and adult obesity. Computer usage and video game playing are associated with physical inactivity among adolescents and young adults.

When students are watching television excessively, they are less likely to be spending time doing homework or reading, participating in after school activities, exercising frequently or being engaged in other intellectually stimulating activities. <sup>i</sup> Television watching is assessed in the same manner as having used a computer and played video games; with having watched 3 or more hours per day of television on an average school day considered a risky, sedentary behavior.

Participation in regular physical activity among young people can help build and maintain healthy bones and muscles, maintain body weight and reduce body fat, reduce feelings of depression and anxiety, and promote psychological well-being. <sup>II, III</sup> Over time, regular physical activity decreases the risk of high blood pressure, heart disease, diabetes, some types of cancer, and premature death.

Healthy People 2020 Objectives	Summit County 2013
<b>PA-8.2.3:</b> Increase the proportion of adolescents in grades 9 through 12 who view television, videos, or play video games for no more than 2 hours a day to at least 73.9%	74.2% of Summit County high school students reported watching television for 2 or fewer hours a day.
<b>PA-8.2.3:</b> Increase the proportion of adolescents in grades 9 through 12 who use a computer to play computer games outside of school (for non- school work) for no more than 2 hours a day to at least 82.6%	60.2% of Summit County high school students reported using a computer for non-school work, for 2 or fewer hours a day.



In Summit County, students were asked on how many of the 7 days before the survey they had been physically active for a total of at least 60 minutes per day. The graph below shows the prevalence for students who reported being physically active for at least 60 minutes per day on 5 or more of the 7 days before the survey. Overall, the prevalence for having been physically active for at least 60 minutes per day on 5 or more of the 7 days before completing the survey was significantly lower among Summit County students than US students. The prevalence for having been physically active for at least 60 minutes per day on 5 or more of the 7 days before completing the survey was significantly lower among Summit County students than US students. The prevalence for having been physically active for at least 60 minutes per day on 5 or more of the 7 days before completing the survey was significantly lower among students in the East Akron and West Akron clusters than for students in the North Suburbs and South Suburbs clusters.



Physically active at least 60 minutes/day on 5 or more days

In Summit County, students were asked on how many of the 7 days before the survey they had been physically active for a total of at least 60 minutes per day. The graph below shows the prevalence for students who reported being physically active for at least 60 minutes per day none of the 7 days before the survey. Overall, the prevalence for not participating in at least 60 minutes of physical activity on any day was significantly higher across Summit County than US and State. The prevalence for not participating in at least 60 minutes of physically higher among students in the East Akron and West Akron clusters than for students in the North Suburbs and South Suburbs clusters.



# Did not participate in at least 60 minutes of physical activity on any day



In Summit County, students were asked how many hours they watched TV on an average school day. The graph below shows the prevalence for students who reported watching television 3 or more hours on an average school day. Overall, the prevalence for watching television for three or more hours on an average school day was higher among US students than for Summit County students. The prevalence for watching television for three or more hours on an average school day was higher among US students on an average school day was higher among Students on an average school day was higher among students in the East Akron and West Akron clusters than among students in the North Suburbs and South Suburbs clusters.



Watched television 3+ hours/day

In Summit County, students were asked how many hours they played video or computer games or used a computer for something that was not school work, on an average school day. The graph below shows the students who reported using computers for 3 or more hours on an average school day for things that were not school work. Overall, the variation in prevalence across US, State and Summit County for using computers for 3 or more hours on an average school day for things that were not school work, was not significant. The prevalence for using computers for 3 or more hours on an average school day for things that were not school work was higher among students in the East Akron cluster than among students in the North Suburbs cluster.



### Used computers 3+ hours/day



In Summit County students reported the amount of television watching and non-school work computer use they engaged in on an average school day. The graph below shows prevalence estimates for the students who watched fewer than 3 hours of television on an average school day, used computers for things other than school work fewer than 3 hours on an average school day, and the combined total for television watching and non-school work computer use for fewer than 3 hours on an average school day. This graph demonstrates the degree to which students engage in these sedentary behaviors.



### **Sedentary behaviors**

In Summit County, students were asked how many sports teams they played on during the 12 months before the survey. The graph below shows the prevalence for students who reported playing on at least one sports team in the 12 months before the survey. Overall, the variation in prevalence across State and Summit County for having played on at least one sports team during the 12 months before the survey was not significant. The prevalence for having played on at least one sports team during the 12 months before the survey was significantly lower among students in the East Akron, West Akron and South Suburbs clusters than among students in the North Suburbs cluster. The prevalence for having played on at least one sports team during the 12 months before the survey was significantly lower among students in the South Suburbs cluster.



#### Played on at least one or more sports team



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering physical activity behaviors. When significant differences exist, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for not having participated in at least 60 minutes of physical activity on any day during the past 7 days among female students was 21.7% which is significantly higher than among male students (15.1%). For differences by grade level, an arrow indicates the population at highest risk (with prevalence and confidence interval) that is significantly different from at least one other grade. For example, the prevalence for not having participated in at least 60 minutes of physical activity on any day during the past 7 days among 12<sup>th</sup> grade students was 21.3% which is significantly higher than among 9<sup>th</sup> or 10<sup>th</sup> grade students (16.1%, 17.7%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Did not participate in at least 60 minutes of physical activity on any day	<b>121.7</b> (20.4-22.9)	15.1 (14.1-16.3)	16.1 (14.4-18.1)	17.7 (16.3-19.3)		<b>19.6-23.1</b>
Physically active at least 60 minutes/day on 5 or more days	<b>134.3</b> (32.8-35.8)	49.3 (47.9-50.8)	45.7 (43.4-48.0)	43.5 (41.5-45.6)		<b>个37.6</b> (35.3-39.9)
Watched television 3 or more hours/day						
Used computers 3 or more hours/day			<b>11.8</b> (39.6-44.1)			36.6 (34.2-39.1)
Played on at least one sports team	<b>†56.2</b> (54.5-57.8)	62.3 (60.6-63.9)	62.7 (60.0-65.3)	60.2 (57.9-62.5)		<b>个</b> 53.9 (51.0-56.7)

### **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Did not participate in at least 60 minutes of physical activity on any day	18.5%
(During the 7 days before the survey.)	(17.6-19.4)
Physically active at least 60 minutes/day on 5 or more days	41.7%
(During the 7 days before the survey.)	(40.5-42.8)
Watched television 3 or more hours/day	25.8%
(On an average school day.)	(24.9-26.8)
Used computers 3 or more hours/day (Played video or computer games or used a computer for something that was not school work on an average school day.)	39.8% (38.6-40.9)
Played on at least one sports team	59.1%
(During the past 12 months.)	(57.9-60.4)



#### Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% Cl)
Did not participate in at least 60 minutes of physical	18.5%	13.2%	15.2%
activity on any day	(17.6-19.4)	(10.8-16.0)	(13.9-16.6)
(During the 7 days before the survey.)	, ,	, ,	, ,
Physically active at least 60 minutes/day on 5 or more days (During the 7 days before the survey.)	47.3% (45.3-49.2)	48.0% (42.8-53.3)	
Watched television 3 or more hours/day	25.8%	28.1%	32.5%
(On an average school day.)	(24.9-26.8)	(25.2-31.5)	(30.4-34.7)
Used computers 3 or more hours/day			
(Played video or computer games or used a computer for	39.8%	37.3%	41.3%
something that was not school work on an average	(38.6-40.9)	(34.1-40.6)	(39.2-43.4)
school day.)			
Played on at least one sports team	59.1%	62.2%	
(During the past 12 months.)	(57.9-60.4)	(57.3-67.0)	

#### **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% Cl)
Did not participate in at least 60 minutes of physical activity on any day (During the 7 days before the survey.)	23.4% (21.6-25.4)	25.3% (22.1-28.7)	16.2% (15.1-17.4)	17.4% (15.7-19.3)
Physically active at least 60 minutes/day on 5 or more days (During the 7 days before the survey.)	35.0% (32.9-37.2)	34.9% (31.6-38.2)	44.9% (43.2-46.7)	42.0% (39.9-44.1)
Watched television 3 or more hours/day (On an average school day.)	32.6% (29.8-35.5)	38.5% (35.1-41.9)	22.2% (20.9-23.5)	24.1% (22.4-25.9)
Used computers 3 or more hours/day (Played video or computer games or used a computer for something that was not school work on an average school day.)	45.3% (42.8-47.8)	39.8% (36.2-43.6)	36.5% (34.9-38.2)	42.3% (39.9-44.8)
Played on at least one sports team (During the past 12 months.)	48.4% (45.5-51.2)	52.3% (49.0-55.5)	64.7% (62.8-66.4)	57.5% (55.0-60.0)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Did not participate in 60 or more			
minutes	or pnysi any d	cal activi ay	ty on
Category	%	CI	
Gender			
Female	21.7	20.4 -	22.9
Male	15.1	14.1 -	16.3
Race/Ethni	city		
White	15.5	14.5 -	16.5
Black	26.0	23.7 -	28.5
Asian	31.3	26.4 -	36.6
Hispanic	25.8	22.1 -	29.9
Other	18.2	15.7 -	21.0
Grade			
9th	16.1	14.4 -	18.1
10th	17.7	16.3 -	19.3
11th	18.7	16.7 -	20.8
12th	21.3	19.6 -	23.1
Total	18.5	17.6 -	19.4

#### Demographics

Physically activity at least 60 minutes/day on 5 or more days					
Category	%	CI			
Gender					
Female	34.3	32.8 -	35.8		
Male	49.3	47.9 -	50.8		
Race/Ethni	city				
White	43.6	42.3 -	45.0		
Black	38.0	35.4 -	40.7		
Asian	27.5	23.2 -	32.3		
Hispanic	38.1	33.8 -	42.7		
Other	42.3	39.0 -	45.8		
Grade					
9th	45.7	43.4 -	48.0		
10th	43.5	41.5 -	45.6		
11th	39.0	36.7 -	41.2		
12th	37.6	35.3 -	39.9		
Total	41.7	40.5 -	42.8		

In Summit County, 18.5% of students did not participate in 60 or more minutes of any kind of physical activity that increased their heart rate and made them breathe hard some of the time on at least 1 day during the 7 days prior to the survey (i.e., did not meet recommended levels of physical activity). The prevalence of not meeting recommended levels of physical activity was higher among female (21.7%) than male (15.1%) students. The prevalence of not meeting recommended levels of physical activity was higher among Black, Asian and Hispanic (26.0%, 31.3%, 25.8%) students, than among White and Other/Multiple (15.5%, 18.2%) students, respectively. The prevalence of not meeting recommended levels of physical activity was higher among 12<sup>th</sup> grade (21.3%) students than 9<sup>th</sup> and 10<sup>th</sup> grade (16.1%, 17.7%) students, respectively.

In Summit County, 41.7% of students were physically active doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on 5 of more days during the 7 days prior to the survey (i.e., met recommended levels of physical activity). The prevalence of having met recommended levels of physical activity was higher among male (49.3%) students than among female (34.3%) students. The prevalence of having met recommended levels of physical activity was higher among White, Black, Hispanic and Other/Multiple (43.6%, 38.0%, 38.1%, 42.3%) students, respectively, than among Asian (27.5%) students. The prevalence of having met recommended levels of physical activity was higher among White (43.6%) students than Black (38.0%) students. The prevalence of having met recommended levels of physical activity was higher among 9th and 10th grade (45.7%, 43.5%) students than 11<sup>th</sup> and 12<sup>th</sup> grade (39.0%, 37.6%) students, respectively.



#### 2013 SUMMIT COUNTY HS YRBS: Physical Activity

Watched	Watched television 3 or more				
h	ours pe	er day			
Category % Cl					
Gender					
Female	26.2	25.0 -	27.5		
Male	25.3	24.0 -	26.7		
Race/Ethni	city				
White	21.8	20.7 -	22.8		
Black	43.0	40.4 -	45.7		
Asian	16.1	13.0 -	19.9		
Hispanic	28.0	24.5 -	31.8		
Other	31.7	28.4 -	35.1		
Grade					
9th	26.2	24.5 -	28.0		
10th	26.7	24.7 -	28.8		
11th	23.7	21.7 -	25.9		
12th	25.7	23.5 -	27.9		
Total	25.8	24.9 -	26.8		

In Summit County, 25.8% of students watched television 3 or more hours/day on an average school day. The prevalence of watching  $\geq 3$ hours/day on an average school day was higher among Black, Hispanic, and Other/Multiple (43.0%, 28.0%, 31.7%) students than White and Asian (21.8%, 16.1%) students, respectively. The prevalence of watching  $\geq 3$  hours/day on an average school day was higher among Black (43.0%) students than Hispanic and Other/Multiple (28.0%, 31.7%) students, respectively.

Used computers 3 or more hours				
	per d	ау		
Category	%	CI		
Gender				
Female	39.5	38.0 -	41.1	
Male	39.9	38.4 -	41.5	
Race/Ethni	city			
White	38.7	37.3 -	40.0	
Black	43.5	40.7 -	46.3	
Asian	34.7	29.7 -	40.1	
Hispanic	41.1	36.7 -	45.5	
Other	44.4	40.9 -	47.9	
Grade				
9th	41.8	39.6 -	44.1	
10th	41.2	39.0 -	43.4	
11th	38.4	36.0 -	40.9	
12th	36.6	34.2 -	39.1	
Total	39.8	38.6 -	40.9	

In Summit County, 39.8% of students played video or computer games or used a computer for something other than school work (including such things as Xbox, PlayStation, tablets smartphones, YouTube, Facebook or other social networking tools, and the Internet) 3 or more hours/day on an average school day. The prevalence of using the computer for something that was not school work for  $\geq 3$  hours/day on an average school day was higher among Black and Other/Multiple (43.5%, 44.4%) students than White and Asian (38.7%, 34.7%) students, respectively. The prevalence of using the computer for something that was not school work for  $\geq$ 3 hours/day on an average school day was higher among 9<sup>th</sup> grade (41.8%) students than 12<sup>th</sup> grade (36.6%) students, respectively.



Played on at least one sports				
	tear	n		
Category	%	CI		
Gender				
Female	56.2	54.5 -	57.8	
Male	62.3	60.6 -	63.9	
Race/Ethni	city			
White	61.3	59.8 -	62.7	
Black	55.3	52.6 -	57.9	
Asian	48.0	42.3 -	53.7	
Hispanic	58.7	54.0 -	63.3	
Other	55.9	52.4 -	59.4	
Grade				
9th	62.7	60.0 -	65.3	
10th	60.2	57.9 -	62.5	
11th	59.0	56.6 -	61.5	
12th	53.9	51.0 -	56.7	
Total	59.1	57.9 -	60.4	

In Summit County, 59.1% of students played on one or more sports teams (run by their school or community group) in the 12 months prior to the survey (sports team participation). The prevalence of sports team participation was higher among male (62.3%) than female (56.2%) students. The prevalence of sports team participation was higher among White (61.3%) students than Black, Asian, and Other/Multiple (55.3%, 48.0%, 55.9%) students, respectively. The prevalence of sports team participation was higher among Hispanic (58.7%) students than Asian (48.0%) students. The prevalence of sports team participation was higher among 9<sup>th</sup> and 10<sup>th</sup> grade (62.7%, 60.2%) students than 12<sup>th</sup> grade (53.9%) students, respectively.



- <sup>i</sup> Campbell, J., Hombo, C., Mazzeo, J. 2000. *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.
- <sup>ii</sup> U.S. Department of Health and Human Services. 1996. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.
- <sup>iii</sup> Strong, W., Malina, R., Blimke, C., et al. 2005. Evidence based physical activity for school-age youth. *Journal of Pediatrics.* 146:732-737.



## Section 12: Other Health Topics

The 2013 Summit County high school YRBS asked students about other health-related issues, including seeing a doctor for a check-up, dentist for preventive care, or health care provider for social emotional help; perception of general health; and asthma. Nationwide, adolescents have the lowest utilization rate of health care services of any age group. Barriers to care include cost of care, low family income, stigma, distrust, confidentiality and parental consent, lack of medical insurance, embarrassment about and lack of transportation to reproductive health services, lack of knowledge about where or how to access care, and lack of adolescent-friendly services. <sup>i</sup>

Sleep is an important dimension to adolescent health. Most adolescents need slightly more than 9 hours of sleep each night, although this varies slightly among individuals. <sup>II</sup> Adolescents who consistently get less than 8 hours of sleep lose the last two hours of sleep, which are the most important for storing new information. <sup>III</sup> Sleep deprivation can affect school performance through lower grades, decreased alertness and concentration, and an increase in anger, impulsivity, and sadness. <sup>IV</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>AH-1:</b> Increase the proportion of adolescents who have had a wellness checkup in the past 12 months to at least 75.6%	65.7% of Summit County high school students reported seeing a doctor or nurse for a wellness checkup in the past 12 months.
<b>OH-7:</b> Increase the proportion of children, adolescents, and adults who used the oral health care system in the past 12 months to at least 49.0%	71.5% of Summit County high school students reported seeing a dentist for a checkup, exam, or teeth cleaning (non-emergency care) in the past 12 months.

In Summit County, students were asked how many hours of sleep they got on an average school night. The chart below shows the prevalence for students who reported obtaining eight or more hours of sleep on an average school night. Overall, the variation in prevalence for having obtained eight or more hours of sleep on school nights among students in the State and across Summit County was not significant. The variation in prevalence for having obtained eight or more hours of sleep on school nights across the four Summit County clusters was not significant.



Ithy Neighborhoods

# Obtained eight or more hours of sleep on an average school night

In Summit County, students were asked if they had ever been told by a doctor or nurse that they had asthma. Overall, the prevalence for ever having been diagnosed with asthma was significantly higher among Summit County students than for the US. The prevalence for ever having been diagnosed with asthma was significantly higher among students in the West Akron cluster than for students in the North Suburbs cluster.



### Ever diagnosed with asthma by doctor or nurse

The graph below shows the prevalence for having been to the emergency room or urgent care center because of their asthma during the 12 months before the survey, among students who had been told they had asthma. The prevalence for having been to the emergency room or urgent care center because of their asthma among students who had been told they had asthma was significantly higher among students in the East Akron and West Akron clusters than for students in the North Suburbs and South Suburbs clusters.



## Have been to the emergency or urgent care due to their asthma, among students with asthma



In Summit County, students were asked how many times they had missed school because they were sick, during the 30 days before the survey. The prevalence for having missed school at least one time during the 30 days before the survey because of sickness was significantly higher among students in the West Akron cluster than for students in the East Akron and North Suburbs clusters.



Missed school because they were sick

In Summit County, students were asked how many times they had missed class or school without permission during the 30 days before the survey. The prevalence for having missed class or school without permission at least one time during the 30 days before the survey was significantly higher among students in the East Akron and West Akron clusters than for students in the North Suburbs and South Suburbs clusters.



### Missed class or school without permission



In Summit County, students were asked when the last time was that they had seen a doctor or nurse for a check-up or physical exam when they were not sick or injured. The graph below shows the students who reported that they had seen a doctor or nurse within the past 12 months for a routine check-up. Overall, the variation in prevalence for having seen a doctor or nurse for a routine check-up within the past 12 months across State and Summit County was not significant. The prevalence for having seen a doctor or nurse for a routine check-up within the past 12 months was significantly lower among students in the East Akron, West Akron and South Suburbs clusters than for students in the past 12 months was significantly lower among students in the South Suburbs cluster. The prevalence for having seen a doctor or nurse for a routine check-up within the past 12 months was significantly lower among students in the East Akron clusters than for students the past 12 months was significantly lower among students in the South Suburbs cluster.



#### Saw a doctor or nurse for a routine check-up

In Summit County, students were asked when the last time was that they saw a dentist for a check-up, exam, teeth cleaning, or other dental work. The graph below shows those students who reported having seen a dentist for a routine check-up during the past 12 months. The variation in prevalence for having seen a dentist for a routine check-up during the past 12 months among students across State and Summit County was not significant. The prevalence for having seen a dentist for a routine check-up during the past 12 months and students for a routine check-up during the past 12 months was significantly lower among students in the East Akron, West Akron and South Suburbs clusters than for students in the North Suburbs cluster. The prevalence for having seen a dentist for a routine check-up during the past 12 months was significantly lower among students.



### Saw a dentist for a routine check-up



In Summit County, students were asked when the last time was that they saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue. The graph below shows those students who reported having seen a doctor, nurse, therapist, social worker or counselor for a mental health issue within the past 12 months. The variation in prevalence for having seen a doctor, nurse, therapist, social worker or counselor for a mental health issue during the past 12 months across State and Summit County was not significant. The prevalence for having seen a doctor, nurse, therapist, social worker or counselor for a mental health issue during the past 12 months across State and Summit County was not significant. The prevalence for having seen a doctor, nurse, therapist, social worker or counselor for a mental health issue during the past 12 months was significantly higher among students in the West Akron cluster than for students in the North Suburbs and South Suburbs clusters.



## Saw a doctor, nurse, therapist, social worker or counselor for a mental health issue



evention Research Center for Healthy Neighborhoods at Case Western Reserve University The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering other health topics. When significant differences exist, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence of having missed class or school without permission among male students was 16.1% which is significantly higher than among female students (13.0%). For differences by grade level, an arrow indicates the population at highest risk (with prevalence and confidence interval) that is significantly different from at least one other grade. For example, the prevalence of having missed class or school without permission among 12<sup>th</sup> grade students was 18.2% which is significantly higher than 9<sup>th</sup> or 10<sup>th</sup> grade students (11.0%, 13.6%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Obtained eight or more hours of sleep on an average school night	<b>124.5</b> (23.1-25.9)	29.2 (27.8-30.6)	33.9 (32.2-35.8)	27.6 (25.8-29.5)		<b>18.2-21.9</b>
Ever had asthma						
Among students with asthma, ever been to the emergency room or urgent care center because of asthma						
Missed school because they were sick	<b>↑51.0</b> (49.5-52.5)	39.8 (38.4-41.3)				
Missed class or school without permission	13.0 (11.9-14.1)	<b>16.1</b> (15.0-17.3)	11.0 (9.5-12.7)	13.6 (12.0-15.3)		<b>18.2</b> (16.3-20.2)
Saw a doctor or nurse for a routine check-up						
Saw a dentist for a routine check-up			74.7 (72.8-76.5)			<b>166.9-71.4</b>
Saw a doctor, nurse, therapist, social worker or counselor for a mental health issue	<b>125.7</b> (24.5-27.1)		27.7 (25.7-29.7)			<b>1</b> 9.2-22.8)



Section 12 | Page 6

at Case Western Reserve University

## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Obtained eight or more hours of sleep on an average school night	26.8% (25.8-27.8)
<b>Ever had asthma</b> (Been told they have asthma by a doctor or nurse)	23.1% (22.3-24.0)
Ever been to the emergency room or urgent care center because of asthma (One or more times in the past 12 months before the survey; all students.)	6.6% (6.0-7.2)
Ever been to the emergency room or urgent care center because of asthma (One or more times in the past 12 months before the survey; among students with asthma.)	22.3% (20.6-24.1)
Missed school because they were sick (During the past 30 days before the survey.)	45.6% (44.5-46.6)
Missed class or school without permission (During the past 30 days before the survey.)	14.6% (13.8-15.4)
Saw a doctor or nurse for routine check-up (During the 12 months before the survey.)	65.7% (64.6-66.7)
Saw a dentist for routine check-up (Not including emergencies, during the 12 months before the survey.)	71.5% (70.5-72.4)
Saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue (During the 12 months before the survey.)	24.3% (23.4-25.3)



## Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% Cl)
Obtained eight or more hours of sleep on an average school night	26.8% (25.8-27.8)	26.4% (23.2-29.8)	
<b>Ever had asthma</b> (Been told they have asthma by a doctor or nurse)	23.1% (22.3-24.0)		21.0% (20.0-22.0)
Ever been to the emergency room or urgent care center because of asthma (One or more times in the past 12 months before the survey; all students.)	6.6% (6.0-7.2)		
Ever been to the emergency room or urgent care center because of asthma (One or more times in the past 12 months before the survey; among students with asthma.)	22.3% (20.6-24.1)		
Missed school because they were sick (During the past 30 days before the survey.)	45.6% (44.5-46.6)		
Missed class or school without permission (During the past 30 days before the survey.)	14.6% (13.8-15.4)		
Saw a doctor or nurse for routine check-up (During the 12 months before the survey.)	65.7% (64.6-66.7)	65.7% (60.2-70.7)	
Saw a dentist for routine check-up (Not including emergencies, during the 12 months before the survey.)	71.5% (70.5-72.4)	74.9% (71.7-77.9)	
Saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue (During the 12 months before the survey.)	24.3% (23.4-25.3)	21.1% (18.1-24.4)	



#### **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% Cl)
Obtained eight or more hours of sleep on an average school night	28.1% (25.5-30.8)	25.3% (22.6-28.2)	26.9% (25.3-28.5)	26.5% (24.8-28.2)
<b>Ever had asthma</b> (Been told they have asthma by a doctor or nurse)	24.0% (22.0-26.1)	26.6% (23.8-29.5)	22.0% (20.7-23.3)	23.5% (21.9-25.2)
Ever been to the emergency room or urgent care center because of asthma (One or more times in the past 12 months before the survey; all students.)	9.8% (8.3-11.7)	11.3% (9.2-13.8)	5.2% (4.5-6.1)	5.7% (4.8-6.7)
Ever been to the emergency room or urgent care center because of asthma (One or more times in the past 12 months before the survey; among students with asthma.)	31.5% (27.0-36.3)	33.1% (27.8-38.9)	18.6% (16.3-21.2)	19.1% (16.2-22.3)
Missed school because they were sick (During the past 30 days before the survey.)	44.0% (41.5-46.5)	51.5% (48.9-54.2)	43.9% (42.2-45.6)	47.3% (45.3-49.3)
Missed class or school without permission (During the 30 days before the survey.)	20.3% (17.8-23.1)	23.6% (20.8-26.6)	11.6% (10.5-12.9)	13.8% (12.4-15.2)
Saw a doctor or nurse for routine check-up (During the 12 months before the survey.)	58.3% (55.3-61.3)	63.2% (59.6-66.6)	69.3% (67.8-70.8)	64.2% (62.3-66.1)
Saw a dentist for routine check-up (Not including emergencies, during the 12 months before the survey.)	62.6% (59.8-65.2)	63.4% (59.7-66.9)	76.2% (74.9-77.4)	70.8% (69.0-72.5)
Saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue (During the 12 months before the survey.)	25.8% (23.7-28.1)	29.6% (26.4-33.0)	23.3% (21.9-24.8)	23.4% (21.8-25.1)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Obtained eight or more hours of				
sleep on ar	n averag	e school	night	
Category	%	CI		
Gender				
Female	24.5	23.1 -	25.9	
Male	29.2	27.8 -	30.6	
Race/Ethni	city			
White	27.5	26.3 -	28.7	
Black	23.7	21.4 -	26.2	
Asian	25.5	21.3 -	30.2	
Hispanic	25.3	21.3 -	29.7	
Other	26.7	23.7 -	30.1	
Grade				
9th	33.9	32.2 -	35.8	
10th	27.6	25.8 -	29.5	
11th	23.4	21.6 -	25.3	
12th	20.0	18.2 -	21.9	
Total	26.8	25.8 -	27.8	

#### Demographics

Ever diagnosed with asthma by							
do	doctor or nurse						
Category	%	CI					
Gender							
Female	23.9	22.7 -	25.1				
Male	22.4	21.2 -	23.7				
Race/Ethni	city						
White	21.5	20.5 -	22.6				
Black	27.9	25.7 -	30.3				
Asian	14.5	11.1 -	18.8				
Hispanic	28.1	24.1 -	32.5				
Other	29.0	26.0 -	32.3				
Grade							
9th	22.5	20.8 -	24.2				
10th	23.6	22.0 -	25.3				
11th	23.7	22.0 -	25.5				
12th	22.8	20.8 -	25.0				
Total	23.1	22.3 -	24.0				

In Summit County, 26.8% of students got an average of eight or more hours of sleep on an average school night. The prevalence of eight or more hours of sleep was higher among male (29.2%) than female (24.5%) students. The prevalence of eight or more hours of sleep was higher among White (27.5%) students than Black (23.7%) students. The prevalence of eight or more hours of sleep was higher among 9<sup>th</sup> grade (33.9%) students than 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (27.6%, 23.4%, 20.0%) students, respectively. The prevalence of eight or more hours of sleep was higher among 10<sup>th</sup> grade (27.6%) students than 11<sup>th</sup> and 12<sup>th</sup> grade (23.4%, 20.0%) students respectively.

In Summit County, 23.1% of students had ever been told by a doctor or nurse that they had asthma. The prevalence of having been told they had asthma by a doctor or nurse was higher among Black, Hispanic and Other/Multiple (27.9%, 28.1%, 29.0%) students than White and Asian (21.5%, 14.5%) students, respectively. The prevalence of having been told by a doctor or nurse that they had asthma was higher among White (21.5%) students than among Asian (14.5%) students.



Have been to the emergency or urgent care due to their asthma						
Category	%	CI				
Gender						
Female	6.4	5.7 -	7.1			
Male	6.8	6.0 -	7.7			
Race/Ethni	city					
White	4.6	4.1 -	5.2			
Black	12.9	11.2 -	14.8			
Asian	4.7	3.0 -	7.2			
Hispanic	10.2	8.0 -	12.9			
Other	10.0	8.2 -	12.3			
Grade						
9th	6.2	5.2 -	7.4			
10th	7.0	6.1 -	8.2			
11th	6.3	5.2 -	7.5			
12th	5.8	4.7 -	7.2			
Total	6.6	6.0 -	7.2			

In Summit County, 6.6% of students had been to the emergency room or urgent care center one or more times, because of their asthma, in the 12 months prior to the survey. The prevalence of having gone to the emergency room or urgent care center was higher among Black, Hispanic and Other/Multiple (12.9%, 10.2%, 10.0%) students than White and Asian (4.6%, 4.7%) students, respectively.

Among students with asthma, have been to the emergency room or urgent care due to their asthma					
Category	%	CI			
Gender					
Female	21.0	19.0 -	23.2		
Male	23.6	21.0 -	26.3		
Race/Ethni	city				
White	17.1	15.3 -	19.1		
Black	35.6	31.7 -	39.7		
Asian	17.9	11.7 -	26.4		
Hispanic	26.2	20.9 -	32.4		
Other	28.0	23.1 -	33.4		
Grade					
9th	22.1	18.9 -	25.7		
10th	23.4	20.5 -	26.6		
11th	20.3	16.9 -	24.1		
12th	20.4	17.0 -	24.4		
Total	22.3	20.6 -	24.1		

In Summit County, 22.3% of students with asthma had been to the emergency room or urgent care center one or more times, because of their asthma, in the 12 months prior to the survey. The prevalence of having gone to the emergency room or urgent care center was higher Black, Hispanic among and Other/Multiple (35.6%, 26.2%, 28.0%) students, respectively, than White (17.1%) students. The prevalence of having gone to the emergency room or urgent care center was higher among Black and Hispanic (35.6%, 26.2%) students, respectively, than Asian (17.9%) students.



Missed school because they were					
SICK					
Category	%	CI			
Gender					
Female	51.0	49.5 -	52.5		
Male	39.8	38.4 -	41.3		
Race/Ethni	city				
White	45.6	44.3 -	46.9		
Black	44.1	41.7 -	46.6		
Asian	37.7	32.6 -	43.1		
Hispanic	50.5	45.8 -	55.1		
Other	47.5	44.0 -	51.0		
Grade					
9th	43.7	41.6 -	45.9		
10th	45.2	43.1 -	47.4		
11th	46.6	44.4 -	48.8		
12th	46.5	43.9 -	49.0		
Total	44.5 -	46.6			

In Summit County, 45.6% of students did not go to school on one or more days in the 30 days prior to the survey because they were sick. The prevalence of not going to school because they were sick was higher among male (51.0%) than female (39.8%) students. The prevalence of not going to school because they were sick was higher among Hispanic and Other/Multiple (50.5%, 47.5%) students, respectively, than among Asian (37.7%) students.

Missed class or school without						
permission						
Category	%	CI				
Gender						
Female	13.0	11.9 -	14.1			
Male	16.1	15.0 -	17.3			
Race/Ethni	city					
White	11.7	10.8 -	12.6			
Black	21.7	19.4 -	24.1			
Asian	16.6	13.3 -	20.5			
Hispanic	22.9	19.6 -	26.6			
Other	19.4	16.7 -	22.4			
Grade						
9th	11.0	9.5 -	12.7			
10th	13.6	12.0 -	15.3			
11th	14.9	13.1 -	17.0			
12th	18.2	16.3 -	20.2			
Total 14.6 13.8 - 15.4						

In Summit County, 14.6% of students missed class or school without permission one or more days in the 30 days prior to the survey. The prevalence of missing class or school without permission was higher among male (16.1%) than female (13.0%) students. The prevalence of missing class or school without permission was higher among Black, Asian, Hispanic, and Other/Multiple (21.7%, 16.6%, 22.9%, 19.4%) students, respectively, than White (11.7%) students. The prevalence of missing class or school without permission was higher among 11<sup>th</sup> and 12<sup>th</sup> grade (14.9%, 18.2%) students than 9<sup>th</sup> grade (11.0%) students, respectively. The prevalence of missing class or school without permission was higher among 12<sup>th</sup> grade (18.2%) students than 10<sup>th</sup> grade (13.6%) students, respectively.



#### 2013 SUMMIT COUNTY HS YRBS: Other Health Topics

Saw a doctor or nurse for a							
routine check-up							
Category % CI							
Gender							
Female	65.8	64.3 -	67.2				
Male	65.8	64.3 -	67.2				
Race/Ethni	city						
White	67.4	66.2 -	68.6				
Black	63.9	61.3 -	66.5				
Asian	52.9	47.5 -	58.3				
Hispanic	60.2	55.7 -	64.6				
Other	65.7	62.3 -	69.0				
Grade							
9th	68.3	66.2 -	70.4				
10th	65.1	63.1 -	67.1				
11th	66.0	63.9 -	68.1				
12th	63.6	61.0 -	66.1				
Total	65.7	64.6 -	66.7				

In Summit County, 65.7% of students had seen a doctor or nurse for a check-up or physical exam one or more times when they were not sick or injured in the 12 months prior to the survey. The prevalence of having seen a doctor or nurse for a check-up or physical exam when they were not sick or injured was higher among White (67.4%) students than Asian and Hispanic (52.9%, 60.2%) students, respectively. The prevalence of having seen a doctor or nurse for a check-up or physical exam when they were not sick or injured was higher among Other/Multiple (65.7%) students than among Asian (52.9%) students. The prevalence of having seen a doctor or nurse for a check-up or physical exam when they were not sick or injured was higher among 9<sup>th</sup> grade (68.3%) students than 12<sup>th</sup> grade (63.6%) students, respectively.

Saw a dentist for a routine check-							
	up						
Category % Cl							
Gender							
Female	72.7	71.4 -	73.9				
Male	70.4	69.0 -	71.8				
Race/Ethni	city						
White	75.6	74.6 -	76.7				
Black	64.0	61.4 -	66.5				
Asian	55.0	49.7 -	60.1				
Hispanic	61.6	57.4 -	65.7				
Other	65.4	61.9 -	68.8				
Grade							
9th	74.7	72.8 -	76.5				
10th	72.0	70.0 -	73.9				
11th	70.6	68.5 -	72.6				
12th	69.2	66.9 -	71.4				
Total 71.5 70.5 - 72							

In Summit County, 71.5% of students had seen a dentist for a check-up, exam, teeth cleaning, or other routine dental work (not including emergencies) one or more times, in the 12 months prior to the survey. The prevalence of having seen a dentist for routine dental work was higher among White (75.6%) students than Black, Asian, Hispanic, and Other/Multiple (64.0%, 55.0%, 61.6%, 65.4%) students, respectively. The prevalence of having seen a dentist for routine dental work was higher among Black and Other/Multiple (64.0%, 65.4%) students than among Asian (55.0%) students. The prevalence of having seen a dentist for routine dental work was higher among 9<sup>th</sup> grade (74.7%) students than 11<sup>th</sup> and 12<sup>th</sup> grade (70.6%, 69.2%) students, respectively.



Saw a doctor, nurse, therapist,						
mental health issue						
Category						
Gender						
Female	25.7	24.5 -	27.1			
Male	22.8	21.6 -	24.1			
Race/Ethni	icity					
White	22.5	21.4 -	23.6			
Black	30.7	28.2 -	33.2			
Asian	18.8	14.9 -	23.5			
Hispanic	27.7	23.7 -	32.2			
Other	28.6	25.5 -	31.8			
Grade						
9th	27.7	25.7 -	29.7			
10th	23.4	21.7 -	25.3			
11th	24.1	22.2 -	26.1			
12th	20.9	19.2 -	22.8			
Total 24.3 23.4 - 25.3						

In Summit County, 24.3% of students had seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue during the 12 months prior to the survey. The prevalence of having seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue was higher among female (25.7%) than male (22.8%) students. The prevalence of having seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue was higher among Black, Hispanic and Other/Multiple (30.7%, 27.7%, 28.6%) students than White and Asian (22.5%, 18.8%) students, respectively. The prevalence of having seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue was higher among 9<sup>th</sup> grade (27.7%) students than 10<sup>th</sup> and  $12^{th}$ grade (23.4%, 20.9%) students, respectively.



- <sup>ii</sup> Wolson, A., Carskadon, M. 1998. Sleep schedules and daytime functioning in adolescents. *Soc Res Child Dev*
- <sup>iii</sup> Smith, C., Lapp, L. 1991. Increases in the number of REMS and REM density in humans following an intensive learning period. *Sleep*. 14:325-330.
- <sup>iv</sup> Noland, H., Price, J., Dake, J., Telljohann, S. 2009. Adolescents' sleep behaviors and perceptions of sleep. *Journal of School Health*. 79(5):224-230.



<sup>&</sup>lt;sup>i</sup> Association of State and Territorial Health Officials. Adolescent and School Health Fact Sheet. Association of State and Territorial Health Officials Web site. Available at http://www.astho.org/index.php?template=access.html. Accessed July 24, 2008.

## Section 13: Positive Youth Development

The 2013 Summit County YRBS included questions on family interaction and social support. Over time it has been determined that promoting positive asset building and considering young people as resources could be critical strategies. Developmental assets are "building blocks" that may decrease risk behavior in adolescents. Developmental assets are commonly grouped into external and internal assets. External assets include: support, empowerment, boundaries and expectations, and constructive use of time. Internal assets include: commitment to learning, positive values, social competencies, and positive identity.

Healthy People 2020 Objectives	Summit County 2013
<b>AH-3.1:</b> Increase the proportion of adolescents who have an adult in their lives with whom they can talk about serious problems to at least 83.3%	80.7% of Summit County high school students reported having an adult (other than their parents) in their lives with whom they can talk about serious problems.
<b>AH-2:</b> Increase the proportion of adolescents who participate in extracurricular and/or out-of-school activities to at least 90.8%	57.2% of Summit County high school students reported participating in extracurricular activities at least one day during the past 7 days.

In Summit County, students were asked to describe their grades in school during the past 12 months. The graph below shows the students who described their grades as mostly A's and B's. Overall, the variation in prevalence for describing their grades in school as mostly A's and B's across State and Summit County was not significant. The prevalence for describing their grades as mostly A's and B's was significantly lower among students in the East Akron, West Akron and South Suburbs clusters than among students in the North Suburbs cluster. The prevalence for describing their grades as mostly A's and B's was significantly lower among students in the East Akron cluster than among students in the South Suburbs cluster.



## Described their grades as mostly A's and B's



In Summit County, students were asked how many meals (including breakfast, lunch or dinner) they had eaten with their family during the week before completing the survey. The prevalence of having eaten at least one meal with family during the week before completing the survey was significantly higher for students in the North Suburbs and South Suburbs clusters than for students in the East Akron and West Akron clusters.



## Had at least one meal with family

In Summit County, students were asked how many adults other than their parents, they would feel comfortable seeking help from if they had an important issue or question affecting their life. The graph below shows those students who reported that they had at least one supportive adult in their life. Overall, the variation in prevalence across State and Summit County was not significant for presence of at least one supportive adult in a student's life. The prevalence for having at least one supportive adult in one's life was significantly lower among students in the East Akron and West Akron clusters than among students in the North Suburbs and South Suburbs clusters.



### Supportive adult



Section 13 | Page 2

In Summit County, students were asked how many friends they would trust to offer good advice if they had a really important secret or problem affecting their life. The graph below shows those students who reported that they had at least one trusted friend in their life. The prevalence for having at least one trusted friend was significantly lower among students in the East Akron and West Akron clusters than among students in the North Suburbs and South Suburbs clusters.



## **Trusted friend**

In Summit County, students were asked how often one of their parents or guardians talked with them about what they are doing in school. The graph below shows those students who reported that their parents/guardians talk with them about school almost every day. The prevalence for parents/guardians talking with student about school almost every day was significantly lower among students in the East Akron, West Akron and South Suburbs clusters than for students in the North Suburbs cluster.



# Parents or guardians talk with student almost every day about school



In Summit County, students were asked on how many of the 7 days before the survey they had participated in organized after school, evening, or weekend activities, other than sports teams. The graph below shows the students that reported they had participated in extracurricular activities on at least one day during the week before the survey. Overall, the prevalence for participation in extracurricular activities was significantly lower across the State than for Summit County. The prevalence for participation in extracurricular activities was significantly lower across the State than for Summit County. The prevalence for participation in extracurricular activities was significantly lower among students in the East Akron and South Suburbs clusters than among students in the West Akron and North Suburbs clusters.



#### **Extracurricular activities**

The pie charts below show the number of supportive adults and trusted friends that Summit County high school students reported having in their lives. In Summit County, 19.4% of high school students reported having zero supportive adults, other than their parents, in their lives from whom they would feel comfortable seeking help. Further, 11.2% of high school students reported having zero trusted friends whom they could trust to give advice about problems affecting their life.





The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering positive youth development. When significant differences exist, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for describing one grades as mostly A's and B's among male students was 72.4% which was significantly lower than among female students (81.0%). For differences by grade level, an arrow indicates the population at highest risk (prevalence with confidence interval are included) that is significantly different from at least one other grade. For example, the prevalence for having eaten at least one meal with their family during the week before the survey among 12<sup>th</sup> grade students was 81.1% which was significantly lower than among 9<sup>th</sup> or 10<sup>th</sup> grade students (85.9%, 85.4%). The demographic tables at the end of this section provide closer examination of gender, prevalence by race/ethnicity, and grade level differences.

	Female	Male	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12th
Described their grades in school as A's and B's	81.0 (79.7-82.2)	<b>个72.4</b> (70.8-73.9)				
Had at least one meal with family			85.9 (84.5-87.2)	85.4 (84.0-86.6)		<b>181.1</b> (79.0-83.0)
One or more supportive adults			<b>个79.1</b> (77.5-80.7)			83.6 (81.5-85.5)
One or more trusted friends	90.4 (89.5-91.2)	<b>* 87.3</b> (86.3-88.3)				
Parents talk with student almost every day about school			59.1 (57.0-61.1)	58.7 (56.7-60.7)		<b>个53.1</b> (50.9-55.4)
Spent at least one day in extracurricular activities	60.6 (59.1-62.2)	<b>†53.7</b> (52.1-55.3)				



## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Described their grades in school as A's and B's	76.7%
Had at least one meal with family (During the 7 days before the survey.)	83.7% (82.9-84.5)
One or more supportive adults (Other than a parent, who they would feel comfortable seeking help from if there was an important issue or question affecting their life.)	80.7% (79.7-81.5)
One or more trusted friends (Friends who would offer good advice if there was a really important secret or problem affecting their life.)	88.9% (88.2-89.5)
Parents talk with student almost every day about school	56.6% (55.6-57.6)
Spent at least one day in clubs or organizations outside of school (During the 7 days before the survey.)	57.2% (56.0-58.4)


## Summit County/State of Ohio/Nation

Risk Behavior	2013 Summit County (95% Cl)	Ohio, 2013 (95% Cl)	US, 2013 (95% Cl)
Described their grades in school as A's and B's	76.7%	72.0%	
(During the 12 months before the survey.)	(75.6-77.8)	(67.3-76.3)	
Had at least one meal with family	83.7%		
(During the 7 days before the survey.)	(82.9-84.5)		
One or more supportive adults			
(Other than a parent, who they would feel comfortable	80.7%	83.1%	
seeking help from if there was an important issue or	(79.7-81.5)	(79.6-86.1)	
question affecting their life.)			
<b>One or more trusted friends</b> (Friends who would offer good advice if there was a really important secret or problem affecting their life.)	88.9% (88.2-89.5)		
Parents talk with student almost every day about school	56.6% (55.6-57.6)		
Spent at least one day in clubs or organizations outside of school (During the 7 days before the survey.)	57.2% (56.0-58.4)	51.9% (47.6-56.2)	



Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% CI)	South Suburbs % (95% CI)
Described their grades in school as A's and B's	66.8%	71.1%	81.5%	76.1%
(During the 12 months before the survey.)	(63.5-70.0)	(67.5-74.4)	(79.9-83.1)	(73.9-78.2)
Had at least one meal with family	81.2%	77.9%	85.5%	84.0%
(During the 7 days before the survey.)	(79.5-82.8)	(75.4-80.3)	(84.3-86.6)	(82.4-85.5)
One or more supportive adults				
(Other than a parent, who they would feel	75.2%	76.9%	81.7%	82.9%
comfortable seeking help from if there was an	(73.1-77.1)	(74.2-79.3)	(80.3-83.0)	(81.2-84.4)
important issue or question affecting their life.)				
One or more trusted friends				
(Friends who would offer good advice if there	84.3%	84.1%	90.8%	89.4%
was a really important secret or problem	(82.5-85.9)	(81.4-86.5)	(89.8-91.7)	(88.0-90.7)
affecting their life.)				
Parents talk with student about school almost	53.0%	52.9%	59.8%	54.3%
every day	(50.8-55.2)	(49.9-55.9)	(58.1-61.4)	(52.4-56.2)
Spent at least one day in clubs or organizations outside of school (During the 7 days before the survey.)	48.1% (45.1-51.1)	59.1% (55.3-62.8)	62.4% (60.7-64.0)	52.5% (50.1-54.9)

## **Regional Prevalence**

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Described grades as mostly A's								
Category	%	CI						
Gender								
Female	81.0	79.7-	82.2					
Male	72.4	70.8-	73.9					
Race/Ethni	city							
White	80.2	78.9-	81.4					
Black	65.1	62.4-	67.7					
Asian	85.9	82.1-	88.9					
Hispanic	67.7	63.2-	71.9					
Other	72.9	69.8-	75.8					
Grade								
9th	75.4	72.9-	77.7					
10th	75.8	73.6-	77.9					
11th	77.8	75.2-	80.1					
12th	79.4	77.1-	81.6					
Total	76.7	75.6-	77.8					

### Demographics

Had at least one meal with family						
Category	%	CI				
Gender						
Female	83.2	82.1 -	84.3			
Male	84.4	83.3 -	85.5			
Race/Ethni	city					
White	86.3	85.3 -	87.2			
Black	76.0	73.8 -	78.1			
Asian	84.2	80.5 -	87.4			
Hispanic	79.8	75.7 -	83.3			
Other	78.9	75.8 -	81.8			
Grade						
9th	85.9	84.5 -	87.2			
10th	85.4	84.0 -	86.6			
11th	82.1	80.4 -	83.7			
12th	81.1	79.0 -	83.0			
Total	83.7	82.9 -	84.5			

In Summit County, 76.7% of students described their grades in school as mostly A's and B's during the 12 months before the survey. The prevalence of describing their grades as mostly A's and B's was lower among male (72.4%) than female (81.0%) students. The prevalence of describing their grades as mostly A's and B's was lower among White, Black, Hispanic and Other/Multiple students (80.2%, 65.1%, 67.7%, 72.9%), respectively, than Asian students (85.9%). The prevalence of describing their grades as mostly A's and B's was lower among Black, Hispanic and Other/Multiple students (65.1%, 67.7%, 72.9%), respectively, than White students (80.2%). The prevalence of describing their grades as mostly A's and B's was lower among Black students (65.1%) than Other/Multiple students (72.9%).

In Summit County, 83.7% of students had eaten one or more meals with their family during the 7 days prior to the survey. The prevalence of having eaten 1+ meals with their family was higher among White (86.3%) students than Black, Hispanic and Other/Multiple (76.0%, 79.8%, 78.9%) students, respectively. The prevalence of having eaten with their family was higher among Asian (84.2%) students than Black (76.0%) students. The prevalence of having eaten with their family was higher among 9<sup>th</sup> and 10<sup>th</sup> grade (85.9%, 85.4%) students than 11<sup>th</sup> and 12<sup>th</sup> grade (82.1%, 81.1%) students, respectively.



One or more supportive adults					
Category	%	CI			
Gender					
Female	81.6	80.4 -	82.7		
Male	79.7	78.5 -	80.9		
Race/Ethni	icity				
White	83.2	82.2 -	84.3		
Black	74.9	72.8 -	77.0		
Asian	71.6	66.3 -	76.4		
Hispanic	75.5	71.2 -	79.4		
Other	78.0	75.1 -	80.7		
Grade					
9th	79.1	77.5 -	80.7		
10th	79.5	77.8 -	81.2		
11th	81.2	79.4 -	82.8		
12th	83.6	81.5 -	85.5		
Total	80.7	79.7 -	81.5		

In Summit County, 80.7% of students had 1 or more adults, besides their parents, from whom they would feel comfortable seeking help if there was an important issue or question affecting their life (supportive adult). The prevalence of a supportive adult was higher among White (83.2%) students than Black, Asian, Hispanic, and Other/Multiple (74.9%, 71.6%, 75.5%, 78.0%) students, respectively. The prevalence of a supportive adult was higher among 12<sup>th</sup> grade (83.6%) students than 9<sup>th</sup> and 10<sup>th</sup> grade (79.1%, 79.5%) students, respectively.

One or more trusted friends							
Category	%	CI					
Gender							
Female	90.4	89.5 -	91.2				
Male	87.3	86.3 -	88.3				
Race/Ethni	city						
White	91.4	90.6 -	92.1				
Black	82.6	80.5 -	84.6				
Asian	83.0	78.7 -	86.6				
Hispanic	83.8	80.1 -	87.0				
Other	86.9	84.3 -	89.2				
Grade							
9th	88.7	87.2 -	90.1				
10th	88.2	86.9 -	89.4				
11th	89.0	87.6 -	90.3				
12th	90.1	88.7 -	91.4				
Total	88.9	88.2 -	89.5				

In Summit County, 88.9% of students had 1 or more friends whom they would trust to offer them good advice if there was an important secret or question affecting their life (trusted friend). The prevalence of a trusted friend was higher among female (90.4%) than male (87.3%) students. The prevalence of a trusted friend was higher among White (91.4%) students than Black, Asian, Hispanic, and Other/Multiple (82.6%, 83.0%, 83.8%, 86.9%) students, respectively.



Parents talk with student almost						
every day about school						
Category	%	CI				
Gender						
Female	55.6	54.2 -	57.1			
Male	57.8	56.4 -	59.2			
Race/Ethni	icity					
White	58.3	57.0 -	59.6			
Black	53.5	51.1 -	55.9			
Asian	51.2	45.8 -	56.5			
Hispanic	51.7	47.3 -	56.1			
Other	53.7	50.2 -	57.2			
Grade	Grade					
9th	59.1	57.0 -	61.1			
10th	58.7	56.7 -	60.7			
11th	55.4	53.2 -	57.6			
12th	53.1	50.9 -	55.4			
Total	56.6	55.6 -	57.6			

In Summit County, 56.6% of students' parents talk to them almost every day about what they are doing in school. The prevalence of parents talking with students almost every day about school was higher among White (58.3%) students than Black, Asian, and Hispanic (53.5%, 51.2%, 51.7%) students, respectively. The prevalence of talking to their parents almost every day about school was higher among 9<sup>th</sup> and 10<sup>th</sup> grade (59.1%, 58.7%) students than 12<sup>th</sup> grade (53.1%) students, respectively.

Spent at least one day in clubs or				
Catogory	w		nooi	
Category	/0	<u> </u>		
Eomalo	60.6	50 1	62.2	
Mala	E2 7	59.1 -		
	55.7 ••	52.1 -	55.5	
Race/Ethni	city			
White	58.1	56.7 -	59.4	
Black	53.9	51.3 -	56.4	
Asian	58.7	52.8 -	64.3	
Hispanic	58.2	53.7 -	62.7	
Other	56.0	52.1 -	59.8	
Grade				
9th	57.5	55.3 -	59.7	
10th	58.0	55.7 -	60.4	
11th	57.4	54.4 -	60.2	
12th	56.2	53.4 -	59.0	
Total	57.2	56.0 -	58.4	

In Summit County, 57.2% of students took part in after school, evening or weekend activities, other than sports teams, (e.g., school clubs, community center groups, music/art/dance lessons, drama, church or other supervised activities) on one or more days during the 7 days prior to the survey. The prevalence of participating in extracurricular activities was higher among female (60.6%) than male (53.7%) students. The prevalence of participating in extracurricular activities was higher among White (58.1%) students than Black (53.9%) students, respectively.



<sup>i</sup> Leffert, N. Benson, P.L., Scales, P.C., Sharma, A., Drake, D., Blyth, D.A. Developmental assets: measurement and prediction at-risk behaviors among adolescents. *Appl Dev Sci.* 1998;2(4):209-230.



# 2013 Summit County Youth Risk Behavior Survey

**Middle School Report** 

September 2014



Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University



## Acknowledgements

The 2013 Summit County Middle School Youth Risk Behavior Survey (YRBS) Report embodies the expertise, cooperation, and dedication of multiple partners.

Most notable are Summit County Public Health (SCPH); the Alcohol, Drug Addiction & Mental Health Services Board (ADM Board); Summit County Family and Children First Council (FCFC) and the Summit County Educational Services Center (ESC). We are especially grateful to the students, teachers, principals, and superintendents who agreed to participate in the survey.

To this end, the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University is grateful for the collective financial support from the consortium.

Report prepared by: Prevention Research Center for Healthy Neighborhoods (PRCHN) Department of Epidemiology and Biostatistics Case Western Reserve University 11000 Cedar Ave., 4<sup>th</sup> floor Cleveland, OH 44106-7069

Shelby Barnes, Surveillance and Evaluation Research Assistant Whitney Crane, YRBS Field Coordinator Marissa Wayner, YRBS Field Coordinator Erika Hood, YRBS Scheduling and Volunteer Coordinator Jean Frank, Manager of Community Initiatives Erika Trapl, Principal Investigator

Submitted to Summit County Adolescent Health Consortium on September 19, 2014

## Introduction

Through collaborations between the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University and a youth-focused consortium represented by Summit County Public Health and the County of Summit Alcohol, Drug Addiction & Mental Health Services Board (ADM Board), the Youth Risk Behavior Survey (YRBS) was administered for the first time in Middle Schools and High Schools throughout Summit County. The YRBS is a cross-sectional tool developed by the Centers for Disease Control and Prevention (CDC) to track adolescent risk behavior over time. The national YRBS has tracked many of the major causes of morbidity and mortality for adolescents since 1991. Nationwide, the YRBS is conducted every two years among students in grades 9 through 12.

In the fall of 2013, the YRBS was administered to students in grades 7 and 8 throughout Summit County. The survey was tailored to fit local needs and addressed a wide range of topics. The 2013 Summit County Middle School YRBS asked questions covering the following health-related behavior categories:

- Section 2: Behaviors that contribute to unintentional injuries
- Section 3: Behaviors that contribute to violence including self-injurious behavior
- Section 4: Tobacco use
- Section 5: Alcohol use
- Section 6: Marijuana and other drug use
- Section 7: Gambling
- Section 8: Behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV
- Section 9: Obesity and weight control
- Section 10: Nutrition
- Section 11: Physical Activity
- Section 12: Other health-related topics
- Section 13: Positive youth development

This report summarizes results from the 2013 Summit County Middle School YRBS. A unique chapter has been written for each category of behaviors. Each chapter consists of a brief literature review that explains the rationale for including items in the survey. A table tracking Summit County progress toward achieving 2020 Healthy People indicators follows. Graphs with explanations are also included depicting risk behavior prevalence reported by Summit County overall, demographic characteristics and for the four Summit County clusters. Graphs and explanations are also included for survey items that were not amenable to dichotomous analysis. Significant differences in prevalence observed by gender and by grade are noted in a chart. Immediately following the narrative sections are a series of tables which summarize the data presented in the report:

- Summit County progress toward achieving 2020 Healthy People indicators
- Overall prevalence tables
- Regional prevalence tables
- Demographic tables



## Methodology

#### Sampling and Weighting

The primary goal of the Summit County Youth Risk Behavior Survey project for the Summit County youth-focused consortium was to obtain baseline adolescent risk behavior data representing each of the four pre-identified Summit County clusters. Because of this, the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University dispensed with the conventional two-stage cluster sample design patterned from the Centers for Disease Control and Prevention (CDC) and its national Youth Risk Behavior Survey (YRBS).

For the 2013 Summit County Middle School YRBS sample, all public schools in Summit County that contained 7<sup>th</sup> and 8<sup>th</sup> grades were included in the sampling frame. All classrooms in a given subject or during a given period of the day were selected. All students in the selected classrooms were eligible to participate allowing for the survey to be administered to the entire student body.

Student participation was both anonymous and voluntary. Permission slips were mailed to the homes of selected students; parents or guardians that approved for their student to participate took no action while parents or guardians with questions or who did not wish for their student to participate called their school's main office. Student nonparticipation was due to absence on the day of survey administration, parental refusal, or student refusal. Additionally, a small number of questionnaires failed quality control and were removed from the final data set.

Of the 26 Summit County middle schools selected for participation, 22 agreed to take part. A total of 8,025 students were eligible to complete the survey, and 6,790 usable questionnaires remained after the data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. The school response rate was 84.6% and the student response rate was 84.6%. The overall response rate was **71.2%** (84.6% x 84.6%).

The overall response rate allowed for data to be weighted to the population of 7<sup>th</sup> and 8<sup>th</sup> grade students in Summit County. Weighting makes the data representative of the population from which it was drawn. A weight was applied to each record to adjust for student non response and the distribution of students by grade, gender, race/ethnicity, and geographic region within Summit County.

Statistical analyses were conducted on weighted data using SPSS complex samples procedures to account for the complex sampling design. Prevalence estimates and 95% confidence intervals were computed for all variables that could be analyzed in a dichotomous fashion. Differences between prevalence estimates were considered statistically significant if the 95% confidence intervals did not overlap. Prevalence estimates with confidence intervals appear in the data tables which summarize the data presented following each narrative section.

The questionnaire included five risk behavior related items for which students could choose more than one answer. Analyses were completed which demonstrated the range of responses. Graphs were created and results descriptions were also included in the narrative sections.



#### **Summit County Clusters**

In order to provide a geographic representation of the prevalence of different risk behaviors in Summit County, the county was divided into four clusters. These four clusters are used in county planning, data analyses and interpretation, and in program development. The four clusters are:

- Area I: West Akron (response rate= 75.3%)–John R. Buchtel Community Learning Center, Litchfield Middle School, Innes Community Learning Center, Miller-South Visual Performing Arts
- Area 2: East Akron (response rate=79.0%)—East Community Learning Center, Hyre Community Learning Center, Roswell Kent Community Learning Center, Jennings Community Learning Center, National Inventors Hall of Fame School Center for Science, Technology, Engineering and Mathematics,
- Area 3: North Suburbs (response rate=59.0%)—Copley-Fairlawn Middle School , Bolich Middle School, Roberts Middle School, Hudson Middle School, Nordonia Middle School, Revere Middle School, Kimpton Middle School, R.B. Chamberlin Middle School, Woodridge Middle School
- Area 4: South Suburbs (response rate=78.6%)—Barberton Middle School, Coventry Junior Higher School, Green Middle School, Manchester Middle School, Mogadore Middle School, Norton Middle School, Spring Hill Middle School, Tallmadge Middle School

Sufficient schools within the East Akron, West Akron and South Suburbs clusters participated in the survey project to permit weighting to these regions, as well as to the county. The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



#### SUMMIT COUNTY MIDDLE SCHOOLS



## **Sample Description**

The table below presents a demographic profile of students who completed the 2013 Summit County Middle School YRBS. A total of 6,790 usable surveys were completed.

2013 Summit County Middle School YRBS					
	N	Weighted %			
Total	6790	100%			
Gender					
Female	3366	48.4			
Male	3391	51.6			
Race					
White*	4113	79.2			
Black*	1166	18.6			
Asian*	238	0.5			
Hispanic	363	0.4			
Other/Multiple	761	1.3			
Grade Level					
7 <sup>th</sup>	3361	49.5			
8 <sup>th</sup>	3364	49.5			
*Non-Hispanic					

The survey included several items intended to supplement standard demographic information. Students were asked who lived with them, the number of times they had changed homes since kindergarten, and the primary language used at home. The next set of tables depicts student responses to these items.



	Akron East	Akron West	Suburbs North	Suburbs South	Overall
Mom and Dad	35.2%	36.8%	62.8%	55.4%	53.4%
Mom and Stepdad	9.1%	8.2%	7.5%	9.9%	8.6%
Stepmom and Dad	2.8%	3.2%	3.5%	4.9%	3.8%
Mom only	33.5%	33.1%	16.4%	17.1%	21.2%
Dad only	3.7%	3.2%	3.2%	4.2%	3.6%
Grandparents or Aunt/Uncle	11.5%	10.2%	4.2%	7.0%	6.9%
Foster family	0.5%	1.1%	0.3%	0.5%	0.5%
Other situation	3.6%	4.1%	2.0%	1.1%	2.2%

Students provided household composition information by responding to the item, "Think of where you live most of the time. Which of the following people live there with you? (Select all that apply.)"

Students provided information intended to assess level of enrollment transience for Summit County school districts overall and for the four regions by responding to the item, "How many times have you changed homes since kindergarten?"

	Akron	Akron	Suburbs	Suburbs	
	East	West	North	South	Overall
Never	32.4%	32.8%	49.2%	43.1%	43.0%
1 or 2 times	25.9%	24.6%	27.5%	28.7%	27.3%
3 or 4 times	19.6%	19.6%	12.5%	14.7%	15.0%
5 or 6 times	7.8%	10.0%	4.7%	5.0%	5.9%
7 + times	6.8%	5.3%	2.9%	4.5%	4.3%
Not sure	7.5%	7.7%	3.2%	4.0%	4.6%

Language at home was assessed by student response to the item, "What is the language you use most often at home?"

	Akron East	Akron West	Suburbs North	Suburbs South	Overall
English	95.0%	98.4%	98.2%	98.3%	97.7%
Spanish	0.8%	0.5%	0.6%	0.5%	0.6%
Another language	4.2%	1.0%	1.2%	1.3%	1.7%



## **Terms and Conventions**

The following terms are used in this report:

- **Cigar use:** Having smoked any of the following products: cigars, cigarillos, or little cigars, such as Black and Milds, Swisher Sweets, or Phillies.
- **Obese/overweight:** Classification based on a student's Body Mass Index (BMI) (kg/m<sup>2</sup>), which was calculated from self-reported height and weight. The BMI values were compared with sex- and age-specific reference data from the 2000 CDC growth charts. Obese was defined as a BMI of >95th percentile for age and sex. Overweight was defined as a BMI of >85th percentile and <95th percentile for age and sex. Previous YRBS reports used the terms "overweight" to describe youth with a BMI >95th percentile for age and sex and "at risk for overweight" for those with a BMI >85th percentile and <95th percentile. However, this report uses the terms "obese" and "overweight" in accordance with the 2007 recommendations from the Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity convened by the American Medical Association (AMA) and co-funded by AMA in collaboration with the Health Resources and Services Administration and CDC. These classifications are not intended to diagnose obesity or overweight in individual students, rather to provide estimates of obesity and overweight for the population of students surveyed.
- **Race/ethnicity:** Analysis included this process: computed from two questions: 1. "Are you Hispanic or Latino?" (Response options were "yes" or "no"), and 2. "What is your race?" (Response options were "American Indian or Alaska Native," "Asian," "Black or African American," "Native Hawaiian or Other Pacific Islander," or "White"). For the second question, students could select more than one response option. For this analysis, students were classified as "Hispanic/Latino" if they answered "yes" to the first question, regardless of how they answered the second question. Students were classified as "White" if they answered "no" to the first question and selected only "White" to the second question. Students were classified as "Black" if they answered "no" to the first question and selected only "Black or African American" to the second question. Students were classified as "Asian" if they answered "no" to the first question and selected only "Asian" to the second question. Students were classified as "Other" if they answered "no" to the first question and selected only the second question. Students were classified as "Asian" if they answered "no" to the first question and selected only "Asian" to the second question. Students were classified as "Other" if they answered "no" to the first question and selected only to the second question. Students were classified as "Other" if they answered "no" to the first question and selected only to the second question. Students were classified as "Other" if they answered "no" to the first question and selected more than one response to the second question. Race/ethnicity was classified as missing for students who did not answer the first question and for students who answered "no" to the first question but did not answer the second question.



#### **Executive Data Summary**

The Youth Risk Behavior Survey provides cross-sectional data about those categories of risk known to contribute most to morbidity and mortality among youth. Within risk behavior categories, questions are included to characterize the level of risk engagement and to determine the prevalence of risk engagement along several timeframes:

- "ever" or lifetime engagement,
- "during the past 12 months" engagement,
- "current" or past 30 days engagement,
- "early initiation" or before the age of 11 years, and
- "past 7 days" engagement

The series of graphs that follow reveal the prevalence of risk behavior engagement according to these timeframes.

The survey contains 12 items addressing behaviors that students may have engaged in over their lifetime. The chart below depicts the prevalence for each of these items.



## Lifetime behaviors



The survey contains 14 items addressing behaviors that students may have engaged in during the 12 months before the survey. The chart below depicts the prevalence for each of these items.



## During the past 12 months

The survey contains 13 items addressing behaviors that students may have engaged in during the past 30 days, considered to be "current use". The chart below depicts the prevalence for each of these items.



## During the past 30 days



The survey contains 3 items addressing behaviors that students may have engaged in for the first time before the age of 11 years. Students who participate in risk behaviors before the age of 11 years are considered to be at higher risk for these behaviors to become habitual and to be more likely to engage in multiple risk behaviors. The chart below depicts the prevalence for each of these items.



Before the age of 11 years

The survey contains 6 items addressing behaviors that students may have engaged in during the 7 days before the survey. The chart below depicts the prevalence for each of these items.



## Behaviors during the past 7 days



To measure academic achievement, Summit County high school students were asked to describe their grades in school. Overall, 80.3% of students described their grades as mostly A's and B's. The following pie chart depicts the breakdown of self-described school grades by Summit County Middle School students.





## Section 2: Behaviors that Contribute to Unintentional Injuries

The 2013 Summit County Middle School YRBS asked students how often they had worn a seat belt when riding in a car, how often they had been a passenger in a car driven by someone who had been drinking alcohol, and if they had suffered a head injury. Head injury is the leading cause of death in bicycle crashes and use of bicycle helmets is the single most effective way of reducing head injuries and fatalities.<sup>i,ii</sup> In 2004, children 14 years and younger accounted for 13% of all bicycle fatalities, making this one of the most frequent causes of injury-related deaths for young children.<sup>iii</sup>

Motor vehicle accidents are the leading cause of death for children and youth ages 5 to 24.<sup>iv</sup> The use of seat belts and child safety restraints greatly reduces the chance of fatalities and serious injuries in motor vehicle crashes. <sup>18</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>IVP-15:</b> Increase the use of safety belts to 92.4%	90.5% of Summit County Middle School students reported usually or always wearing a seatbelt when riding in a car.
<b>SA-1:</b> Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol to no more than 25.5%	13.3% of Summit County Middle School students reported that they rode with a driver who had been drinking alcohol at least once during the past 30 days.

Among the behaviors that contribute to unintentional injuries, the prevalence of rarely or never wearing a seatbelt was significantly higher among students in the Akron East, Akron West, and Suburbs South clusters compared to prevalence reported for Suburbs North. These differences are depicted in the graph below.



## Behaviors that contribute to unintentional injuries by cluster



Students were asked how many times in the past 30 days they rode in a car driven by someone who had been drinking alcohol. The graph below depicts the difference between 7<sup>th</sup> grade and 8<sup>th</sup> grade students with a significant difference between the two grades.



Rode with a driver who had been drinking alcohol by grade

Additional analyses were conducted to investigate if there was an association of having suffered a blow or jolt to the head with sports team participation. The prevalence for having suffered a blow or jolt to the head among all students during the 12 months before the survey was 15.4%. The prevalence for having suffered a blow or jolt to the head among students who had played on one or more sports teams during the past 12 months was 17.7%. The prevalence of having suffered a blow or jolt to the head among students who had not played on one or more sports teams during the past 12 months was 11.3%.



#### Blow or jolt to the head with sports team participation



The table below shows significant differences between the demographic groups of gender and grade level when considering the unintentional injury items. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for rode with a driver who had been drinking alcohol among Summit County 8<sup>th</sup> grade students was 15.4% which was significantly higher than the prevalence reported by Summit County 7<sup>th</sup> grade students (11.2%). Prevalence by race/ethnicity can be examined in the demographic tables at the end of this section.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Rarely or never wore a seatbelt				
Rode with a driver who had been drinking alcohol			11.2% (10.0-12.5)	<b>↑</b> 15.4% (13.9-17.0)
Suffered a blow or jolt to the head				

## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Rarely or never wore a seatbelt	9.5%
(When riding in a car driven by someone else.)	(8.6-10.4)
Rode with a driver who had been drinking alcohol	13.3%
(During the past 30 days.)	(12.4-14.4)
Suffered a blow or jolt to the head (Which caused memory problems, double or blurry vision, headaches or "pressure" in the head, or nausea or vomiting during the 12 months before the survey.)	15.4% (14.4-16.6)



## **Regional Prevalence**

Risk Behavior	East Akron % (95% CI)	West Akron % (95% CI)	North Suburbs* % (95% Cl)	South Suburbs % (95% CI)
<b>Rarely or never wore a seatbelt</b> (When riding in a car driven by someone else.)	17.0% (14.5-19.8)	15.1% (12.6-18.1)	5.3% (4.2-6.6)	9.6% (7.9-11.5)
Rode with a driver who had been drinking alcohol (During the past 30 days.)	16.5% (14.1-19.3)	14.9% (12.6-17.6)	11.9% (10.4-13.6)	13.1% (11.4-15.1)
Suffered a blow or jolt to the head (Which caused memory problems, double or blurry vision, headaches or "pressure" in the head, or nausea or vomiting during the 12 months before the survey.)	16.7% (14.5-19.2)	13.1% (11.0-15.5)	15.2% (13.4-17.1)	15.9% (14.1-18.0)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Rarely or never wore a seatbelt			
Category	%	CI	
Gender			
Female	10.1	8.8 -	11.5
Male	8.8	7.6 -	10.1
Race/Ethnici	ty		
White	7.2	6.2 -	8.2
Black	18.3	15.9 -	20.9
Asian	12.6	8.2 -	18.7
Hispanic	20.5	12.0 -	32.9
Other	16.5	11.8 -	22.5
Grade			
7th	8.2	7.1 -	9.5
8th	10.3	8.9 -	12.0
Total	9.5	8.6 -	10.4

## Demographics

Rode with a driver who had been drinking alcohol				
Category % Cl				
Gender				
Female	14.4	13.1 -	15.9	
Male	12.2	10.8 -	13.7	
Race/Ethnic	city			
White	12.2	11.2 -	13.4	
Black	17.1	14.6 -	19.9	
Asian	16.7	11.1 -	24.5	
Hispanic	23.0	14.2 -	34.9	
Other	18.3	14.2 -	23.2	
Grade				
7th	11.2	10.0 -	12.5	
8th	15.4	13.9 -	17.0	
Total	13.3	14.4 -	16.6	

In Summit County, 9.5% of students rarely or never wore a seat belt when riding in a car driven by someone else. The prevalence of rarely or never wearing a seat belt was higher among Black and Hispanic (18.3%, 20.5%) students than White (7.2%) students. In Summit County, 13.3% of students had ridden in a car or other vehicle driven by someone else who had been drinking alcohol one or more times in the 30 days prior to the survey. The prevalence of having ridden with a driver who had been drinking alcohol in the 30 days prior to the survey was higher among Black, Hispanic and Other/Multiple (17.1%, 23%, 18.3%) students than White (12.2%) students. The prevalence of having ridden with a driver who had been drinking alcohol in the 30 days prior to the survey was higher among 8<sup>th</sup> grade students (15.4%) than 7<sup>th</sup> grade (11.2%) students.



Suffered a blow or jolt to the				
	head			
Category % Cl				
Gender				
Female	13.8	12.4 -	15.3	
Male	16.8	15.3 -	18.4	
Race/Ethnic	ity			
White	15.6	14.3 -	16.9	
Black	14.8	12.8 -	17.1	
Asian	10.2	5.5 -	18.1	
Hispanic	27.2	18.1 -	38.8	
Other	20.5	16.2 -	25.5	
Grade				
7th	15.4	13.9 -	16.9	
8th	15.2	13.6 -	16.9	
Total	15.4	14.4 -	16.6	

In Summit County, 15.4% of students had suffered a blow or jolt to the head in the 12 months prior to the survey. The prevalence of suffering a blow or jolt to the head in the 12 months prior to the survey was higher for Hispanic (27.2%) students than White and Black (15.6%, 14.8%) students.



- <sup>i</sup> Centers for Disease Control and Prevention. 1995. Injury-control recommendations: Bicycle helmets. *Morbidity and Mortality Weekly Report.* 44(RR-1):1-17.
- <sup>ii</sup> Sosin, D., Sacks, J., Webb, K. 1996. Pediatric head injuries and deaths from bicycling in the United States. *Pediatrics.* 98:868-870.
- <sup>III</sup> National Highway Traffic Safety Administration. Traffic Safety Facts, Laws: Bicycle Helmet Use Laws. National Highway Traffic Safety Administration Web site. Available at http://www.nhtsa.dot.gov/portal/nhtsa\_static\_file\_downloader.jsp?file=/staticfiles/DOT/NHTSA/Co mmunication%20&%20Consumer%20Information/Articles/Associated%20Files/810886.pdf. Accessed July 22, 2008.
- <sup>iv</sup> Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.



## Section 3: Behaviors that Contribute to Violence including Self-Injurious Behaviors

The 2013 Summit County Middle School YRBS asked students about violent behaviors, such as physical fighting, weapon carrying, bullying, intentional self-harm, and suicide. Adolescents can experience violence along a continuum that may begin with verbal harassment and advance into physical acts of violence.<sup>i</sup> Bullying and being bullied at school are associated with key violence-related behaviors including carrying weapons, fighting and sustaining injuries from fighting.<sup>ii</sup>

Persistent sadness and hopelessness are criteria for and predictors of clinical depression, though by themselves they are insufficient for a diagnosis of depression. Depressed youth are much more likely to use drugs or alcohol, drop out of school, or engage in promiscuous sex than a young person who is not depressed.<sup>III</sup> Youth are much more likely to think about and attempt suicide if they are depressed.<sup>IV</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>IVP-34:</b> Reduce physical fighting among adolescents to no more than 28.4%.	32.7% of Summit County Middle School students reported being involved in at least one physical fight during the past 12 months.
<b>IVP-35:</b> Reduce bullying among adolescents to no more than 17.9%	42.8% of Summit County Middle School students reported being bullied electronically, on school property, or away from school property during the past 12 months.
<b>MHMP-2:</b> Reduce suicide attempts by adolescents to no more than 1.7 per 100 population.	9.7% of Summit County Middle School students attempted suicide one or more times during the 12 months before the survey.



Of the violence-related behaviors by cluster, the Suburbs South cluster reported a significantly higher prevalence of students who carried a weapon during the 30 days prior to the survey than the Akron East, Akron West, and Suburbs North clusters. Akron East students were more likely than the Suburbs North and South clusters to avoid going to school because of safety concerns as well as to have been in a physical fight than students in Suburbs North and South.



Violence-related behaviors by cluster

Students in Summit County were asked how often they carried a weapon such as a gun, knife, or club in the past 30 days. The graph below depicts responses from students by gender and race/ethnicity, who said they carried a weapon on one or more days of the past 30 days. The prevalence of carrying a weapon in the 30 days prior to the survey was significantly higher among male than female students. Also, the prevalence of carrying a weapon in the 30 days prior to the survey was significantly higher to the survey was significantly higher for Hispanic students than White, Black, Asian or Other students.



## Carried a weapon by gender and race

Summit County Middle School students were asked how many times they were in a physical fight during the past 12 months. The graph below depicts the students who reported getting in a physical fight one or more times in the past 12 months by gender within each cluster. The prevalence of physical fighting was significantly higher among females in the Akron East and Akron West clusters than the Suburbs North and South. The prevalence of physical fighting was significantly higher among males in the Suburbs North.



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering the behaviors contributing to violence items. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for getting in a physical fight among Summit County male students was 40.9% which was significantly higher than the prevalence reported by Summit County female students (23.8%). Prevalence by race/ethnicity can be examined in the demographic tables at the end of this section.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Carried a weapon	5.1%	<b>↑</b> 16.9%		
	(4.3-6.1)	(15.2-18.8)		
Found it easy to get a handgun	12.2%	<b>↑</b> 18.0%	11.6%	<b>^</b> 18.7%
	(10.9-13.6)	(16.2-20.0)	(10.2-13.3)	(16.8-20.7)
Did not go to school because of	<b>↑</b> 9.2%	6.2%		
safety concerns	(8.1-10.4)	(5.3-7.2)		
In a physical fight	23.8%	<b>1</b> 40.9%		
	(21.9-25.9)	(38.7-43.1)		



Students were asked questions about being bullied on school property, being bullied away from school property, and being electronically bullied. Students from the Suburbs North and South reported a significantly higher prevalence of having been bullied on school property and electronically bullied than Akron West. The Suburbs North and South also reported a significantly higher prevalence from the Akron East and Akron West clusters, of students who had been bullied away from school property.



Summit County students were asked if they had been teased or name called during the 12 months before completing the survey for any of the reasons indicated in the graph below. Students were able to select all that applied. While 34.5% of students were teased about their weight, the majority of students who reported being teased or name-called indicated it was for some reason other than their weight, gender, race/ethnicity background, sexual orientation, or religion.



#### **Reasons for being teased or name-called**

#### The

table below shows significant differences that appeared between the demographic groups of gender and



grade level when considering the behaviors contributing to violence through bullying items. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for being electronically bullied among Summit County female students was 27.2% which was significantly higher than the prevalence reported by Summit County male students (12.6%). Prevalence by race/ethnicity can be examined in the demographic tables at the end of this section.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Bullied on school property	<b>^</b> 37.6%	29.2%		
	(35.6-39.6)	(27.3-31.1)		
Bullied away from school property	<b>↑</b> 27.0%	16.8%		
	(25.1-28.9)	(15.2-18.5)		
Electronically bullied	<b>^</b> 27.2%	12.6%	17.3%	<b>↑ 22.1%</b>
	(25.3-29.3)	(11.2-14.0)	(15.8-19.0)	(20.2-24.1)

Students were asked how many times they had done something to purposely hurt themselves without wanting to die, such as cutting, or burning themselves in the past 12 months. They were asked how many times they felt so sad and hopeless almost every day for two weeks or more in a row that they stopped



### Depression and suicide by cluster

doing some usual activities. In this report it is referred to as depressive sadness. They were also asked if during the past 12 months, they had ever seriously considered attempting suicide and if they actually attempted suicide. The prevalence of intentional self-harm was significantly higher among the Suburbs South than Suburbs North. The prevalence of depressive sadness was significantly higher among Akron East, Akron West and Suburbs South than Suburbs North. The prevalence was significantly higher among Akron East than Suburbs North, for seriously considered attempting suicide and attempting suicide, respectively.



The prevalence for depressive sadness, seriously considered attempting suicide and attempted suicide were all significantly higher among females than males. The differences are depicted in the graph below.



Association of depressive sadness and violence-related behaviors by gender

The graph below depicts the differences among depressive sadness, seriously considered attempting suicide and attempted suicide by grade. The prevalence of depressive sadness and seriously considered attempting suicide is significantly higher for 8<sup>th</sup> grade than 7<sup>th</sup> grade. There is no significant difference between 7<sup>th</sup> grade and 8<sup>th</sup> grade for those that reported attempted suicide.



## Assocation of depressive sadness and violence-related behaviors by grade



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering the behaviors contributing to violence through self-harm, depressive sadness and suicide. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for intentional selfharm among Summit County female students was 24.2% which was significantly higher than the prevalence reported by Summit County male students (9.1%). Prevalence by race/ethnicity can be examined in the demographic tables at the end of this section.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Intentional self-harm	<b>^</b> 24.2%	9.1%	13.9%	<b>^</b> 18.8%
	(22.3-26.3)	(7.9-10.3)	(12.5-15.5)	(17.0-20.6)
Depressive sadness	<b>^</b> 29.2%	14.5%	18.7%	<b>^</b> 24.5%
	(27.0-31.6)	(13.1-16.1)	(17.1-20.5)	(22.3-26.9)
Seriously considered attempting	<b>^</b> 18.4%	8.3%	11.0%	<b>^</b> 15.4%
suicide	(16.7-20.3)	(7.2-9.5)	(9.8-12.4)	(13.7-17.2)
Attempted suicide	<b>^</b> 11.4%	8.0%		
	(10.0-12.9)	(7.0-9.2)		



## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
<b>Carried a weapon</b>	11.3%
(Such as a gun, knife, or club; one or more times during the 30 days before the survey.)	(10.3-12.4)
Found it easy to get a handgun	15.2% (14.0-16.6)
Did not go to school because of safety concerns	7.7%
(One or more times during the 30 days before the survey.)	(6.9-8.4)
In a physical fight	32.7%
(One or more times during the 12 months before the survey.)	(31.1-34.3)
Bullied on school property	33.3%
(During the 12 months before the survey.)	(31.9-34.7)
Bullied away from school property	21.7%
(During the 12 months before the survey.)	(20.6-22.9)
<b>Electronically bullied</b> (Such as through e-mail, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)	19.6% (18.4-20.9)
Intentional self-harm	16.4%
(Such as cutting or burning self; during 12 months before survey.)	(15.3-17.6)
<b>Depressive sadness</b> (Almost every day for two weeks or more in a row, during the 12 months before the survey.)	21.7% (20.3-23.1)
Seriously considered attempting suicide	13.3%
(During the 12 months before the survey.)	(12.2-14.4)
Attempted suicide	9.7%
(One or more times during the 12 months before the survey.)	(8.9-10.6)



## **Regional Prevalence**

Risk Behavior	East Akron % (95% CI)	West Akron % (95% CI)	North Suburbs* % (95% CI)	South Suburbs % (95% CI)
<b>Carried a weapon</b> (Such as a gun, knife, or club; one or more times during the 30 days before the survey.)	10.8% (8.8-13.3)	6.7% (5.0-8.9)	9.8% (8.2-11.6)	15.5% (13.5-17.8)
Found it easy to get a handgun	16.4% (13.6-19.6)	15.5% (13.1-18.2)	13.2% (11.2-15.6)	17.5% (15.4-19.7)
Did not go to school because of safety concerns (One or more times during the 30 days before the survey.)	11.3% (9.5-13.5)	9.7% (7.5-12.6)	6.4% (5.4-7.7)	6.7% (5.6-8.0)
In a physical fight (One or more times during the 12 months before the survey.)	41.4% (37.6-45.3)	38.5% (34.7-42.4)	28.0% (25.7-30.5)	32.8% (29.7-36.0)
<b>Bullied on school property</b> (During the 12 months before the survey.)	31.6% (28.2-35.1)	26.7% (23.4-30.3)	34.0% (31.8-36.3)	35.6% (33.3-38.0)
<b>Bullied away from school property</b> (During the 12 months before the survey.)	18.1% (15.7-20.7)	16.3% (13.3-19.8)	23.3% (21.4-25.3)	23.3% (21.3-25.4)
<b>Electronically bullied</b> (Such as through e-mail, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)	17.7% (14.9-20.9)	12.2% (9.7-15.2)	20.2% (18.3-22.3)	22.6% (20.4-24.9)
Intentional self-harm (Such as cutting or burning self; during the 12 months before the survey.)	18.1% (15.5-21.1)	17.1% (14.3-20.4)	14.4% (12.8-16.1)	18.4% (16.3-20.7)
<b>Depressive sadness</b> (Almost every day for two weeks or more in a row, during the 12 months before the survey.)	24.5% (21.7-27.6)	25.5% (22.4-28.9)	18.2% (16.0-20.5)	24.0% (21.6-26.6)
Seriously considered attempting suicide (During the 12 months before the survey.)	17.0% (14.5-19.8)	13.6% (11.0-16.7)	11.3% (9.7-13.1)	14.1% (12.3-16.1)



Risk Behavior	East	West	North	South
	Akron	Akron	Suburbs*	Suburbs
	%	%	%	%
	(95% CI)	(95% CI)	(95% CI)	(95% CI)
Attempted suicide (One or more times during the 12 months before the survey.)	12.6% (10.2-15.5)	11.4% (9.0-14.5)	8.1% (6.9-9.4)	10.0% (8.6-11.6)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Carried a weapon					
Category	%	CI			
Gender					
Female	5.1	4.3 -	6.1		
Male	16.9	15.2 -	18.8		
Race/Ethnicity					
White	12.2	11.0 -	13.5		
Black	6.7	5.3 -	8.5		
Asian	6.7	3.0 -	14.4		
Hispanic	34.4	21.9 -	49.5		
Other	13.0	9.8 -	17.1		
Grade					
7th	10.5	9.1 -	12.2		
8th	11.7	10.3 -	13.3		
Total	11.3	10.3 -	12.4		

### Demographics

Found it easy to get a handgun					
Category	%	CI			
Gender					
Female	12.2	10.9 -	13.6		
Male	18.0	16.2 -	20.0		
Race/Ethnicity					
White	15.1	13.7 -	16.7		
Black	15.5	13.3 -	18.1		
Asian	7.0	4.0 -	12.0		
Hispanic	29.5	19.9 -	41.2		
Other	17.1	13.5 -	21.3		
Grade					
7th	11.6	10.2 -	13.3		
8th	18.7	16.8 -	20.7		
Total	15.2	14.0 -	16.6		

In Summit County, 11.3% of students had carried a weapon (e.g., gun, knife, or club) in the 30 days prior to the survey. The prevalence of carrying a weapon in the 30 days prior to the survey was higher among male (16.9%) than female (5.1%) students. The prevalence of carrying a weapon in the 30 days prior to the survey was higher for Hispanic (34.4%) students than White, Black, Asian or Other/Multiple (12.2%, 6.7%, 6.7%, 13.0%) students. The prevalence of weapon carrying was higher for White (12.2%) than Black (6.7%) students.

In Summit County, 15.2% of students found it to be "sort of easy" or "very easy" to get a handgun. The prevalence of finding it easy to get a handgun was higher among male (18%) than female (12.2%) students. The prevalence of finding it easy to get a handgun was higher for Hispanic (29.5%) students than White, Black and Asian (15.1%, 15.5%, 7.0%) students. The prevalence of finding it easy to get a handgun was higher among 8<sup>th</sup> grade (18.7%) students than 7<sup>th</sup> grade (11.6%) students.


Did not go to school because of				
safet	t <mark>y conce</mark>	erns		
Category	%	C	21	
Gender				
Female	9.2	8.1 -	10.4	
Male	6.2	5.3 -	7.2	
Race/Ethnicit	У			
White	6.8	6.1 -	7.7	
Black	10.2	8.5 -	12.2	
Asian	11.7	6.5 -	20.2	
Hispanic	14.0	7.3 -	25.2	
Other	13.4	9.1 -	19.5	
Grade				
7th	7.5	6.5 -	8.5	
8th	7.7	6.6 -	9.0	
Total	7.7	6.9 -	8.4	

In Summit County, 7.7% of students did not go to school at least one day during the 30 days before the survey because they felt they would be unsafe at school or on their way to or from school. The prevalence of having not gone to school because of safety concerns was higher among female (9.2%) than male (6.2%) students. The prevalence of having not gone to school because of safety concerns was higher among Black (10.2%) and Other/Multiple (13.4%) students than White (6.8%) students.

In a	physica	l fight	
Category	%	CI	
Gender			
Female	23.8	21.9 -	25.9
Male	40.9	38.7 -	43.1
Race/Ethnic	city		
White	29.5	27.7 -	31.3
Black	45.8	42.3 -	49.3
Asian	22.0	13.7 -	33.5
Hispanic	54.6	42.0 -	66.7
Other	43.8	38.1 -	49.8
Grade			
7th	33.5	31.1 -	35.9
8th	31.5	29.2 -	33.9
Total	32.7	31.1 -	34.3

In Summit County, 32.7% of students were in a physical fight one or more times in the 12 months prior to the survey. The prevalence of physical fighting one or more times in the 12 months prior to the survey was higher among male (40.9%) than female (23.8%) students. The prevalence of physical fighting one or more times in the 12 months prior to the survey was higher for Black, Hispanic and Other/Multiple (45.8%, 54.6%, 43.8%) students than White (29.5%) or Asian (22.0%) students.



Bullied o	on schoo	l proper	ty
Category	%	CI	
Gender			
Female	37.6	35.6 -	39.6
Male	29.2	27.3 -	31.1
Race/Ethnic	ity		
White	35.9	34.3 -	37.4
Black	22.4	19.8 -	25.2
Asian	24.0	17.4 -	32.1
Hispanic	36.6	26.1 -	48.5
Other	38.1	32.9 -	43.6
Grade			
7th	33.3	31.3 -	35.3
8th	33.3	31.2 -	35.4
Total	33.3	31.9 -	34.7

In Summit County, 33.3% of students were bullied on school property one or more times in the 12 months prior to the survey. The prevalence of being bullied on school property one or more times in the 12 months prior to the survey was higher among female (37.6%) than male (29.2%) students. The prevalence of being bullied on school property one or more times in the 12 months prior to the survey was higher for White, Hispanic and Other/Multiple (35.9%, 36.6%, 38.1%) students than Black (22.4%) and Asian (24.0%) students.

Bullied away from school			
Category	%	, CI	
Gender			
Female	27.0	25.1 -	28.9
Male	16.8	15.2 -	18.5
Race/Ethnic	ity		
White	23.7	22.3 -	25.2
Black	13.2	11.2 -	15.6
Asian	11.9	8.3 -	16.7
Hispanic	24.3	15.2 -	36.4
Other	24.6	19.8 -	30.2
Grade			
7th	21.1	19.4 -	22.8
8th	22.4	20.6 -	24.4
Total	21.7	20.6 -	22.9

In Summit County, 21.7% of students were bullied away from school property one or more times in the 12 months prior to the survey. The prevalence of being bullied away from school property one or more times in the 12 months prior to the survey was higher among female (27%) than male (16.8%) students. The prevalence of being bullied away from school property one or more times in the 12 months prior to the survey was higher for White and Other/Multiple (23.7%, 24.6%) students than Black (13.2%) and Asian (11.9%) students.



Electi	ronically	bullied	
Category	%	CI	
Gender			
Female	27.2	25.3 -	29.3
Male	12.6	11.2 -	14.0
Race/Ethnic	ity		
White	21.5	20.1 -	23.0
Black	12.1	9.9 -	14.8
Asian	8.4	5.1 -	13.5
Hispanic	19.5	11.5 -	31.2
Other	18.4	14.5 -	23.1
Grade			
7th	17.3	15.8 -	19.0
8th	22.1	20.2 -	24.1
Total	19.6	18.4 -	20.9

In Summit County, 19.6% of students were electronically bullied one or more times in the 12 months prior to the survey. The prevalence of being electronically bullied one or more times in the 12 months prior to the survey was higher among female (27.2%) than male (12.6%) students. The prevalence of being electronically bullied one or more times in the 12 months prior to the survey was higher for White (21.5%) students than Black and Asian (12.1%, 8.4%) students. The prevalence of being electronically bullied was higher among 8<sup>th</sup> grade (22.1%) students than 7<sup>th</sup> grade (17.3%) students.

Inten	tional se	lf-harm	
Category	%	CI	
Gender			
Female	24.2	22.3 -	26.3
Male	9.1	7.9 -	10.3
Race/Ethnic	ity		
White	16.9	15.7 -	18.2
Black	13.4	11.2 -	15.9
Asian	16.0	10.3 -	24.1
Hispanic	28.5	18.2 -	41.5
Other	25.3	20.7 -	30.6
Grade			
7th	13.9	12.5 -	15.5
8th	18.8	17.0 -	20.6
Total	16.4	15.3 -	17.6

In Summit County, 16.4% of students purposely hurt themselves one or more times without wanting to die in the 12 months prior to the survey. The prevalence of purposely hurting oneself one or more times without wanting to die in the 12 months prior to the survey was higher among female (24.2%) than male (9.1%) students. The prevalence of purposely hurting oneself one or more times without wanting to die in the 12 months prior to the survey was higher for Hispanic and Other/Multiple (28.5%, 25.3%) students than Black (13.4%) students, respectively, and higher among Other/Multiple (25.3%) students than White (16.9%) and Asian (16.0%) students. The prevalence of purposely hurting oneself one or more times without wanting to die in the 12 months prior to the survey was higher among 8<sup>th</sup> grade (18.8%) students than 7<sup>th</sup> grade (13.9%) students.



Depi	ressive s	adness	
Category	%	CI	
Gender			
Female	29.2	27.0 -	31.6
Male	14.5	13.1 -	16.1
Race/Ethnic	ity		
White	21.2	19.7 -	22.8
Black	22.7	20.0 -	25.6
Asian	19.7	11.0 -	32.6
Hispanic	28.6	19.1 -	40.4
Other	31.2	25.8 -	37.2
Grade			
7th	18.7	17.1 -	20.5
8th	24.5	22.3 -	26.9
Total	21.7	20.3 -	23.1

In Summit County, 21.7% of students felt sad or hopeless almost every day for two weeks or more in a row and stopped doing usual activities in the 12 months prior to the survey. The prevalence of feeling sad or hopeless almost every day for two weeks or more in a row in the 12 months prior to the survey was higher among female (29.2%) than male (14.5%) students. The prevalence of feeling sad or hopeless almost every day for two weeks or more in a row in the 12 months prior to the survey was higher for Other/Multiple (31.2%) students than White (21.2%) and Black (22.7%) students. The prevalence of feeling sad or hopeless was higher among 8<sup>th</sup> grade (24.5%) students than 7<sup>th</sup> grade (18.7%) students.

Seriously considered attempting			
	suicide	9	
Category	%	CI	
Gender			
Female	18.4	16.7 -	20.3
Male	8.3	7.2 -	9.5
Race/Ethnic	ity		
White	13.0	11.9 -	14.3
Black	13.7	11.4 -	16.3
Asian	8.2	5.3 -	12.4
Hispanic	25.8	16.0 -	38.7
Other	20.0	15.7 -	25.0
Grade			
7th	11.0	9.8 -	12.4
8th	15.4	13.7 -	17.2
Total	13.3	12.2 -	14.4

In Summit County, 13.3% of students seriously considered attempting suicide one or more times in the 12 months prior to the survey. The prevalence of seriously considering attempting suicide was higher among female (18.4%) than male (8.3%) students. The prevalence of seriously considering attempting suicide was higher for Hispanic (25.8%) students than White and Asian (13%, 8.2%) students. The prevalence of seriously considering attempting suicide was higher among 8<sup>th</sup> grade (15.4%) students than 7<sup>th</sup> grade (11%) students.



Atte	empted s	uicide	
Category	%	CI	
Gender			
Female	11.4	10.0 -	12.9
Male	8.0	7.0 -	9.2
Race/Ethnic	ity		
White	9.3	8.4 -	10.3
Black	10.6	8.7 -	12.9
Asian	10.8	6.2 -	18.1
Hispanic	23.4	14.1 -	36.2
Other	16.5	12.2 -	22.0
Grade			
7th	9.0	7.9 -	10.2
8th	10.2	8.9 -	11.6
Total	9.7	8.9 -	10.6

In Summit County, 9.7% of students attempted suicide one or more times in the 12 months prior to the survey. The prevalence of attempting suicide one or more times in the 12 months prior to the survey was higher among female (11.4%) than male (8%) students. The prevalence of attempting suicide one or more times in the 12 months prior to the survey was higher for Hispanic and Other/Multiple (23.4%, 16.5%) students than White (9.3%) students, respectively, and higher for Hispanic (23.4%) students than Black (10.6%) students.



- <sup>i</sup> Ohio Department of Health. 2003. Ohio Youth Risk Behavior Survey. Columbus, OH: Ohio Department of Health.
- <sup>ii</sup> National Center for Education Statistics. 2007. *Indicators of School Crime and Safety: 2007.* Washington, DC: U.S. Department of Education.
- <sup>III</sup> Child Trends Databank. (2014). *Adolescents who felt sad or hopeless*. Available at: http://www.childtrends.org/?indicators=adolescents-who-felt-sad-or-hopeless.
- <sup>iv</sup> Child Trends Databank. (2014). *Suicidal teens*. Available at: http://www.childtrends.org/?indicators=suicidal-teens.



## Section 4: Tobacco Use

The 2013 Summit County Middle School YRBS asked students about cigarette and cigar use. Using tobacco can have serious effects on long-term health. The use of cigarettes is the single leading preventable cause of death in the United States.<sup>1</sup> Almost 90% of adult smokers initiate use before or at age 18.<sup>11</sup> Tobacco use in adolescence is associated with many other health risk behaviors, including higher-risk sexual behavior and use of alcohol or other drugs.<sup>11</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>TU-2.2:</b> Reduce use of cigarettes by adolescents to no more than 16.0%.	4.2% of Summit County Middle School students reported using cigarettes in the past 30 days.
<b>TU-2.4:</b> Reduce use of cigars by adolescents to no more than 8.0%	5.1% of Summit County Middle School students reported using cigars in the past 30 days.*

\*The wording of the 2013 Summit County Middle School YRBS cigar use item differs from the item used to obtain the HP2020 Objective. For Summit County "cigar use" includes cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies.

Summit County students were asked several questions about tobacco use that assessed ever use of cigarettes, age when they smoked a whole cigarette for the first time, and current use of cigarettes, smokeless tobacco and cigars. The prevalence of ever smoked cigarettes, smoked a whole cigarette for the first time before age 11 years, current cigarette use and current cigar use was higher among the Akron East, Akron West and Suburbs South clusters than the Suburbs North cluster.



Research Center for Healthy Neighborhoods at Case Western Reserve University

#### Tobacco use behaviors by cluster

The graph below shows the prevalence for current single product use (cigarettes only, cigars only, smokeless tobacco only) as well as current combustible use (cigarettes and/or cigars) and current use of any of the tobacco products. This graph demonstrates that Summit County Middle School students who report current tobacco use are likely to engage in multiple product use.



Summit County Middle School students were asked on how many days they smoked cigarettes. The prevalence of current cigarette use was significantly higher among 8<sup>th</sup> grade students than 7<sup>th</sup> grade students. The prevalence of current cigarette use was significantly higher among Hispanic students than White, Black, Asian, or Other/Multiple students. The differences are depicted below.



# Healthy Neighborhoods

Summit County Middle School students were asked on how many days they smoked cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies. The prevalence of current cigar use was significantly higher among 8<sup>th</sup> grade students than 7<sup>th</sup> grade students. The prevalence was significantly higher among Hispanic, Black and Other/Multiple students than White and Asian students, respectively.



# Summit County Middle School students were asked on how many days they used chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen. The prevalence of current smokeless tobacco use was significantly higher among Hispanic students than White and Black students.



#### Current smokeless tobacco use by grade and race



Summit County students were asked how they usually obtained their tobacco products during the 30 days before they completed the survey. The pie chart below shows responses from the Summit County Middle School students who reported current use of any tobacco product. While middle school students are not of the legal age to buy and use tobacco products, most students reported obtaining tobacco by someone giving it to them (27.8%).



Of the students who reported getting tobacco from someone who gave it to them, the prevalence was significantly higher among female students than male students.

Got tobacco from someone who gave it to them





The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering tobacco use behaviors. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for current cigarette use among Summit County 8<sup>th</sup> grade students was 5.3% which was significantly higher than the prevalence reported by Summit County 7<sup>th</sup> grade students (3.0%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Ever used cigarettes			6.3%	<b>^</b> 10.9%
			(5.2-7.6)	(9.5-12.6)
Smoked a cigarette before 11 years of age			2.2%	<b>↑</b> 3.8%
			(1.7-2.9)	(3.0-4.7)
Current cigarette use			3.0%	<b>^</b> 5.3%
			(2.3-3.9)	(4.4-6.5)
Current smokeless tobacco use	1.6%	<b>↑</b> 3.6%		
	(1.1-2.1)	(2.9-4.5)		
Current cigar use			3.8%	<b>↑</b> 6.4%
			(3.0-4.8)	(5.2-7.7)
Get tobacco from someone who gave it to	<b>^</b> 37.1%	20.5%		
them	(30.0-44.9)	(15.0-27.3)		
Student perception of parents' belief that			88.8%	<b>^</b> 84.6%
tobacco use is very wrong			(87.4-90.1)	(82.8-86.2)



### **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
<b>Ever smoked a cigarette</b> (Had at least one cigarette on at least 1 day during their life.)	8.7% (7.9-9.7)
Smoked a whole cigarette for the first time before age 11 years	3.1% (2.6-3.7)
<b>Current cigarette use</b> (Smoked a cigarette on at least 1 day during the 30 days before the survey.)	4.2% (3.7-4.9)
<b>Current smokeless tobacco use</b> (Used chewing tobacco, snuff, or dip on at least 1 day during the 30 days before the survey.)	2.6% (2.2-3.2)
<b>Current cigar use</b> (Smoked a cigar, cigarillo, little cigar, or flavored cigar on at least 1 day during the 30 days before the survey.)	5.1% (4.4-5.9)
Someone gave tobacco to them (Among current tobacco users)	27.8% (23.0-33.3)
Student perception of parents' belief that tobacco use is very wrong	86.6% (85.5-87.6)



#### **Regional Prevalence**

Risk Behavior	East Akron % (95% CI)	West Akron % (95% CI)	North Suburbs* % (95% CI)	South Suburbs % (95% CI)
<b>Ever smoked a cigarette</b> (Had at least one cigarette on at least 1 day during their life.)	12.6% (10.4-15.3)	11.0% (8.9-13.4)	4.4% (3.5-5.6)	12.3% (10.5-14.5)
Smoked a whole cigarette for the first time before age 11 years	6.3% (4.7-8.3)	4.1% (2.7-6.0)	1.4% (0.9-2.2)	3.7% (2.8-4.8)
<b>Current cigarette use</b> (Smoked a cigarette on at least 1 day during the 30 days before the survey.)	5.8% (4.5-7.6)	4.8% (3.4-6.8)	1.9% (1.3-2.7)	6.7% (5.4-8.5)
<b>Current smokeless tobacco use</b> (Used chewing tobacco, snuff, or dip on at least 1 day during the 30 days before the survey.)	4.7% (3.2-6.7)	2.9% (1.5-5.6)	1.1% (0.7-1.7)	3.7% (2.8-4.9)
<b>Current cigar use</b> (Smoked a cigar, cigarillo, little cigar, or flavored cigar on at least 1 day during the 30 days before the survey.)	10.8% (8.6-13.4)	11.1% (8.6-14.1)	1.6% (1.0-2.5)	5.2% (4.1-6.7)
Someone gave tobacco to them (Among current tobacco users.)	17.6% (11.3-26.3)	19.1% (12.1-28.7)	42.6% (30.0-56.3)	31.8% (23.4-41.4)
Student perception of parents' belief that tobacco use is very wrong	84.3% (80.9-87.1)	86.9% (83.8-89.5)	89.1% (87.4-90.5)	83.8% (81.6-85.8)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ever s	moked ci	igarettes	5
Category	%	CI	
Gender			
Female	8.8	7.6 -	10.1
Male	8.6	7.5 -	9.8
Race/Ethnic	city		
White	8.4	7.4 -	9.5
Black	9.4	7.6 -	11.4
Asian	8.8	4.3 -	17.5
Hispanic	37.7	24.9 -	52.5
Other	14.0	10.2 -	18.9
Grade			
7th	6.3	5.2 -	7.6
8th	10.9	9.5 -	12.6
Total	8.7	7.9 -	9.7

#### Demographics

Smoked a cigarette for the first						
time be	efore age	11 year	s			
Category	Category % Cl					
Gender						
Female	2.9	2.4 -	3.7			
Male	3.3	2.6 -	4.0			
Race/Ethnic	ity					
White	2.7	2.2 -	3.3			
Black	4.4	3.1 -	6.0			
Asian	2.9	0.9 -	8.9			
Hispanic	22.3	10.8 -	40.6			
Other	7.5	4.6 -	11.8			
Grade						
7th	2.2	1.7 -	2.9			
8th	3.8	3.0 -	4.7			
Total	3.1	2.6 -	3.7			

In Summit County, 8.7% of students had ever smoked cigarettes in their lifetimes. The prevalence of having ever smoked cigarettes was higher among Hispanic (37.7%) than White, Black, Asian and Other/Multiple (8.4%, 9.4%, 8.8%, 14.0%) students. The prevalence of having ever smoked cigarettes was higher among 8<sup>th</sup> grade (10.9%) students than 7<sup>th</sup> grade (6.3%) students.

In Summit County, 3.1% of students smoked a cigarette before 11 years of age. The prevalence of cigarette smoking before 11 years of age was higher among Hispanic (22.3%) students than White, Black and Asian (2.7%, 4.4%, 2.9%) students, respectively; and higher for Other/Multiple (7.5%) students than White (2.7%) students. The prevalence of cigarette smoking before 11 years of age was higher among 8<sup>th</sup> grade (3.8%) students than 7<sup>th</sup> grade (2.2%) students.



Current cigarette use				
Category	%	CI		
Gender				
Female	4.3	3.5 -	5.2	
Male	4.1	3.4 -	5.0	
Race/Ethnic	ity			
White	4.3	3.6 -	5.0	
Black	3.7	2.6 -	5.3	
Asian	5.2	1.8 -	14.4	
Hispanic	24.3	14.5 -	37.8	
Other	6.7	4.2 -	10.7	
Grade				
7th	3.0	2.3 -	3.9	
8th	5.3	4.4 -	6.5	
Total	4.2	3.7 -	4.9	

In Summit County, 4.2% of students smoked a cigarette on at least one day during the 30 days before the survey (i.e., current cigarette use). The prevalence of current cigarette use was higher among Hispanic (24.3%) students than White, Black, Asian and Other/Multiple (4.3%, 3.7%, 5.2%, 6.7%) students. The prevalence of current cigarette use was higher among 8<sup>th</sup> grade (5.3%) students than 7<sup>th</sup> grade (3%) students.

Current smokeless tobacco use				
Category	%	C	]	
Gender				
Female	1.6	1.1 -	2.1	
Male	3.6	2.9 -	4.5	
Race/Ethnici	ty			
White	2.3	1.9 -	2.9	
Black	3.3	2.1 -	5.2	
Asian	2.4	0.8 -	6.8	
Hispanic	14.3	6.8 -	27.6	
Other	5.1	2.8 -	9.2	
Grade				
7th	2.0	1.5 -	2.8	
8th	3.0	2.3 -	3.8	
Total	2.6	2.2 -	3.2	

In Summit County, 2.6% of students used smokeless tobacco, snuff or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen during the 30 days before the survey (i.e., current smokeless tobacco use). The prevalence of smokeless tobacco use was higher among male (3.6%) than female (1.6%) students. The prevalence of smokeless tobacco use was higher among Hispanic (14.3%) students than White and Black (2.3%, 3.3%) students.



Current cigar use				
Category	%	CI		
Gender				
Female	4.9	4.0 -	5.9	
Male	5.3	4.4 -	6.3	
Race/Ethnic	ity			
White	3.7	3.0 -	4.4	
Black	11.0	9.0 -	13.3	
Asian	2.3	0.7 -	6.9	
Hispanic	21.9	12.5 -	35.5	
Other	10.2	7.4 -	14.0	
Grade				
7th	3.8	3.0 -	4.8	
8th	6.4	5.2 -	7.7	
Total	5.1	4.4 -	5.9	

In Summit County, 5.1% of students smoked cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies during the 30 days prior to the survey (i.e., current cigar use). The prevalence of current cigar use was higher among Hispanic (21.9%) students than White and Asian (3.7%, 2.3%) students, respectively; and higher among Black (11%) students then White (3.7%) students. The prevalence of current cigar use was higher among 8<sup>th</sup> grade (6.4%) students than 7<sup>th</sup> grade (3.8%) students.

Someone gave tobacco to them				
Category	%	CI		
Gender				
Female	37.1	30.0 -	44.9	
Male	20.5	15.0 -	27.3	
Race/Ethnic	ity			
White	32.2	26.0 -	39.0	
Black	18.7	11.7 -	28.6	
Asian	1.7	0.2 -	14.8	
Hispanic	11.8	2.7 -	39.1	
Other	31.8	19.6 -	47.1	
Grade				
7th	26.5	19.8 -	34.4	
8th	29.6	22.9 -	37.4	
Total	27.8	23.0 -	33.3	

In Summit County, 27.8% of students got tobacco from someone who gave it to them. The prevalence of getting tobacco from someone who gave it to them was higher among female (37.1%) than male (20.5%) students.



Student perception of parents' belief that tobacco use is very					
	wrong				
Category	%	CI			
Gender					
Female	86.2	84.6 -	87.6		
Male	87.1	85.5 -	88.5		
Race/Ethnie	city				
White	86.8	85.6 -	88.0		
Black	85.6	82.8 -	88.0		
Asian	82.9	68.2 -	91.6		
Hispanic	71.5	57.9 -	82.2		
Other	85.1	80.7 -	88.7		
Grade					
7th	88.8	87.4 -	90.1		
8th	84.6	82.8 -	86.2		
Total	86.6	85.5 -	87.6		

In Summit County, 86.6% of students perceive that their parents/guardians feel it would be very wrong for them to use tobacco. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to use tobacco was higher among White and Black (86.8%, 85.6%) students than Hispanic (71.5%) students. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to use tobacco was higher among 7<sup>th</sup> grade (88.8%) students than 8<sup>th</sup> grade (84.6%) students.



- <sup>i</sup> U.S. Department of Health and Human Services. 2004. *The Health Consequences of Smoking: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- <sup>ii</sup> U.S. Department of Health and Human Services. 1994. *Preventing Tobacco Use among Young People: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.



# Section 5: Alcohol Use

The 2013 Summit County Middle School YRBS asked students three questions about alcohol consumption. Alcohol use among youth has been linked to unintentional injuries, physical fights, academic problems, job problems and illegal behavior.<sup>i</sup> Alcohol use has been identified as a major contributing factor in approximately one-third of all unintentional injury deaths, homicides and suicides, which are the leading causes of death and disability among young people.<sup>ii</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>SA-13.1:</b> Reduce the proportion of adolescents reporting use of alcohol or any illicit drugs during the past 30 days to no more than 16.6%.	10.8% of Summit County Middle School students reported using alcohol or marijuana in the past 30 days.

Summit County students were asked several questions about their alcohol use. The graph below depicts the responses of those students who reported having ever drank alcohol, drank alcohol for the first time before age 11, and current alcohol use in the past 30 days before the survey. The graph also shows those students who reported getting alcohol from someone giving it to them as well as the students' perception of parents' belief that alcohol use is "very wrong".

The Akron East, Akron West, and Suburbs South clusters report a higher prevalence of having ever drank alcohol and current alcohol use than the Suburbs North cluster. The Akron East and Akron West clusters have a significantly higher prevalence than the Suburbs North and South clusters of having drank alcohol for the first time before age 11 years. The Akron West and Suburbs North clusters have a significantly higher prevalence of student perception of parent's belief that alcohol use is very wrong than the Suburbs South cluster. Variations in the prevalence of students who got their alcohol from someone who gave it to them was not significant.



#### Alcohol use behavior by cluster

revention Research Center for Healthy Neighborhoods at Case Western Reserve University The graph below depicts the prevalence of alcohol use by race/ethnicity which includes the responses of students who reported ever using alcohol, those that drank alcohol for the first time before age 11 and those that currently drank alcohol in the past 30 days before the survey. Higher prevalence is noted among Hispanic students of having ever used alcohol and current alcohol use than White, Black and Asian students. The prevalence of having drank alcohol for the first time before age 11 years was higher among Black and Other/Multiple students than White and Asian students.



#### Prevalence of alcohol use by race

The prevalence of current alcohol use and student perception of parents' belief that alcohol use is very wrong are depicted below. The prevalence of current alcohol use is significantly higher among 8<sup>th</sup> grade students than 7<sup>th</sup> grade students. While the prevalence of current alcohol use was higher among 8<sup>th</sup> grade students, the prevalence of student perception of parental belief that alcohol use is "very wrong" was significantly higher among 7<sup>th</sup> grade students.



# Current alcohol use and student perception of parents'



As shown in a previous graph, Summit County Middle School students were asked about current alcohol use and their perception of their parents' belief that alcohol use is "very wrong". The graph below depicts those differences by cluster as a side-by-side comparison of the two questions. The Akron East, Akron West, and Suburbs South clusters have a significantly higher prevalence of current alcohol use, whereas the Akron West and Suburbs North have a significantly higher prevalence of perception of parents' belief that alcohol use is "very wrong".



Students in Summit County were asked how they usually got the alcohol they drank during the past 30 days before the survey. Nationally, those students who obtained their alcohol by someone giving it to them are the sole prevalence reported. However, the pie chart below shows all responses from the Summit County students who consumed alcohol during that time.



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering alcohol use behaviors. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for current alcohol use among Summit County 8<sup>th</sup> grade students was 11.3% which was significantly higher than the prevalence reported by Summit County 7<sup>th</sup> grade students (6.0%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Every drank alcohol			18.3%	<b>^</b> 28.7 %
			(16.5-20.2)	(26.3-31.2)
Drank alcohol for the first time before 11				
years of age				
Current alcohol use			6.0%	<b>^</b> 11.3%
			(5.1-7.1)	(9.8-12.9)
Someone gave alcohol to them				
Student perception of parents' belief			78.2%	<b>↑</b> 72.3%
that alcohol use is very wrong			(76.3-80.1)	(69.9-74.5)

#### **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Ever used alcohol	23.4%
(Had at least one drink of alcohol on at least 1 day during their life.)	(21.9-25.0)
Drank alcohol for the first time before age 11 years	10.0%
(Other than a few sips.)	(9.1-10.8)
<b>Current alcohol use</b> (Had at least one drink of alcohol on at least 1 day during the 30 days before the survey.)	8.6% (7.8-9.6)
Someone gave alcohol to them	44.8%
(During the 30 days before the survey among current drinkers.)	(39.7-50.1)
Student perception of parents' belief that alcohol use is very wrong	75.2% (73.7-76.6)



#### **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% Cl)
<b>Ever used alcohol</b> (Had at least one drink of alcohol on at least 1 day during their life.)	29.5% (26.1-33.2)	26.0% 22.2-30.2	17.3% (15.2-19.7)	28.6% (25.6-31.7)
Drank alcohol for the first time before age 11 years (Other than a few sips.)	13.8% (11.6-16.2)	12.0% (9.7-14.8)	8.0% (6.9-9.4)	10.1% (8.7-11.8)
<b>Current alcohol use</b> (Had at least one drink of alcohol on at least 1 day during the 30 days before the survey.)	10.8% (8.6-13.3)	10.0% (7.7-13.0)	5.6% (4.6-6.8)	11.7% (9.8-13.9)
Someone gave alcohol to them (During the 30 days before the survey among current drinkers.)	37.8% (27.0-49.9)	46.4% (35.0-58.1)	49.3% (38.1-60.6)	44.3% (36.8-52.1)
Student perception of parents' belief that alcohol use is very wrong	73.9% (69.9-77.5)	77.5% (73.8-80.8)	78.5% (76.4-80.5)	69.9% (67.0-72.6)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ever drank alcohol				
Category	%	CI		
Gender				
Female	23.8	21.8 -	25.8	
Male	23.0	21.3 -	24.9	
Race/Ethnici	ity			
White	22.2	20.5 -	23.9	
Black	29.1	25.9 -	32.6	
Asian	8.1	4.5 -	13.9	
Hispanic	44.5	34.3 -	55.2	
Other	32.6	27.5 -	38.1	
Grade				
7th	18.3	16.5 -	20.2	
8th	28.7	26.3 -	31.2	
Total	23.4	21.9 -	25.0	

#### Demographics

Drank alcohol for the first time				
bef	ore age	11 years		
Category	%	C		
Gender				
Female	9.8	8.7 -	11.1	
Male	10.1	9.0 -	11.3	
Race/Ethnic	ity			
White	8.9	8.0 -	9.8	
Black	14.0	12.0 -	16.3	
Asian	4.1	1.8 -	9.0	
Hispanic	16.4	9.5 -	26.9	
Other	17.4	13.5 -	22.2	
Grade				
7th	9.9	8.8 -	11.3	
8th	10.0	8.9 -	11.3	
Total	10.0	9.1 -	10.8	

In Summit County, 23.4% of students had ever drank alcohol in their lifetimes. The prevalence of having ever drank alcohol was higher among Hispanic (44.5%) students than White, Black and Asian (22.2%, 29.1%, 8.1%) students, respectively. The prevalence of having ever drank alcohol was higher among Other/Multiple (32.6%) students than White and Asian (22.2%, 8.1%) students, respectively. The prevalence was lower among Asian (8.1%) students than White, Black, Hispanic and Other/Multiple (22.2%, 29.1%, 44.5%, 32.6%) students. The prevalence was significantly higher among 8<sup>th</sup> grade (28.7%) students than 7<sup>th</sup> grade (18.3%) students.

In Summit County, 10% of students had their first drink of alcohol before age 11 years. The prevalence having their first drink of alcohol before age 11 years was higher for Black and Other/Multiple (14%, 17.4%) students than White (8.9%) students.



Current alcohol use			
Category	%	CI	
Gender			
Female	9.7	8.5 -	11.0
Male	7.5	6.5 -	8.7
Race/Ethnic	ity		
White	8.3	7.3 -	9.4
Black	9.7	7.8 -	12.0
Asian	1.9	0.6 -	5.8
Hispanic	27.6	17.5 -	40.7
Other	15.2	11.9 -	19.3
Grade			
7th	6.0	5.1 -	7.1
8th	11.3	9.8 -	12.9
Total	8.6	7.8 -	9.6

Someone gave alcohol to them				
Category	%	CI		
Gender				
Female	46.3	39.8 -	52.8	
Male	43.6	36.0 -	51.4	
Race/Ethnic	city			
White	46.8	40.8 -	53.0	
Black	41.2	30.9 -	52.3	
Asian	0.9	0.1 -	8.8	
Hispanic	20.6	7.1 -	46.9	
Other	42.7	28.9 -	57.7	
Grade				
7th	48.8	40.6 -	57.0	
8th	43.6	37.1 -	50.3	
Total	44.8	39.7 -	50.1	

In Summit County, 8.6% of students consumed at least one drink of alcohol during the 30 days prior to the survey (i.e., current alcohol use). The prevalence of current alcohol use was higher for Hispanic (27.6%) students than White, Asian and Black (8.3%, 1.9%, 9.7%) students. The prevalence of current alcohol was higher among 8<sup>th</sup> grade (11.3%) students than 7<sup>th</sup> grade (6.0%) students. In Summit County, 44.8% of students got the alcohol they drank from someone that gave it to them during the 30 days prior to the survey. The prevalence of students who got the alcohol they drank from someone that gave it to them was higher among White, Black and Other/Multiple (46.8%, 41.2%, 42.7%) students than Asian (0.9%) students.



Student perception of parents'				
belief tha	belief that alcohol use is very			
	wrong	;		
Category	%	CI		
Gender				
Female	75.2	73.4 -	76.9	
Male	75.3	73.2 -	77.3	
Race/Ethnic	city			
White	74.5	72.8 -	76.1	
Black	78.9	75.3 -	82.0	
Asian	76.5	63.1 -	86.2	
Hispanic	58.8	47.9 -	68.8	
Other	74.5	69.8 -	78.8	
Grade				
7th	78.2	76.3 -	80.1	
8th	72.3	69.9 -	74.5	
Total	75.2	73.7 -	76.6	

In Summit County, 75.2% of students perceive that their parents/guardians feel it would be very wrong for them to drink alcohol. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to drink alcohol was higher among White, Black and Other/Multiple (74.5%, 78.9%, 74.5%) students than Hispanic (58.8%) students. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to drink alcohol was higher among 7<sup>th</sup> grade (78.2%) students than 8<sup>th</sup> grade (72.3%) students.





<sup>&</sup>lt;sup>i</sup> Substance Abuse and Mental Health Services Administration. 1999. *The relationship between mental health and substance abuse among adolescents*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

<sup>&</sup>lt;sup>ii</sup> Hingson, R., Kenkel, D. 2004. Social, Health, and Economic Consequences of Underage Drinking. Reducing Underage Drinking: A Collective Responsibility. Washington, DC: The National Academy of Sciences.

### Section 6: Marijuana and Other Drug Use

The 2013 Summit County Middle School YRBS asked students about marijuana use, inhalant use, prescription drug abuse, and whether they had been offered, sold, or given an illegal drug on school property. Illegal drug use can lead to unhealthy behaviors and negative consequences. Drug abuse may contribute to depression and suicide, unintended pregnancy, school failure, violent behavior, delinquency, and transmission of sexually transmitted diseases, including HIV.<sup>i</sup>

Marijuana is used for the intoxication or high that it gives most users. For most youth, marijuana is not difficult to obtain.<sup>ii</sup> Many think marijuana is not as harmful as other illicit drugs; however, it has both shortand long-term health effects. The short-term effects include memory problems, loss of coordination, anxiety attacks, and increased heart rate.<sup>iii</sup> Possible long-term effects include respiratory problems, a weakened immune system, and cognitive deficits.<sup>iv</sup>

Prescription drug abuse is reaching prevalence levels near use of marijuana among adolescents. 9.1% of teens aged 12-17 misused prescription drugs in 2005. In 2006, there were as many new abusers of prescription drugs as new users of marijuana.<sup>v</sup> Prescription and over the counter medications are widely available, free or inexpensive, and falsely believed to be safer than illicit drugs. In 2006, 2.1 million teens abused prescription drugs and an additional 2.1 million had misused over the counter cough and cold medications at least once in their lifetime.<sup>vi</sup>

Inhalant use, the deliberate inhalation of toxic substances to induce a psychoactive or mind-altering effect, tends to occur among younger teens and can be highly toxic and even lethal.<sup>vii</sup> The 2006 Monitoring the Future study indicated that 8th graders have tried inhalants in their lifetime more so than any other illicit drug.<sup>viii</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>SA-13.1:</b> Reduce the proportion of adolescents reporting use of alcohol or any illicit drugs during the past 30 days to no more than 16.6%.	10.8% of Summit County Middle School students reported using alcohol or marijuana in the past 30 days.
<b>SA-13.2:</b> Reduce the proportion of adolescents reporting use of marijuana during the past 30 days to no more than 6.0%	5.2% of Summit County Middle School students reported using marijuana at least once during the past 30 days.
<b>AH-7:</b> Reduce the proportion of adolescents who have been offered, sold, or given an illegal drug on school property to no more than 20.4%	13.8% of Summit County Middle School students reported being offered, sold, or given an illegal drug on school property.



The graph below shows Summit County Middle School student prevalence for having ever used six specific drugs one or more times during their life. The Akron East, Akron West and Suburbs South clusters all reported significantly higher prevalence in marijuana use and inhalant use than did the Suburbs North cluster. Akron East and Akron West reported significantly higher prevalence in having ever used heroin and methamphetamines than the Suburbs North. Other significant prevalence differences can be noted in the regional table at the end of this section.



Ever use of illicit and prescription drugs by cluster

Students in Summit County were asked if they had ever used any of five types of illicit drugs: heroin, methamphetamines, inhalants, synthetic or designer drugs, or prescription pain relievers without a doctor's prescription. Additional analysis was conducted to characterize the amount of illicit drug use occurring among Summit County Middle School students. While the majority of students reported no illicit drug use (88.0%), the graph below shows that 71.2% of students who reported any illicit drug use, had used one type of drug. 19.3% of students who reported any illicit drug use had used two or three types of drugs. 9.5% of students who reported any illicit drug use had used four or more types of drugs.



#### Number of illicit drugs ever used



The graph below depicts the use of marijuana by cluster with responses to ever having used marijuana, current marijuana use within the past 30 days before the survey, and having tried marijuana for the first time before age 11 years. The Akron East, Akron West, and Suburbs South clusters have a significantly higher prevalence of having ever used marijuana and current marijuana use than the Suburbs North cluster. The Akron East and Akron West clusters have a significantly higher prevalence of students that tried marijuana for the first time before age 11 years than the Suburbs North cluster. The Akron East allows a significantly higher prevalence of students that tried marijuana for the first time before age 11 years than the Suburbs North cluster. The Akron East cluster also has a significantly higher prevalence for marijuana use before age 11 years than the Suburbs South cluster.



The graph below depicts the differences between ever having used marijuana, current marijuana use, and having tried marijuana for the first time before age 11 years by grade. There were significant differences in prevalence between 7<sup>th</sup> grade and 8<sup>th</sup> grade in ever having used marijuana and current marijuana use.



#### Marijuana use behavior by grade



Summit County Middle School students were asked how wrong they perceived their parents/guardians feel it would be for them to use marijuana. The graph below depicts the prevalence of current marijuana use and "very wrong" responses to parental perception by cluster. There is a significant difference between the Akron East, Akron West, and Suburbs South clusters than the Suburbs North cluster in both current marijuana use and "very wrong" parental perception.



Current marijuana use and student perception of parents' belief that marijuana use is very wrong

Additional analysis of the "Types of prescription drugs abused" item reveals that the majority of the students who reported having used a prescription drug without a doctor's prescription, had used one type of drug. The chart below further describes the number of types of drugs abused by Summit County Middle School students.



#### Number of types of prescription drugs abused



The graph below depicts the prevalence of middle school students that reported being offered, sold, or given an illegal drug on school property by cluster. There are no significant differences between clusters.



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering marijuana and other drug use behaviors. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for current marijuana use among Summit County 8<sup>th</sup> grade students was 7.4% which was significantly higher than the prevalence reported by Summit County 7<sup>th</sup> grade students (3.0%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Ever marijuana use			6.5%	<b>^ 12.9%</b>
			(5.4-7.9)	(11.2-14.8)
Tried marijuana for the first time before age 11	1.7%	<b>^</b> 3.0%		
years	(1.3-2.3)	(2.4-3.7)		
Current marijuana use			3.0%	<b>↑</b> 7.4%
			(2.3-3.9)	(6.2-9.0)
Student perception of parents' belief that			92.1%	<b>^</b> 86.1%
marijuana use is very wrong			(90.7-93.3)	(84.2-87.8)
Offered, sold, or given an illegal drug on school	11.6%	<b>^</b> 15.9%	12.1%	<b>^</b> 15.3%
property	(10.4-12.8)	(14.4-17.6)	(10.7-137.7)	(13.8-16.9)
Ever heroin use				
Ever methamphetamines use				
Ever inhalant use				
Ever synthetic or designer drug use				
Ever took prescription pain medication without a	<b>↑</b> 8.1%	5.7%	5.4%	<b>↑</b> 8.3%
doctor's prescription	(7.0-9.4)	(4.7-6.9)	(4.5-6.6)	(7.0-9.6)



#### **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Ever used marijuana	9.7%
(Used marijuana one or more times during their life.)	(8.7-10.8)
Tried marijuana for the first time before age 11 years	2.4% (2.0-2.9)
Current marijuana use	5.2%
(Used marijuana one or more times during the 30 days before the survey.)	(4.5-6.1)
<b>Ever used heroin</b>	1.4%
(Used heroin one or more times during their life.)	(1.0-1.8)
<b>Ever used methamphetamines</b>	1.5%
(Used methamphetamines one or more times during their life.)	(1.2-2.0)
<b>Ever used inhalants</b>	6.9%
(Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays one or more times during their life.)	(6.1-7.8)
<b>Ever used synthetic or designer drugs</b>	2.3%
(Used synthetic or designer drugs one or more times during their life.)	(1.8-2.9)
<b>Ever took prescription pain medication without a doctor's prescription</b> (Used prescription pain relievers or painkillers without a doctor's prescription one or more times during their life.)	6.9% (6.1-7.8)
Offered, sold, or given an illegal drug on school property	13.8%
(One or more times during the 12 months before the survey.)	(12.8-15.0)
Student perception of parents' belief that marijuana use is very wrong	89.0% (87.8-90.0)



#### **Regional Prevalence**

Risk Behavior	East Akron % (95% CI)	West Akron % (95% CI)	North Suburbs* % (95% Cl)	South Suburbs % (95% Cl)
<b>Ever used marijuana</b> (Used marijuana one or more times during their life.)	14.7% (11.9-18.0)	14.8% (12.0-18.0)	5.2% (4.0-6.7)	12.1% (10.1-14.5)
Tried marijuana for the first time before age 11 years	5.2% (3.8-7.1)	4.4% (2.9-6.5)	1.1% (0.7-1.7)	2.2% (1.5-3.2)
<b>Current marijuana use</b> (Used marijuana one or more times during the 30 days before the survey.)	7.7% (5.5-10.5)	7.9% (5.7-10.8)	2.8% (2.0-4.0)	6.7% (5.3-8.5)
Ever used heroin (Used heroin one or more times during their life.)	3.2% (1.9-5.3)	3.1% (1.8-5.3)	0.4% (0.2-0.9)	1.3% (0.8-2.1)
<b>Ever used methamphetamines</b> (Used methamphetamines one or more times during their life.)	3.8% (2.3-6.4)	3.0% (1.7-5.1)	0.7% (0.4-1.1)	1.1% (0.6-2.1)
<b>Ever used inhalants</b> (Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays one or more times during their life.)	9.4% (7.3-12.1)	8.3% (5.9-11.5)	4.6% (3.6-5.8)	8.6% (7.2-10.3)
<b>Ever used synthetic or designer drugs</b> (Used synthetic or designer drugs one or more times during their life.)	4.2% (2.5-7.0)	3.3% (1.9-5.5)	1.4% (0.9-2.2)	2.1% (1.4-3.2)
Ever took prescription pain medication without a doctor's prescription (Used prescription pain relievers or painkillers without a doctor's prescription one or more times during their life.)	10.4% (8.1-13.1)	7.9% (5.8-10.5)	5.4% (4.2-6.8)	7.2% (5.8-8.9)
Offered, sold, or given an illegal drug on school property (One or more times during the 12 months before the survey.)	17.1% (14.7-19.7)	15.6% (12.7-19.1)	12.9% (11.2-14.7)	13.0% (11.2-15.1)
Student perception of parents' belief that marijuana use is very wrong	83.7% (80.5-86.5)	85.6% (81.9-88.6)	91.9% (90.1-93.4)	88.0% (85.8-89.9)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ever used marijuana				
Category	%	CI		
Gender				
Female	8.8	7.6 -	10.2	
Male	10.4	9.1 -	11.8	
Race/Ethnic	ity			
White	8.5	7.4 -	9.7	
Black	14.8	12.4 -	17.5	
Asian	3.5	0.8 -	13.9	
Hispanic	27.8	17.6 -	41.0	
Other	17.3	13.8 -	21.4	
Grade				
7th	6.5	5.4 -	7.9	
8th	12.9	11.2 -	14.8	
Total	9.7	8.7 -	10.8	

#### Demographics

Tried marijuana for the first time before age 11 years			
Category	%	C	l
Gender			
Female	1.7	1.3 -	2.3
Male	3.0	2.4 -	3.7
Race/Ethnici	ty		
White	1.6	1.3 -	2.1
Black	5.5	4.1 -	7.3
Asian	0.8	0.1 -	5.8
Hispanic	4.4	1.4 -	12.9
Other	6.9	4.5 -	10.6
Grade			
7th	2.1	1.6 -	2.8
8th	2.6	2.0 -	3.4
Total	2.4	2.0 -	2.9

In Summit County, 9.7% of students had used marijuana one or more times during their life (i.e., lifetime marijuana use). The prevalence of lifetime marijuana use was higher for Hispanic (27.8%) students than White, Black, and Asian (8.5%, 14.8%, 3.5%) students. The prevalence of lifetime marijuana use was higher for Black (14.8%) students than White (8.5%) students; and higher for Other/Multiple (17.3%) students than White (8.5%) students. The prevalence of lifetime marijuana use was higher among 8<sup>th</sup> grade (12.9%) students than 7<sup>th</sup> grade (6.5%) students.

In Summit County, 2.4% of students had tried marijuana for the first time before 11 years of age. The prevalence of students that had tried marijuana before 11 years of age was higher among male (3.0%) than female (1.7%) students. The prevalence of students that had tried marijuana before 11 years of age was higher for Black and Other/Multiple (5.5%, 6.9%) students than White (1.6%) students.



Current marijuana Use			
Category	%	CI	
Gender			
Female	5.1	4.1 -	6.2
Male	5.3	4.4 -	6.3
Race/Ethnic	ity		
White	4.6	3.8 -	5.5
Black	7.6	5.7 -	10.0
Asian	1.0	0.2 -	5.5
Hispanic	25.8	15.0 -	40.5
Other	10.4	7.5 -	14.1
Grade			
7th	3.0	2.3 -	3.9
8th	7.4	6.2 -	9.0
Total	5.2	4.5 -	6.1

In Summit County, 5.2% of students had used marijuana one or more times during the 30 days prior to the survey (i.e., current marijuana use). The prevalence of current marijuana was higher for Hispanic (25.8%) students than White, Black, Asian and Other/Multiple (4.6%, 7.6%, 1.0%, 10.4%) students; and higher among Black (7.6%) students than White (4.6%) and Asian (1.0%) students. The prevalence of current marijuana use was higher among 8<sup>th</sup> grade (7.4%) students than 7<sup>th</sup> grade (3.0%) students.

Ever used heroin			
Category	%	CI	
Gender			
Female	1.1	0.7 -	1.5
Male	1.6	1.2 -	2.3
Race/Ethnicity			
White	0.9	0.6 -	1.2
Black	3.0	1.9 -	4.8
Asian	3.3	0.7 -	14.2
Hispanic	11.8	5.1 -	24.7
Other	3.4	1.5 -	7.8
Grade			
7th	1.1	0.7 -	1.6
8th	1.4	1.0 -	2.2
Total	1.4	1.0 -	1.8

In Summit County, 1.4% of students had used heroin one or more times during their life (i.e., lifetime heroin use). The prevalence of lifetime heroin use was higher for Hispanic (11.8%) students than White and Black (0.9%, 3%) students; and higher for Black and Other/Multiple (3%, 3.4%) students than White (0.9%) students.


Ever used methamphetamines				
Category	%	C		
Gender				
Female	1.0	0.7 -	1.5	
Male	2.0	1.4 -	2.8	
Race/Ethnici	ty			
White	1.0	0.7 -	1.4	
Black	3.3	2.0 -	5.5	
Asian	1.4	0.3 -	5.5	
Hispanic	13.2	6.5 -	24.8	
Other	3.9	1.8 -	8.2	
Grade				
7th	1.2	0.8 -	1.8	
8th	1.7	1.1 -	2.5	
Total	1.5	1.2 -	2.0	

In Summit County, 1.5% of students had used methamphetamines one or more times during their life (i.e., lifetime methamphetamines use). The prevalence of lifetime methamphetamines use was higher for Hispanic (13.2%) students than White, Black and Asian (1.0%, 3.3%, 1.4%) students; and higher among Black and Other/Multiple (3.3%, 3.9%) students than White (1.0%) students.

Ever used inhalants				
Category	%	CI		
Gender				
Female	8.0	6.9 -	9.3	
Male	5.8	5.0 -	6.9	
Race/Ethnicity				
White	6.4	5.6 -	7.4	
Black	8.3	6.4 -	10.8	
Asian	5.3	1.9 -	14.3	
Hispanic	26.0	15.9 -	39.4	
Other	11.6	8.1 -	16.4	
Grade				
7th	6.3	5.3 -	7.5	
8th	7.3	6.1 -	8.7	
Total	6.9	6.1 -	7.8	

In Summit County, 6.9% of students had used inhalants one or more times during their life (i.e., lifetime inhalant use). The prevalence of lifetime inhalant use was higher for Hispanic (26.0%) students than White, Black, and Asian (6.4%, 8.3%, 5.3%) students.



Ever used synthetic or designer drugs				
Category	%	CI		
Gender				
Female	1.9	1.4 -	2.7	
Male	2.5	1.9 -	3.4	
Race/Ethnicity				
White	1.8	1.4 -	2.4	
Black	3.7	2.3 -	5.9	
Asian	3.4	0.7 -	14.2	
Hispanic	18.9	10.1 -	32.5	
Other	4.7	2.5 -	8.7	
Grade				
7th	1.8	1.3 -	2.5	
8th	2.6	1.9 -	3.5	
Total	2.3	1.8 -	2.9	

In Summit County, 2.3% of students had used synthetic or designer drugs one or more times during their life (i.e., lifetime synthetic or designer drug use). The prevalence of lifetime synthetic or designer drug use was higher for Hispanic (18.9%) students than White, Black, and Other/Multiple (1.8%, 3.7%, 4.7%) students.

Ever took prescription pain medication without a doctor's prescription				
Category	%	CI		
Gender				
Female	8.1	7.0 -	9.4	
Male	5.7	4.7 -	6.9	
Race/Ethnic	city			
White	6.1	5.3 -	7.1	
Black	9.1	7.2 -	11.5	
Asian	6.1	3.3 -	11.0	
Hispanic	26.0	16.2 -	39.0	
Other	12.9	9.5 -	17.3	
Grade				
7th	5.4	4.5 -	6.6	
8th	8.3	7.0 -	9.6	
Total	6.9	6.1 -	7.8	

In Summit County, 6.9% of students had used prescription pain relievers or painkillers without a doctor's prescription one or more times during their life (i.e., lifetime unauthorized prescription drug use). The prevalence of lifetime unauthorized prescription drug use was higher for Hispanic (26.0%) students than White, Black and Asian (6.1%, 9.1%, 6.1%) students; and higher for Black and Other/Multiple (9.1%, 12.9%) students than White (6.1%) students. The prevalence of lifetime unauthorized prescription drug use was higher among 8<sup>th</sup> grade (8.3%) students than 7<sup>th</sup> grade (5.4%) students.



Offered, sold, or given an illegal drug on school property				
Category	%	CI		
Gender				
Female	11.6	10.4 -	12.8	
Male	15.9	14.4 -	17.6	
Race/Ethnicity				
White	13.3	12.1 -	14.6	
Black	16.2	13.8 -	19.0	
Asian	6.2	3.4 -	10.9	
Hispanic	23.2	14.3 -	35.3	
Other	18.4	13.7 -	24.3	
Grade				
7th	12.1	10.7 -	13.7	
8th	15.3	13.8 -	16.9	
Total	13.8	12.8 -	15.0	

In Summit County, 13.8% of students had been offered, sold, or given illegal drugs on school property one or more times in the 12 months prior to the survey. The prevalence of having been offered, sold, or given illegal drugs on school property one or more times in the 12 months prior to the survey was higher among male (15.9%) students than female (11.6%) students. The prevalence of having been offered, sold, or given illegal drugs on school property one or more times in the 12 months prior to the survey was higher among male (15.9%) students than female (11.6%) students. The prevalence of having been offered, sold, or given illegal drugs on school property one or more times in the 12 months prior to the survey was higher among 8<sup>th</sup> grade (15.3%) students than 7<sup>th</sup> grade (12.1%) students.

Student perception of parents' belief that marijuana use is very				
	wrong	5		
Category	%	CI		
Gender				
Female	89.0	87.5 -	90.4	
Male	89.0	87.5 -	90.3	
Race/Ethnicity				
White	90.0	88.6 -	91.1	
Black	84.3	81.3 -	86.9	
Asian	86.2	69.7 -	94.4	
Hispanic	77.5	65.6 -	86.1	
Other	84.8	80.6 -	88.1	
Grade				
7th	92.1	90.7 -	93.3	
8th	86.1	84.2 -	87.8	
Total	89.0	87.8 -	90.0	

In Summit County, 89% of students perceive that their parents/guardians feel it would be very wrong for them to use marijuana. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to use marijuana was higher among White (90%) students than Black, Hispanic and Other/Multiple (84.3%, 77.5%, 84.8%) students. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to use marijuana was higher among 7<sup>th</sup> grade (92.1%) students than 8<sup>th</sup> grade (86.1%) students.



- <sup>i</sup> Wu, W., Khan, A. 2005. Adolescent Illicit Drug Use: Understanding and Addressing the Problem. *Medscape Public Health & Prevention.* 3(2).
- <sup>ii</sup> Substance Abuse and Mental Health Services Administration. 2001. *The NHSDA Report: Obtaining Marijuana Easy for Youths*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- <sup>iii</sup> National Institute on Drug Abuse. NIDA InfoFacts: Marijuana. National Institute on Drug Abuse Web site. Available at http://www.nida.nih.gov/Infofax/marijuana.html. Accessed on July 24, 2008.
- <sup>iv</sup> Hubbard, J., Franco, S., Onaivi, E. 1999. Marijuana: Medical Implications. *The American Academy of Family Physicians*. 60:2583-93.
- <sup>v</sup> Substance Abuse and Mental Health Services Administration. 2006. *Misuse of Prescription Drugs, 2005*. Available at http://www.oas.samhsa.gov/prescription/toc.htm. Accessed on June 1, 2009.
- <sup>vi</sup> Substance Abuse and Mental Health Services Administration. 2007. Results from the 2006 National Survey on Drug Use and Health: National Findings. Office of Applied Studies, NSDUH Series H-32, DHHS Publication No. SMA 07-4293. Rockville, MD.
- vii Volkow, N. 2005. Inhalant abuse: Danger under the kitchen sink. NIDA Notes. 20(3).
- viii Johnston, L., O'Malley, P., Bachman, J., Schulenberg, J. 2007. Monitoring the Future national results on adolescent drug use: Overview of key findings, 2006. Bethesda, MD: National Institute on Drug Abuse.



# **Section 7: Gambling**

The 2013 Summit County Middle School YRBS included two items about gambling. Middle school students were asked if they had gambled money or personal items one or more times in the 12 months prior to the survey. They were also asked if they had bet or gambled more than they wanted to at least one time in the 30 days prior to the survey.

Problem gambling is widespread. It is estimated that in Ohio 264,000 adults and approximately 38,000 adolescents exhibit problem gambling behaviors.<sup>i</sup>

Little is known about the course and outcomes of adolescent gambling. A review of 26 gambling prevalence studies conducted in the US and Canada shows both a high level of adolescent involvement in gambling activities and an increase in participation in recent years.<sup>II</sup> Estimates of problem gambling or pathological gambling range between two and four times higher than the adult population, with 4 to 8 percent suffering serious problems and an additional 10 to 14 percent at risk for gambling problems.<sup>IIII,IV,V</sup>

Healthy People 2020 Objectives	Summit County 2013
There are no HP2020 objectives that relate directly to questions asked in the 2013 Summit County YRBS	

The graph below depicts by Summit County regional cluster those who gambled money or personal items and those that bet or gambled more than intended. There are no significant differences noted between clusters of those students who gambled money or personal items. However, Akron East and Akron West clusters have a significantly higher prevalence than the Suburbs North cluster, of students who bet or gambled more than they wanted.



#### Gambling behavior by cluster



The graph below depicts the two gambling behaviors by gender and grade among all students. There is a significant difference between females and males in that males were more likely to have gambled money or personal items in the past 12 months before the survey. There is a significant difference between 7<sup>th</sup> grade and 8<sup>th</sup> grade students with 8<sup>th</sup> grade students reporting they gambled money or personal items more in the past 12 months before the survey. However, there is no significant difference by grade of those that gambled more than they wanted.



Summit County Middle School students were asked to select all that applied from a list of possible gambling products/methods that they used to gamble in the past 30 days before the survey. Most students responded that they gambled on games of personal skill such as bowling, video games, or dares; or they gambled on a sport.



#### **Types of gambling**



Students in Summit County were asked to select all that applied from a list of possible gambling locations where they had gambled in the 30 days before the survey. Most students responded that they gambled in their own home or in another person's home.



**Gambling location** 

The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering gambling behaviors among all students. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for having gambled money or personal items among Summit County male students was 25.9% which was significantly higher than the prevalence reported by Summit County female students (12.4%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Gambled money or personal items	12.4% (11.1-13.9)	↑ 25.9% (24.0-28.0)	16.6% (14.8-18.5)	↑ 22.1% (20.3-24.0)
Bet or gambled more than intended				



#### **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Gambled money or personal items (During the 12 months before the survey; among all students.)	19.4% (18.0-20.8)
Bet or gambled more than intended (During the 30 days before the survey; always or most of the time; among all students.)	1.1% (0.8-1.5)

#### **Regional Prevalence**

Risk Behavior	East Akron % (95% CI)	West Akron % (95% CI)	North Suburbs* % (95% CI)	South Suburbs % (95% CI)
Gambled money or personal items (During the 12 months before the survey; among all students.)	21.8% (19.1-24.8)	18.6% (15.8-21.8)	18.3% (16.2-20.5)	20.0% (17.4-22.9)
<b>Bet or gambled more than intended</b> (During the 30 days before the survey; always or most of the time; among all students.)	2.5% (1.5-4.2)	1.9% (0.9-4.3)	0.4% (0.2-0.8)	1.0% (0.5-1.9)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Gambled money or personal items				
Catagony	0/			
Category	70	C		
Gender				
Female	12.4	11.1 -	13.9	
Male	25.9	24.0 -	28.0	
Race/Ethnie	city			
White	19.0	17.5 -	20.6	
Black	21.4	18.6 -	24.6	
Asian	7.5	4.3 -	12.7	
Hispanic	30.9	19.1 -	45.9	
Other	18.0	13.9 -	23.0	
Grade				
7th	16.6	14.8 -	18.5	
8th	22.1	20.3 -	24.0	
Total	19.4	18.0 -	20.8	

Demo	grap	hics
------	------	------

Bet or gamb	Bet or gambled more than intended			
Category	%	C	1	
Gender				
Female	0.7	0.4 -	1.2	
Male	1.4	1.0 -	1.9	
Race/Ethnic	ity			
White	0.6	0.4 -	1.0	
Black	2.7	1.0 -	4.3	
Asian	0.0	0.0 -	0.0	
Hispanic	6.3	1.9 -	18.6	
Other	4.0	1.9 -	8.2	
Grade				
7th	1.0	0.6 -	1.6	
8th	1.0	0.6 -	1.5	
Total	1.1	0.8 -	1.5	

In Summit County, 19.4% of students had gambled money or personal items one or more times in the 12 months prior to the survey. The prevalence of gambling money or personal items in the 12 months prior to the survey was higher among male (25.9%) students than female (12.4%) students. The prevalence of gambling money or personal items in the 12 months prior to the survey was higher for Hispanic (30.9%) students than Asian (7.5%) students. The prevalence of gambling money or personal items in the 12 months prior to the survey was higher for Hispanic (30.9%) students than Asian (7.5%) students. The prevalence of gambling money or personal items in the 12 months prior to the survey was higher among 8<sup>th</sup> grade (22.1%) students than 7<sup>th</sup> grade (16.6%) students.

In Summit County, 1.1% of students had gambled more than they wanted to at least one time in the 30 days prior to the survey. The prevalence of having gambled more than they wanted to was higher among Hispanic and Other/Multiple (6.3%, 4.0%) students than White (0.6%) students.



- <sup>ii</sup> Jacobs DF. Youth gambling in North America: Long-term trends and future prospects. In: Derevensky JL, Gupta R, editors. Gambling Problems in Youth: Theoretical and Applied Perspectives. New York, NY: Klewer Academic/Plenum Publishers; 2004. pp.1-24.
- <sup>iii</sup> Gupta R, Derevensky JL. Adolescent gambling behavior: A prevalence study and examination of the correlates associated with problem gambling. J Gambl Stud. 1998;14(4):319-45.
- <sup>iv</sup> Shaffer HJ, Hall MN. Estimating the prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. J Gaml Stud. 1996;12(2):193-214
- <sup>v</sup> Shaffer HJ, Hall MN. Updating and refining prevalence estimated of disordered gambling behavior in the United States and Canada. Can J Public Health. 2001;92(3):168-72



<sup>&</sup>lt;sup>i</sup> "Ohio Problem Gambling." Prevention. Ohio Department of Mental Health and Addiction Service, n.d. Web. 9 Sep 2013. <a href="http://mha.ohio.gov/Default.aspx?tabid=505">http://mha.ohio.gov/Default.aspx?tabid=505</a>>.

# Section 8: Sexual Behaviors

The 2013 Summit County Middle School YRBS asked students whether they had ever had sexual intercourse and whether they or their partner used a condom most of the time or always during the past three months. The middle school students were also asked if they had been taught in school about AIDS or HIV infection and if they had talked about AIDs or HIV Infection with parents or other adults in their family. Early sexual activity is associated with a high number of sexual partners, <sup>i,ii</sup> STI contraction, teenage pregnancy, and greater risk for unwanted sex.<sup>iii</sup> Since 1990, teen pregnancy and birth rates in the United States have declined significantly. Researchers cite two main factors: fewer teens are having sex, and among those who are, more are using contraceptives.<sup>iv</sup> While this is a positive trend, there are still risks for those teens that are entering into sexual relationships during their adolescent years.

While conducting analyses for the sexual behavior category of survey items, researchers noticed a sizeable proportion of missing responses. Missing data were more common among males and minority students. The amount of missing data decreased by grade. The stability of the data examined in this section must be considered and caution used in interpretation.

Healthy People 2020 Objectives	Summit County 2013
<b>FP-9:</b> Increase the proportion of adolescents aged 17 years and under who have never had sexual intercourse.	97.5% of Summit County Middle School students have never had sexual intercourse.

The graph below depicts responses to the sexual behavior questions by cluster. There are no significant differences across the clusters for those that ever had sexual intercourse and those sexually active students who reported using a condom most of the time or always during the past three months. However, the Akron East and Akron West clusters report significant differences from the Suburbs North and Suburbs South clusters with regard to having AIDS or HIV education in school and having talked with their parents or other adults in their family about AIDS or HIV infection.



# Sexual behaviors that contribute to unintended pregnancy



The following graph depicts 7<sup>th</sup> grade and 8<sup>th</sup> grade students who have ever had sexual intercourse and those who used a condom most of the time or always during the past three months. There is no significant differences to report between grade levels.



Sexual behaviors by grade

The graph below depicts the responses to ever having sexual intercourse and condom use most of the time or always during the past three months by gender. While there is a higher prevalence of condom use by males than females, the difference is not significant.



# Healthy Neighborhoods

The prevalence of being taught in school about AIDS or HIV infection and talking about AIDS or HIV infection with parents or other adults in their family was significantly higher among 8<sup>th</sup> grade students than 7<sup>th</sup> grade students.



Prevalence of AIDS/HIV education by grade

The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for being taught in school about AIDS or HIV infection among Summit County 7<sup>th</sup> grade students was 48.8% which was significantly lower than the prevalence reported by Summit County 8<sup>th</sup> grade students (71.3%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Ever had sexual intercourse				
Current condom use				
Taught in school about AIDS or HIV			<b>^</b> 48.8%	71.3%
infection			(45.4-52.2)	(68.5-73.8)
Talked about AIDS or HIV infection with			<b>^</b> 31.7%	38.7%
parents or other adults in family			(29.5-34.0)	(36.6-40.7)



# **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
<b>Ever had sexual intercourse</b> (Had sexual intercourse one or more times during their life.)	2.5% (2.0-3.1)
<b>Condom use</b> (Used a condom most of the time or always during the past 3 months, among currently sexually active students.)	16.7% (9.4-27.7)
Were taught in school about AIDS or HIV infection	60.0% (57.5-62.4)
Talked about AIDS or HIV infection with parents or other adults in family	35.2% (33.7-36.8)



# **Regional Prevalence**

Risk Behavior	East	West	North	South
	Akron	Akron	Suburbs*	Suburbs
	%	%	%	%
	(95% CI)	(95% CI)	(95% CI)	(95% CI)
<b>Ever had sexual intercourse</b> (Had sexual intercourse one or more times during their life.)	4.2% (2.9-6.0)	3.2% (2.2-4.7)	2.0% (1.4-2.9)	2.0% (1.3-3.2)
<b>Condom use</b> (Used a condom most of the time or always during the past 3 months, among currently sexually active students.)	22.1% (8.8-45.5)	19.3% (6.4-45.3)	7.3% (1.0-38.7)	15.3% (5.0-38.4)
Were taught in school about AIDS or HIV	72.9%	74.8%	52.7%	60.4%
Infection	(68.9-76.6)	(69.9-79.1)	(49.0-56.4)	(54.6-65.9)
Talked about AIDS or HIV infection with parents or other adults in family	45.7%	49.4%	30.5%	33.1%
	(42.4-49.1)	(44.9-54.0)	(28.1-33.0)	(30.6-35.7)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ever had sexual intercourse						
Category % Cl						
Gender						
Female	2.0	1.4 -	2.8			
Male	3.0	2.3 -	4.0			
Race/Ethnici	ty					
White	2.2	1.7 -	2.8			
Black	3.9	2.7 -	5.6			
Asian	5.6	2.9 -	10.6			
Hispanic	5.6	2.1 -	14.2			
Other	2.2	1.0 -	5.0			
Grade						
7th	2.3	1.7 -	3.0			
8th	2.6	1.9 -	3.5			
Total	2.5	2.0 -	3.1			

Demographics

Condom use						
Category % Cl						
Gender						
Female	5.7	1.4 -	20.0			
Male	22.5	12.2 -	37.6			
Race/Ethnici	ity					
White	7.9	2.5 -	22.6			
Black	30.8	15.4 -	52.1			
Asian	0.8	0.1 -	8.5			
Hispanic	3.0	0.3 -	24.1			
Other	10.4	1.2 -	51.7			
Grade						
7th	14.5	6.1 -	30.9			
8th	17.9	7.6 -	36.6			
Total 16.7 9.4 - 27.7						

In Summit County, 2.5% of students have had sexual intercourse one or more times during their lifetime.

In Summit County, 16.7% of students who were sexually active used a condom most of the time or always during the past three months. The prevalence of students who were sexually active used a condom most of the time or always during the past three months was higher among Black (30.8%) students than Asian (0.8%) students.



Were taught in school about AIDS or HIV Infection						
Category	Category % Cl					
Gender						
Female	57.8	54.8 -	60.7			
Male	62.0	59.1 -	64.8			
Race/Ethnic	city					
White	57.4	54.5 -	60.3			
Black	73.1	69.9 -	76.0			
Asian	43.5	33.5 -	54.1			
Hispanic	64.2	53.8 -	73.4			
Other	69.1	63.6 -	74.1			
Grade						
7th	48.8	45.4 -	52.2			
8th	71.3	68.5 -	73.8			
Total	60.0	57.5 -	62.4			

In Summit County, 60.0% of students were taught about HIV/AIDS in school. The prevalence of being taught about HIV/AIDS in school was higher among Black (73.1%) students than White and Asian (57.4%, 43.5%) students. The prevalence of being taught about HIV/AIDS in school was higher among 8<sup>th</sup> grade (71.3%) students than 7<sup>th</sup> grade (48.8%) students.

Talked about AIDS or HIV					
infection with parents or other					
ad	ults in fa	mily			
Category % Cl					
Gender					
Female	35.8	33.8 -	37.8		
Male	34.6	32.5 -	36.8		
Race/Ethnic	ity				
White	31.3	29.7 -	33.0		
Black	55.4	51.7 -	59.0		
Asian	18.7	13.2 -	25.7		
Hispanic	49.0	37.6 -	60.6		
Other	46.2	41.0 -	51.5		
Grade					
7th	31.7	29.5 -	34.0		
8th	38.7	36.6 -	40.7		
Total	35.2	33.7 -	36.8		

In Summit County, 35.2% of students talked about AIDS or HIV infection with parents or other adults in the family. The prevalence of talking about AIDS or HIV infection with parents or other adults in the family was higher among Black (55.4%) students than White, Asian and Other/Multiple (31.3%, 18.7%, 46.2%) students; and higher among Hispanic and Other/Multiple (49.0%, 46.2%) students than White (31.3%) students. The prevalence of talking about AIDS or HIV infection with parents or other adults in the family was higher among 8<sup>th</sup> grade (38.7%) students than 7<sup>th</sup> grade (31.7%) students.



- <sup>ii</sup> Santelli, J., Brener, N., Lowry, R., Bhatt, A., Zabin, L. 1998. Multiple sexual partners among U.S. adolescents and young adults. *Family Planning Perspectives*. 30(6):271-275.
- <sup>iii</sup> Moore, K., Manlove, J., Glei, D., Morrison, D. 1998. Nonmarital school-age motherhood: family, individual, and school characteristics. *Journal of Adolescent Research*. 13(4):433-457.
- <sup>iv</sup> Martin, J., Hamilton, B., Sutton, P., Ventura, S., Menacker, F., Kirmeyer, S., Munson, M. 2007. Births: final data for 2005. *National Vital Statistics Reports*. 56(6).



<sup>&</sup>lt;sup>i</sup> Smith, C. 1997. Factors associated with early sexual activity among urban adolescents. *Social Work*. 42(4):334-346.

# Section 9: Obesity, Overweight, and Weight Control

The 2013 Summit County Middle School YRBS asked students about their height and weight in order to calculate the student's Body Mass Index (BMI). Additionally, students were asked how they describe their own weight and what (if anything) they were currently trying to do about their weight.

Obesity has reached epidemic proportions. In the past 20 years, the prevalence of obesity has increased by more than 60% among adults and tripled in children and adolescents.<sup>i</sup> Overweight adolescents often become overweight adults with an increased risk for a wide variety of poor health outcomes including diabetes, stroke, heart disease, arthritis and certain cancers.<sup>ii,iii</sup> Obesity during adolescence is associated with negative psychological and social consequences and health problems such as Type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome.<sup>iv</sup>

The Summit County Adolescent Health Consortium was particularly interested in these topics and requested an analysis that explored more fully the congruence (or lack thereof) between calculated BMI status with perception of weight, what students were trying to do about their weight, dietary behaviors and levels of physical activity. For this reason this chapter contains far more detailed and specific analyses.

Healthy People 2020 Objectives	Summit County 2013
<b>NWS-10.3:</b> Reduce the proportion of adolescents aged 12 to 19 years who are considered obese to no more than 16.1%	11.7% of Summit County Middle School students were considered obese.

The chart below depicts the distribution of Body Mass Index (BMI) classifications among Summit County Middle School students. Obese was defined as a BMI of  $\ge 95^{th}$  percentile for age and sex. Overweight was defined as a BMI of  $\ge 85^{th}$  percentile and  $< 95^{th}$  percentile for age and sex. Normal weight was defined as a BMI of  $\ge 5^{th}$  percentile and  $< 85^{th}$  percentile for age and sex. Underweight was defined as a BMI of  $< 5^{th}$  percentile for age and sex.

# Normal weight, 69.4% Obese, 11.7% Underweight, 3.2%

at Case Western Reserve University

### Summit County Middle School overall BMI

Slightly over two-thirds (69.4%) of Summit County Middle School students reported heights and weights consistent with normal weight, with the remaining one-third had BMI's for their age and sex that put them into a category of risk (underweight, overweight, or obese). It is important to note that BMI is calculated using self-reported height and weight and, therefore, may inaccurately estimate the actual prevalence of overweight and obese students. The graph below depicts BMI by cluster with each column representing a cluster.



**BMI by cluster** 

The two pie charts below depict the BMI of Summit County Middle School students examined by gender. There is a significant difference between male (14.2%) students and female (8.9%) students that were in the obese category. A significant difference was reported of female (72.6%) students who classified as normal weight compared to male (66.6%) students.





Summit County Middle School students were asked how they described their weight by responding to "very underweight", "slightly underweight", "about the right weight", "slightly overweight", and "very overweight". Students were also asked what they were trying to do about their weight whether they were "trying to lose weight", "gain weight", "stay the same weight", or "not trying to do anything about their weight". The graph below depicts the prevalence of students that perceived themselves to be "slightly" or "very" overweight, the two BMI categories of obese and overweight, and the students that reported "trying to lose weight" by cluster.



In Summit County, students were asked to choose all that applied from a list of weight loss and/or weight control options that they engaged in during the 30 days before completing the survey. Of the students who were trying to lose weight, the graph below shows their responses for each option listed. The majority of students reported that they exercised to lose weight or to keep from gaining weight during the 30 days before completing the survey.



The chart below depicts the weight loss and/or weight control options that students engaged in during the 30 days before completing the survey but examined by gender. Male students were significantly more likely to report using exercise as a means of weight loss. Female students were significantly more likely to report eating less, fasting and vomiting or taking laxatives.



#### Weight loss/control efforts by gender

BMI categories of Underweight, Normal weight and Overweight/Obese were further examined by gender, race/ethnicity, and Summit County clusters. The graphs below depict these analyses. There are no significant differences to report between grade levels.

By Gender: Female students were more likely to be of normal weight. Male students were more likely to be overweight/obese.



#### **BMI categories by gender**



By Race/Ethnicity: Asian students were more likely to be underweight than White, Black, Hispanic and Other/Multiple students.



**BMI categories by race/ethnicity** 

By Summit County Cluster: Students in the Suburbs North cluster were significantly more likely than students in the Akron East, Akron West or Suburbs South clusters, to be of normal weight and least likely to be overweight/obese.



BMI categories by cluster



BMI categories of Underweight, Normal weight and Overweight/Obese were further examined for possible associations with dietary behaviors and physical activity behaviors. The graphs below depict these analyses.

- There are no significant differences to report between BMI categories of students who ate 5 or more fruits/vegetables on the day before the survey.
- The prevalence of not eating breakfast every day during the week before completing the survey was higher among overweight/obese students than underweight and normal weight students.
- There are no significant differences to report between BMI categories of students who ate fast food on one or more days during the week before the survey.



#### BMI category by dietary behavior

- The prevalence of not having engaged in physical activity (that increased one's heart rate and made one breathe hard some of the time) for a total of at least 60 minutes per day on 5 or more of the 7 days before completing the survey was similar for the three BMI categories. No significant changes were reported.
- The prevalence of having engaged in physical activity (that increased one's heart rate and made one breathe hard some of the time) for a total of at least 60 minutes per day on 5 or more of the 7 days before completing the survey was significantly lower among overweight/obese students than among normal weight students.
- The prevalence of watching 3+ hours of television per day on an average school day was significantly higher among overweight/obese students than among normal weight students.
- There was no significant difference to report in the prevalence of playing video or computer games or using a computer for something that was not school work for 3+ hours on an average school day between BMI categories.



#### BMI category by physical activity behavior



- The prevalence of engaging in fewer than 3 hours of sedentary behavior (television watching or using a computer for something that was not school work for 3+ hours on an average school day) was significantly higher among normal weight students than among overweight/obese students.
- There was no significant difference to report in the prevalence of engaging in 3 6 hours of sedentary behavior (television watching or using a computer for something that was not school work for 3+ hours on an average school day) between BMI categories.
- The prevalence of engaging in 6 or more hours of sedentary behavior (television watching or using a computer for something that was not school work for 3+ hours on an average school day) was significantly higher among overweight/obese students than among normal weight students.



#### Sedentary behavior by BMI category



BMI categories of Underweight, Normal weight and Overweight/Obese were further examined for possible associations with perceptions of weight and weight management by gender. The graphs below depict these analyses.

#### Perception of Weight: Female

BMI-Underweight

- 52.1% of female students whose self-reported weight and height placed them in the Underweight BMI category considered themselves to be Underweight.
- Discordance existed among the 33.0% of female students whose self-reported weight and height placed them in the Underweight BMI category but they considered themselves to be of Normal weight.
- Discordance was further evident among the 14.9% of female students whose self-reported weight and height placed them in the Underweight BMI category but they considered themselves to be Overweight/Obese.

**BMI-Normal Weight** 

- Discordance existed among the 17.7% of female students whose self-reported weight and height placed them in the Normal weight BMI category but they considered themselves to be Underweight.
- 61.7% of female students whose self-reported weight and height placed them in the Normal weight BMI category considered themselves to be of Normal weight.
- Discordance was further evident among the 20.5% of female students whose self-reported weight and height placed them in the Normal weight BMI category but they considered themselves to be Overweight/Obese.

BMI-Overweight/Obese

- Discordance existed among the 4.7% of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category but they considered themselves to be Underweight.
- Discordance was further evident among the 28.4% of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category but they considered themselves to be of Normal weight.
- 66.9% of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category considered themselves to be Overweight/Obese.



### Female BMI category by perception of weight



#### Perception of Weight: Male

BMI-Underweight

- 70.2% of male students whose self-reported weight and height placed them in the Underweight BMI category considered themselves to be Underweight.
- Discordance existed among the 29.8% of male students whose self-reported weight and height placed them in the Underweight BMI category but they considered themselves to be of Normal weight.
- 0.0% of male students whose self-reported weight and height placed them in the Underweight BMI category considered themselves to be Overweight/Obese.

**BMI-Normal Weight** 

- Discordance existed among the 29.6% of male students whose self-reported weight and height placed them in the Normal weight BMI category but they considered themselves to be Underweight.
- 62.5% of male students whose self-reported weight and height placed them in the Normal weight BMI category considered themselves to be of Normal weight.
- Discordance was further evident among the 7.9% of male students whose self-reported weight and height placed them in the Normal weight BMI category but they considered themselves to be Overweight/Obese.

BMI-Overweight/Obese

- Discordance existed among the 4.1% of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category but they considered themselves to be Underweight.
- Discordance was further evident among the 39.1% of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category but they considered themselves to be of Normal weight.
- 56.8% of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category considered themselves to be Overweight/Obese.



### Male BMI category by perception of weight

■ Perception of underweight ■ Perception of normal weight ■ Perception of overweight/obese



# Weight Management: Female

BMI-Underweight

- Sixty-five percent of Underweight females expressed some level of discord with regard to weight status and weight loss efforts: 35.6% of female students whose self-reported weight and height placed them in the Underweight BMI category were trying to lose weight, 12.2% were trying to stay the same weight while 34.4% reported not trying to do anything about their weight.
- 17.9% of female students whose self-reported weight and height placed them in the Underweight BMI category expressed concordance by indicating that they were trying to gain weight.

#### BMI-Normal weight

- A little less than half of female students whose self-reported weight and height placed them in the Normal weight BMI category registered discordance by reporting that they were trying to lose weight.
- Discordance was further evident among the 6.0% of female students whose self-reported weight and height placed them in the Normal weight BMI category but they reported that they were trying to gain weight.
- About fifty percent of female students whose self-reported weight and height placed them in the Normal weight BMI category expressed concordance by indicating that they were trying to stay the same weight or that they were not trying to do anything about their weight.

#### BMI-Overweight/Obese

- 81.9% of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category expressed concordance by indicating that they were trying to lose weight.
- Eighteen percent of female students whose self-reported weight and height placed them in the Overweight/Obese BMI category registered discordance by reporting that they were trying to gain weight, trying to stay the same weight, or not trying to do anything about their weight.



#### Female BMI category by trying to do about weight



#### Weight Management: Male

BMI-Underweight

- Sixty percent of Underweight males expressed some level of discord with regard to weight status and weight loss efforts: 6.8% of male students whose self-reported weight and height placed them in the Underweight BMI category were trying to lose weight, 21.2% were trying to stay the same weight while 32.6% reported not trying to do anything about their weight.
- 39.4% of male students whose self-reported weight and height placed them in the Underweight BMI category expressed concordance by indicating that they were trying to gain weight.

#### **BMI-Normal weight**

- 19.7% of male students whose self-reported weight and height placed them in the Normal weight BMI category registered discordance by reporting that they were trying to lose weight.
- Discordance was further evident among the 22.8% of male students whose self-reported weight and height placed them in the Normal weight BMI category but they reported that they were trying to gain weight.
- Fifty-seven percent of male students whose self-reported weight and height placed them in the Normal weight BMI category expressed concordance by indicating that they were trying to stay the same weight or that they were not trying to do anything about their weight.

BMI-Overweight/Obese

- 63.4% of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category expressed concordance by indicating that they were trying to lose weight.
- Thirty-six percent of male students whose self-reported weight and height placed them in the Overweight/Obese BMI category registered discordance by reporting that they were trying to gain weight, trying to stay the same weight, or not trying to do anything about their weight.



#### Male BMI category by trying to do about weight



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering obesity, overweight, and weight control behaviors. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for trying to lose weight among Summit County female students was 54.4% which was significantly higher than the prevalence reported by Summit County male students (34.0%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Describes self as slightly or very	<b>^</b> 33.6%	24.0%		
overweight	(31.7-35.5)	(22.3-25.8)		
Trying to lose weight	<b>^</b> 54.4%	34.0%		
	(52.1-56.7)	(32.0-36.1)		
Overweight				
Obese	8.9%	<b>^</b> 14.2%		
	(7.7-10.4)	(12.8-15.7)		

#### **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Describes themselves as slightly or very overweight	28.7% (27.4-30.0)
Trying to lose weight	44.1% (42.4-45.7)
<b>Overweight</b> (Having a BMI >85 <sup>th</sup> percentile and <95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)	15.7% (14.5-16.9)
<b>Obese</b> (Having a BMI of >95 <sup>th</sup> percentile for age and sex. Calculated from self- reported height and weight, adjusted for sex and age.)	11.7% (10.8-12.8)



# **Regional Prevalence**

Risk Behavior	East	West	North	South
	Akron	Akron	Suburbs*	Suburbs
	%	%	%	%
	(95% CI)	(95% CI)	(95% CI)	(95% CI)
Describes self as slightly or very overweight	27.8%	26.1%	28.4%	30.4%
	(24.6-31.2)	(22.8-29.8)	(26.5-30.4)	(28.0-33.0)
Trying to lose weight	46.6%	46.3%	39.9%	48.4%
	(43.2-50.0)	(41.7-51.0)	(37.4-42.6)	(45.6-51.1)
<b>Overweight</b> (Having a BMI >85 <sup>th</sup> percentile and <95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)	19.7% (17.1-22.6)	18.5% (15.4-21.9)	13.8% (12.0-15.8)	15.4% (13.5-17.5)
<b>Obese</b>	14.5%	15.6%	8.2%	14.5%
(Having a BMI of >95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)	(11.7-17.7)	(12.4-19.4)	(6.9-9.7)	(12.9-16.2)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Describes themselves as slightly				
or very overweight				
Category	%	CI		
Gender				
Female	33.6	31.7 -	35.5	
Male	24.0	22.3 -	25.8	
Race/Ethnicity				
White	30.2	28.7 -	31.7	
Black	22.7	20.0 -	25.7	
Asian	15.6	10.4 -	22.7	
Hispanic	23.9	15.8 -	34.5	
Other	30.7	26.2 -	35.5	
Grade				
7th	27.7	25.8 -	29.6	
8th	29.9	28.0 -	31.8	
Total	28.7	27.4 -	30.0	

## Demographics

Trying to lose weight				
	5 10 1030	weight		
Category	%	CI		
Gender				
Female	54.4	52.1 -	56.7	
Male	34.0	32.0 -	36.1	
Race/Ethnic	ity			
White	44.2	42.3 -	46.1	
Black	44.6	41.2 -	47.9	
Asian	31.6	24.5 -	39.7	
Hispanic	37.5	28.2 -	47.9	
Other	45.6	40.3 -	51.0	
Grade				
7th	42.5	40.2 -	44.8	
8th	45.8	43.3 -	48.3	
Total	44.1	42.4 -	45.7	

In Summit County, 28.7% of students describe themselves as slightly or very overweight. The prevalence of describing oneself as slightly or very overweight was higher among female (33.6%) students than male (24.0%) students. The prevalence of describing oneself as slightly or very overweight was higher for White (30.2%) students than Black (22.7%) and Asian (15.6%) students. In Summit County, 44.1% of students are trying to lose weight. The prevalence of trying to lose weight was higher among female (54.4%) than male (34.0%) students.



Overweight			
Category	%	CI	
Gender			
Female	15.1	13.6 -	16.7
Male	16.2	14.6 -	17.9
Race/Ethnic	ity		
White	14.5	13.3 -	15.8
Black	20.1	17.5 -	22.9
Asian	12.0	7.1 -	19.5
Hispanic	17.4	8.9 -	31.1
Other	17.0	12.9 -	22.1
Grade			
7th	15.1	13.6 -	16.7
8th	16.2	14.5 -	18.1
Total	15.7	14.5 -	16.9

In Summit County, 15.7% of students reported heights and weights consistent with being overweight. The prevalence of being overweight was higher for Black (20.1%) students than White (14.5%) students.

	Obese	!			
Category	%	CI			
Gender					
Female	8.9	7.7 -	10.4		
Male	14.2	12.8 -	15.7		
Race/Ethnic	Race/Ethnicity				
White	11.0	10.0 -	12.1		
Black	15.6	13.2 -	18.4		
Asian	6.1	3.2 -	11.6		
Hispanic	13.2	7.0 -	23.3		
Other	10.4	7.4 -	14.3		
Grade					
7th	12.3	10.7 -	14.0		
8th	11.3	10.0 -	12.7		
Total	11.7	10.8 -	12.8		

In Summit County, 11.7% of students reported heights and weights consistent with being obese. The prevalence of being obese was higher among male (14.2%) students than female (8.9%) students. The prevalence of being obese was higher for Black (15.6%) students than White and Asian (11%, 6.1%) students.



- <sup>ii</sup> Ferraro, K., Thorpe, R., Wilkinson, J. 2003. The life course of severe obesity: Does childhood overweight matter? *Journal of Gerontology*. 58B(2):S110-S119.
- <sup>III</sup> Mokdad, A., Ford, E., Bowman, B., et al. 2003. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *Journal of the American Medical Association*. 289(1):76-79.
- <sup>iv</sup> Freedman, D., Khan, L., Serdula, M., Dietz, W., Srinivasan, S., Berenson, G. 2005. The relation of childhood BMI to adult adiposity: The Bogalusa Heart Study. *Pediatrics*. 115(1):22-27.



<sup>&</sup>lt;sup>i</sup> National Center for Health Statistics. Prevalence of Overweight among Children and Adolescents: United States, 1999-2002. National Center for Health Statistics Web site. Available at: http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm. Accessed July 24, 2008.

# **Section 10: Dietary Behaviors**

The 2013 Summit County Middle School YRBS asked students about their consumption of fruits and vegetables, milk, breakfast, and fast food. Diet and nutrition have important links to adolescent health and well-being, as well as to major causes of morbidity and mortality later in life. Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. There is probable evidence to suggest that dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer, <sup>i,ii,iii</sup> cardiovascular disease, <sup>iv</sup> and stroke.<sup>v</sup> Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.

Milk is an important source of calcium for adolescents.<sup>vi,vii</sup> Calcium is essential for forming and maintaining healthy bones and low calcium intake during the first two to three decades of life is an important risk factor in developing osteoporosis.<sup>viii</sup> Although the recommended intake of calcium is 1,300 mg/day, most adolescents consume far less.<sup>ix</sup> National data indicate that the average calcium intake per day among persons aged 12 to 19 years was 1,125 mg/day (among males) and 814 mg/day (among females).<sup>viii</sup>

Healthy People 2020 Objectives	Summit County 2013
There are no HP2020 objectives that relate directly to questions asked in the 2013 Summit County YRBS	

The chart below depicts the comparisons for fruit and vegetable consumption and milk consumption. There are no significant differences between clusters of students who ate fruits and vegetables five or more times yesterday. The Suburbs North and Suburbs South clusters are significantly higher than the Akron West cluster of students who drank milk three or more times yesterday.



#### **Dietary behaviors by cluster**



The remaining dietary behaviors by cluster are depicted below which include drinking beverages that are high in caffeine, drinking soda or pop, not eating breakfast every day, and eating fast food. Of the students who reported drinking soda or pop one or more times yesterday and for those that did not eat breakfast every day, the Akron East, Akron West, and Suburbs South clusters are significantly greater than the Suburbs North cluster. For students that responded to drinking beverages high in caffeine one or more times yesterday, Akron East was significantly higher than the Suburbs North cluster. The Suburbs South cluster has a significantly higher prevalence of students who ate fast food on one or more days per week than the Akron West and Suburbs North clusters.



#### Dietary behaviors by cluster continued

Eating breakfast every day may reduce the risk for obesity and insulin resistance syndrome, an early sign of developing diabetes, by as much as 35 to 50 percent.<sup>x</sup> Breakfast eaters tend to eat fewer calories, less saturated fat and cholesterol and have better overall nutritional status than breakfast skippers.<sup>xi</sup>

The pie chart below depicts the frequency of breakfast consumption during the 7 days before the survey, among Summit County Middle School students. The majority (59.8%) of middle school students did not eat breakfast on all 7 days before the survey. However, 40.2% of students reported eating breakfast on all 7 days before the survey.


The chart below shows the responses by gender of students who did not eat breakfast every day during the 7 days before completing the survey. Female students reported a higher prevalence than male students of not eating breakfast every day.



### Did not eat breakfast every day by gender

The pie chart below depicts the frequency of fast food consumption during the 7 days before the survey, among Summit County Middle School students. The majority (66.6%) of Summit County Middle School students reported eating fast food on one or more days in the 7 days before the survey. However, most (34.0%) students reported only having fast food on 1 day.

Fast food consumption in the past 7 days



Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering dietary behaviors. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for not eating breakfast every day for Summit County female students was 67.5% which was significantly higher than the prevalence reported by Summit County male students (52.4%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Ate fruits and vegetables five or more				
times yesterday				
Drank soda or pop one or more times	45.3%	<b>↑</b> 50.7%		
yesterday	(43.1-47.5)	(48.5-52.9)		
Drank beverages that were high in				
caffeine one or more times yesterday				
Drank milk three or more times yesterday	<b>^</b> 22.7%	35.4%		
	(20.8-24.7)	(33.3-37.5)		
Did not eat breakfast every day	<b>↑</b> 67.5%	52.4%	56.4%	<b>^</b> 63.5%
	(65.4-69.5)	(50.2-54.7)	(54.0-58.8)	(61.2-65.7)
Ate fast food on one or more days/week				



# **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Ate fruits and vegetables five or more times yesterday	25.7%
(The day before the survey.)	(24.5-27.0)
Drank soda or pop one or more times yesterday	48.1%
(Not including diet soda or diet pop; the day before the survey.)	(46.4-49.8)
Drank beverages that were high in caffeine one or more times yesterday	21.2%
(The day before the survey.)	(19.8-22.7)
<b>Drank milk three or more times yesterday</b>	29.1%
(The day before the survey.)	(27.6-30.6)
Ate fast food on one or more days/week	66.6%
(During the 7 days before the survey.)	(65.1-68.2)
Did not eat breakfast every day	59.8%
(During the 7 days before the survey.)	(58.2-61.4)



### **Regional Prevalence**

Risk Behavior	East	West	North	South
	Akron	Akron	Suburbs*	Suburbs
	%	%	%	%
	(95% Cl)	(95% CI)	(95% Cl)	(95% Cl)
Ate fruits and vegetables five or more times yesterday	26.3%	27.1%	26.6%	23.6%
	(23.4-29.4)	(23.6-31.0)	(24.6-28.7)	(21.8-25.5)
Drank soda or pop one or more times yesterday (Not including diet soda or diet pop.)	54.8% (51.6-58.1)	47.4% (43.8-51.0)	43.1% (40.4-45.8)	52.5% (49.5-55.4)
Drank beverages that were high in caffeine one or more times yesterday	26.9%	20.8%	19.2%	21.6%
	(23.6-30.5)	(17.2-24.9)	(16.9-21.7)	(19.5-23.8)
Drank milk three or more times	29.0%	22.0%	30.3%	29.6%
yesterday	(25.5-32.7)	(18.7-25.7)	(28.0-32.8)	(27.0-32.4)
<b>Did not eat breakfast every day</b>	62.4%	62.8%	54.9%	65.2%
(During the week before the survey.)	(58.5-66.1)	(59.4-66.2)	(52.2-57.6)	(62.9-67.4)
Ate fast food on one or more days/week	68.5%	65.7%	62.4%	72.5%
(During the week before the survey.)	(64.8-72.0)	(62.0-69.3)	(59.8-65.0)	(70.2-74.8)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Ate fruits and vegetables five or				
more	times ye	esterday		
Category	%	CI		
Gender				
Female	25.3	23.5 -	27.2	
Male	26.1	24.3 -	28.0	
Race/Ethnic	ity			
White	25.8	24.4 -	27.1	
Black	24.5	21.6 -	27.7	
Asian	36.2	26.2 -	47.6	
Hispanic	31.0	20.5 -	43.9	
Other	28.5	24.1 -	33.4	
Grade				
7th	27.4	25.8 -	29.1	
8th	23.9	22.1 -	25.9	
Total	25.7	24.5 -	27.0	

### Demographics

Drank soda or pop one or more times yesterday				
Category	%	CI		
Gender				
Female	45.3	43.1 -	47.5	
Male	50.7	48.5 -	52.9	
Race/Ethnici	ity			
White	47.8	45.8 -	49.8	
Black	48.7	45.2 -	52.1	
Asian	44.9	35.5 -	54.6	
Hispanic	50.8	40.0 -	61.6	
Other	56.7	51.1 -	62.1	
Grade				
7th	48.6	45.9 -	51.4	
8th	47.5	45.1 -	49.8	
Total	48.1	46.4 -	49.8	

In Summit County, 25.7% of students had eaten fruits and vegetables five or more times on the day before the survey.

In Summit County, 48.1% of students had a can, bottle, or glass of soda or pop one or more times on the day before the survey. The prevalence of having a can, bottle, or glass of soda or pop one or more times on the day before the survey was higher among male (50.7%) students than female (45.3%) students.



Drank beverages high in caffeine			
one or m	ore time	s yester	day
Category	%	CI	
Gender			
Female	21.0	19.3 -	22.9
Male	21.4	19.6 -	23.3
Race/Ethnic	ity		
White	20.8	19.3 -	22.4
Black	22.4	19.5 -	25.6
Asian	17.1	12.1 -	23.6
Hispanic	25.0	16.8 -	35.4
Other	30.6	25.0 -	36.8
Grade			
7th	20.0	18.1 -	22.2
8th	22.5	20.4 -	24.7
Total	21.2	19.8 -	22.7

In Summit County, 21.2% of students had a drink that was high in caffeine one or more times on the day before the survey.

Drank milk three or more times				
	yesterda	ay		
Category	%	CI		
Gender				
Female	22.7	20.8 -	24.7	
Male	35.4	33.3 -	37.5	
Race/Ethnic	city			
White	31.4	29.7 -	33.1	
Black	19.3	16.6 -	22.3	
Asian	15.3	10.4 -	21.8	
Hispanic	21.0	14.4 -	29.7	
Other	26.5	22.1 -	31.3	
Grade				
7th	29.9	27.8 -	32.0	
8th	28.5	26.5 -	30.7	
Total	29.1	27.6 -	30.6	

In Summit County, 29.1% of students drank three or more glasses of milk on the day before the survey. The prevalence of having drank three or more glasses of milk on the day before the survey was higher among male (35.4%) students than female (22.7%) students. The prevalence of having drank three or more glasses of milk on the day before the survey was higher for White (31.4%) students than Black and Asian (19.3%, 15.3%) students.



Did not eat breakfast everyday			
Category	%	CI	
Gender			
Female	67.5	65.4 -	69.5
Male	52.4	50.2 -	54.7
Race/Ethnic	city		
White	58.6	56.8 -	60.5
Black	66.4	63.3 -	69.4
Asian	66.4	57.1 -	74.6
Hispanic	57.6	45.6 -	68.7
Other	65.1	59.1 -	70.7
Grade			
7th	56.4	54.0 -	58.8
8th	63.5	61.2 -	65.7
Total	59.8	58.2 -	61.4

In Summit County, 59.8% of students did not eat breakfast everyday on the 7 days prior to the survey. The prevalence of not eating breakfast everyday was higher among female (67.5%) students than male (52.4%) students. The prevalence of not eating breakfast everyday was higher among Black (66.4%) students than White (58.6%) students. The prevalence of not eating breakfast everyday was higher among 8<sup>th</sup> grade (63.5%) students than 7<sup>th</sup> grade (56.4%) students.

Ate fast food on one or more			
Category	%	CI	
Gender			
Female	66.1	63.9 -	68.1
Male	67.3	65.1 -	69.3
Race/Ethnic	ity		
White	66.4	64.6 -	68.2
Black	69.4	66.1 -	72.5
Asian	39.9	31.0 -	49.6
Hispanic	67.6	56.0 -	77.4
Other	64.1	58.6 -	69.2
Grade			
7th	65.9	63.5 -	68.3
8th	67.5	65.4 -	69.6
Total	66.6	65.1 -	68.2

In Summit County, 66.6% of students ate fast food on one or more days during the 7 days prior to the survey. The prevalence of eating fast food was higher among White and Black (66.4%, 69.4%) students than Asian (39.9%) students.



- <sup>i</sup> Key, T., Schatzkin, A., Willet, W., Allen, N., Spencer, E., Travis, R. 2004. Diet, nutrition, and the prevention of cancer. *Public Health Nutrition*. 7(1A):187-200.
- <sup>ii</sup> Kushi, L., Byers, T., Doyle, C., Bandera, E., McCullough, M., McTiernan, A., Gansler, T., Andrews, K., Thun, M. 2006. American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention: reducing the risk of cancer with healthy food choices and physical activity. *CA: A Cancer Journal for Clinicians*. 56:254-281.
- <sup>III</sup> Vainio, H., Weiderpass, E. 2006. Fruit and vegetables in cancer prevention. *Nutrition and Cancer*. 54(1):111-42.
- <sup>iv</sup> Bazzano, L., He, J., Ogden, L., Loria, C., Vupputuri, S., Myers, L., Whelton, P. 2002. Fruit and vegetable intake and risk of cardiovascular disease in US adults: the first National Health and Nutrition Examination Survey Epidemiologic Follow-up Study. *American Journal of Clinical Nutrition*. 76(1):93-99.
- <sup>v</sup> He, F., Nowson, C., MacGregor, G. 2006. Fruit and vegetable consumption and stroke: meta-analysis of cohort studies. *Lancet.* 367(9507):320-326.
- <sup>vi</sup> U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2005. *Dietary Guidelines for Americans, 2005*. Washington, DC: U.S. Government Printing Office.
- <sup>vii</sup> Forshee, R., Anderson, P., Storey, M. 2006. Changes in calcium intake and association with beverage consumption and demographics: Comparing data form CSFII 1994-1996, 1998 and NHANES 1999-2002. *Journal of the American College of Nutrition*. 25(20):108-116.
- viii NIH Consensus Development on Optimal Calcium Intake. 1994. Optimal calcium intake. *Journal of the American Medical Association.* 272:1942-1948.
- <sup>ix</sup> Institute of Medicine, Food and Nutrition Board. 1997. *Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride.* Washington, DC: National Academy Press.
- \* Pereira, M., Kartashov, A., Ebbeling, C., Van Horn, L., Slattery, M., Jacobs, D., Ludwig, D. 2005. Fast-food habits, weight gain, and insulin resistance (the CARDIA study): 15-year prospective analysis. *The Lancet*. 365(9453):36–42.
- <sup>xi</sup> Wyatt HR, Grunwald OK, Mosca CL, Klem ML, Wing RR, Hill JO (2002). Long-term weight loss and breakfast in subjects in the National Weight Control Registry. *Obesity Research*; 10:78-82.



## **Section 11: Physical Activity**

The 2013 Summit County Middle School YRBS asked students about their computer/video game usage and television watching habits, along with amount of physical activity and sports team participation. Television (TV) viewing, computer usage, and video/DVD usage are all considered sedentary behaviors. Child and adolescent TV viewing, in particular, is associated with childhood and adult obesity and youth who engage in less than two hours of TV viewing per day tend to be more active. Computer usage and video game playing are associated with physical inactivity among adolescents and young adults.

When students are watching television excessively, they are less likely to be spending time doing homework or reading, participating in after school activities, exercising frequently or being engaged in other intellectually stimulating activities.<sup>1</sup> Television watching is assessed in the same manner as having used a computer and played video games; with having watched 3 or more hours per day of television on an average school day considered a risky, sedentary behavior.

Healthy People 2020 Objectives	Summit County 2013
<b>PA-8.2.2:</b> Increase the proportion of children and adolescents aged 6 to 14 years who view television, videos, or play video games for no more than 2 hours a day to 86.8%.	72.0% of Summit County Middle School students watched television 2 or fewer hours per day on an average school day.
<b>PA-8.3.2:</b> Increase the proportion of children and adolescents aged 6 to 14 years who use a computer or play computer games outside of school (for non-school work) for no more than 2 hours a day to 100%.	59.4% of Summit County Middle School students used a computer or played computer games outside of school (for non-school work) for 2 or fewer hours on an average school day.



The chart below depicts the differences among physical activity behaviors by cluster. The Suburbs North and South clusters report a higher prevalence than Akron East and Akron West, of students who participated in 60 or more minutes of physical activity on 5 or more days. Akron East and Akron West have a significantly higher prevalence than Suburbs North and South, of students who did not participate in 60 more minutes of physical activity on any day. Akron East and Akron West have a significantly higher prevalence of students who watched television 3 or more hours per day than the Suburbs North and South clusters. Akron East and Suburbs South have a significantly higher prevalence than the Suburbs North of students who used computers 3 or more hours per day. The Suburbs North has a significantly higher prevalence of students who played on one or more sports teams than the other three clusters.



### Physical activity behaviors by cluster



The chart below depicts the prevalence of two sedentary behaviors among Summit County Middle School students who participated in the 2013 MS YRBS: use of a computer for something that was not school work or having played video games for 3 or more hours on an average school day and watching television for 3 or more hours on an average school day. The chart is organized by race/ethnicity to demonstrate a consistent difference between students in Summit County.

Black students were significantly more likely than White, Asian or Hispanic (24.0%, 16.4%, 28.8%) students to have watched 3 or more hours of television on an average school day.



#### Prevelance of sedentary behaviors by race

In Summit County, students reported the amount of television watching and non-school work computer use they engaged in on an average school day. The graph below depicts prevalence estimates for the students who watched fewer than 3 hours of television on an average school day, used computers for things other than school work for fewer than 3 hours on an average school day, and the combined total for television watching and non-school work computer use for fewer than 3 hours on an average school day. This graph demonstrates the degree to which students engage in these sedentary behaviors.



#### Sedentary behaviors



Participation in regular physical activity among young people can help build and maintain healthy bones and muscles, maintain body weight and reduce body fat, reduce feelings of depression and anxiety, and promote psychological well-being.<sup>ii,iii</sup> Over time, regular physical activity decreases the risk of high blood pressure, heart disease, diabetes, some types of cancer, and premature death.

The following chart depicts the prevalence by gender of students who:

- Were physically active at least 60 minutes per day on 5 or more days during the 7 days prior to the survey
- Did not participate in at least 60 minutes of physical activity on any day during the 7 days prior to the survey
- Reported playing on one or more sports teams during the 12 months before taking the survey

Male students were significantly more likely to have met recommended levels of physical activity and to have participated on at least one sports team than females. Female students were significantly more likely not to have exercised adequately on any of the seven days prior to completing the survey than male students.



### Prevalence of physical activity by gender



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering physical activity and sedentary behaviors. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for not participating in at least 60 minutes of physical activity on any day among Summit County female students was 15.4% which was significantly higher than the prevalence reported by Summit County male students (11.3%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Physically active at least 60 minutes	<b>^</b> 41.2%	55.0%		
per day on 5 or more days	(55.0-52.9)	(52.9-57.2)		
Did not participate in at least 60	<b>^</b> 15.4%	11.3%		
minutes of physical activity on any day	(13.9-17.0)	(10.1-12.7)		
Watched TV 3 or more hours per day				
Used computers 3 or more hours per				
day				
Played on one or more sports teams	<b>^</b> 63.4%	68.4%		
	(61.0-65.8)	(66.5-70.2)		



## **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Physically active at least 60 minutes per day on 5 or more days	48.2%
(During the 7 days before the survey.)	(46.7-49.8)
<b>Did not participate in at least 60 minutes of physical activity on any day</b>	13.3%
(During the 7 days before the survey.)	(12.3-14.4)
Watched TV 3 or more hours per day	28.0%
(On an average school day.)	(26.6-29.5)
Used computers 3 or more hours per day (Played video or computer games or used a computer for something that was not school work on an average school day.)	40.6% (39.1-42.2)
Played on at least one sports team	65.9%
(During the 12 months before the survey.)	(64.3-67.5)



### **Regional Prevalence**

Risk Behavior	East	West	North	South
	Akron	Akron	Suburbs*	Suburbs
	%	%	%	%
	(95% CI)	(95% CI)	(95% CI)	(95% CI)
Physically active at least 60 minutes per day on 5 or more days (During the 7 days before the survey.)	40.5% (37.0-44.1)	40.2% (36.0-44.6)	50.5% (47.9-53.0)	51.1% (48.8-53.4)
Did not participate in at least 60 minutes of physical activity on any day (During the 7 days before the survey.)	18.0% (15.5-20.7)	18.8% (15.7-22.4)	11.2% (9.6-13.0)	12.5% (11.0-14.2)
Watched TV 3 or more hours/day	36.7%	38.7%	24.1%	26.4%
(On an average school day.)	(33.6-40.1)	(34.1-43.4)	(22.0-26.5)	(24.5-28.5)
Used computers 3 or more hours/day (Played video or computer games or used a computer for something that was not school work on an average school day.)	43.0% (39.6-46.5)	43.0% (38.9-47.1)	36.4% (33.9-39.0)	45.3% (42.5-48.1)
<b>Played on at least one sports team</b>	53.3%	53.5%	72.8%	65.4%
(During the past 12 months.)	(49.8-56.7)	(49.4-57.6)	(70.2-75.1)	(62.7-68.0)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Physically active at least 60 minutes per day on 5 or more					
•	days				
Category	%	CI			
Gender					
Female	41.2	39.1 -	43.4		
Male	55.0	52.9 -	57.2		
Race/Ethnic	city				
White	50.4	48.7 -	52.1		
Black	39.4	36.0 -	42.8		
Asian	33.2	24.3 -	43.4		
Hispanic	38.5	29.0 -	49.0		
Other	44.0	38.6 -	49.4		
Grade					
7th	48.4	46.0 -	50.7		
8th	48.1	45.8 -	50.3		
Total	48.2	46.7 -	49.8		

### Demographics

Did not participate in at least 60 minutes of physical activity on any day					
Category	%	CI			
Gender					
Female	15.4	13.9 -	17.0		
Male	11.3	10.1 -	12.7		
Race/Ethnic	city				
White	11.6	10.5 -	12.8		
Black	19.7	17.2 -	22.3		
Asian	30.9	20.9 -	43.2		
Hispanic	18.1	10.1 -	30.1		
Other	21.6	16.6 -	27.7		
Grade					
7th	12.6	11.1 -	14.1		
8th	13.9	12.4 -	15.5		
Total	13.3	12.3 -	14.4		

In Summit County, 48.2% of students were physically active at least 60 minutes per day on 5 or more of the 7 days before the survey. The prevalence of being physically activity on five or more days of the 7 days prior to the survey was higher among male (55.0%) students than female (41.2%) students. The prevalence of being physically activity on five or more days of the 7 days prior to the survey was higher among White (50.4%) students than Black or Asian (39.4%, 33.2%) students. In Summit County, 13.3% of students did not participate in at least 60 minutes of physical activity on any of the 7 days prior to the survey. The prevalence of engaging in no physical activity was higher among female (15.4%) students than male (11.3%) students. The prevalence of engaging in no physical activity was higher among Black, Asian and Other/Multiple (19.7%, 30.9%, 21.6%) students than White (11.6%) students.



Watched TV 3 or more hours/day				
Category	%	CI		
Gender				
Female	29.1	27.1 -	31.1	
Male	27.1	25.2 -	29.0	
Race/Ethnic	ity			
White	24.0	22.6 -	25.5	
Black	47.7	44.5 -	50.9	
Asian	16.4	10.5 -	24.6	
Hispanic	28.8	18.6 -	41.8	
Other	41.8	36.0 -	48.0	
Grade				
7th	29.0	26.8 -	31.3	
8th	27.1	25.2 -	29.1	
Total	28.0	26.6 -	29.5	

In Summit County, 28% of students watched TV three or more hours per day on an average school day. The prevalence of students watching TV for three or more hours per day on an average school day was higher among Black (47.7%) students than White, Hispanic, and Asian (24%, 28.8%, 16.4%) students; and higher among Other/Multiple (41.8%) students than White (24.0%) students.

Used computers 3 or more					
	hours/d	ay			
Category	gory % Cl				
Gender					
Female	41.7	39.4 -	44.0		
Male	39.6	37.4 -	41.8		
Race/Ethnic	city				
White	40.4	38.7 -	42.3		
Black	41.6	38.2 -	45.1		
Asian	39.8	31.0 -	49.4		
Hispanic	39.2	27.8 -	51.9		
Other	47.2	41.9 -	52.6		
Grade					
7th	38.4	35.8 -	41.1		
8th	43.0	40.8 -	45.2		
Total	40.6	39.1 -	42.2		

In Summit County, 40.6% of students played video games or used computers for something that was not school work for three or more hours per day on an average school day.



Played on at least one sports					
	team				
Category	%	CI			
Gender					
Female	63.4	61.0 -	65.8		
Male	68.4	66.5 -	70.2		
Race/Ethnic	ity				
White	68.0	66.2 -	69.8		
Black	58.8	55.4 -	62.2		
Asian	34.1	25.4 -	44.1		
Hispanic	61.9	49.1 -	73.2		
Other	56.4	51.2 -	61.5		
Grade					
7th	66.0	63.4 -	68.5		
8th	65.9	63.3 -	68.3		
Total	65.9	64.3 -	67.5		

In Summit County, 65.9% of students played on one more sports teams in the 12 months prior to the survey. The prevalence of playing on one or more sport teams was higher among male (68.4%) students than female (63.4%) students. The prevalence of playing on one or more sports teams was higher among White (68.0%) students than Black, Asian and Other/Multiple (58.8%, 34.1%, 56.4%) students.



- <sup>i</sup> Campbell, J., Hombo, C., Mazzeo, J. 2000. *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.
- <sup>ii</sup> U.S. Department of Health and Human Services. 1996. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.
- <sup>III</sup> Strong, W., Malina, R., Blimke, C., et al. 2005. Evidence based physical activity for school-age youth. *Journal of Pediatrics.* 146:732-737.



# Section 12: Other Health Topics

The 2013 Summit County Middle School YRBS asked students about other health-related issues, including seeing a doctor or dentist for a check-up, obtaining eight or more hours of sleep on an average school night, asthma related health, and general assessment of health. Nationwide, adolescents have the lowest utilization rate of health care services of any age group. Barriers to care include cost of care; low family income; stigma; distrust; confidentiality and parental consent; lack of medical insurance; embarrassment about and lack of transportation to reproductive health services; lack of knowledge about where or how to access care; and lack of adolescent-friendly services.<sup>1</sup>

Healthy People 2020 Objectives	Summit County 2013
<b>AH-1:</b> Increase the proportion of adolescents who have had a wellness check-up in the past 12 months to at least 75.6%	69.1% of Summit County Middle School students reported seeing a doctor or nurse for a wellness check-up in the past 12 months.
<b>OH-7:</b> Increase the proportion of children, adolescents, and adults who used the oral health care system in the past 12 months to at least 49.0%	75.6% of Summit County Middle School students reported seeing a dentist for a check-up, exam, or teeth cleaning (non-emergency care) in the past 12 months.

The chart below depicts the prevalence of Summit County students who reported having seen a doctor or nurse for a check-up when they were not injured or sick during the past 12 months. The American Academy of Pediatrics recommends that children up to the age of 21 years obtain preventive physical exams annually.<sup>II</sup> Over 64% of students in all four clusters were in compliance with this recommendation. The chart also demonstrates the prevalence of students who reported having seen a dentist for a check-up for routine dental work. Lastly, the chart depicts those students who reported seeing a doctor, nurse, therapist, social worker, or counselor for a mental health problem.



### Saw a doctor or dentist by cluster



Summit County Middle School students were asked if they had ever been told they have asthma by a doctor or nurse and how many times they had to go to the emergency room or urgent care center because of their asthma during the past 12 months before the survey. The graph below depicts these differences by cluster. It is important to note that the students who reported having been to the emergency room or urgent care center because of their asthma have been told they have asthma. Students in the Akron East and Akron West clusters were significantly more likely than the students in the Suburbs South cluster to have been diagnosed with asthma. Among students with asthma that had gone to the emergency room or urgent care because of asthma, significant differences were reported from the Akron East, Akron West and Suburbs South clusters than the Suburbs North cluster.



The graph below depicts the prevalence by cluster of students who did not go to school because they were sick and missed class or school without permission (i.e. skipped or "cut"), during the past 30 days before the survey. A significant difference was reported by Akron East, Akron West, and the South Suburbs compared to the North Suburbs for students that reported missing class or school without permission.





Summit County Middle School students were also asked how many hours of sleep they got on an average school night. The graph below depicts the students that reported having obtained eight or more hours of sleep per night. The Suburbs North cluster reported having a significantly higher prevalence than the Suburbs South cluster.



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering other health behaviors. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for missing school because of sickness among Summit County female students was 48.1% which was significantly higher than the prevalence reported by Summit County male students (40.0%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Obtained eight or more hours of sleep on an average	<b>↑</b> 50.9%	56.5%	58.8%	<b>^</b> 48.1%
school night	(48.8-53.1)	(54.2-58.8)	(56.7-60.9)	(46.3-51.2)
Ever had asthma				
Among students with asthma, ever been to the				
emergency room or urgent care center because of				
asthma				
Missed school because they were sick	<b>↑</b> 48.1%	40.0%		
	(46.0-50.3)	(37.9-42.1)		
			/	
Missed class or school without permission			6.3%	<b>↑</b> 9.2%
			(5.2-7.5)	(7.9-10.8)
Saw a doctor or nurse for a routine check-up				
Saw a dentist for a routine check-up				
Saw a doctor, nurse, therapist, social worker or				
counselor for a mental health issue				



# **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
Obtained eight or more hours of sleep on an average school night	53.7% (52.0-55.3)
Ever had asthma	19.6% (18.5-20.9)
Ever been to the emergency room or urgent care center because of asthma- among all students (One or more times in the 12 months before the survey; all students.)	6.9% (6.2-7.8)
Ever been to the emergency room or urgent care center because of asthma- among students with asthma (One or more times in the 12 months before the survey; among students with asthma.)	27.5% (24.8-30.3)
Missed school because of sickness (During the 30 days before the survey.)	44.0% (42.5-45.6)
Missed class or school without permission (During the 30 days before the survey.)	8.0% (7.1-8.9)
Saw a doctor or nurse for check-up (When not sick or injured, during the 12 months before the survey.)	69.1% (67.4-70.7)
Saw a dentist for routine check-up (Not including emergencies, during the 12 months before the survey.)	75.6% (74.1-77.0)
Saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue (During the 12 months before the survey.)	25.7% (24.3-27.2)



# **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% CI)
Obtained eight or more hours of sleep on an average school night	51.2% (47.6-54.9)	50.9% (46.7-55.2)	57.1% (54.5-59.7)	50.5% (47.5-53.5)
Ever had asthma	22.7% (19.8-26.0)	24.5% (20.5-29.0)	19.2% (17.4-21.1)	17.3% (15.4-19.4)
Ever been to the emergency room or urgent care because of asthma- among all students (One or more times in the 12 months before the survey; all students.)	10.8% (8.5-13.7)	13.0% (10.0-16.8)	5.0% (4.1-6.1)	6.2% (5.0-7.6)
Ever been to the emergency room or urgent care because of asthma- among students with asthma (One or more times in the past 12 months before the survey; among students with asthma.)	36.6% (30.1-43.6)	42.6% (34.7-50.8)	21.1% (17.4-25.4)	26.1% (21.7-31.0)
Missed school because of sickness (During the 30 days before the survey.)	45.7% (42.3-49.1)	47.2% (42.6-51.8)	44.3% (41.8-46.7)	41.9% (39.2-44.6)
Missed class or school without permission (During the 30 days before the survey.)	14.0% (11.5-17.0)	11.8% (9.1-15.1)	5.6% (4.6-6.9)	7.5% (6.0-9.4)
Saw a doctor or nurse for check- up (When not sick or injured, during the 12 months before the survey.)	65.7% (62.1-69.2)	64.6% (60.2-68.8)	72.9% (70.3-75.4)	66.1% (63.2-68.8)
Saw a dentist for routine check- up (Not including emergencies, during the 12 months before the survey.)	66.6% (62.8-70.1)	64.4% (60.0-68.6)	81.4% (79.3-83.4)	74.1% (71.6-76.5)



Risk Behavior	East Akron % (95% Cl)	West Akron % (95% Cl)	North Suburbs* % (95% Cl)	South Suburbs % (95% Cl)
Saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue (During the 12 months before the survey.)	28.8% (25.5-32.3)	29.4% (25.9-33.0)	23.1% (20.9-25.4)	27.4% (24.8-30.0)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Obtained eight or more hours of				
	sleep			
Category	%	CI		
Gender				
Female	50.9	48.8 -	53.1	
Male	56.5	54.2 -	58.8	
Race/Ethnic	ity			
White	54.6	52.6 -	56.5	
Black	49.7	46.2 -	53.3	
Asian	52.4	42.4 -	62.3	
Hispanic	44.2	33.8 -	55.2	
Other	52.7	47.1 -	58.2	
Grade				
7th	58.8	56.7 -	60.9	
8th	48.8	46.3 -	51.2	
Total	53.7	52.0 -	55.3	

Demographics

In Summit County, 53.7% of students obtained			
an average of eight or more hours of sleep on an			
average school night. The prevalence of			
obtaining eight or more hours of sleep per night			
on an average school night was higher among			
male (56.5%) students than female (50.9%)			
students. The prevalence of obtaining eight or			
more hours of sleep per night on an average			
school night was higher among 7 <sup>th</sup> grade (58.8%)			
students than 8 <sup>th</sup> grade (48.8%) students.			

Ever had asthma				
Category	%	CI		
Gender				
Female	18.8	17.3 -	20.4	
Male	20.4	18.7 -	22.3	
Race/Ethnic	ity			
White	17.9	16.6 -	19.3	
Black	28.4	25.0 -	32.1	
Asian	9.5	6.4 -	13.8	
Hispanic	20.3	13.0 -	30.1	
Other	24.9	20.8 -	29.3	
Grade				
7th	18.9	17.3 -	20.6	
8th	20.2	18.5 -	22.1	
Total	19.6	18.5 -	20.9	

In Summit County, 19.6% of students had been diagnosed with asthma by a doctor or nurse. The prevalence of being diagnosed with asthma by a doctor or nurse was higher among Black (28.4%) students than White and Asian (17.9%, 9.5%) students.



Ever been to the emergency room or urgent care because of asthma- among all students					
Category	%	CI			
Gender					
Female	7.3	6.3 -	8.4		
Male	6.6	5.6 -	7.9		
Race/Ethnic	ity				
White	5.7	4.9 -	6.5		
Black	12.6	10.3 -	15.5		
Asian	4.7	1.4 -	14.7		
Hispanic	16.5	8.4 -	29.8		
Other	11.9	8.6 -	16.3		
Grade					
7th	6.4	5.4 -	7.6		
8th	7.3	6.2 -	8.5		
Total 6.9 6.2 - 7.8					

Ever been to the emergency				
room or urgent care because of				
astrima- a	among st asthma	adents v	vitn	
Category	%	CI		
Gender				
Female	29.2	25.7 -	33.0	
Male	25.6	21.9 -	29.7	
Race/Ethnie	city			
White	24.5	21.5 -	27.7	
Black	35.8	30.0 -	42.0	
Asian	20.2	5.9 -	50.7	
Hispanic	44.0	26.1 -	63.6	
Other	38.4	29.1 -	48.7	
Grade				
7th	25.8	22.1 -	29.9	
8th	28.5	24.6 -	32.8	
Total	27.5	24.8 -	30.3	

In Summit County, 6.9% of all students had been to the Emergency Room or Urgent Care because of asthma symptoms one or more times in the 12 months prior to the survey. The prevalence of going to the Emergency Room or Urgent Care because of asthma symptoms was higher among Black, Hispanic, and Other/Multiple (12.6%, 16.5%, 11.9%) students than White (5.7%) students. In Summit County, 27.5% of students who had been diagnosed with asthma had been to the Emergency Room or Urgent Care because of asthma symptoms one or more times in the 12 months prior to the survey. The prevalence of students who had been diagnosed with asthma going to the Emergency Room or Urgent Care because of asthma symptoms was higher among Black (35.8%) and Other/Multiple (38.4%) students than White (24.5%) students.



Missed school because of					
	sicknes	s			
Category	Category % Cl				
Gender					
Female	48.1	46.0 -	50.3		
Male	40.0	37.9 -	42.1		
Race/Ethnic	city				
White	44.5	42.7 -	46.2		
Black	42.2	38.6 -	45.9		
Asian	27.9	20.7 -	36.5		
Hispanic	49.2	36.0 -	62.5		
Other	46.0	40.8 -	51.2		
Grade					
7th	43.3	40.9 -	45.6		
8th	44.6	42.4 -	46.9		
Total	44.0	42.5 -	45.6		

In Summit County, 44% of students did not go to school because they were sick on at least one day in the 30 days prior to the survey. The prevalence of not going to school because they were sick was higher among female (48.1%) students than male (40%) students.

Missed class or school without				
-	permissi	on		
Category	% CI			
Gender				
Female	8.8	7.6 -	10.2	
Male	7.1	6.1 -	8.3	
Race/Ethnic	ity			
White	6.6	5.7 -	7.6	
Black	13.8	11.3 -	16.8	
Asian	13.2	4.9 -	30.9	
Hispanic	34.1	20.2 -	51.5	
Other	10.8	7.7 -	15.0	
Grade				
7th	6.3	5.2 -	7.5	
8th	9.2	7.9 -	10.8	
Total	8.0	7.1 -	8.9	

In Summit County, 8% of students had missed class or school without permission at least once in the 30 days prior to the survey. The prevalence of having missed class or school without permission was higher among Hispanic (34.1%) students than White, Black, Asian and Other/Multiple (6.6%, 13.8%, 13.2%, 10.8%) students; and higher among Black and Other/Multiple (13.8%, 10.8%) students than White (6.6%) students. The prevalence of having missed class or school without permission was higher among 8<sup>th</sup> grade (9.2%) students than 7<sup>th</sup> grade (6.3%) students.



Saw a doctor or nurse for check-				
	up			
Category	Category % CI			
Gender				
Female	68.2	66.0 -	70.4	
Male	69.9	67.8 -	72.0	
Race/Ethnic	ity			
White	70.1	68.2 -	71.8	
Black	66.6	62.9 -	70.0	
Asian	49.4	39.1 -	59.7	
Hispanic	55.1	41.4 -	68.1	
Other	64.2	58.8 -	69.3	
Grade				
7th	71.4	69.0 -	73.7	
8th	66.9	64.5 -	69.3	
Total	69.1	67.4 -	70.7	

In Summit County, 69.1% of students saw a doctor or nurse for a check-up in the 12 months prior to the survey. The prevalence of seeing a doctor or nurse for a check-up in the 12 months prior to the survey was higher among White (70.1%) students than Hispanic and Asian (55.1%, 49.4%) students.

Saw a dentist for routine check-				
	up			
Category	%	CI		
Gender				
Female	74.8	72.9 -	76.7	
Male	76.4	74.5 -	78.2	
Race/Ethnic	ity			
White	78.1	76.5 -	79.6	
Black	65.5	62.2 -	68.7	
Asian	45.2	33.2 -	57.7	
Hispanic	63.1	50.5 -	74.2	
Other	64.7	59.8 -	69.3	
Grade				
7th	73.8	71.4 -	76.1	
8th	77.6	75.3 -	79.6	
Total	75.6	74.1 -	77.0	

In Summit County, 75.6% of students saw a dentist for a check-up, exam, teeth cleaning, or other routine work in the 12 months prior to the survey. The prevalence of seeing a dentist for a check-up, exam, teeth cleaning, or other routine work in the 12 months prior to the survey was higher among White (78.1%) students than Black, Hispanic, Asian and Other/Multiple (65.5%, 63.1%, 45.2%, 64.7%) students.



Saw a doctor, nurse, therapist,				
social work	ker, or co	ounselor	for a	
men	tal healt	h issue		
Category	%	CI		
Gender				
Female	26.5	24.6 -	28.5	
Male	24.9	22.9 -	26.9	
Race/Ethnic	city			
White	25.1	23.4 -	26.8	
Black	28.8	25.8 -	32.1	
Asian	18.4	13.7 -	24.3	
Hispanic	21.2	13.9 -	31.0	
Other	30.7	25.9 -	36.0	
Grade				
7th	24.7	22.8 -	26.7	
8th	26.6	24.4 -	29.0	
Total	25.7	24.3 -	27.2	

In Summit County, 25.7% of students saw a doctor, nurse, therapist, social worker, or counselor for a mental health problem in the 12 months prior to the survey. The prevalence of seeing a doctor, nurse, therapist, social worker, or counselor for a mental health problem was higher among Other/Multiple (30.7%) and Black (28.8%) students than Asian (18.4%) students.



<sup>ii</sup> American Academy of Pediatrics. Pediatric Care Online Website. Available at <u>http://www.pediatriccareonline.org/pco/ub/view/Bright-</u> Futures/135183/0/Appendix\_C:\_Recommendations\_for\_Preventive\_Pediatric\_Health\_Care



<sup>&</sup>lt;sup>i</sup> Association of State and Territorial Health Officials. Adolescent and School Health Fact Sheet. Association of State and Territorial Health Officials Web site. Available at http://www.astho.org/index.php?template=access.html. Accessed July 24, 2008.

# **Section 13: Positive Youth Development**

Over time it has been determined that promoting positive asset building and considering young people as resources could be critical strategies. As a result, the field of youth development began examining the role of protective factors in a young person's environment and how these factors could influence one's choices.<sup>i</sup> Protective factors include, but are not limited to: family support, caring adults, positive peer groups, strong sense of self and self-esteem, and engagement in school and community activities.

Summit County Middle School students were asked on how many days during the 7 days before the survey they spent in clubs or organizations outside of school, how often their parents talk with them about school, and how many supportive adults and trusted friends that students felt they have. They were also asked how they would describe their grades during the past 12 months before the survey.

Healthy People 2020 Objectives	Summit County 2013
<b>AH-3.1:</b> Increase the proportion of adolescents who have an adult in their lives with whom they can talk about serious problems to at least 83.3%	79.9% of Summit County Middle School students reported having an adult (other than their parents) in their lives with whom they can talk about serious problems.
<b>AH-2:</b> Increase the proportion of adolescents who participate in extracurricular and/or out-of-school activities to at least 90.8%	54.2% of Summit County Middle School students reported participating in extracurricular activities at least one day during the past 7 days.

The chart below depicts by cluster the students that reported having spent at least one day in clubs or organizations outside of school, having parents that talk with their student almost every day, and those students that reported their grades as A's and B's. There prevalence of having spent at least 1 day in extracurricular activities was significantly higher among the Akron West and Suburbs North cluster compared to the Suburbs South cluster. Significant difference in prevalence is also found between students in the Suburbs North cluster than students in the Suburbs South and Akron East clusters for parents that talk with their student about school almost every day. The Suburbs North and South have a significantly higher prevalence of students that described their grades in school as A's and B's compared to students in the Akron East and Akron West clusters.



### Postive youth developement by cluster



The chart below depicts the students that reported having at least one supportive adult and at least one trusted friend by cluster. Students from the Suburbs North cluster reported a significantly higher prevalence for having one or more trusted friends compared to students from the Akron East and Akron West clusters. No significant differences were reported among the clusters for having one or more supportive adults.



Supportive factor by cluster

The following pie charts depict the number of supportive adults (other than a parent) that all students felt they have, as well as the number of trusted friends. Most students reported having 5 or more supportive adults (23.3%).





Many students (22.9%) reported having 5 or more trusted friends.



The graph below depicts by cluster the prevalence of students who reported having at least one family meal in the past 7 days before the survey. The Suburbs North and Suburbs South clusters have a significantly higher prevalence of students who had at least one family meal in the past 7 days before the survey than the Akron East and West clusters.



### Had at least one family meal in the past 7 days



The table below shows significant differences that appeared between the demographic groups of gender and grade level when considering positive youth development. When a significant difference exists, an arrow indicates the population at highest risk; the prevalence with confidence interval is included. For example, the prevalence for describing their grades in school as A's and B's among Summit County male students was 76.4% which was significantly lower than the prevalence reported by Summit County female students (84.4%). The demographic tables at the end of this section provide closer examination of prevalence by race/ethnicity.

	Female	Male	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Described their grades in school as	84.4%	<b>↑</b> 76.4%		
A's and B's	(82.5-86.1)	(74.1-78.6)		
Had at least one meal with family			91.7%	<b>↑</b> 88.6%
			(90.4-92.8)	(87.2-89.9)
One or more supportive adult				
One or more trusted friend	91.5% (90.3-92.6)	↑ 86.2% (84.6-87.6)		
Parents talk with students almost				
every day about school				
Spent at least one day in clubs or	58.8%	<b>^</b> 49.7%		
organizations outside of school	(56.5-61.2)	(47.7-51.7)		



### **Overall Prevalence**

Risk Behavior	% (95% Confidence Interval)
<b>Described their grades in school as A's and B's</b> (During the 12 months before the survey.)	80.3% (78.5-82.0)
Had at least one meal with family (During the 7 days before the survey.)	90.0% (89.1-90.9)
One or more supportive adults (One or more adults, other than a parent, who they would feel comfortable seeking help from if there was an important issue or question affecting their life.)	79.9% (78.6-81.1)
One or more trusted friends (One or more friends who would offer good advice if there was a really important secret or problem affecting their life.)	88.9% (87.9-89.8)
Parents talk with student almost every day about school	60.8% (59.4-62.2)
Spent at least one day in clubs or organizations outside of school (During the 7 days before the survey.)	54.2% (52.6-55.8)


# **Regional Prevalence**

Risk Behavior	East Akron % (95% Cl)	West Akron % (95% CI)	North Suburbs* % (95% Cl)	South Suburbs % (95% Cl)
<b>Described their grades in school as A's and B's</b> (During the 12 months before the survey.)	74.9% (70.6-78.6)	73.3% (68.6-77.5)	82.8% (79.7-85.6)	81.7% (79.3-83.8)
Had at least one meal with family (On one or more days of the 7 days before the survey.)	86.5% (84.1-88.5)	85.6% (82.6-88.2)	91.8% (90.4-93.1)	90.4% (88.8-91.9)
One or more supportive adults (One or more adults, other than a parent, who they would feel comfortable seeking help from if there was an important issue or question affecting their life.)	77.8% (74.2-81.0)	76.7% (72.9-80.2)	80.7% (78.7-82.5)	80.5% (78.5-82.4)
One or more trusted friends (One or more friends who would offer good advice if there was a really important secret or problem affecting their life.)	85.2% (82.1-87.9)	84.5% (80.9-87.4)	90.4% (89.0-91.7)	89.4% (87.6-91.0)
Parents talk with student almost every day about school	56.8% (53.4-60.1)	60.7% (57.0-64.3)	63.7% (61.6-65.7)	58.1% (55.5-60.7)
Spent at least one day in clubs or organizations outside of school (During the 7 days before the survey.)	51.7% (48.8-54.6)	59.1% (54.2-63.8)	56.7% (54.1-59.3)	49.9% (47.1-52.8)

\*The overall participation rate obtained for the North Suburbs cluster did not reach the 60% minimum required for the data to be considered representative of all North Suburbs cluster students, including those who did not complete the survey. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.



Described	their gra	des in so	hool
a	s A's and	B's	
Category	%	CI	
Gender			
Female	84.4	82.5 -	86.1
Male	76.4	74.1 -	78.6
Race/Ethnic	ity		
White	82.8	80.9 -	84.5
Black	69.5	65.9 -	72.9
Asian	85.0	75.4 -	91.3
Hispanic	64.0	51.3 -	75.0
Other	81.2	76.2 -	85.3
Grade			
7th	82.5	80.0 -	84.7
8th	78.3	75.4 -	80.9
Total	80.3	78.5 -	82.0

# Demographics

Had at least	t one me	al with f	amily
Category	%	CI	
Gender			
Female	88.9	87.5 -	90.1
Male	91.2	89.9 -	92.2
Race/Ethnic	ity		
White	91.5	90.5 -	92.4
Black	83.8	81.2 -	86.1
Asian	84.4	75.4 -	90.5
Hispanic	87.4	76.6 -	93.6
Other	84.0	77.8 -	88.7
Grade			
7th	91.7	90.4 -	92.8
8th	88.6	87.2 -	89.9
Total	90.0	89.1 -	90.9

In Summit County, 80.3% of students described their grades in school as A's and B's. The prevalence of students that described their grades in school as A's and B's was significantly higher among females (84.4%) than males (76.4%). White, Asian, and Other/Multiple (82.8%, 85.0%, 81.2%) students have a significantly higher prevalence than Black (69.5%) and Hispanic (64.0%) students, respectively.

In Summit County, 90.0% of students had one or more meals with family during the 7 days prior to the survey. The prevalence of having one or more meals with family was higher among White (91.5%) students than Black and Other/Multiple (83.8%, 84.0%) students. The prevalence of having one or more meals with family was higher among 7<sup>th</sup> grade (91.7%) students than 8<sup>th</sup> grade (88.6%) students.



One or mo	ore supp	ortive ad	lults
Category	%	CI	
Gender			
Female	79.5	77.8 -	81.0
Male	80.3	78.5 -	82.0
Race/Ethnic	city		
White	80.5	79.1 -	81.9
Black	77.6	74.5 -	80.3
Asian	60.7	50.0 -	70.5
Hispanic	73.5	60.8 -	83.2
Other	80.8	75.6 -	85.1
Grade			
7th	79.7	77.9 -	81.4
8th	80.1	78.3 -	81.8
Total	79.9	78.6 -	81.1

In Summit County, 79.9% of students have one or more adults, other than a parent, who they would feel comfortable seeking help from if there was an important issue or question affecting their life. The prevalence was higher among Other/Multiple, White and Black (80.8%, 80.5%, 77.6%) students than Asian (60.7%) students.

One or n	nore trus	ted frier	nds
Category	%	CI	
Gender			
Female	91.5	90.3 -	92.6
Male	86.2	84.6 -	87.6
Race/Ethnie	city		
White	89.8	88.6 -	90.8
Black	85.0	82.2 -	87.4
Asian	78.7	63.0 -	88.9
Hispanic	82.9	70.1 -	91.0
Other	87.2	82.8 -	90.5
Grade			
7th	88.5	87.0 -	89.8
8th	89.3	87.9 -	90.5
Total	88.9	87.9 -	89.8

In Summit County, 88.9% of students have one or more friends who they feel would offer good advice if there was a really important secret or problem affecting their life. The prevalence of having one or more trusted friends was higher among female (91.5%) students than male (86.2%) students. The prevalence of having one or more trusted friends was higher among White (89.8%) students than Black (85.0%) students.



Parents tall	k with st	udent al	most
every	day abou	ut schoo	l
Category	%	CI	
Gender			
Female	58.8	56.6 -	61.0
Male	62.6	60.6 -	64.7
Race/Ethnic	ity		
White	61.2	59.6 -	62.9
Black	59.5	56.0 -	63.0
Asian	42.0	32.4 -	52.2
Hispanic	45.9	31.9 -	60.6
Other	57.5	51.6 -	63.1
Grade			
7th	62.2	60.2 -	64.2
8th	59.6	57.4 -	61.7
Total	60.8	59.4 -	62.2

In Summit County, 60.8% of students have parents that talk to them about school almost every day. The prevalence of having parents that talk to them about school almost every day was higher among White (61.2%) and Black (59.5%) students than Asian (42.0%) students.

Spent at lea	ast one d	lay in clu	ibs or
organizati	ons outs	ide of sc	hool
Category	%	CI	
Gender			
Female	58.8	56.5 -	61.2
Male	49.7	47.7 -	51.7
Race/Ethnic	ity		
White	53.8	51.9 -	55.7
Black	56.6	52.9 -	60.2
Asian	45.0	34.6 -	55.9
Hispanic	58.4	46.0 -	69.8
Other	56.9	51.3 -	62.3
Grade			
7th	52.7	50.2 -	55.3
8th	55.7	53.1 -	58.2
Total	54.2	52.6 -	55.8

In Summit County, 54.2% of students spent at least one day in clubs or organizations outside of school in the 7 days prior to the survey. The prevalence of having spent at least one day in clubs or organizations outside of school in the 7 days prior to the survey was higher among female (58.8%) students than male (49.7%) students.



<sup>i</sup> Positive Youth Development. 2010. Web Site <u>http://www.findyouthinfo.gov/topic\_pyd.shtml</u>. Accessed on September 20, 2010.



Section 13 | Page 10

# **Summit County High School YRBS**

# 2013

#### **Directions**

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing this survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing the survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the circles completely. When you are finished, follow the instructions of the person giving you the survey.





# Thank you very much for your help.







1. What is your zip code?

Directions: Write your Zip code in the shaded boxes. Fill in the matching oval below each number.



- 2. How old are you?
  - a. 12 years old or younger
  - b. 13 years old
  - c. 14 years old
  - d. 15 years old
  - e. 16 years old
  - f. 17 years old
  - g. 18 years old or older
- 3. What is your sex?
  - a. Female
  - b. Male
- 4. What grade are you in?
  - a. 9<sup>th</sup> grade
  - b. 10<sup>th</sup> grade
  - c. 11<sup>th</sup> grade
  - d. 12<sup>th</sup> grade
  - e. Ungraded or other grade
- 5. Are you Hispanic or Latino?
  - a. Yes
  - b. No
- 6. What is your race? (Select one or more responses.)
  - a. American Indian or Alaska Native
  - b. Asian
  - c. Black or African American
  - d. Native Hawaiian or Other Pacific Islander
  - e. White

- 7. During the past 12 months, how would you describe your grades in school?
  - a. Mostly A's
  - b. Mostly B's
  - c. Mostly C's
  - d. Mostly D's
  - e. Mostly F's
  - f. None of these grades
  - g. Not sure
- 8. Think of where you live most of the time. Which of the following people live there with you? (Select all that apply.)
  - a. Mother
  - b. Father
  - c. Stepmother
  - d. Stepfather
  - e. Foster Mother
  - f. Foster Father
  - g. Grandparent(s)
  - h. Aunt(s)/Uncle(s)
  - i. Brother(s)/Sister(s)
  - j. My children
  - k. Non-relative or someone else
- 9. How many times have you changed homes since kindergarten?
  - a. Never
  - b. 1 or 2 times
  - c. 3 or 4 times
  - d. 5 or 6 times
  - e. 7 or more times
  - f. Not sure
- 10. What is the language you use most often at home?
  - a. English
  - b. Spanish
  - c. Another language

11. How tall are you without your shoes on? Directions: Write your height in the shaded blank boxes. Fill in the matching oval below each number.

Exam	ple
He	eight
Feet	Inches
5	11
3	0
4	1
•	2
6	3
7	4
	5
	6
	7
	8
	9
	10
	•

12. How much do you weigh without your shoes on? Directions: Write your weight in the shaded blank boxes. Fill in the matching oval below each number.

Exa	mple
	Mai

v	Veigh	it	
Ρ	ound	s	
1	5	З	
$\bigcirc$	0	$\bigcirc$	
•	1	$(\mathbf{I})$	
2	2	•	
3	3	3	
	4	4	
	٠	5	
	6	6	
	$\bigcirc$	$\bigcirc$	
	8	8	
	9	9	

#### The next 5 questions ask about safety.

- 13. How often do you wear a seat belt when **riding** in a car driven by someone else?
  - a. Never
  - b. Rarely
  - c. Sometimes
  - d. Most of the time
  - e. Always

- 14. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?
  - a. 0 times
    - b. 1 time
    - c. 2 or 3 times
    - d. 4 or 5 times
    - e. 6 or more times
- 15. During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?
  - a. I did not drive a car or other vehicle during the past 30 days
  - b. 0 times
  - c. 1 time
  - d. 2 or 3 times
  - e. 4 or 5 times
  - f. 6 or more times
- 16. During the past 30 days, on how many days did you **text or e-mail** while driving a car or other vehicle?
  - a. I did not drive a car or other vehicle during the past 30 days
  - b. 0 days
  - c. 1 or 2 days
  - d. 3 to 5 days
  - e. 6 to 9 days
  - f. 10 to 19 days
  - g. 20 to 29 days
  - h. All 30 days
- 17. During the past 12 months, did you suffer a blow or jolt to your head which caused you to get "knocked out," have memory problems, double or blurry vision, headaches or "pressure" in the head, or nausea or vomiting?
  - a. Yes
  - b. No
  - c. Not sure

# The next 6 questions ask about violence-related behaviors.

- 18. During the past 30 days, on how many days did you carry **a weapon** such as a gun, knife, or club?
  - a. 0 days
  - b. 1 day
  - c. 2 or 3 days
  - d. 4 or 5 days
  - e. 6 or more days
- 2

- 19. If you wanted to get a handgun, how easy would it be for you to get one?
  - a. Very hard
  - b. Sort of hard
  - c. Sort of easy
  - d. Very easy
- 20. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?
  - a. 0 days
  - b. 1 day
  - c. 2 or 3 days
  - d. 4 or 5 days
  - e. 6 or more days
- 21. During the past 12 months, how many times were you in a physical fight?
  - a. 0 times
  - b. 1 time
  - c. 2 or 3 times
  - d. 4 or 5 times
  - e. 6 or 7 times
  - f. 8 or 9 times
  - g. 10 or 11 times
  - h. 12 or more times
- 22. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?
  - a. I have not had a boyfriend or girlfriend during the past 12 months
  - b. Yes
  - c. No
- 23. Have you ever been forced to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)
  - a. Yes
  - b. No

The next 4 questions ask about bullying. Bullying is when one or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power, argue or fight or tease each other in a friendly way.

- 24. During the past 12 months, have you ever been bullied **on school property**?
  - a. Yes
  - b. No
- 25. During the past 12 months, have you ever been bullied away from school property?
  - a. Yes
  - b. No
- 26. During the past 12 months, have you ever been electronically bullied? (Count being bullied through email, chat rooms, social media, instant messaging, websites, or texting.)
  - a. Yes
  - b. No
- 27. During the past 12 months, have you ever been teased or name called for any of the following reasons? (Select **all** that apply.)
  - a. I have not been teased or name called during the past 12 months
  - b. Your weight
  - c. Your gender
  - d. Your race or ethnic background
  - e. Your sexual orientation
  - f. Your religion
  - g. Other

# The next question asks about hurting yourself on purpose.

- 28. During the past 12 months, how many times did you do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose?
  - a. 0 times
  - b. 1 time
  - c. 2 or 3 times
  - d. 4 or 5 times
  - e. 6 or more times

The next 3 questions ask about sad feelings and suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life.

- 29. During the past 12 months, did you ever feel so sad and hopeless almost every day for **two weeks or more in a row** that you stopped doing some usual activities?
  - a. Yes
  - b. No
- 3

- 30. During the past 12 months, did you ever **seriously** consider attempting suicide?
  - a. Yes
  - b. No
- 31. During the past 12 months, how many times did you actually attempt suicide?
  - a. 0 times
  - b. 1 time
  - c. 2 or 3 times
  - d. 4 or 5 times
  - e. 6 or more times

#### The next 5 questions ask about tobacco use.

- 32. How old were you when you smoked a whole cigarette for the first time?
  - a. I have never smoked a whole cigarette
  - b. 8 years old or younger
  - c. 9 or 10 years old
  - d. 11 or 12 years old
  - e. 13 or 14 years old
  - f. 15 or 16 years old
  - g. 17 years old or older
- 33. During the past 30 days, on how many days did you smoke cigarettes?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 to 19 days
  - f. 20 to 29 days
  - g. All 30 days
- 34. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 to 19 days
  - f. 20 to 29 days
  - g. All 30 days

- 35. During the past 30 days, on how many days did you smoke cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 to 19 days
  - f. 20 to 29 days
  - g. All 30 days
- 36. During the past 30 days, how did you **usually** get your own tobacco? (Count things such as cigarettes, cigars, cigarillos, little cigars, flavored cigars, chewing tobacco, snuff, or dip.) (Select only **one** response.)
  - a. I did not use any tobacco in the past 30 days
  - b. I bought it at a store such as a liquor store, convenience store, supermarket, discount store, or gas station
  - c. I bought it at a restaurant, bar, or club
  - d. I bought it at a public event such as a concert or sporting event
  - e. I gave someone else money to buy it for me
  - f. Someone gave it to me
  - g. I took it from a store or family member
  - h. I got it some other way

The next 6 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

- 37. How old were you when you had your first drink of alcohol other than a few sips?
  - a. I have never had a drink of alcohol
  - b. 8 years old or younger
  - c. 9 or 10 years old
  - d. 11 or 12 years old
  - e. 13 or 14 years old
  - f. 15 or 16 years old
  - g. 17 years old or older

- 38. During the past 30 days, on how many days did you have at least one drink of alcohol?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 to 19 days
  - f. 20 to 29 days
  - g. All 30 Days
- 39. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
  - a. 0 days
  - b. 1 day
  - c. 2 days
  - d. 3 to 5 days
  - e. 6 to 9 days
  - f. 10 to 19 days
  - g. 20 or more days
- 40. During the past 30 days, what is the largest number of alcoholic drinks you had in a row, that is within a couple of hours?
  - a. I did not drink alcohol during the past 30 days
  - b. 1 or 2 drinks
  - c. 3 drinks
  - d. 4 drinks
  - e. 5 drinks
  - f. 6 or 7 drinks
  - g. 8 or 9 drinks
  - h. 10 or more drinks
- 41. During the past 30 days, how did you **usually** get the alcohol you drank? (Select only **one** response.)
  - a. I did not drink alcohol during the past 30 days
  - b. I bought it at a store such as a liquor store, convenience store, supermarket, discount store, or gas station
  - c. I bought it at a restaurant, bar, or club
  - d. I bought it at a public event such as a concert or sporting event
  - e. I gave someone else money to buy it for me
  - f. Someone gave it to me
  - g. I took it from a store or family member
  - h. I got it some other way

- 42. During the past 30 days, how often have you been at a party or gathering in a home where parents permitted underage alcohol use?
  - a. 0 times
    - b. 1 time
    - c. 2 times
    - d. 3 to 5 times
    - e. 6 to 10 times
    - f. 11 to 15 times
    - g. 16 to 25 time
    - h. More than 25 times

#### The next 3 questions ask about marijuana use. Marijuana is also called grass, pot, or weed.

- 43. During your life, how many times have you used marijuana?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 to 99 times
  - g. 100 or more times
- 44. How old were you when you tried marijuana for the first time?
  - a. I have never tried marijuana
  - b. 8 years old or younger
  - c. 9 or 10 years old
  - d. 11 or 12 years old
  - e. 13 or 14 years old
  - f. 15 or 16 years old
  - g. 17 years old or older
- 45. During the past 30 days, how many times did you use marijuana?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times

#### The next 10 questions ask about other drugs.

- 46. During your life, how many times have you used **any form of cocaine**, including powder, crack, or freebase?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 47. During your life, how many times have you used **heroin** (also called smack, junk, or China White)?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 48. During your life, how many times have you used **methamphetamines** (also called speed, crystal, crank, or ice)?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 49. During your life, how many times have you used **hallucinogenic drugs** such as LSD, acid, PCP, ecstasy, angel dust, mescaline, or mushrooms?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 50. During your life, how many times have you taken **steroid pills or shots** without a doctor's prescription?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times

- 51. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 52. During your life, how many times have you taken **synthetic or designer drugs** (such as bath salts, K2, or spice) to get high?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 53. During your life, how many times have you used prescription pain relievers or painkillers such as Vicodin, Percocet, OxyContin, Lortabs, or Codiene (also called Oxy, Oxy Cotton, Os, Norco, or Vikes) without a doctor's prescription?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times

- 54. During your life, what type of prescription drugs have you taken without a doctor's prescription? (Select **all** that apply.)
  - a. I have never taken prescription drugs without a doctor's prescription
  - b. Narcotic pain relievers such as OxyContin, Percocet, Vicodan, or Lortabs
  - c. Tranquilizers or anti-anxiety drugs such as Xanax or Valium
  - d. Sleeping pills, sedatives and other depressants such as Ambien, or Phenobarbitual
  - e. Stimulants or amphetamines such as Ritalin (also called Vitamin-R or Study drug)
  - f. I have taken multiple prescription drugs without a doctor's prescription at the same time
  - g. I have taken prescription drugs without a doctor's prescription but I am not sure which one(s)
- 55. During the past 12 months, has anyone offered, sold, or given you an illegal drug **on school property**?
  - a. Yes
  - b. No

#### The next 7 questions ask about gambling. Gambling involves betting anything of value (money, watch, soda, etc.) on a game or event.

- 56. During the past 12 months, how often did you **gamble money or personal items** while playing cards, betting on personal skills or sports teams, buying lottery tickets or scratch-offs, using the Internet, or doing anything else?
  - a. I did not gamble money or personal items during the past 12 months
  - b. Less than once a month
  - c. About once a month
  - d. About once a week
  - e. Daily

- 57. During the past 30 days, on which of the following did you gamble? (Select **all** that apply.)
  - a. I did not gamble during the past 30 days.
  - b. "Scratch-offs"
  - c. Lottery tickets such as Powerball or Megabucks
  - d. Pull tabs or "paper" games other than lotteries
  - e. Dice or coin flips
  - f. Playing cards such as poker or blackjack
  - g. A sport
  - h. A horse or dog race
  - i. Games of personal skill such as bowling, video games, or dares
  - j. Bingo for money
  - k. Money over the internet
  - I. Money in other ways
- 58. During the past 30 days, where did you gamble? (Select **all** that apply.)
  - a. I did not gamble during the past 30 days
  - b. Internet
  - c. Casino
  - d. Harness racing
  - e. Community festival, concert, or other event
  - f. My home
  - g. Another person's home
  - h. Neighborhood store or convenience store
  - i. Park, parking lot, or other public space
  - j. Sporting event
  - k. School property
  - I. Other place
- 59. During the past 30 days, how often have you felt bad about the amount you bet, or about what happens when you bet money?
  - a. Never
  - b. Rarely
  - c. Sometimes
  - d. Most of the time
  - e. Always

- 60. During the past 30 days, how often have you felt that you would like to stop betting money but didn't think you could?
  - a. Never
  - b. Rarely
  - c. Sometimes
  - d. Most of the time
  - e. Always
- 61. During the past 30 days, how often have you lied to anyone about betting or gambling?
  - a. Never
  - b. Rarely
  - c. Sometimes
  - d. Most of the time
  - e. Always
- 62. During the past 30 days, how often have you bet or gambled more than you wanted?
  - a. Never
  - b. Rarely
  - c. Sometimes
  - d. Most of the time
  - e. Always

#### The next 5 questions ask about sexual behavior.

- 63. How old were you when you had sexual intercourse for the first time?
  - a. I have never had sexual intercourse
  - b. 11 years old or younger
  - c. 12 years old
  - d. 13 years old
  - e. 14 years old
  - f. 15 years old
  - g. 16 years old
  - h. 17 years old or older
- 64. During the past 3 months, with how many people did you have sexual intercourse?
  - a. I have never had sexual intercourse
  - b. I have had sexual intercourse, but not during the past 3 months
  - c. 1 person
  - d. 2 people
  - e. 3 people
  - f. 4 people
  - g. 5 people
  - h. 6 or more people

- 65. During the past 3 months, how often did you or your partner use a condom when you had sexual intercourse?
  - a. I have never had sexual intercourse
  - b. I have had sexual intercourse but not during the past 3 months
  - c. Never
  - d. Rarely
  - e. Sometimes
  - f. Most of the time
  - g. Always
- 66. Did you drink alcohol or use drugs before you had sexual intercourse the **last time**?
  - a. I have never had sexual intercourse
  - b. Yes
  - c. No
- 67. How many times in your life have you been pregnant or gotten someone pregnant?
  - a. 0 times
  - b. 1 time
  - c. 2 or more times
  - d. Not sure

#### The next 3 questions ask about body weight.

- 68. How do **you** describe your weight?
  - a. Very underweight
  - b. Slightly underweight
  - c. About the right weight
  - d. Slightly overweight
  - e. Very overweight
- 69. Which of the following are you trying to do about your weight?
  - a. Lose weight
  - b. Gain weight
  - c. Stay the same weight
  - d. I am **not trying to do anything** about my weight

- 70. During the past 30 days, which of the following did you do to lose weight or keep from gaining weighting? (Select all that apply.)
  - a. I am not trying to lose weight or keep from gaining weight
  - b. Exercise
  - c. Eat less food, fewer calories, or food low in fat
  - d. Go without eating for 24 hours or more (also called fasting)
  - e. Take any diet pills, powders, or liquids without a doctor's advice
  - f. Vomit or take laxatives
  - g. Something else

The next 12 questions ask about food you ate or drank during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.

- 71. During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks)
  - a. I did not drink 100% fruit juice during the past 7 days
  - b. 1 to 3 times during the past 7 days
  - c. 4 to 6 times during the past 7 days
  - d. 1 time per day
  - e. 2 times per day
  - f. 3 times per day
  - g. 4 or more times per day
- 72. During the past 7 days, how many times did you eat **fruit**? (Do **not** count fruit juice.)
  - a. I did not eat fruit during the past 7 days
  - b. 1 to 3 times during the past 7 days
  - c. 4 to 6 times during the past 7 days
  - d. 1 time per day
  - e. 2 times per day
  - f. 3 times per day
  - g. 4 or more times per day

- 73. During the past 7 days, how many times did you eat green salad?
  - a. I did not eat green salad during the past
    7 days
  - b. 1 to 3 times during the past 7 days
  - c. 4 to 6 times during the past 7 days
  - d. 1 time per day
  - e. 2 times per day
  - f. 3 times per day
  - g. 4 or more times per day
- 74. During the past 7 days, how many times did you eat **potatoes**? (Do **not** count French fries, fried potatoes or potato chips.)
  - a. I did not eat potatoes during the past 7 days
  - b. 1 to 3 times during the past 7 days
  - c. 4 to 6 times during the past 7 days
  - d. 1 time per day
  - e. 2 times per day
  - f. 3 times per day
  - g. 4 or more times per day
- 75. During the past 7 days, how many times did you eat carrots?
  - a. I did not eat carrots during the past 7 days
  - b. 1 to 3 times during the past 7 days
  - c. 4 to 6 times during the past 7 days
  - d. 1 time per day
  - e. 2 times per day
  - f. 3 times per day
  - g. 4 or more times per day
- 76. During the past 7 days, how many times did you eat **other vegetables** (Do **not** count green salad, potatoes, or carrots)?
  - a. I did not eat other vegetables during the past 7 days
  - b. 1 to 3 times during the past 7 days
  - c. 4 to 6 times during the past 7 days
  - d. 1 time per day
  - e. 2 times per day
  - f. 3 times per day
  - g. 4 or more times per day

- 77. During the past 7 days, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not include diet soda or diet pop.)
  - a. I did not drink soda or pop during the past 7 days
  - b. 1 to 3 times during the past 7 days
  - c. 4 to 6 times during the past 7 days
  - d. 1 time per day
  - e. 2 times per day
  - f. 3 times per day
  - g. 4 or more times per day
- 78. During the past 7 days, how many times did you have a drink that was high in caffeine, such as coffee or espresso, or energy drinks, such as Red Bull, Monster, or Rockstar? (Do **not** include soda or pop or tea.)
  - a. I did not drink a drink that was high in caffeine or an energy drink during the past 7 days
  - b. 1 to 3 times during the past 7 days
  - c. 4 to 6 times during the past 7 days
  - d. 1 time per day
  - e. 2 times per day
  - f. 3 times per day
  - g. 4 or more times per day
- 79. During the past 7 days, how times did you drink **milk**? (Count the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one time.)
  - a. I did not drink milk during the past 7 days
  - b. 1 to 3 times during the past 7 days
  - c. 4 to 6 times during the past 7 days
  - d. 1 time per day
  - e. 2 times per day
  - f. 3 times per day
  - g. 4 or more times per day
- 80. During the past 7 days, on how many days did you eat **breakfast**?
  - a. 0 days
  - b. 1 day
  - c. 2 days
  - d. 3 days
  - e. 4 days
  - f. 5 days
  - g. 6 days
  - h. 7 days

- 81. During the past 7 days, on how many days did you eat at least one meal or snack from a fast food restaurant, such as McDonalds, Taco Bell, or KFC?
  - a. 0 days
    - b. 1 day
    - c. 2 days
  - d. 3 days
  - e. 4 days
  - f. 5 days
  - g. 6 days
  - h. 7 days
- 82. During the past 7 days, how many meals (breakfast, lunch, or dinner) did you eat with your family?
  - a. 0 meals
  - b. 1 to 3 meals
  - c. 4 to 6 meals
  - d. 7 to 9 meals
  - e. 10 to 12 meals
  - f. 13 to 15 meals
  - g. 16 or more meals

#### The next 4 questions ask about physical activity.

- 83. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)
  - a. 0 days
  - b. 1 day
  - c. 2 days
  - d. 3 days
  - e. 4 days
  - f. 5 days
  - g. 6 days
  - h. 7 days
- 84. On an average school day, how many hours do you watch TV?
  - a. I do not watch TV on an average school day
  - b. Less than 1 hour per day
  - c. 1 hour per day
  - d. 2 hours per day
  - e. 3 hours per day
  - f. 4 hours per day
  - g. 5 or more hours per day

- 85. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPod, an iPad, or tablet, a smartphone, YouTube, Facebook or other social networking tools, and the Internet.)
  - a. I do not play video or computer games or use a computer for something that is not school work
  - b. Less than 1 hour per day
  - c. 1 hour per day
  - d. 2 hours per day
  - e. 3 hours per day
  - f. 4 hours per day
  - g. 5 or more hours per day
- 86. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)
  - a. 0 teams
  - b. 1 team
  - c. 2 teams
  - d. 3 or more teams

# The next 3 questions ask about how your parents or guardians feel about certain behaviors.

- 87. How wrong do your parents/guardians feel it would be for you to use tobacco (for example cigarettes, cigars, or chewing tobacco)?
  - a. Very wrong
  - b. Wrong
  - c. A little wrong
  - d. Not at all wrong
- 88. How wrong do your parents/guardians feel it would be for you to drink beer, wine, or hard liquor (for example vodka, whiskey, or gin)?
  - a. Very wrong
  - b. Wrong
  - c. A little wrong
  - d. Not at all wrong
- 89. How wrong do your parents/guardians feel it would be for you to use marijuana?
  - a. Very wrong
  - b. Wrong
  - c. A little wrong
  - d. Not at all wrong

# The next 14 questions ask about other health-related topics.

- 90. Have you ever been taught about AIDS or HIV infection in school?
  - a. Yes
  - b. No
  - c. Not sure
- 91. Have you ever talked about AIDS or HIV infection with your parents or other adults in your family?
  - a. Yes
  - b. No
  - c. Not sure
- 92. On an average school night, how many hours of sleep do you get?
  - a. 4 or less hours
  - b. 5 hours
  - c. 6 hours
  - d. 7 hours
  - e. 8 hours
  - f. 9 hours
  - g. 10 or more hours
- 93. Has a doctor or nurse ever told you that you have asthma?
  - a. Yes
  - b. No
  - c. Not sure
- 94. During the past 12 months, how many times did you go to an emergency room or urgent care center because of your asthma?
  - a. I do not have asthma
  - b. 0 times
  - c. 1 or 3 times
  - d. 4 to 9 times
  - e. 10 to 12 times
  - f. 13 or more times
- 95. During the past 30 days, on how many days did you not go to school because you were sick?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 or more days

- 96. During the past 30 days, on how many days did you miss class or school without permission (i.e. skipped or "cut")?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 or more days
- 97. When was the last time you saw a doctor or nurse for a check-up or physical exam when you were not sick or injured?
  - a. During the past 12 months
  - b. Between 12 and 24 months ago
  - c. More than 24 months ago
  - d. Never
  - e. Not sure
- 98. When was the last time you saw a dentist for a checkup, exam, teeth cleaning, or other dental work?
  - a. During the past 12 months
  - b. Between 12 and 24 months ago
  - c. More than 24 months ago
  - d. Never
  - e. Not sure
- 99. When was the last time you saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue?
  - a. During the past 12 months
  - b. Between 12 and 24 months ago
  - c. More than 24 months ago
  - d. Never
  - e. Not sure
- 100. Besides your parents, how many adults would you feel comfortable seeking help from if you had an important issue or question affecting your life?
  - a. 0 adults
  - b. 1 adult
  - c. 2 adults
  - d. 3 adults
  - e. 4 adults
  - f. 5 or more adults

- 101. How many of your friends would you trust to offer you good advice if you had a really important secret or problem affecting your life?
  - a. 0 friends
    - b. 1 friend
  - c. 2 friends
  - d. 3 friends
  - e. 4 friends
  - f. 5 or more friends
- 102. How often does one of your parents or guardians talk with you about what you are doing in school?
  - a. About every day
  - b. About once or twice a week
  - c. About once or twice a month
  - d. Less than once a month
  - e. Never
- 103. On how many of the past 7 days did you take part in organized after school, evening, or weekend activities (other than sports teams) such as school clubs, community center groups, music/art/dance lessons, drama, church, or other supervised activities?
  - a. 0 days
  - b. 1 day
  - c. 2 days
  - d. 3 days
  - e. 4 days
  - f. 5 days
  - g. 6 days
  - h. 7 days

END OF SURVEY – Thank you for your help!

CASE WESTERN RESERVE UNIVERSITY

# Summit County Youth Risk Behavior Survey

2014 High School Item Rationale



Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University

# Contents

DEMOGRAPHICS – National CORE
DEMOGRAPHICS – Local priority
UNINTENTIONAL INJURY – National CORE 4
UNINTENTIONAL INJURY – Local Priority
VIOLENCE-RELATED BEHAVIORS – National CORE
VIOLENCE-RELATED BEHAVIORS – Local Priority
DEPRESSION AND SUICIDE – National CORE 15
TOBACCO USE – National CORE
TOBACCO USE – Local Priority
TOBACCO USE – Local Priority
ALCOHOL USE – National CORE
ALCOHOL USE – Local Priority
ILLEGAL AND PERSCRIPTION DRUG USE – National CORE
ILLEGAL AND PRESCRIPTION DRUG USE – Local Priority 24
MARIJUANA USE - Local Priority
MARIJUANA USE - Local Priority    26      GAMBLING BEHAVIORS – Local Priority    27      REPRODUCTIVE HEALTH – National CORE    28      REPRODUCTIVE HEALTH – Local Priority    30      OBESITY AND WEIGHT CONTROL – National CORE    32      OBESITY AND WEIGHT CONTROL – Local Priority    34      DIETARY BEHAVIORS – National CORE    35
MARIJUANA USE - Local Priority.    26      GAMBLING BEHAVIORS – Local Priority.    27      REPRODUCTIVE HEALTH – National CORE.    28      REPRODUCTIVE HEALTH – Local Priority.    30      OBESITY AND WEIGHT CONTROL – National CORE.    32      OBESITY AND WEIGHT CONTROL – Local Priority.    34      DIETARY BEHAVIORS – National CORE.    35      DIETARY BEHAVIORS – Local Priority.    38
MARIJUANA USE - Local Priority
MARIJUANA USE - Local Priority    26      GAMBLING BEHAVIORS – Local Priority    27      REPRODUCTIVE HEALTH – National CORE    28      REPRODUCTIVE HEALTH – Local Priority    30      OBESITY AND WEIGHT CONTROL – National CORE    32      OBESITY AND WEIGHT CONTROL – Local Priority    34      DIETARY BEHAVIORS – National CORE    35      DIETARY BEHAVIORS – Local Priority    38      PHYSICAL ACTIVITY – National CORE    40      OTHER HEALTH-RELATED TOPICS – Local Priority    43
MARIJUANA USE - Local Priority    26      GAMBLING BEHAVIORS – Local Priority    27      REPRODUCTIVE HEALTH – National CORE    28      REPRODUCTIVE HEALTH – Local Priority    30      OBESITY AND WEIGHT CONTROL – National CORE    32      OBESITY AND WEIGHT CONTROL – Local Priority    34      DIETARY BEHAVIORS – National CORE    35      DIETARY BEHAVIORS – National CORE    38      PHYSICAL ACTIVITY – National CORE    40      OTHER HEALTH-RELATED TOPICS – Local Priority    43      ASTHMA.    43
MARIJUANA USE - Local Priority    26      GAMBLING BEHAVIORS - Local Priority    27      REPRODUCTIVE HEALTH - National CORE    28      REPRODUCTIVE HEALTH - Local Priority    30      OBESITY AND WEIGHT CONTROL - National CORE    32      OBESITY AND WEIGHT CONTROL - Local Priority    34      DIETARY BEHAVIORS - National CORE    35      DIETARY BEHAVIORS - Local Priority    38      PHYSICAL ACTIVITY - National CORE    40      OTHER HEALTH-RELATED TOPICS - Local Priority    43      ABSENTEEISM    43
MARIJUANA USE - Local Priority.    26      GAMBLING BEHAVIORS - Local Priority.    27      REPRODUCTIVE HEALTH - National CORE.    28      REPRODUCTIVE HEALTH - Local Priority.    30      OBESITY AND WEIGHT CONTROL - National CORE.    32      OBESITY AND WEIGHT CONTROL - Local Priority.    34      DIETARY BEHAVIORS - National CORE.    35      DIETARY BEHAVIORS - Local Priority.    38      PHYSICAL ACTIVITY - National CORE.    40      OTHER HEALTH-RELATED TOPICS - Local Priority.    43      ASTHMA.    43      ABSENTEEISM.    43      PREVENTATIVE HEALTHCARE.    44

# **DEMOGRAPHICS – National CORE**

#### **QUESTION(S):**

- 1. What is your zip code?
- 2. How old are you?
- 3. What is your sex?
- 4. In what grade are you?
- 5. Are you Hispanic or Latino?
- 6. What is your race?

#### **RATIONALE:**

These are general demographic questions. They are used to break the survey responses into more meaningful categories which allow for examination of risk behaviors among sub-groups.

# **DEMOGRAPHICS** – Local priority

#### **QUESTION(S):**

7. During the past 12 months, how would you describe your grades in school?

#### **RATIONALE:**

This question is used to assess academic achievement. It is also considered a developmental asset. Developmental assets are grouped into external (support, empowerment, boundaries and expectations, and constructive use of time) and internal (commitment to learning, positive values, social competencies, and positive identity) assets.(1) Grades in school are an internal asset.

#### **REFERENCES:**

1. Leffert N, Benson PL, Scales PC, Sharma A, Drake D, Blyth DA. Developmental assets: measurement and prediction of at-risk behaviors among adolescents. Applied Developmental Science. 1998; 2(4):209-230.

#### **QUESTION(S):**

8. Think of where you live most of the time. Which of the following people live there with you?

- 9. How many times have you changed homes since kindergarten?
- 10. What is the language you use most often at home?

#### **RATIONALE:**

These questions are used to determine household and family structure. They can be used as risk or protective factors in association with many risk behaviors. Most often, they are used to determine whether a student lives in a two-parent, one-parent, or non-parental guardian home and to examine behaviors with relationship to stability of family structure.(1, 2) Additionally, adverse childhood experiences such as childhood abuse, neglect, and childhood health problems are strongly associated with frequent residential mobility.(3) Finally, language preference and English language proficiency have previously been associated with health-related behaviors, disease prevalence, and access to health care (4, 5) and may have implications for delivery of culturally and linguistically appropriate programming.

#### **REFERENCES:**

- 1. Santelli JS, Lowry R, Brener ND, Robin L. The association of sexual behaviors with socioeconomic status, family structure, and race/ethnicity among US adolescents. American Journal of Public Health. 2000; 90:1582-1588.
- 2. Rindfleich A, Burroughs JE, Denton F. Family structure, materialism, and compulsion consumption. Journal of Consumer Research. 1997; 25:312-325.
- 3. Dong M, Anda RF, Felitti VJ, et al. Childhood Residential Mobility and Multiple Health Risks During Adolescence and Adulthood: The Hidden Role of Adverse Childhood Experiences. Arch Pediatric Adolescent Med. 2005;159 (12):1104-1110. doi:10.1001/archpedi.159.12.1104.
- 4. Fiscella K, Franks P, Doescher MP, Saver BG. Disparities in health care by race, ethnicity, and language among the insured: findings from a national sample. Med Care 2002;40:52–59.
- 5. Flores G, Abreu M, Tomany-Korman SC. Limited English proficiency, primary language at home, and disparities in children's health care: how language barriers are measured matters. Public Health Rep 2005;120:418–430.

# **UNINTENTIONAL INJURY – National CORE**

#### **QUESTION(S):**

13. How often do you wear a seat belt when riding in a car driven by someone else?

#### **RATIONALE:**

This question measures the frequency with which seat belts are worn when riding in a car driven by someone else. In 2006, 1,537 young people ages 15 and under were killed and 203,819 were injured in passenger vehicle crashes; of those injured, approximately 9% had an injury that was so severe they

Prepared by the CWRU Prevention Research Center for Healthy Neighborhoods, July 2014

were unable to walk, drive, or continue the activities they normally engaged in prior to the crash.(1) Motor-vehicle related injuries kill more young adults ages 5-19 years than any other single cause in the United States. (2) Safety belts, when used appropriately, reduce the risk of fatal injury to front-seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%.(3) In 2010, among all fatally injured 16-19 year-old occupants, seat belt use among passengers (29%) was considerably lower than among drivers (44%).(4) In 2009, the use of seat belts in passenger vehicles saved an estimated 12,713 lives.(5) In 2011, 8% of high school students nationwide had rarely or never worn a seat belt when riding in a car driven by someone else.(5) During 1991–2011, among students nationwide, a significant linear decrease occurred in the prevalence of rarely or never wearing a seat belt (26%–8%).(6)

#### **REFERENCES:**

- National Highway Traffic Safety Administration. 2006 Motor Vehicle Occupant Protection Facts. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2008. Available at http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Assoc iated%20Files/810654.pdf. Accessed May 21, 2012.
- 2. Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed May 21, 2012.
- 3. National Highway Traffic Safety Administration. *Traffic Safety Facts, 2006 Data: Occupant Protection.* Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2007. Available at http://www-nrd.nhtsa.dot.gov/Pubs/810807.PDF. Accessed May 21, 2012.
- 4. Highway Data Loss Institute. *Fatality Facts 2010: Teenagers*. Insurance Institute for Highway Safety; 2012. Available at http://www.iihs.org/research/default.aspx. Accessed May 24, 2012.
- 5. National Highway Traffic Safety Administration. Lives saved in 2009 by restraint use and minimum-drinking-age laws. Washington, D.C.: US Department of Transportation, National Highway Traffic Safety Administration: 2010. Publication no DOT-HS-811-383. Available at http://wwwnrd.nhtsa.dot.gov/Pubs/811383.pdf. Accessed May 21, 2012.
- 6. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.

#### **QUESTION(S):**

14. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?

15. During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?

#### **RATIONALE:**

These questions measure the frequency with which high school students drove a motor vehicle while under the influence of alcohol or rode as a passenger in a motor vehicle operated by someone who was under the influence of alcohol. In 2008, 22% of 15- to 20-year-old drivers who were killed in motor vehicle crashes and 4% of those injured in crashes had been drinking alcohol. (1) In 2010, 15% of fatally injured passenger vehicle drivers ages 16-17 years old had a blood alcohol concentration (BAC) of 0.08 grams per deciliter (g/dL) at the time of the crash.(2) In 2011, 8% of high school students nationwide had driven a car or other vehicle one or more times when they had been drinking alcohol and 24% of high school students nationwide had ridden in a car or other vehicle driver by someone who had been drinking alcohol one or more times during the 30 days before the survey. (3) Among students nationwide, the prevalence of having driven a car when they had been drinking alcohol did not change significantly during 1991–1997 (17%–17%) and then decreased during 1997–2011 (17%–8%).(3) During 1991–2011, among students nationwide, a significant linear decrease occurred in the prevalence of riding with a driver (3) who had been drinking alcohol (40%–24%).(3)

#### **REFERENCES:**

- 1. National Highway Traffic Safety Administration. Traffic Safety Facts, 2008 Data: Young Drivers. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2009. Available at http://wwwnrd.nhtsa.dot.gov/pubs/811169.pdf. Accessed May 21, 2012.
- 2. Highway Data Loss Institute. Fatality Facts 2010: Teenagers. Insurance Institute for Highway Safety; 2012. Available at http://www.iihs.org/research/fatality.aspx?topicName=Teenagers. Accessed May 24, 2012.
- 3. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

#### **QUESTION(S):**

16. During the past 30 days, on how many days did you text or e-mail while driving a car or other vehicle?

#### **RATIONALE:**

This question measures the frequency with which students engage in texting or e-mailing while driving a motor vehicle. Motor vehicle accidents are the leading cause of death among U.S. adolescents age 16-19. (1) In 2008, distracted driving accounted for nearly 16% of all road fatalities; drivers aged 16-29 accounted for almost 40% of these. (2) Teens are at least as likely to engage in texting while driving as adults, (3) teens are less willing to disengage from a distracting behavior even as more road hazards are presented, (4) and teens are less adept at handling road hazards than adults. (4)Among students nationwide, the prevalence of texting while driving one or more times in the 30 days before the survey was 33%.(5)

#### **REFERENCES:**

Prepared by the CWRU Prevention Research Center for Healthy Neighborhoods, July 2014

- Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed May 18, 2012.
- 2. Wilson FA, Stimpson JP. Trends in fatalities from distracted driving in the United States, 1999 to 2008. American Journal of Public Health. 2010; 100(11):2213-9.
- 3. National Highway Traffic Safety Administration. Traffic safety facts: Young drivers report the highest level of phone involvement in crash or near-crash incidents. Publication no. DOT HS 811 611. Washington, DC: USDOT, 2012. http://www-nrd.nhtsa.dot.gov/Pubs/811611.pdf.
- 4. Lee SE, Klauer SG, Olsen ECB, et al. Detection of road hazards by novice teen and experienced adult drivers. Transportation Research Record 2008;2078:26-32.
- 5. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

# **UNINTENTIONAL INJURY – Local Priority**

#### **QUESTION(S):**

17. During the past 12 months, did you suffer a blow or jolt to your head which caused you to get "knocked out," have memory problems, double or blurry vision, headaches or "pressure" in the head, or nausea or vomiting?

# **RATIONALE:**

This question measures self-reported head injury or concussions, or concussion-like symptoms. While data related to the long-term effects of such injury in children has not been established, studies have shown that children 8 to 16 have been found to have persistent deficits in processing complex visual stimuli up to three months after a concussion and additional physical and mental health effects are hypothesized.(1) Additionally, compared with similar students without a history of concussion, adolescent athletes with 2 or more concussions also demonstrate statistically significant lower gradepoint averages.(2)

- 1. Brosseau-Lachaine O, Gagnon I, Forget R, Faubert J. Mild traumatic brain injury induces prolonged visual processing deficits in children. Brain Inj. 2008;22(9):657–668
- 2. Moser RS, Schatz P, Jordan BD. Prolonged effects of concussion in high school athletes. Neurosurgery. 2005;57(2):300–306

# **VIOLENCE-RELATED BEHAVIORS – National CORE**

#### **QUESTION(S):**

18. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club?

20. During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?

#### **RATIONALE:**

These questions measure violence-related behaviors and school-related violent behaviors. Homicide is the second leading cause of death among all youth ages 15-19 years (8.9 per 100,000) and is the leading cause of death among black youth ages 15-19 years (30.4 per 100,000).(1) Approximately 12% of homicide victims in the United States in 2010 were aged 13-19; of these victims, 93% were killed with a weapon, such as a gun, knife, or club.(2) Firearms intensify violence and increase the likelihood of fatality in a conflict. (3) Of all violent deaths that occurred on school property between 1994 and 2006, 65% involved firearms.(4) Nearly 100% of school districts have a policy prohibiting weapon possession or use by high school students on school property.(5) In 2010, students ages 12-18 were victims of approximately 828,000 nonfatal victimizations at school, including 359,000 violent victimizations, 91,400 of which were serious violent victimizations.(6) Among high school students nationwide in 2011, 17% had carried a weapon, 5% had carried a gun, and 5% had carried a weapon on school property on at least 1 day during the 30 days before the survey.(7) The prevalence of having carried a weapon decreased during 1991–1999 (26%–17%) and then did not change significantly during 1999–2011 (17%–17%).(7) Among high school students nationwide in 2011, 6% had not gone to school on at least 1 day during the 30 days before the survey because they felt they would be unsafe at school or on their way to or from school and 7% had been threatened or injured with a weapon on school property 1 or more times during the 12 months before the survey. (7) Among students nationwide, the prevalence of having not gone to school because of safety concerns did not change significantly during 1993–2011 (4%–6%).(7) Among students nationwide, the prevalence of having been threatened or injured with a weapon on school property did not change significantly during 1993–2003 (7%–9%) and then decreased during 2003–2011 (9%–7%).(7)

- Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed May 22, 2012.
- 2. Department of Justice. Crime in the United States, 2010.Uniform Crime Report Federal Bureau of Investigation Web site. Available at http://www.fbi.gov/aboutus/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/index-page. Accessed May 22, 2012.
- 3. Cook PJ, Ludwig J. The costs of gun violence against children. Future of Children 2002;12(2):87-99.

- 4. Centers for Disease Control and Prevention. School-associated homicides United States 1992-2006. MMWR 2008;57(02):33-36.
- 5. Jones SE, Fisher CJ, Greene BZ, Hertz MF, Pritzl J. Healthy and safe school environment, part I: results from the School Health Policies and Programs Study 2006. Journal of School Health 2007;77(8):522-543.
- Robers S, Zhang J, Truman J. (2012). Indicators of School Crime and Safety: 2011 (NCES 2012-002/NCJ 236021). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC. Available at http://nces.ed.gov/pubs2012/2012314.pdf. Accessed May 22, 2012.
- 7. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

#### **QUESTION(S):**

24. During the past 12 months, have you ever been bullied on school property?

26. During the past 12 months, have you ever been electronically bullied? (Count being bullied through email, chat rooms, instant messaging, websites, or texting.)

# **RATIONALE:**

These questions measure the frequency and severity of bullying behavior. Bullying victimization is associated with depression,(1,2) suicidal ideation,(1,2) self-injury,(2) suicide attempts,(2) increased odds of repeated common health problems,(3) school absenteeism,(4) psychological distress,(3) and feeling unsafe at school.(4) Electronic bullying victimization has been associated with discipline problems in school, skipping school, weapon carrying,(1) psychological distress,(6) lower self-esteem,(7) social anxiety,(8) depression,(2) suicidal ideation,(2) self-injury,(2) and suicide attempts.(2) Among high school students nationwide in 2011, 20% had been bullied on school property during the 12 months before the survey and 16% had been electronically bullied through e-mail, chat rooms, instant messaging, websites, or texting during the 12 months before the survey. (9)

- 1. Van der Wal MF, de Wit CA, Hirasing RA. Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics* 2003;111(6):1312-1317.
- 2. Kessel Schneider S, O'Donnell L, Stueve A, Coulter RWS. Cyberbullying, school bullying, and psychological distress: a regional census of high school students. *American Journal of Public Health* 2012;102:171-177.
- 3. Rigby K. Consequences of bullying in school. *The Canadian Journal of Psychiatry* 2003;48(9):583-590.

10

- 4. Glew GM, Fan MY, Katon W, Rivara FR, Kernic MA. Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine* 2005;159:1026-1031.
- 5. Ybarra ML, Diener-West M, Leaf PJ. Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health* 2007;41:S42–S50.
- 6. Kiriakidis SP, Kavoura A. Cyberbullying. A review of the literature on harassment through the internet and other electronic means. *Family & Community Health* 2010;33(2):82-93.
- 7. Patchin JW, Hinduja S. Cyberbullying and self-esteem. Journal of School Health 2010;80:614-621.
- 8. Juvonen J, Gross EF. Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health* 2008;78:496-505.
- 9. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.

# **VIOLENCE-RELATED BEHAVIORS – Local Priority**

#### **QUESTION(S):**

19. If you wanted to get a handgun, how easy would it be for you to get one?

#### **RATIONALE:**

This question measures violence-related behaviors of currently carrying weapons and access to handguns. Homicide is the second leading cause of death among all youth ages 15-19 years (8.9 per 100,000) and is the leading cause of death among black youth ages 15-19 years (30.4 per 100,000).(1) Approximately 12% of homicide victims in the United States in 2010 were aged 13-19; of these victims, 93% were killed with a weapon, such as a gun, knife, or club.(2) Firearms intensify violence and increase the likelihood of fatality in a conflict. (3) Of all violent deaths that occurred on school property between 1994 and 2006, 65% involved firearms.(4) Nearly 100% of school districts have a policy prohibiting weapon possession or use by high school students on school property.(5) Weapon carrying a school is associated both with increased risk of suicide and further involvement in other violence related activities.(6, 7) Studies have shown that, typically, males have higher access to firearms, and current access in the home increases the odds of both violent victimization and violent offending significantly.(8)

11

- Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed May 22, 2012.
- 2. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.
- 3. Department of Justice. Crime in the United States, 2010.Uniform Crime Report Federal Bureau of Investigation Web site. Available at http://www.fbi.gov/aboutus/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/index-page. Accessed May 22, 2012.
- 4. Cook PJ, Ludwig J. The costs of gun violence against children. Future of Children 2002;12(2):87-99.
- 5. Centers for Disease Control and Prevention. School-associated homicides United States 1992-2006. MMWR 2008;57(02):33-36.
- 6. Jones SE, Fisher CJ, Greene BZ, Hertz MF, Pritzl J. Healthy and safe school environment, part I: results from the School Health Policies and Programs Study 2006. Journal of School Health 2007;77(8):522-543.
- 7.

Borowsky, IW. Et al. Adolescent Suicide Attempts: Risks and Protectors. Pediatrics 2001; 107:3 485-493; doi:10.1542/peds.107.3.485

- 8. DuRant RH, Kahn J, Beckford PH, Woods ER (1997) The association of weapon carrying and fighting on school property and other health risk and problem behaviors among high school students. Arch Pediatric Adolescent Med 151:360–366.
- 9. Ruback, R. B., Shaffer, J. N., & Clark, V. A. (2011). Easy access to firearms: Juveniles' risks for violent offending and violent victimization. Journal of Interpersonal Violence, 26, 2111-2138.

# **QUESTION(S):**

21. During the past 12 months, how many times were you in a physical fight?

#### **RATIONALE:**

This question measures the frequency and severity of physical fights in general and on school property. Physical fighting is a marker for other problem behaviors(1) and is associated with serious injury-related health outcomes.(2,3) Among high school students nationwide in 2011, 33% had been in a physical fight and 12% had been in a physical fight on school property one or more times during the 12 months before the survey.(4) The percentage of high school students who were in a physical fight decreased during 1991–2009 (42%–31%) and then did not change significantly during 2009–2011 (31%–33%).(4) The percentage of high school students who were in a physical fight on school property decreased during 1993-2009 (16–11%) and then did not change significantly during 2009–2011 (11%–12%).(4)

- 1. Sosin DM, Koepsell TD, Rivara FP, Mercy JA. Fighting as a marker for multiple problem behaviors in adolescents. Journal of Adolescent Health 1995;16:209-215.
- 2. Borowsky IW, Ireland M. Predictors of future fight-related injury among adolescents. Pediatrics 2004;113:530-536.
- 3. Pickett W, Craig W, Harel Y, et al. Cross-national study of fighting and weapon carrying as determinants of adolescent injury. Pediatrics 2005;116:855-863.
- 4. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

# **QUESTION(S):**

22. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?

# **RATIONALE:**

This question measures the frequency of physical and sexual violence. Intimate partner abuse victimization is associated with participation in other high risk behaviors,(1-3) including suicide ideation and attempts, as well as post-traumatic stress disorder and major depressive episodes. (4,5) According to CDC's National Intimate Partner and Sexual Violence Survey, over 1 million women have experienced sexual violence by an intimate partner in the past 12 months.(6) Almost 3 million men have experience sexual violence other than rape by an intimate partner in the past 12 months. (6) Forced sexual intercourse is associated with negative psychosocial and mental health consequences.(7,8) In 2011, 8% of high school students nationwide had ever been physically forced to have sexual intercourse when they did not want to. (9)

- 1. Ackard DM, Eisenberg ME, Neumark-Sztainer D. Long-term impact of adolescent dating violence on the behavioral and psychological health of male and female youth. *Journal of Pediatrics* 2007;151(5):476-481.
- 2. Centers for Disease Control and Prevention. Physical dating violence among high school students United States, 2003. *MMWR* 2006;55(19):532-535.
- 3. Roberts TA, Klein J, Fisher S. Longitudinal effect of intimate partner abuse and high-risk behavior among adolescents. *Archives of Pediatrics & Adolescent Medicine* 2003;157:875-881.
- 4. Wolitzy-Taylor KB, Ruggiero JK, Danielson CK, et al. Prevalence and correlates of dating violence in a national sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry* 2008;47(7):755Y762.

- 5. Coker AL, McKeown RE, Sanderson M, Davis KE, Valois RF, Huebner S. Severe dating violence and quality of life among South Carolina high school students. *American Journal of Preventive Medicine* 2000;19(4):220–227.
- 6. Black MC, Basile KC, Breiding MJ, et al. *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report.* 2011. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- 7. Ackard DM, Neumark-Sztainer D. Date violence and date rape among adolescents: associations with disordered eating behaviors and psychological health. *Child Abuse & Neglect* 2002;26:455-473.
- 8. Howard DE, Wang MQ. Psychosocial correlates of U.S. adolescents who report a history of forced sexual intercourse. *Journal of Adolescent Health* 2005;36:372379.
- 9. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.

#### **QUESTION(S):**

23. Have you ever been forced to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)

# **RATIONALE:**

This question measure the frequency of physical and sexual violence. Intimate partner abuse victimization is associated with participation in other high risk behaviors,(1-3) including suicide ideation and attempts, as well as post-traumatic stress disorder and major depressive episodes. (4,5) According to CDC's National Intimate Partner and Sexual Violence Survey, over 1 million women have experienced sexual violence by an intimate partner in the past 12 months.(6) Almost 3 million men have experience sexual violence other than rape by an intimate partner in the past 12 months. (6) Forced sexual intercourse is associated with negative psychosocial and mental health consequences.(7,8) In 2011, 8% of high school students nationwide had ever been physically forced to have sexual intercourse when they did not want to. (9)

- 10. Ackard DM, Eisenberg ME, Neumark-Sztainer D. Long-term impact of adolescent dating violence on the behavioral and psychological health of male and female youth. *Journal of Pediatrics* 2007;151(5):476-481.
- 11. Centers for Disease Control and Prevention. Physical dating violence among high school students United States, 2003. *MMWR* 2006;55(19):532-535.
- 12. Roberts TA, Klein J, Fisher S. Longitudinal effect of intimate partner abuse and high-risk behavior among adolescents. *Archives of Pediatrics & Adolescent Medicine* 2003;157:875-881.

14

- 13. Wolitzy-Taylor KB, Ruggiero JK, Danielson CK, et al. Prevalence and correlates of dating violence in a national sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry* 2008;47(7):755Y762.
- 14. Coker AL, McKeown RE, Sanderson M, Davis KE, Valois RF, Huebner S. Severe dating violence and quality of life among South Carolina high school students. *American Journal of Preventive Medicine* 2000;19(4):220–227.
- 15. Black MC, Basile KC, Breiding MJ, et al. *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report.* 2011. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- 16. Ackard DM, Neumark-Sztainer D. Date violence and date rape among adolescents: associations with disordered eating behaviors and psychological health. *Child Abuse & Neglect* 2002;26:455-473.
- 17. Howard DE, Wang MQ. Psychosocial correlates of U.S. adolescents who report a history of forced sexual intercourse. *Journal of Adolescent Health* 2005;36:372379.
- 18. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.

#### **QUESTION(S):**

25. During the past 12 months, have you ever been bullied away from school property?

27. During the past 12 months, have you ever been teased or name called for any of the following reasons?

# **RATIONALE:**

These questions measure the frequency and severity of bullying behavior. Bullying victimization is associated with depression,(1,2) suicidal ideation,(1,2) self-injury,(2) suicide attempts,(2) increased odds of repeated common health problems,(3) school absenteeism,(4) psychological distress,(3) and feeling unsafe at school.(4) Electronic bullying victimization has been associated with discipline problems in school, skipping school, weapon carrying,(1,5, 11) psychological distress,(6) lower self-esteem,(7) social anxiety,(8) depression,(2) suicidal ideation,(2) self-injury,(2) and suicide attempts.(2) One third of students 12 to 18 report having been bullied at school.(10) In a national survey of 10 to 15 year olds, 64% of youth bullied electronically through mean including e-mail, chat rooms, instant messaging, websites, or texting did not also report being harassed at school.(5,9) While bullying can occur for many reasons, some students are more likely to be targeted, or more likely to report having been bullied.(11) National surveys have found that upward of 80% of GLBTQ youth report having been bullied or harassed related to issues of sexuality or gender identity.(12) Additionally, overweight and obese 11-14 year olds have a higher relative odds of bullying victimization.(13) Data related to bullying based on racial, ethnic or religious background is mixed.(11)

- 1. Van der Wal MF, de Wit CA, Hirasing RA. Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics* 2003;111(6):1312-1317.
- 2. Kessel Schneider S, O'Donnell L, Stueve A, Coulter RWS. Cyberbullying, school bullying, and psychological distress: a regional census of high school students. *American Journal of Public Health* 2012;102:171-177.
- 3. Rigby K. Consequences of bullying in school. The Canadian Journal of Psychiatry 2003;48(9):583-590.
- 4. Glew GM, Fan MY, Katon W, Rivara FR, Kernic MA. Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine* 2005;159:1026-1031.
- 5. Ybarra ML, Diener-West M, Leaf PJ. Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health* 2007;41:S42–S50.
- 6. Kiriakidis SP, Kavoura A. Cyberbullying. A review of the literature on harassment through the internet and other electronic means. *Family & Community Health* 2010;33(2):82-93.
- 7. Patchin JW, Hinduja S. Cyberbullying and self-esteem. *Journal of School Health* 2010;80:614-621.
- 8. Juvonen J, Gross EF. Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health* 2008;78:496-505.
- 9. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.
- 10. U.S. Department of Education, Institute of Education Science: National Center for Education Statistics. Indicators of School Crime and Safety: 2007. NCES 2008-021. December 2007.
- 11. American Psychological Association: Public Interest Government Relations Office. Bullying and School Climate. Accessed 23 April 2014. www.apa.org/about/gr/issues/cyf/bullying-school-climate
- 12. Kosciw, J.G., Greytak, E.A., Diaz, E.M., & Bartkiewicz, M.J. (2010). The 2009 National School Climate Survey: The experiences of lesbian, gay, bisexual, and transgender youth in our nation's schools. New York: GLSEN.
- 13. Janssen, W.M. Craig, W.F. Boyce et al.Associations between overweight and obesity with bullying behaviors in school-aged children. Pediatrics, 113 (2004), pp. 1187–1194

# **DEPRESSION AND SUICIDE – National CORE**

#### **QUESTION(S):**

28. During the past 12 months, how many times did you do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose?

29. During the past 12 months, did you ever feel so sad and hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?

30. During the past 12 months, did you ever seriously consider attempting suicide?

31. During the past 12 months, how many times did you actually attempt suicide?

#### **RATIONALE:**

These questions measure sadness, suicide ideation, attempted suicide, and the seriousness of those attempts. Suicide is the third leading cause of death among youth ages 15-19 years.(1) The suicide rate for persons ages 15-19 was 7.8 per 100,000 in 2009 up from 7.3 per 100,000 in 2006.(1) A prior suicide attempt is one of the most significant risk factors for a suicide fatality. (2,3) Among high school students nationwide in 2011, 28% felt so sad or hopeless almost every day for 2 or more weeks in a row that they stopped doing some usual activities.(4) Among high school students nationwide in 2011, 16% had seriously considered attempting suicide, 13% had made a plan about how they would attempt suicide, and 8% had attempted suicide one or more times during the 12 months before the survey.(4) The percentage of students who seriously considered attempting suicide decreased during 1991–2009 (29%–14%) and then increased during 2009–2011 (14%–16%).(4)

#### **REFERENCES:**

- Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2012. Accessed May 29, 2012.
- 2. Borowsky IW, Ireland M, Resnick, MD. Adolescent suicide attempts: risks and protectors. Pediatrics 2001; 107:485–493.
- 3. Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behavior. Journal of Child Psychology and Psychiatry 2006;47(3/4):372–394.
- 4. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

# **TOBACCO USE – National CORE**

#### **QUESTION(S):**

- 32. How old were you when you smoked a whole cigarette for the first time?
- 33. During the past 30 days, on how many days did you smoke cigarettes?

17

34. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?

#### **RATIONALE:**

These questions measure ever and current smoking patterns, age of initiation, access to cigarettes, smoking on school property, and attempts to quit smoking. Cigarette smoking is the leading cause of preventable death in the United States(1) and accounts for approximately 440,000 deaths each year.(2) Cigarette smoking increases risk of heart disease; chronic obstructive pulmonary disease; acute respiratory illness; stroke; and cancers of the lung, larynx, oral cavity, pharynx, pancreas, and cervix.(1,3) In addition, as compared to nonsmokers, cigarette smokers are more likely to drink alcohol, use marijuana and cocaine, engage in risky sexual behaviors, engage in physical fighting, carry a weapon, and attempt suicide.(3-5) If current patterns of smoking behavior persist, an estimated 6.4 million U.S. persons who were under the age of 18 in 2000 could die prematurely from smoking-related illnesses.(6) In 2006, approximately 64% of schools had adopted policies that 1) prohibited cigarette smoking and smokeless tobacco use among students, faculty and staff, and school visitors in school buildings; outside on school grounds; on school buses or other vehicles used to transport students; and at off-campus, school-sponsored events; and 2) prohibited cigar or pipe smoking by students, faculty and staff, and school visitors.(7) Among high school students nationwide in 2011, 45% had ever tried cigarette smoking, 18% had smoked cigarettes on at least 1 day during the 30 days before the survey, and 5% had smoked cigarettes on school property on at least 1 day during the 30 days before the survey.(8) The percentage of high school students who had ever tried cigarette smoking did not change significantly during 1991–1999 (70%–70%) and then decreased during 1999–2011 (70%–45%).(8) The percentage of high school students who had smoked cigarettes on at least 1 day during the 30 days before the survey increased significantly during 1991–1997 (27%–36%) and then decreased during 1997-2011 (36%-18%).(8)

- 1. U.S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General. U.S. Department of Health and Human Services; Centers for Disease Control and Prevention; National Center for Chronic Disease Prevention and Health Promotion; Office on Smoking and Health; 2004.
- Centers for Disease Control and Prevention. Annual smoking-attributable mortality, years of potential life lost, and productivity losses—United States, 2000–2004. MMWR 2008;57(45):1226– 1228.
- 3. U.S. Department of Health and Human Services. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2012.
- 4. Everett SA, Malarcher AM, Sharp DJ, Husten CG, Giovino GA. Relationship between cigarette, smokeless tobacco, and cigar use, and other health risk behaviors among U.S. high school students. Journal of School Health 2000;70:234-240.

18

- Substance Abuse and Mental Health Services Administration, Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2011. Available at http://www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.htm#4.9. Accessed May 22, 2012.
- 6. Hahn EJ, Rayens MK, Chaloupka FJ, Okoli CTC, Yang J. Projected smoking-related deaths among U.S. youth: A 2000 update. ImpacTeen. Research Paper Series 2002;22.
- 7. Kann L, Brener ND, Wechsler H. Overview and summary: School Health Policies and Programs Study 2006. Journal of School Health 2007;77(8):385-397.
- 8. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

# **TOBACCO USE – Local Priority**

#### **QUESTION(S):**

35. During the past 30 days, on how many days did you smoke cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies?

36. During the past 30 days, how did you usually get your own tobacco? (Count things such as cigarettes, cigars, cigarillos, little cigars, flavored cigars, chewing tobacco, snuff, or dip?

#### **RATIONALE:**

These questions measure cigar smoking patterns and acquisition of tobacco products. Like cigarettes, cigar smoking can cause lung cancer, coronary heart disease, and chronic obstructive pulmonary disease.(1-3) The overall risk of oral and pharyngeal cancer is 7-10 times higher among cigar smokers compared to those who never smoked.(4) In 2011, 13% of high school students nationwide had smoked cigars, cigarillos, or little cigars on at least 1 day during the 30 days before the survey.(4) The percentage of students who had smoked cigars, cigarillos, or little cigars on at least 1 day during the 30 days before decreased during 1997–2005 (22%–14%) and then did not change significantly during 2005–2011 (14%–13%).(4) However, this prevalence is likely underreported due to the lack of branded examples in national surveys. These questions were modified to include common brands and the indication of flavor which has been shown to increase reporting of cigar use, specifically among African American adolescents in urban areas.(5,6) Access to tobacco products is directly related to age of initiation and current use, and identification of means of access offers opportunity for targeted prevention interventions(7).
- 1. US Department of Health and Human Services. Smoking and Tobacco Control Monograph No. 9: Cigars – Health Effects and Trends. Bethesda, MD: US Department of Health and Human Services, National Cancer Institute; 1998. No 98-4302:217.
- 2. Shaper AG, Wannamethee SG, Walker M. Pipe and cigar smoking and major cardiovascular events, cancer incidence and all-cause mortality in middle-age British men. *International Journal of Epidemiology*. 2003; 32:802-808.
- 3. Rodriguez J, Jiang R, Johnson WC, MacKenzie BA, Smith LJ, Barr RG. The association of pop and cigar use with cotinine levels, lung function, and airflow obstruction: A cross-sectional study. *Annals of Internal Medicine*. 2010; 152:201-210.
- 4. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United State, 2011. MMWR Surveillance Summary 2012; 61 (No. SS-4):1-162.
- 5. Trapl ES, Tercheck JJ, Danosky L, Cofie L, Brooks-Russell A, Frank SH. Complexity of measuring "cigar use" in adolescents: Results from and split sample experiment. *Nicotine & Tobacco Research*. 2011; 4:291-295.
- 6. Tercheck JJ, Larkin EM, Male ML, Frank SH. Measuring cigar use in adolescents: Inclusion of a brand-specific item. *Nicotine & Tobacco Research*. 2009; 11:842-846.
- 7. Campaign for Tobacco Free Kids. Where do Youth Smokers Get Their Cigarettes? Research Factsheet 0073. Accessed 23 April 2014.

## **TOBACCO USE – Local Priority**

## **QUESTION(S):**

87. How wrong do your parents/guardians feel it would be for you to use tobacco?

## **RATIONALE:**

This question is from a set that are required core measures for Drug Free Community Projects. This questions ask students about their perception of the beliefs of their parents and guardians with regard to engaging in tobacco use. A student's perception about risk often influences the likelihood of engaging in the behavior themselves (1). Parents' use of inconsistent and/or unusually harsh or severe punishment with their children places the children at higher risk for substance use and other problem behaviors.(2) The Summit County YRBS Coalition added the term "guardian" to these previously standardized questions to ensure that this addresses children whom are being raised by someone other than their biological parent(s).

#### **REFERENCES:**

1. Steinberg L. A social neuroscience perspective on adolescent risk-taking. Developmental Review. 2008;28:78–106.

20

 Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013. <a href="http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf">http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf</a>>.

## **ALCOHOL USE – National CORE**

#### **QUESTION(S):**

37. How old were you when you had your first drink of alcohol other than a few sips?

38. During the past 30 days, on how many days did you have at least one drink of alcohol?

39. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

40. During the past 30 days, what is the largest number of alcoholic drinks you had in a row, that is within a couple hours?

41. During the past 30 days, how did you usually get the alcohol you drank?

#### **RATIONALE:**

These questions measure ever and current use of alcohol, age of initiation, binge drinking, the largest number of alcoholic drinks consumed during a drinking occasion, and access to alcohol. Alcohol is used by more young people than tobacco or illicit drugs.(1) Heavy alcohol drinking and binge drinking among youth is associated with risky sexual behaviors, being a victim of dating violence, and use of cigarettes, marijuana, cocaine, and other illegal drugs.(2-7) Persons who begin drinking alcohol before the age of 15 years are five times as likely to report alcohol dependence or abuse than those who first drank alcohol at age 21 or older. (8) Initiation of alcohol use before 13 years of age also has been associated with an increased risk for suicide.(9,10) Little is currently known about the largest number of drinks consumed by high school students when they drink. However, persons 18-24 years of age consume an average of 9.5 drinks per binge episode(11) and binge drinking by high school students is strongly correlated with binge drinking by adults in the same state. (12) Motor vehicle crashes are the leading cause of death among youth ages 15–19 years in the United States(13) and alcohol use is associated with 22% of all traffic-related fatalities, including 18% of all traffic fatalities among drivers 16 to 20 years of age. (14) Limiting youth access to alcohol has reduced underage alcohol use and alcohol-related problems. (15) However, youth continue to obtain alcohol from a variety of sources, reflecting the need for improved enforcement of underage drinking laws as well as greater public awareness of restrictions on drinking alcohol by underage youth. Among high school students nationwide in 2011, 71% had had at least one drink of alcohol on at least 1 day during their life and 39% had had at least one drink of alcohol on at least 1 day during the 30 days before the survey. (16) In addition, 22% of high school students had had 5 or more drinks of alcohol in a row on at least 1 day during the 30 days before the survey. (16) The percentage of high school students who had had at least

one drink of alcohol on at least 1 day during their life did not change significantly during 1991–1999 (82%–81%), and then decreased during 1999–2011 (81%–71%).(16)

- Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011.
- 2. Dunn MS, Bartee RT, Perko MA. Self-reported alcohol use and sexual behaviors of adolescents. Psychological Reports 2003;92:339-348.
- 3. Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, Schootman M, Cottler LB, Bierut LJ. Substance use and the risk for sexual intercourse with and without a history of teenage pregnancy among adolescent females. Journal of Studies on Alcohol and Drugs 2011;72:194-198.
- 4. Anderson JE, Mueller TE. Trends in sexual risk behavior and unprotected sex among high school students, 1991-2005: the role of substance use. Journal of School Health 2008;78:575-580.
- 5. Young A, Grey M, Abbey A, Boyd CJ, McCabe SE. Alcohol-related sexual assault victimization among adolescents: prevalence, characteristics, and correlates. Journal of Studies on Alcohol and Drugs 2008;69:39-48.
- 6. Miller JW, Naimi TS, Brewer RD, Jone SE. Binge drinking and associated health risk behaviors among high school students. Pediatrics 2007;119:76-85.
- 7. Johnson P, Boles SM, Vaughan R, Herbert D. The co-occurrence of smoking and binge drinking in adolescence. Addictive Behaviors 2000;25:779-783.
- 8. Substance Abuse and Mental Health Services Administration. Alcohol dependence or abuse and age at first use. The NSDUH Report October 22, 2004. Available at http://oas.samhsa.gov/2k4/ageDependence/ageDependence.cfm. Accessed June 1, 2012.
- 9. Swahn MH, Bossarte RM, Sullivent EE. Age of alcohol use initiation, suicidal behavior, and peer and dating violence victimization and perpetration among high-risk, seventh-grade adolescents. Pediatrics 2008;121:297-305.
- 10. Bossarte RM, Swahn MH. The associations between early alcohol use and suicide attempts among adolescents with a history of major depression. Addictive Behaviors 2011;36:532-535.
- 11. Naimi TS, Nelson DE, Brewer RD. The intensity of binge alcohol consumption among U.S. adults. American Journal of Preventive Medicine 2010;38(2):201–207.
- 12. Nelson DE, Naimi TS, Brewer RD, Nelson HA. State alcohol-use estimates among youth and adults, 1993-2005. American Journal of Preventive Medicine 2009;36(3):218–224.

22

- Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2012. Accessed June 1, 2012.
- National Highway Traffic Safety Administration. Traffic Safety Facts, 2010 Data: Alcohol-Impaired Driving. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2012. Available at http://www.nrd.nhtsa.dot.gov/Pubs/811606.pdf. Accessed June 1, 2012.
- 15. Klepp KI, Schmid LA, Murray DM. Effects of the increased minimum drinking age law on drinking and driving behavior among adolescents. Addiction Research 1996;4:237-244.
- 16. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

## **ALCOHOL USE – Local Priority**

#### **QUESTION(S):**

88. How wrong do your parents/guardians feel it would be for you to drink beer, wine, or hard liquor (for example vodka, whiskey, or gin)?

#### **RATIONALE:**

This question is from a set that are required core measures for Drug Free Community Projects. This questions ask students about their perception of the beliefs of their parents and guardians with regard to engaging in alcohol use. A student's perception about risk often influences the likelihood of engaging in the behavior themselves (1). Parents' use of inconsistent and/or unusually harsh or severe punishment with their children places the children at higher risk for substance use and other problem behaviors.(2) The Summit County YRBS Coalition added the term "guardian" to these previously standardized questions to ensure that this addresses children whom are being raised by someone other than their biological parent(s).

- 3. Steinberg L. A social neuroscience perspective on adolescent risk-taking. Developmental Review. 2008;28:78–106.
- Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013. <a href="http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf">http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf</a>>.

## **ILLEGAL AND PERSCRIPTION DRUG USE – National CORE**

#### **QUESTION(S):**

43. During your life, how many times have you used marijuana?

44. How old were you when you tried marijuana for the first time?

45. During the past 30 days, how many times did you use marijuana?

46. During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?

47. During your life, how many times have you used heroin (also called smack, junk, or China White)?

48. During your life, how many times have you used methamphetamines (also called speed, crystal, crank, or ice)?

49. During your life, how many times have you used hallucinogenic drugs such as LSD, acid, PCP, ecstasy, angel dust, mescaline, or mushrooms?

50. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?

51. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

55. During the past 12 months, has anyone offered, sold, or give you an illegal drug on school property?

## **RATIONALE:**

These questions measure ever and current use of marijuana and ever use of cocaine, inhalants, heroin, methamphetamines, hallucinogens, steroids, and injected drugs; use of prescription drugs without a doctor's prescription; and illegal drug activity on school property. Among youth, illicit drug use is associated with heavy alcohol and tobacco use,(1) violence and delinquency,(2-5) and suicide. (6) All school districts prohibit illegal drug possession or use by students on school property. (7) Among high school students nationwide in 2011, 40% had used marijuana, 7% had used any form of cocaine, 3% had used heroin, 4% had used methamphetamines, and 8% had used ecstasy one or more times during their life, and 4% had taken steroid pills or shots without a doctor's prescription.(8) In addition, 11% of high school students had sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high and 2% had used a needle to inject any illegal drug into their body one or more times during their life.(8) Also, 26% of students had been offered, sold, or given an illegal drug on school property during the 12 months before the survey.(8) The percentage of high school students who had

used marijuana one or more times during their life increased during 1991–1999 (31%–47%) and then decreased during 1999–2011 (47%–40%). (8)

#### **REFERENCES:**

- Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings. NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011. Available at: http://www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.pdf. Accessed June 1, 2012.
- Substance Abuse and Mental Health Services Administration. Youth violence and illict drug use. The NSDUH Report 2006;5:1-3. Available at: http://www.oas.samhsa.gov/2k6/youthViolence/youthViolence.pdf. Accessed June 1, 2012.
- 3. Substance Abuse and Mental Health Services Administration. Marijuana use and delinquent behaviors among youths. The NSDUH Report January 9, 2004. Available at http://www.samhsa.gov/data/2k4/MJdelinquency/MJdelinquency.pdf. Accessed June 1, 2012.
- 4. Substance Abuse and Mental Health Services Administration. Inhalant use and delinquent behaviors among young adolescents. The NSDUH Report March 17, 2005. Available at http://oas.samhsa.gov/2k5/inhale/inhale.pdf. Accessed June 1, 2012.
- 5. Substance Abuse and Mental Health Services Administration. Nonmedical stimulant use, other drug use, delinquent behaviors, and depression among adolescents. The NSDUH Report February 28, 2008. Available at http://oas.samhsa.gov/2k8/stimulants/depression.pdf. Accessed June 1, 2012.
- 6. Substance Abuse and Mental Health Services Administration. Substance use and the risk of suicide among youths. The NHSDA Report July 12, 2002. Available at http://oas.samhsa.gov/2k2/suicide/suicide.cfm. Accessed May 19, 2012.
- 7. Everett Jones S, Fisher CJ, Greene BZ, Hertz MF, Pritzl J. Healthy and safe school environment, part I: results from the School Health Policies and Programs Study 2006. Journal of School Health 2007;77(8):522-543.
- 8. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

## **ILLEGAL AND PRESCRIPTION DRUG USE – Local Priority**

#### **QUESTION(S):**

54. During your life, what type of prescription drugs have you taken without a doctor's prescription?

#### **RATIONALE:**

Prepared by the CWRU Prevention Research Center for Healthy Neighborhoods, July 2014

This questions measures prescription drug use without a doctors prescription. Prescription drug abuse is reaching prevalence levels near use of marijuana among adolescents. 9.1% of teens aged 12-17 misused prescription drugs in 2005. In 2006, there were as many new abusers of prescription drugs as new users of marijuana.(1) Prescription and over the counter medications are widely available, free or inexpensive, and falsely believed to be safer than illicit drugs. In 2006, 2.1 million teens abused prescription drugs and an additional 2.1 million had misused over the counter cough and cold medications at least once in their lifetime.(2)

Drug abuse may contribute to depression and suicide, unintended pregnancy, school failure, violent behavior, delinquency, and transmission of sexually transmitted diseases, including HIV.(3)

#### **REFERENCES:**

- 1. Substance Abuse and Mental Health Services Administration. 2006. Misuse of Prescription Drugs, 2005. Available at http://www.oas.samhsa.gov/prescription/toc.htm. Accessed on June 1, 2009.
- Substance Abuse and Mental Health Services Administration. 2007. Results from the 2006 National Survey on Drug Use and Health: National Findings. Office of Applied Studies, NSDUH Series H-32, DHHS Publication No.SMA 07-4293. Rockville, MD.
- 3. Wu, W., Khan, A. 2005. Adolescent Illicit Drug Use: Understanding and Addressing the Problem. Medscape Public Health & Prevention. 3(2).

## **QUESTION(S):**

42. During the past 30 days, how often have you been at a party or gathering in a home where parents permitted underage alcohol use?

52. During your life, how many times have you taken synthetic or designer drugs (such as bathsalts, K2, or spice) to get high?

53. During your life, how many times have you used prescription pain relievers or painkillers such as Vicodin, Percocet, Oxy Cotton, Os, Norco, or Vikes) without a doctor's prescription?

## **RATIONALE:**

These questions measure access to alcohol and use of both synthetic drugs and prescription pain relievers without a doctor's prescription. Among youth, illicit drug use is associated with heavy alcohol and tobacco use,(1) violence and delinquency, (2-5) and suicide. (6) All school districts prohibit illegal drug possession or use by students on school property.(7) Among high school students nationwide in 2011, 8% had used ecstasy one or more times during their life, and 4% had taken steroid pills or shots without a doctor's prescription.(8) In addition, 11% of high school students had sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high and 2% had used a needle to inject any illegal drug into their body one or more times during their life.(8)

#### **REFERENCES:**

- Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings. NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011. Available at: http://www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.pdf. Accessed June 1, 2012.
- Substance Abuse and Mental Health Services Administration. Youth violence and illict drug use. The NSDUH Report 2006;5:1-3. Available at: http://www.oas.samhsa.gov/2k6/youthViolence/youthViolence.pdf. Accessed June 1, 2012.
- 3. Substance Abuse and Mental Health Services Administration. Marijuana use and delinquent behaviors among youths. The NSDUH Report January 9, 2004. Available at http://www.samhsa.gov/data/2k4/MJdelinquency/MJdelinquency.pdf. Accessed June 1, 2012.
- 4. Substance Abuse and Mental Health Services Administration. Inhalant use and delinquent behaviors among young adolescents. The NSDUH Report March 17, 2005. Available at http://oas.samhsa.gov/2k5/inhale/inhale.pdf. Accessed June 1, 2012.
- 5. Substance Abuse and Mental Health Services Administration. Nonmedical stimulant use, other drug use, delinquent behaviors, and depression among adolescents. The NSDUH Report February 28, 2008. Available at http://oas.samhsa.gov/2k8/stimulants/depression.pdf. Accessed June 1, 2012.
- 6. Substance Abuse and Mental Health Services Administration. Substance use and the risk of suicide among youths. The NHSDA Report July 12, 2002. Available at http://oas.samhsa.gov/2k2/suicide/suicide.cfm. Accessed May 19, 2012.
- 7. Everett Jones S, Fisher CJ, Greene BZ, Hertz MF, Pritzl J. Healthy and safe school environment, part I: results from the School Health Policies and Programs Study 2006. Journal of School Health 2007;77(8):522-543.
- 8. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

#### MARIJUANA USE - Local Priority

#### **QUESTION(S):**

89. How wrong do your parents/guardians feel it would be for you to use marijuana?

#### **RATIONALE:**

This question is from a set that are required core measures for Drug Free Community Projects. This questions ask students about their perception of the beliefs of their parents and guardians with regard

Prepared by the CWRU Prevention Research Center for Healthy Neighborhoods, July 2014

to engaging in alcohol use. A student's perception about risk often influences the likelihood of engaging in the behavior themselves (1). Parents' use of inconsistent and/or unusually harsh or severe punishment with their children places the children at higher risk for substance use and other problem behaviors.(2) The Summit County YRBS Coalition added the term "guardian" to these previously standardized questions to ensure that this addresses children whom are being raised by someone other than their biological parent(s).

#### **REFERENCES:**

- 5. Steinberg L. A social neuroscience perspective on adolescent risk-taking. Developmental Review. 2008;28:78–106.
- Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013. <a href="http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf">http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf</a>>.

## **GAMBLING BEHAVIORS – Local Priority**

#### **QUESTION(S):**

56. During the past 12 months, how often did you gamble money or personal items such as while playing cards, betting on personal skills or sports teams, buying lottery tickets or scratch-offs, or using the internet?

57. During the past 30 days, on which of the following did you gamble?

58. During the past 30 days, where did you gamble?

59. During the past 30 days, how often have you felt bad about the amount you bet, or about what happens when you bet money?

60. During the past 30 days, how often have you ever felt that you would like to stop betting money but didn't think you could?

61. During the past 30 days, how often have you lied to anyone about betting or gambling?

62. During the past 30 days, how often have you bet or gambled more than you wanted?

#### **RATIONALE:**

These questions were sponsored by the Alcohol and Drug Addiction and Mental Health Services board to address a lack of data around gambling. Problem Gambling refers to any gambling that goes beyond the "normal" bounds of gambling for fun, recreation or entertainment. Compulsive gambling (or pathological gambling) is a recognized and treatable illness, and children of problem gamblers may be at higher risk for a broad range of health, mental health and school-related problems.(3)

28

Problem gambling is a widespread. Two million (1 percent) of U.S. adults are estimated to meet criteria for pathological gambling in a given year, according to the National Council on Problem Gambling. Another four to six million (2-3 percent) would be considered problem gamblers; that is, they do not meet the full diagnostic criteria for pathological gambling, but meet one of more of the criteria and are experiencing problems due to their gambling behavior. Based on national prevalence data, in Ohio it is estimated that 264,000 adults and approximately 38,000 adolescents exhibit problem gambling behaviors.(2)

Little is known about the course and outcomes of adolescent gambling. A review of 26 gambling prevalence studies conducted in the US and Canada shows both a high level of adolescent involvement in gambling activities and an increase in participation in recent years.(1) Estimates of problem gambling or pathological gambling range between two and four times higher than the adult population, with 4 to 8 percent suffering serious problems and an additional 10 to 14 percent at risk for gambling problems. (4-7)

#### **REFERENCES:**

- 1. Jacobs DF. Youth gambling in North America: Long-term trends and future prospects. In: Derevensky JL, Gupta R, editors. Gambling Problems in Youth: Theoretical and Applied Perspectives. New York, NY: Klewer Academic/Plenum Publishers; 2004. pp. 1–24.
- 2. "Ohio Problem Gambling." Prevention. Ohio Department of Mental Health and Addiction Services, n.d. Web. 9 Sep 2013. <a href="http://mha.ohio.gov/Default.aspx?tabid=505">http://mha.ohio.gov/Default.aspx?tabid=505</a>>.
- 3. "Problem Gambling Quick Facts." Ohio.gov. Ohio for Responsible Gambling, n.d. Web. 19 Sep 2013. <a href="http://www.org.ohio.gov/index.html">http://www.org.ohio.gov/index.html</a>>.
- 4. Derevensky JL, Gupta R. Prevalence estimates of adolescent gambling: A comparison of the SOGS-RA, DSM-IV-J, and the GA 20 questions. J Gambl Stud. 2000;16(2/3):227–51.
- 5. Gupta R, Derevensky JL. Adolescent gambling behavior: A prevalence study and examination of the correlates associated with problem gambling. J Gambl Stud. 1998;14(4):319–45.
- 6. Shaffer HJ, Hall MN. Estimating the prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. J Gambl Stud. 1996;12(2):193–214.
- 7. Shaffer HJ, Hall MN. Updating and refining prevalence estimated of disordered gambling behavior in the United States and Canada. Can J Public Health. 2001;92(3):168–72.

## **REPRODUCTIVE HEALTH – National CORE**

#### **QUESTION(S):**

63. How old were you when you had sexual intercourse for the first time?

- 64. During the past 3 months, with how many people did you have sexual intercourse?
- 66. Did you drink alcohol or use drugs before you had sexual intercourse the last time?
- 90. Have you ever been taught about AIDS or HIV infection in school?

## **RATIONALE:**

These questions measure the prevalence of sexual activity, number of sexual partners, age at first intercourse, alcohol and other drug use related to sexual activity, condom use, contraceptive use, and whether high school students received HIV prevention education. Early initiation of sexual intercourse is associated with having a greater number of lifetime sexual partners.(1-2) In addition, adolescents who initiate sexual intercourse early are less likely to use contraception(2-3) and are at higher risk for STDs(4) and pregnancy.(5,6) Estimates suggest that while representing 25% of the ever sexually active population, persons aged 15- to 24-years acquire nearly half of all new STDs.(7) Gonorrhea rates are highest among females between the ages of 15 and 19 years (570.9 cases per 100,000 females) and males between the ages of 20 and 24 years (421.0 cases per 100,000 males).(8) Between 2006 and 2009, the rate of HIV diagnoses in the 40 states with mature confidential name-based HIV infection reporting increased 24% among persons ages 13-19 years and 31% among persons aged 20- to 24-years. By the end of 2008, in the 40 states with confidential name-based HIV infection reporting there were an estimated 7,859 persons ages 13–19 years living with a diagnosis of HIV infection and 3,388 living with a diagnosis of AIDS.(9) Among high school students nationwide in 2011, 47% had ever had sexual intercourse, 15% had had sexual intercourse with four or more persons during their life, and 34% had had sexual intercourse with at least one person during the 3 months before the survey.(10) The percentage of students who ever had sexual intercourse decreased during 1991-2001 (54%-46%) and then did not change significantly during 2001–2011 (46%–47%). The percentage of students who had sexual intercourse with four or more persons during their life decreased during 1991–2001 (19%–14%) and then did not change significantly during 2001–2011 (14%–15%). During 1991–2011, there was a significant linear decrease in the percentage of students who had had sexual intercourse with at least one person during the 3 months before the survey (37%–34%).(10) In 2011, among the 34% of students who were currently sexually active, 60% reported that either they or their partner had used a condom during last sexual intercourse.(10) The percentage of sexually active students who used a condom during last sexual intercourse increased during 1991–2003 (46%–63%) and then did not change significantly during 2003–2011 (63%–60%).(10) In 2006, 88% of high schools taught HIV prevention education in a required health education course.(11) Among high school students nationwide in 2011, 84% of students had ever been taught in school about AIDS or HIV infection.(10) The percentage of students who were taught in school about AIDS or HIV infection increased during 1991–1997 (83%–92%) and then decreased during 1997-2011 (92%-84%).(10)

- 1. Santelli JS, Brener ND, Lowry R, et al. Multiple sexual partners among U.S. adolescents and young adults. Family Planning Perspectives 1998;30:271–5.
- 2. Martinez G, Copen CE, Abma JC. Teenagers in the United States: Sexual activit contraceptive use, and childbearing, 2006–2010 National Survey of Family Growth. National Center for Health Statistics. *Vital Health Stat* 2011; 23(31). <u>www.cdc.gov/nchs/data/series/sr\_23/sr23\_031.pdf</u> Accessed May 8, 2012.

- 3. Manning WD, Longmore MA, Giordano PC. The relationship context of contraceptive use at first intercourse. *Family Planning Perspectives*. 2000;32(3):104–110.
- 4. Kaestle CE, Halpern CT, Miller WC, Ford CA. Young age at first sexual intercourse and sexually transmitted infections in adolescents and young adults. *American Journal of Epidemiology* 2005;161(8):774-780.
- 5. Manlove J, Terry E, Gitelson L, Papillo AR, Russell S. Explaining demographic trends in teenage fertility, 1980–1995. *Family Planning Perspectives* 2000;32(4):166–175.
- 6. Thornberry TP, Smith CA, Howard GJ. Risk factors for teenage fatherhood. *Journal of Marriage* & *Family* 1997;59:505–522.
- 7. Weinstock H, Berman S, Cates W. Sexually transmitted disease among America youth: Incidence and prevalence estimates, 2000. *Perspectives on Sexual and Reproductive Health* 2004;36(1):6–10.
- 8. Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2010. Atlanta: U.S. Department of Health and Human Services; 2011. Available at <u>www.cdc.gov/std/stats10/default.htm</u>. Accessed May 8, 2012.
- 9. Centers for Disease Control and Prevention. Diagnoses of HIV infection and AIDS among adolescents and young adults in the United States and 5 U.S. dependent areas, 2006–2009. *HIV Surveillance Supplemental Report* 2012;17(No.2). Available at http://www.cdc.gov/hiv/surveillance/resources/reports/2009supp\_vol17no2/index. htm. Accessed May 8, 2012.
- 10. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.
- 11. Kann L, Telljohann SK, Wooley SF. Health education: results from the School Health Policies and Programs Study 2006. *Journal of School Health* 2007;77: 408-434.

## **REPRODUCTIVE HEALTH – Local Priority**

#### **QUESTION(S):**

65. During the past 3 months, how often did you or your partner use a condom when you had sexual intercourse?

#### **RATIONALE:**

This questions measures whether the student or their partner used a condom during sexual intercourse in the past three months. Predictors of condom use include self-efficacy, peer influences, perceived risk for STDs, and outcome expectations.(1-4) Since 1990, teen pregnancy and birth rates in the United States have declined significantly. Researchers cite two main factors: fewer teens are having sex, and among those who are, more are using contraceptives.(5) While this is a positive trend, there are still risks for those teens that are entering into sexual relationships during their adolescent years. (5)

#### **REFERENCES:**

- 1. K.A. Moore, B.C. Miller, D. Glei, D.R. Morrison. Adolescent Sex, Contraception, and Childbearing: A Review of Recent Research. Child Trends, Inc, *Washington*, *DC* (1995)
  - 2. K. Basen-Engquist, G.S. Parcel. Attitudes, norms, and self-efficacy: A model of adolescents-HIV-related sexual risk behavior. *Health Educ*, 19 (1992), pp. 263–277
- 3. M.A. Shafer, C.B. Boyer. Psychosocial and behavioral factors associated with risk of sexually transmitted diseases, including human immunodeficiency virus infection, among urban school students. *J Pediatr*, 119 (1991), pp. 826–833
- 4. D.P. Orr, C.D. Langefeld. Factors associated with condom use by sexually active male adolescents at risk for sexually transmitted disease. Pediatrics, 91 (1993), pp. 873–879
- 5. Martin, J., Hamilton, B., Sutton, P., Ventura, S., Menacker, F., Kirmeyer, S., Munson, M. 2007. Births: final data for 2005. *National Vital Statistics Reports*. 56(6).

## **QUESTION(S):**

67. How many times in your life have you been pregnant or gotten someone pregnant?

#### **RATIONALE:**

This question measures whether the student or their partner used a condom during sexual intercourse and whether the students had ever been or had ever gotten someone pregnant. Since 1990, teen pregnancy and birth rates in the United States have declined significantly. Researchers cite two main factors: fewer teens are having sex, and among those who are, more are using contraceptives.(1) While this is a positive trend, there are still risks for those teens that are entering into sexual relationships during their adolescent years. (1)

#### **REFERENCES:**

1. Martin, J., Hamilton, B., Sutton, P., Ventura, S., Menacker, F., Kirmeyer, S., Munson, M. 2007. Births: final data for 2005. National Vital Statistics Reports. 56(6).

#### **QUESTION(S):**

91. Have you ever talked about AIDS and HIV infection with your parents or other adults in your family?

#### **RATIONALE:**

This question measures whether students report having received HIV prevention education. The Centers for Disease Control and Prevention (CDC) estimates that 15% of the 35,314 new HIV diagnoses reported in 2006 were among youth 13–24 years of age.(1) Recent trends in HIV prevalence reveal that

Prepared by the CWRU Prevention Research Center for Healthy Neighborhoods, July 2014

the disproportionate burden of HIV/AIDS among racial minorities is even greater among youth 13–19 years of age than among young adults 20–24 years of age. (2)

Additionally, in 2006, 88% of high schools taught HIV prevention education in a required health education course. (3) Among high school students nationwide in 2011, 84% of students had ever been taught in school about AIDS or HIV infection. (4) The percentage of students who were taught in school about AIDS or HIV infection increased during 1991–1997 (83%–92%) and then decreased during 1997–2011 (92%–84%).(4)

#### **REFERENCES:**

- 1. Centers for Disease Control and Prevention (CDC). HIV and AIDS in the United States: A picture of today's epidemic. 2008; http://www.cdc.gov/hiv/topics/surveillance/united\_states.htm
- Centers for Disease Control and Prevention (CDC). HIV/AIDS surveillance in adolescents and young adults (through 2007). 2009; http://www.cdc.gov/hiv/topics/surveillance/resources/slides/adolescents/index.htm.
- 3. Kann L, Telljohann SK, Wooley SF. Health education: results from the School Health Policies and Programs Study 2006. Journal of School Health 2007;77: 408-434.
- 4. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

## **OBESITY AND WEIGHT CONTROL – National CORE**

#### **QUESTION(S):**

- 11. How tall are you without your shoes on?
- 12. How much do you weight without your shoes on?
- 68. How do you describe your weight?
- 69. Which of the following are you trying to do about your weight?

#### **RATIONALE:**

These questions measure self-reported height and weight and perceived body weight. Data on selfreported height and weight is used to calculate body mass index (BMI) and determine the corresponding BMI-for-age percentile for adolescents. BMI-for-age percentile is a proxy measure of weight status, correlates with body fat,(1) and is recommended for assessing weight status in youth ages 2-20.(2) Although BMI calculated from self-reported height and weight underestimates the prevalence of obesity compared to BMI calculated from measured height and weight,(3) self-reported height and weight are useful for tracking BMI trends over time. In addition, obesity prevalence trends from national surveys of adults using self-reported height and weight(4) have been consistent with trend data from national

Prepared by the CWRU Prevention Research Center for Healthy Neighborhoods, July 2014

surveys using measured height and weight.(5) It is critical to continue monitoring height and weight because the prevalence of obesity among adolescents has tripled since 1980.(6) Obesity during adolescence is associated with negative psychological and social consequences and health problems such as type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome.(7) Further, obese adolescents are more likely to become obese adults.(8,9) Nationwide in 2011, based on national YRBS data, 13% of high school students were obese and 15% were overweight.(10) During 1999–2011, significant linear increases occurred in the percentage of students who were obese (11%–13%) and who were overweight (14%–15%).(10)

- Mei Z, Grummer-Strawn LM, Pietrobelli A, Goulding A, Goran MI, Dietz WH. Validity of body mass index compared with other body-composition screening indexes for assessment of body fatness in children and adolescents. American Journal of Clinical Nutrition 2002;75(6):978-985.
- 2. Krebs NF, Himes JH, Jacobson D, Nicklas TA, Guilday P, Styne D. Assessment of child and adolescent overweight and obesity. Pediatrics 2007;120:S193-S228.
- Brener ND, McManus T, Galuska DA, Lowry R, Wechsler H. Reliability and validity of selfreported height and weight among high school students. Journal of Adolescent Health 2003;32:281-287.
- 4. Galuska DA, Serdula M, Pamuk E, Siegel PZ, Byers T. Trends in overweight among US adults from 1987 to 1993: a multistate telephone survey. American Journal of Public Health 1996;86:1729-1735.
- 5. Centers for Disease Control and Prevention. Update: Prevalence of overweight among children, adolescents, and adults United States, 1988-1994. Morbidity and Mortality Weekly Report 1997;46(9):199-202.
- Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999-2010. JAMA 2012;307(5):E1.
- Daniels SR, Arnett DK, Eckel RH, et al. Overweight in children and adolescents: Pathophysiology, consequences, prevention, and treatment. Circulation 2005;111:1999-2012.
- 8. Guo SS, Wu W, Cameron W, Roche AF. Predicting overweight and obesity in adulthood from body mass index values in childhood and adolescence. American Journal of Clinical Nutrition 2002;76:653-658.
- Freedman DS, Khan LK, Serdula MK, Dietz WH, Srinivasan SR, Berenson GS. The relation of childhood BMI to adult adiposity: The Bogalusa Heart Study. Pediatrics 2005;115(1):22-27.
- 10. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance -

United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

## **OBESITY AND WEIGHT CONTROL – Local Priority**

#### **QUESTION(S):**

70. During the past 30 days, which of the following did you do to lose weight or to keep from gaining weight?

#### **RATIONALE:**

This question is a combination of three national core questions created to assess what methods students are using who are trying to maintain or lose weight. Current recommendations promote healthy eating and physical activity as effective weight control behaviors.(1,2) Unhealthy weight control behaviors include fasting, taking diet pills or laxatives, or inducing vomiting. Engaging in unhealthy weight control behaviors may result in physical and psychological health problems such as obesity, eating disorders such as anorexia and bulimia, (3) and stunted growth. (4) Disordered eating behaviors are correlated with inadequate nutrient intake,(5) low self-esteem, high levels of depression, suicidal ideation, high levels of stress, and alcohol and drug use.(6) Nationwide 2011, 46% of high school students were trying to lose weight.(7) In 2011, 12% of high school students did not eat for 24 or more hours to lose weight or to keep from gaining weight, 5% of high school students had taken diet pills, powders, or liquids without a doctor's advice, and 4% had vomited or taken laxatives to lose weight or keep from gaining weight during the 30 days before the survey.(7) During 1999–2011, the percentage of students who did not eat for 24 or more hours to lose weight or to keep from gaining weight decreased (13%-12%).(7) The percentage of students who took diet pills, powders, or liquids to lose weight or to keep from gaining weight increased during 1999–2001 (8%–9%) and then decreased during 2001–2011 (9%–5%).(7) The percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight did not change significantly during 1995–2003 (5%–6%) and then decreased during 2003–2011 (6%– 4%).(7)

- 1. Davis MM, Gance-Cleveland B, Hassink S, Johnson R, Paradis G, Resnicow K. Recommendations for prevention of childhood obesity. Pediatrics 2007;120:S229
- 2. Spear BA, Barlow SE, Ervin C, et al. Recommendations for treatment of child and adolescent overweight and obesity. Pediatrics 2007;120:S254.
- 3. Neumark-Sztainer D, Wall M, Guo J, Story M, Haines J, Eisenberg M. Obesity, disordered eating, and eating disorders in a longitudinal study of adolescents: How do dieters fare 5 years later? Journal of the American Dietetic Association 2006;106: 559 568.
- 4. Golden NH, Katzman DK, Kreipe RE, et al. Eating disorders in adolescents: Position paper of the Society for Adolescent Medicine. Journal of Adolescent Health 2003;33:496-503.

- 5. Neumark-Sztainer D, Hannan PJ, Story M, Perry CL. Weight-control behaviors among adolescent girls and boys: Implications for dietary intake. Journal of the American Dietetic Association 2004;104:913-920.
- 6. Neumark-Sztainer D, Hannan PJ. Weight-related behaviors among adolescent girls and boys. Archives of Pediatric and Adolescent Medicine 2000;154:569-577.
- 7. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

## **DIETARY BEHAVIORS – National CORE**

#### **QUESTION(S):**

71. During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks)

72. During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)

73. During the past 7 days, how many times did you eat green salad?

74. During the past 7 days, how many times did you eat potatoes? (Do not count French fries, fried potatoes or potato chips.)

75. During the past 7 days, how many times did you eat carrots?

76. During the past 7 days, how many times did you eat other vegetables (Do not count green salad, potatoes, or carrots)?

77. During the past 7 days, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not include diet soda or diet pop.)

80. During the past 7 days, on how many days did you eat breakfast?

#### **RATIONALE:**

These questions measure dietary behaviors, including consumption of fruits and vegetables, and soda or pop. The fruit and vegetable questions are similar to questions asked of adults on the Centers for Disease Control and Prevention Behavioral Risk Factor Survey 2009 questionnaire.(1) Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. There is probable evidence to suggest that dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer,(2-4) cardiovascular disease,(5) and stroke.(6) Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.(7-9) In 2011, during the 7 days before the survey, 34% of high school students nationwide had eaten fruit or drunk 100% fruit juice two or more times per

day and 15% of students had eaten vegetables three or more times per day.(10) The percentage of students who ate fruit or drank 100% fruit juice two or more times per day decreased during 1999–2005 (35%–30%) and then increased during 2005–2011 (30%–34%). The percentage of students who ate vegetables three or more times per day did not change during 1999–2011 (14%–15%).(10) In recent years, sugar-sweetened beverage consumption has significantly increased among children and adolescents.(11-12) Among persons ages 2-18 years, soft drinks (i.e. sugar-sweetened beverages) comprised 3% of the total daily calories consumed in 1977–1978 compared to 7% in 1999–2001.(11) Sugar-sweetened beverages are the primary source of added sugars in the diet of US children and adolescents and contributes an average of 173 kcal/day (8.5% of daily energy intake).(12) Consumption of sugar-sweetened beverages, including soft drinks, appears to be associated with increased risk of being overweight among children, (13,14) the development of metabolic syndrome and type 2 diabetes,(15) and is associated with a less healthy diet,(16) decreased bone density,(17) and dental decay.(18) Nationwide in 2011, 28% of high school students had drunk a can, bottle, or glass of soda or pop (not counting diet soda or diet pop) one or more times per day during the 7 days before the survey.(10) Milk is an important source of many nutrients, including calcium.(19) There is evidence that intake of milk and milk products is associated with bone health in children and adolescents and with a lower risk of cardiovascular disease and type 2 diabetes and with lower blood pressure in adults.(19) Although the recommended intake of milk and milk products is 3 cups per day for adolescents, most adolescents consume far less. (19) In 2011, 15% of high school students nationwide had drunk three or more glasses of milk per day.(10) Eating breakfast is associated with weight loss and weight loss maintenance,(19) improved nutrient intake,(19) and better cognitive function, academic performance, school attendance rates, psychosocial function, and mood.(20)

- 1. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System Survey Questionnaire. Atlanta, GA, U.S. Department of Health and Human Services; Centers for Disease Control and Prevention; 2009. Available at http://www.cdc.gov/brfss/questionnaires/pdf-ques/2009brfss.pdf. Accessed June 5, 2012.
- 2. Key T, Schatzkin A, Willet WC, Allen NE, Spencer EA, Travis RC. Diet, nutrition, and the prevention of cancer. Public Health Nutrition 2004;7(1A):187-200.
- 3. Kushi LH, Byers T, Doyle C, et al. American Cancer Society Guidelines on Nutrition and Physical Activity for cancer prevention: reducing the risk of cancer with healthy food choices and physical activity. CA: A Cancer Journal for Clinicians 2006; 56:254-281.
- 4. Vainio H, Weiderpass E. Fruit and vegetables in cancer prevention. Nutrition and Cancer 2006;54(1):111-42.
- 5. Bazzano LA, He J, Ogden LG, et al. Fruit and vegetable intake and risk of cardiovascular disease in US adults: the first National Health and Nutrition Examination Survey Epidemiologic Follow-up Study. American Journal of Clinical Nutrition 2002;76(1):93-99.
- 6. He FJ, Nowson CA, MacGregor GA. Fruit and vegetable consumption and stroke: metaanalysis of cohort studies. Lancet 2006;367(9507):320-326.

- 7. Rolls BJ, Ello-Martin JA, Tohill BC. What can intervention studies tell us about the relationship between fruit and vegetable consumption and weight management. Nutrition Reviews 2004;62(1):1-17.
- 8. He K, Hu FB, Colditz GA, Manson JE, Willett WC, Liu S. Changes in intake of fruits and vegetables in relation to risk of obesity and weight gain among middle- aged women. International Journal of Obesity 2004;28:1569-1574.
- 9. Goss J, Grubbs L. Comparative analysis of body mass index, consumption of fruits and vegetables, smoking, and physical activity among Florida residents. Journal of Community Health Nursing 2005;22(1):37-46.
- 10. Tahmassebi J, Duggal M, Malik-Kotru G, et al. Soft drinks and dental health: a review of the current literature. Journal of Dental Research 2006;34(1):2-11.
- 11. Nielsen SJ, Popkin BS. Changes in beverage intake between 1977 and 2001. American Journal of Preventive Medicine 2004;27(3):205-210.
- 12. Reedy J, Krebs-Smith SM. Dietary sources of energy, solid fats, and added sugars among children and adolescents in the United States. Journal of the American Dietetic Association 2010;110:1477–84.
- 13. Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. American Journal of Public Health 2007;97(4):667-675.
- 14. Malik V, Schulze M, Hu F. Intake of sugar sweetened beverages and weight gain: a systematic review. American Journal of Public Health 2007;97(4):667-675.
- 15. Malik VS, Popkin BM, Bray GA, Despres JP, Willett WC, Hu FB. Sugar- sweetened beverages and risk of metabolic syndrome and type 2 diabetes: a meta- analysis. Diabetes Care 2010;33:2477–83.
- 16. Marshall T, Gilmore J, Broffitt B, et al. Diet quality in young children is influenced by beverage consumption. Journal of the American College of Nutrition 2005;24(1):65-75.
- Whiting S, Healey A, Psiuk S, et al. Relationship between carbonated and other low nutrient dense beverages and bone mineral content of adolescents. Nutrition Research 2001; 21(8):1107-1115.
- 18. U.S. Department of Health and Human Services and U.S. Department of Agriculture. Dietary Guidelines for Americans 2010. 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010. Accessed May 16, 2012. Available at http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/Polic yDoc.pdf.
- Clinical Report--Sports Drinks and Energy Drinks for Children and Adolescents: Are They Appropriate? Committee on Nutrition and the Council on Sports Medicine and Fitness. Pediatrics 29 May 2011. DOI: 10.1542/peds.2011-0965

 Bernstrin, GA et al. Caffeine effects on learning, performance and anxiety in normal school-age children. Journal of the American Academy of Child and Adolescent Psychiatry. 1994;33(3):407-415

## **DIETARY BEHAVIORS – Local Priority**

#### **QUESTION(S):**

78. During the past 7 days, how many times did you drink a can, bottle, or glass of an energy drink, such as Monster, Rockstar, Red Bull, or 5-Hour Energy?

#### **RATIONALE:**

This question asks about consumption of drinks high in caffeine. Caffeine is the most widely consumed psychoactive drug, with of 75% of US adults and adolescents consuming caffeine at least daily.(1) Caffeine intake is associated with sleep duration and falling asleep in school.(2,3)

#### **REFERENCES:**

- 1. James JE. Acute and chronic effects of caffeine on performance, mood, headache, and sleep. *Neuropsychobiology*. 1998; 38:32-41.
- 2. Orbeta RL, Overpeck MD, Ramcharran D, Kogan MD, Ledsky R. High caffeine intake in adolescents: Associations with difficulty sleeping and feeling tired in the morning. *Journal of Adolescent Health*. 2006; 38(4):451-453.
- 3. Calamaro CJ, Mason TBA, Ratcliffe SJ. Adolescents living the 24/7 lifestyle: Effects of caffeine and technology on sleep duration and daytime functioning. *Pediatrics*. 2009; 123(6).

#### **QUESTION(S):**

79. During the past 7 days, how many times did you drink milk? (Count the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at your school as equal to one time.)

#### **RATIONALE:**

This question asks about milk intake during the past 7 days. Milk is an important source of many nutrients, including calcium.(1) There is evidence that intake of milk and milk products is associated with bone health in children and adolescents and with a lower risk of cardiovascular disease and type 2 diabetes and with lower blood pressure in adults.(1) Although the recommended intake of milk and milk products is 3 cups per day for adolescents, most adolescents consume far less.(1)

#### **REFERENCES:**

1. Tahmassebi J, Duggal M, Malik-Kotru G, et al. Soft drinks and dental health: a review of the current literature. Journal of Dental Research 2006;34(1):2-11.

#### **QUESTION(S):**

81. During the past 7 days, on how many days did you eat food from a fast food restaurant, such as McDonalds, Burger King, Pizza Hut, Taco Bell, Kentucky Fried Chicken, or Subway?

#### **RATIONALE:**

This question asks about days per week that fast food was eaten. Diet and nutrition have important links to adolescent health and well-being, as well as to major causes of morbidity and mortality later in life. Eating fast food is typically an unhealthy option and increased consumption is closely linked with obesity. (1-3)

#### **REFERENCES:**

- 1. French SA, Story M, Neumark-Sztainer D, Fulkerson JA, Hannan P. Fast food restaurant use among adolescent: Associations with nutrient intake, food choices and behavioral and psychosocial variables. *Journal of the International Association for the Study of Obesity*. 2001; 25(12):1823-1833.
- 2. Davis B, Carpenter C. Proximity of fast food restaurant to school and adolescent obesity. *American Journal of Public Health*. 2009; 99(3):505-510.
- 3. Niemeier HM, Raynor HA, Lloyd-Richardson EE, Rogers ML, Wing RR. Fast food consumption and breakfast skipping: Predictors of weight gain from adolescence to adulthood in a nationally representative sample. *Journal of Adolescent Health*. 2006; 39(6):842-849.

#### **QUESTION(S):**

82. During the past 7 days, on how many meals (breakfast, lunch, or dinner) did you eat with your family?

#### **RATIONALE:**

This question asks about the days in the last week that the student reported sharing a meal with their family. Frequency of family meals, and dinner specifically, a developmental asset or protective factor that may curtail high-risk behaviors among youth.(1) Number of family meals per week is also inversely associated with tobacco, alcohol, and marijuana use; low grade point average; depressive symptoms; and suicide involvement.(2)

- 1. Fulkerson JA, Story M, Mellin A, Leffert N, Neumark-Sztainer D, French SA. Family dinner meal frequency and adolescent development: Relationships with developmental assets and high-risk behaviors. *Journal of Adolescent Health*. 2006; 29(3):337-345.
- Eisenberg ME, Olson RE, Neumark-Sztainer D, Story M, Bearinger LH. Correlations between family meals and psychosocial well-being among adolescents. *Archives of Pediatrics & Adolescent Medicine*. 2004; 158(8):792-796

## **PHYSICAL ACTIVITY – National CORE**

## **QUESTION(S):**

83. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)

84. On an average school day, how many hours do you watch TV?

85. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPod, an iPad, or tablet, a smartphone, YouTube, Facebook or other social networking tools and the Internet.)

86. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)

## **RATIONALE:**

These questions measure participation in physical activity, physical education classes, and sports teams and time spent watching television (TV) and using a computer or playing video games. Participation in regular physical activity among young people can help build and maintain healthy bones and muscles, maintain body weight and reduce body fat, reduce feelings of depression and anxiety, and promote psychological well-being.(1) Over time, regular physical activity decreases the risk of high blood pressure, heart disease, diabetes, obesity, some types of cancer, and premature death.(1) In 2008, the U.S. Department of Health and Human Services recommended that young people ages 6–17 participate in at least 60 minutes of physical activity daily.(2) In 2011, 29% of high school students were physically active doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on each of the 7 days before the survey.(3) School physical education classes can increase adolescent participation in physical activity(4-8) and help high school students develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.(4,9) In 2011, 52% of high school students nationwide went to physical education classes on 1 or more days in an average week when they were in school.(3) Watching TV and using a computer are considered sedentary behaviors. Among youth, time spent watching TV is associated with childhood and adult obesity, (10-14) consumption of fast food, soft drinks, and high-fat snacks, (15-20) and consumption of fewer fruits and vegetables.(15,21-22) Youth who engage in less than two hours of TV viewing per day tend to be more active.(13) Computer usage and video game playing are associated with physical inactivity among adolescents(11) and young adults.(22) Among high school students

nationwide in 2011, 31% of students played video or computer games or used a computer for something that was not school work for 3 or more hours per day on an average school day and 32% watched television 3 or more hours per day on an average school day.(3) The percentage of students who used computers 3 or more hours per day did not change significantly during 2003–2005 (22%–21%) and then increased during 2005–2011 (21%–31%).(3) During 1999–2011, a significant linear decrease occurred in the percentage of high school students who watched television 3 or more hours per day (43%–32%).(3)

- 1. Physical Activity Guidelines Advisory Committee. *Physical Activity Guidelines Advisory Committee Report, 2008.* Washington, DC: U.S. Department of Health and Human Services; 2008.
- 2. U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. Washington, DC, U.S. Department of Health and Human Services; 2008. Available at http://www.health.gov/PAguidelines/pdf/paguide.pdf. Accessed June 4, 2012.
- 3. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.
- 4. Trudeau F, Shephard RJ. Contribution of school programmes to physical activity levels and attitudes in children and adults. *Sports Medicine* 2005;35(2):89-105.
- 5. McKenzie TL, Li DL, Derby CA, Webber LS, Luepker RV, Cribb P. Maintenance of effects of the CATCH physical education program: results from the CATCH-ON Study. *Health Education & Behavior* 2003;30:447-462.
- 6. McKenzie TL, Sallis JF, Prochaska JJ, Conway TL, Marshall SJ, Rosengard P. Evaluation of a twoyear middle-school physical education intervention: M- SPAN. *Medicine & Science in Sports & Exercise* 2004;36:1382-1388.
- 7. Pate R, Ward DS, Saunders RP, Felton G, Dishman RK, Dowda M. Promotion of physical activity among high school girls: a randomized controlled trial. *American Journal of Public Health* 2005;95:1582-87.
- 8. Gordon-Larsen P, McMurray RG, Popkin BM. Determinants of adolescent physical activity and inactivity patterns. *Pediatrics* 2000;105:83-91. Epub June 1, 2000. Available at http://pediatrics.aappublications.org/content/105/6/e83.abstract. Accessed June 2, 2012.
- 9. Dishman RK, Motl RW, Saunders R, et al. Enjoyment mediates effects of a school-based physical-activity intervention. *Medicine & Science in Sports & Exercise* 2005;37(3):478-487.
- Fulton JE, Wang X, Yore MM, Carlson SA, Galuska DA, Caspersen CJ. Television viewing, computer usage, and BMI among U.S. children and adolescents. *Journal* of Physical Activity and Health 2009;6(Suppl 1): S28-S35.

- 11. Gordon-Larson P, Adair LS, Popkin BM. Ethnic differences in physical activity and inactivity patterns and overweight status. *Obesity Research* 2002;10(3):141-149.
- 12. Kaur H, Choi WS, Mayo MS, Harris KJ. Duration of television watching is associated with increased body mass index. *Journal of Pediatrics* 2003;143(4):506-511.
- 13. Lowry R, Wechsler H, Galuska D, Fulton J, Kann L. Television viewing and its associations with overweight, sedentary lifestyle, and insufficient consumption of fruits and vegetables among US high school students: differences by race, ethnicity, and gender. *Journal of School Health* 2002; 72(10):413-421.
- 14. Utter J, Neumark-Sztainer D, Jeffery R, Story M. Couch potatoes or french fries: are sedentary behaviors associated with body mass index, physical activity, and dietary behaviors among adolescents? *Journal of the American Dietetic Association* 2003;103(10):1298-1305.
- 15. Coon KA, Tucker KL. Television and children's consumption patterns. A review of the literature. *Minerva Pediatrica* 2001; 54:423-36.
- 16. Utter J, Scragg R, Schaaf D. Associations between television viewing and consumption of commonly advertised foods among New Zealand children and young adolescents. *Public Health Nutrition* 2006;9:606-12.
- 17. Matheson DM, Killen JD, Wang Y, Varady A, Robinson TN. Children's food consumption during television viewing. *American Journal of Clinical Nutrition* 2004;79:1088-94.
- 18. Coon KA, Goldberg J, Rogers BL, Tucker KL. Relationships between use of television during meals and children's food consumption patterns. *Pediatrics* 2001;107:E7.
- 19. Salmon J, Campbell KJ, Crawford DA. Television viewing habits associated with obesity risk factors: a survey of Melbourne schoolchildren. *Medical Journal of Australia* 2006;184:64-7.
- 20. Taveras EM, Sandora TJ, Shih M, Ross-Degnan D, Goldmann DA, Gillman MW. The association of television and video viewing with fast food intake by preschool-age children. *Obesity Research* 2006;14:2034-41.
- Boynton-Jarrett R, Thomas T, Peterson K, Wiecha J, Sobol A, Gortmaker S. Impact of television viewing patterns on fruit and vegetable consumption among adolescents. *Pediatrics* 2003;112:1321-6.
- 22. Fotheringham MJ, Wonnacott RL, Owen N. Computer use and physical inactivity in young adults: public health perils and potentials of new information technologies. *Annals of Behavioral Medicine* 2000;22:269-275.
- Burgeson CR, Wechsler H, Brener ND, Young JC, Spain CG. Physical education and activity: results from the School Health Policies and Programs Study 2000. J Sch Health. 2001; 71: 279– 293.

## **OTHER HEALTH-RELATED TOPICS – Local Priority**

#### **ASTHMA**

#### **QUESTION(S):**

93. Has a doctor or nurse ever told you that you have asthma?

94. During the past 12 months, how many times did you go to an emergency room or urgent care center because of your asthma?

#### **RATIONALE:**

These questions prevalence of reported asthma as well as urgent care utilization related to asthma in the past year. Approximately 10.1 million (14%) U.S. children <18 years have been diagnosed with asthma at some time in their lives (1). In 2004, children made 7 million visits to doctors' offices and hospital outpatient departments, 754,000 visits to hospital emergency departments, and had 198,000 hospitalizations due to asthma (2). In 2003, an estimated 12.8 million school days were lost due to asthma among school-aged children (2). Among high school students nationwide in 2011, 23% had ever been told by a doctor or nurse that they ever had asthma (3). During 2003–2011, the percentage of high school students nationwide who ever had asthma increased (19%–23%). (3) Additionally, the Summit County YRBS Coalition requested that Asthma questions be included given the lack of the comparable asthma data available.

#### **REFERENCES:**

- 1. National Center for Environmental Health. 2010 Lifetime and Current Asthma Population Estimates and Prevalence Tables. National Health Interview Survey Data Web site. Available at http://www.cdc.gov/asthma/nhis/2010/data.htm. Accessed May 23, 2012.
- Akinbami, Lara. Asthma Prevalence, Health Care Use, and Mortality, 2003-2005. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics; 2007. Available at http://www.cdc.gov/nchs/data/hestat/asthma03-05/asthma03-05.htm. Accessed June 4, 2013.
- 3. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

#### ABSENTEEISM

#### **QUESTION(S):**

95. During the past 30 days, on how many days did you not go to school because you were sick?

44

96. During the past 30 days, on how many days did you miss a class or school without permission (i.e. skipped or "cut")?

#### **RATIONALE:**

These questions ask students to identify the frequency of absenteeism due to illness as well as truancy over the past thirty days. Absenteeism is associated with a variety of socioeconomic and physical and mental health issues. Identified risk factors include homelessness, teenage pregnancy, school violence and victimization, and parental involvement.(1) Absenteeism a key risk factor for suicide attempt, unsafe sexual behavior, teenage pregnancy, violence, unintentional injury, driving under the influence of alcohol, and tobacco and substance use.(2-6) Chronic absenteeism is associated as well with school dropout,(7) economic deprivation, and marital, social, and psychiatric problems in adulthood.(8)

#### **REFERENCES:**

- 1. Kearney, CA. School Absenteeism and school refusal behavior in youth: A contemporary review. *Clinical Psychology Review:* 28.3(2008). 451-471.
- 2. Chou, L.-C. C.-Y. Ho, C.-Y. Chen, W.J. Chen. Truancy and illicit drug use among adolescents surveyed via street outreach Addictive Behaviors, 31 (2006), pp. 149–154
- 3. Denny, S.J., T.C. Clark, P.D. Watson. Comparison of health-risk behaviours among students in alternative high schools from New Zealand and the USA.
- Guttmacher, S. B.C. Weitzman, F. Kapadia, S.L. Weinberg. Classroom-based surveys of adolescent risk-taking behaviors: Reducing the bias of absenteeism. American Journal of Public Health, 92 (2002), pp. 235–237
- 5. Hallfors, D. J.L. Vevea, B. Iritani, H. Cho, S. Khatapoush, L. Saxe. Truancy, grade point average, and sexual activity: A meta-analysis of risk indicators for youth substance use. Journal of School Health, 72 (2002), pp. 205–21
- 6. K.L. Henry, D.H. Huizinga. Truancy's effect on the onset of drug use among urban adolescents placed at risk. Journal of Adolescent Health, 40 (2007), pp. 358.e9–358.e17
- Kogan, S.M. Z. Luo, V.M. Murry, G.H. Brody. Risk and protective factors for substance use among African American high school dropouts. Psychology of Addictive Behaviors, 19 (2005), pp. 382– 391
- 8. US Census Bureau. Educational attainment in the United States: 2004. Washington DC (2005).

#### PREVENTATIVE HEALTHCARE

#### **QUESTION(S):**

97. When was the last time you saw a doctor or nurse for a check-up or physical exam when you were not sick or injured?

#### **RATIONALE:**

This question asked students about seeing a doctor for a check-up and general assessment of health. Nationwide, adolescents have the lowest utilization rate of health care services of any age group. Barriers to care include cost of care; low family income; stigma; distrust; confidentiality and parental consent; lack of medical insurance; embarrassment about and lack of transportation to reproductive health services; lack of knowledge about where or how to access care; and lack of adolescent-friendly services.(1)

#### **REFERENCES:**

1. Association of State and Territorial Health Officials. Adolescent and School Health Fact Sheet. Association of State and Territorial Health Officials Web site. Available at http://www.astho.org/index.php?template=access.html. Accessed July 24, 2008.

#### **QUESTION(S):**

98. When was the last time you saw a dentist for a checkup, exam, teeth cleaning, or other routine dental work (not for an emergency)?

#### **RATIONALE:**

This question asked students about seeing a dentist for a check-up and general assessment of oral health. It is estimated that nearly 50% of children and adolescents do not receive appropriate preventative oral health care, as defined by the American Academy of Pediatric Dentistry. (1) Additionally, tooth decay (dental caries) affects children in the United States more than any other chronic infectious disease. Untreated tooth decay causes pain and infections that may lead to problems with eating, speaking, playing, and learning. (2) While many children and adolescents will receive emergency treatment for issues related to oral health, preventive visits can eliminate procedures and spending associated with emergency care. (3)

- 1. Yu, SM. Factors That Influence Receipt of Recommended Preventive Pediatric Health and Dental Care. Pediatrics: 110.6 Dec 1, 2002(e73)
- 2. Children's Oral Health; Centers for Disease Control and Prevention Division of Oral Health Oral Health Home: 10 Sept 2013
- 3. Watson, MR. et al. The impact of income on children's and adolescents' preventive dental visits. The Journal of the American Dental Association; 132, November 2001(1580-1587)

#### **QUESTION(S):**

99. When was the last time you saw a doctor, nurse, therapist, social worker, or counselor for a mental health problem?

#### **RATIONALE:**

This question asks students about seeing a doctor, nurse, therapist, social worker or counselor for an issue related to their mental health. Mental health is important to overall health. Mental disorders are chronic health conditions that can continue through the lifespan. Without early diagnosis and treatment, children with mental disorders can have problems at home, in school, and in forming friendships. This can also interfere with their healthy development, and these problems can continue into adulthood (1).

Children's mental disorders affect many children and families. Boys and girls of all ages, ethnic/racial backgrounds, and regions of the United States experience mental disorders. Based on the National Research Council and Institute of Medicine report that gathered findings from previous studies, it is estimated that 13 –20 percent of children living in the United States (up to 1 out of 5 children) experience a mental disorder in a given year and an estimated \$247 billion is spent each year on childhood mental disorders (2). Because of the impact on children, families, and communities, children's mental disorders are an important public health issue in the United States (1).

#### **REFERENCES:**

- 1. Children's Mental Health New Report. Centers for Disease Control and Prevention: CDC Features; 16 May 2013. http://www.cdc.gov/features/childrensmentalhealth/
- 2. National Research Council and Institute of Medicine. Preventing mental, emotional, and behavioral disorders among young people: progress and possibilities. Washington, DC: The National Academic Press; 2009.

## **POSITIVE YOUTH DEVELOPMENT – Local Priority**

#### **QUESTION(S):**

92. On an average school night, how many hours of sleep do you get?

#### **RATIONALE:**

This question measures the number of hours of sleep students estimate they get on an average school night. Sleep is an important dimension to adolescent health. Most adolescents need slightly more than 9 hours of sleep each night, although this varies slightly among individuals.(1) Adolescents who consistently get less than 8 hours of sleep lose the last two hours of sleep, which are the most important learning processes, such as storing new information.(2) Sleep deprivation can affect school performance

through lower grades, decreased alertness and concentration, and an increase in anger, impulsivity, and sadness.(3)

#### **REFERENCES:**

- 1. Wolson, A., Carskadon, M. 1998. Sleep schedules and daytime functioning in adolescents. Soc Res Child Dev.
- 2. Smith, C., Lapp, L. 1991. Increases in the number of REMS and REM density in humans following an intensive learning period. Sleep. 14:325-330.
- 3. Noland, H., Price, J., Dake, J., Telljohann, S. 2009. Adolescents' sleep behaviors and perceptions of sleep. Journal of School Health. 79(5): 224-230.

#### **QUESTION(S):**

100. Besides your parents, how many adults would you feel comfortable seeking help from if you had an important issue or question affecting your life?

101. How many of your friends would you trust to offer you good advice if you had a really important secret or problem affecting your life?

#### **RATIONALE:**

These questions asked the student about the number of trusted adults that students felt they have, as well as the number of trusted friends. Over time it has been determined that promoting positive asset building and considering young people as resources could be critical strategies. As a result, the field of youth development began examining the role of protective factors in a young person's environment and how these factors could influence one's choices.(1) Protective factors include, but are not limited to: family support, caring adults, positive peer groups, strong sense of self and self-esteem, and engagement in school and community activities.

#### **REFERENCES:**

1. Positive Youth Development. 2010. Web Site http://www.findyouthinfo.gov/topic\_pyd.shtml. Accessed on September 20, 2010.

#### **QUESTION(S):**

102. How often does one of your parents or guardians ask about what you are doing in school?

#### **RATIONALE:**

Adolescents from households with "authoritative parenting" (meaning that the parents are **consistently involved** in their lives, and have a warm but firm relationship with their children) show consistent advantages in their psychosocial development and mental health. (1) Research has shown that high levels of parental monitoring are associated with less engagement in risk behaviors such as alcohol use,

Prepared by the CWRU Prevention Research Center for Healthy Neighborhoods, July 2014

tobacco use, and sexual intercourse. (2) For males and females, increased negotiation is associated with increased risk behavior and sex-related protective factors (i.e. condom use). Although monitoring is an important practice for parents of older adolescents, managing their behavior through negotiation of unsupervised time may have mixed results leading to increased experimentation with sexuality and substances, but perhaps in a more responsible way. Trust established between females and their parents continue to be a strong deterrent for risky behaviors but appear to have little effect on behaviors of males.

#### **REFERENCES:**

- 1. Steinberg, L. "We know some things: Parent-adolescent relationships in retrospect and prospect." *Journal of Research on Adolescence*. 2001. 11(1), 1-19.
- 2. Dishion TJ, McMahon RJ. Parental monitoring and prevention of child and adolescent problem behavior: A conceptual and empirical formulation. Clinical Child and Family Psychology Review. 1998; 1:61-75.
- 3. Borawski EA, Ievers-Landis CE, Lovegreen LD, Trapl ES. Parental monitoring, negotiated unsupervised time, and parental trust: The role of perceived parenting practices in adolescent health risk behaviors. Journal of Adolescent Health. 2003; 33(2):60-70.

#### **QUESTION(S):**

103. On how many of the past 7 days did you take part in an organized after school, evening, or weekend activities (other than sports teams) such as school clubs, community center groups, music/art/dance lessons, drama, church, or other supervised activities?

#### **RATIONALE:**

This question seeks to assess the frequency of participation in positive activities in the students' community and is one of six items in a Brief Youth Assets measure. When opportunities for positive participation are available in a community, children are more likely to become bonded to the community. (1) Evidence suggests that participation and recognition for positive participation in community activities both act as protective factors and lowers adolescents' risk for problem behaviors, such as the use of tobacco, alcohol and marijuana. (1,2)

- Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013. <a href="http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf">http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf</a>>.
- 2. Steinberg L. Adolescent Transitions and Alcohol other Drug Use Prevention. Washington, DC. US Dept of Health and Human Services publication ADM91-1725; 1991:13-51

# Summit County Middle School YRBS

# 2013

## **Directions**

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing this survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing the survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the circles completely. When you are finished, follow the instructions of the person giving you the survey.





#### Thank you very much for your help.







1. What is your zip code?

Directions: Write your Zip code in the shaded boxes. Fill in the matching oval below each number.

Example					
	ZipCode				
4	4	1	5	2	
		$\bigcirc$	$\bigcirc$	$\bigcirc$	
		•	1		
		2	2	•	
		3	3	3	
		4	4	4	
		5	•	(5)	
		6	6	6	
		$\bigcirc$	$\bigcirc$	$\bigcirc$	
		8	8	8	
		9	9	9	

- 2. How old are you?
  - a. 10 years old or younger
  - b. 11 years old
  - c. 12 years old
  - d. 13 years old
  - e. 14 years old
  - f. 15 years old
  - g. 16 years old or older
- 3. What is your sex?
  - a. Female
  - b. Male
- 4. What grade are you in?
  - a. 6<sup>th</sup> grade
  - b. 7<sup>th</sup> grade
  - c. 8<sup>th</sup> grade
  - d. Other
- 5. Are you Hispanic or Latino?
  - a. Yes
  - b. No
- 6. What is your race? (Select one or more responses.)
  - a. American Indian or Alaska Native
    - b. Asian
    - c. Black or African American
    - d. Native Hawaiian or Other Pacific Islander
    - e. White

- 7. During the past 12 months, how would you describe your grades in school?
  - a. Mostly A's
  - b. Mostly B's
  - c. Mostly C's
  - d. Mostly D's
  - e. Mostly F's
  - f. None of these grades
  - g. Not sure
- 8. Think of where you live most of the time. Which of the following people live there with you? (Select all that apply.)
  - a. Mother
  - b. Father
  - c. Stepmother
  - d. Stepfather
  - e. Foster Mother
  - f. Foster Father
  - g. Grandparent(s)
  - h. Aunt(s)/Uncle(s)
  - i. Brother(s)/Sister(s)
  - j. My children
  - k. Non-relative or someone else
- 9. How many times have you changed homes since kindergarten?
  - a. Never
  - b. 1 or 2 times
  - c. 3 or 4 times
  - d. 5 or 6 times
  - e. 7 or more times
  - f. Not sure
- 10. What is the language you use most often at home?
  - a. English
  - b. Spanish
  - c. Another language
- 11. How many days of the week do you take care of yourself in the afternoon or evening afterschool without an adult being there?
  - a. No days
  - b. 1 day
  - c. 2 days
  - d. 3 days
  - e. 4 days
  - f. All 5 days

- 12. Think of those days that you take care of yourself in the afternoon or evening without an adult being there. How many hours do you usually take care of yourself?
  - a. I am not left alone
  - b. 1 hour
  - c. 2 hours
  - d. 3 hours
  - e. 4 or more hours
- 13. How tall are you without your shoes on? Directions: Write your height in the shaded blank boxes. Fill in the matching oval below each number.

Example				
Height				
Feet	Inches			
5	11			
3	0			
4	1			
•	2			
6	3			
$\overline{O}$	4			
	5			
	6			
	7			
	8			
	9			
	10			
	•			

14. How much do you weigh without your shoes on? Directions: Write your weight in the shaded blank boxes. Fill in the matching oval below each number.

Example

Weight				
Pounds				
1	5	2		
0	0	0		
٠	1			
2	2	•		
3	3	3		
	4	4		
	•	5		
	6	6		
	$\bigcirc$	$\bigcirc$		
	8	8		
	9	9		

#### The next 3 questions ask about safety.

- 15. How often do you wear a seat belt when **riding** in a car driven by someone else?
  - a. Never
  - b. Rarely
  - c. Sometimes
  - d. Most of the time
  - e. Always
- 16. During the past 30 days, how many times did you **ride** in a car or other vehicle **driven by someone who had been drinking alcohol**?
  - a. 0 times
  - b. 1 time
  - c. 2 or 3 times
  - d. 4 or 5 times
  - e. 6 or more times
- 17. During the past 12 months, did you suffer a blow or jolt to your head which caused you to get "knocked out," have memory problems, double or blurry vision, headaches or "pressure" in the head, or nausea or vomiting?
  - a. Yes
  - b. No
  - c. Not sure

## The next 4 questions ask about violence-related behaviors.

- 18. During the past 30 days, on how many days did you carry **a weapon** such as a gun, knife, or club?
  - a. 0 days
  - b. 1 day
  - c. 2 or 3 days
  - d. 4 or 5 days
  - e. 6 or more days
- 19. If you wanted to get a handgun, how easy would it be for you to get one?
  - a. Very hard
  - b. Sort of hard
  - c. Sort of easy
  - d. Very easy

- 20. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?
  - a. 0 days
  - b. 1 day
  - c. 2 or 3 days
  - d. 4 or 5 days
  - e. 6 or more days
- 21. During the past 12 months, how many times were you in a physical fight?
  - a. 0 times
  - b. 1 time
  - c. 2 or 3 times
  - d. 4 or 5 times
  - e. 6 or 7 times
  - f. 8 or 9 times
  - g. 10 or 11 times
  - h. 12 or more times

The next 4 questions ask about bullying. Bullying is when one or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power, argue or fight or tease each other in a friendly way.

- 22. During the past 12 months, have you ever been bullied on school property?
  - a. Yes
  - b. No
- 23. During the past 12 months, have you ever been bullied away from school property?
  - a. Yes
  - b. No
- 24. During the past 12 months, have you ever been electronically bullied? (Count being bullied through email, chat rooms, social media, instant messaging, websites, or texting.)
  - a. Yes
  - b. No

- 25. During the past 12 months, have you ever been teased or name called for any of the following reasons? (Select **all** that apply.)
  - a. I have not been teased or name called during the past 12 months
  - b. Your weight
  - c. Your gender
  - d. Your race or ethnic background
  - e. Your sexual orientation
  - f. Your religion
  - g. Other

## The next question asks about hurting yourself on purpose.

- 26. During the past 12 months, how many times did you do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose?
  - a. 0 times
  - b. 1 time
  - c. 2 or 3 times
  - d. 4 or 5 times
  - e. 6 or more times

The next 3 questions ask about sad feelings and suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life.

- 27. During the past 12 months, did you ever feel so sad and hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?
  - a. Yes
  - b. No
- 28. During the past 12 months, did you ever **seriously** consider attempting suicide?
  - a. Yes
  - b. No
- 29. During the past 12 months, how many times did you actually attempt suicide?
  - a. 0 times
  - b. 1 time
  - c. 2 or 3 times
  - d. 4 or 5 times
  - e. 6 or more times

#### The next 5 questions ask about tobacco use.

- 30. How old were you when you smoked a whole cigarette for the first time?
  - a. I have never smoked a whole cigarette
  - b. 8 years old or younger
  - c. 9 or 10 years old
  - d. 11 or 12 years old
  - e. 13 or 14 years old
  - f. 15 or 16 years old
  - g. 17 years old or older
- 31. During the past 30 days, on how many days did you smoke cigarettes?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 to 19 days
  - f. 20 to 29 days
  - g. All 30 days
- 32. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 to 19 days
  - f. 20 to 29 days
  - g. All 30 days
- 33. During the past 30 days, on how many days did you smoke cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 to 19 days
  - f. 20 to 29 days
  - g. All 30 days

- 34. During the past 30 days, how did you usually get your own tobacco? (Count things such as cigarettes, cigars, cigarillos, little cigars, flavored cigars, chewing tobacco, snuff, or dip.) (Select only one response.)
  - a. I did not use any tobacco in the past 30 days
  - b. I bought it at a store such as a liquor store, convenience store, supermarket, discount store, or gas station
  - c. I bought it at a restaurant, bar, or club
  - d. I bought it at a public event such as a concert or sporting event
  - e. I gave someone else money to buy it for me
  - f. Someone gave it to me
  - g. I took it from a store or family member
  - h. I got it some other way

#### The next 3 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. Do not include drinking a few sips of wine for religious purposes.

- 35. How old were you when you had your first drink of alcohol other than a few sips?
  - a. I have never had a drink of alcohol
  - b. 8 years old or younger
  - c. 9 or 10 years old
  - d. 11 or 12 years old
  - e. 13 or 14 years old
  - f. 15 or 16 years old
  - g. 17 years old or older
- 36. During the past 30 days, on how many days did you have at least one drink of alcohol?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 to 19 days
  - f. 20 to 29 days
  - g. All 30 Days

- 37. During the past 30 days, how did you **usually** get the alcohol you drank? (Select only **one** response.)
  - a. I did not drink alcohol during the past 30 days
  - b. I bought it at a store such as a liquor store, convenience store, supermarket, discount store, or gas station
  - c. I bought it at a restaurant, bar, or club
  - d. I bought it at a public event such as a concert or sporting event
  - e. I gave someone else money to buy it for me
  - f. Someone gave it to me
  - g. I took it from a store or family member
  - h. I got it some other way

#### The next 3 questions ask about marijuana use. Marijuana is also called grass, pot, or weed.

- 38. During your life, how many times have you used marijuana?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 to 99 times
  - g. 100 or more times
- 39. How old were you when you tried marijuana for the first time?
  - a. I have never tried marijuana
  - b. 8 years old or younger
  - c. 9 or 10 years old
  - d. 11 or 12 years old
  - e. 13 or 14 years old
  - f. 15 or 16 years old
  - g. 17 years old or older
- 40. During the past 30 days, how many times did you use marijuana?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times

#### The next 7 questions ask about other drugs.

- 41. During your life, how many times have you used **heroin** (also called smack, junk, or China White)?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 42. During your life, how many times have you used **methamphetamines** (also called speed, crystal, crank, or ice)?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 43. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 44. During your life, how many times have you taken **synthetic or designer drugs** (such as bath salts, K2, or spice) to get high?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 45. During your life, how many times have you used prescription pain relievers or painkillers such as Vicodin, Percocet, OxyContin, Lortabs, or Codiene (also called Oxy, Oxy Cotton, Os, Norco, or Vikes) without a doctor's prescription?
  - a. 0 times
  - b. 1 or 2 times
  - c. 3 to 9 times
  - d. 10 to 19 times
  - e. 20 to 39 times
  - f. 40 or more times
- 46. During your life, what type of prescription drugs have you taken without a doctor's prescription? (Select all that apply.)
  - a. I have never taken prescription drugs without a doctor's prescription
  - b. Narcotic pain relievers such as OxyContin, Percocet, Vicodan, or Lortabs
  - c. Tranquilizers or anti-anxiety drugs such as Xanax or Valium
  - Sleeping pills, sedatives and other depressants such as Ambien, or Phenobarbitual
  - e. Stimulants or amphetamines such as Ritalin (also called Vitamin-R or Study drug)
  - f. I have taken multiple prescription drugs without a doctor's prescription at the same time
  - g. I have taken prescription drugs without a doctor's prescription but I am not sure which one(s)
- 47. During the past 12 months, has anyone offered, sold, or given you an illegal drug **on school property**?
  - a. Yes
  - b. No

#### The next 4 questions ask about gambling. Gambling involves betting anything of value (money, watch, soda, etc.) on a game or event.

- 48. During the past 12 months, how often did you **gamble money or personal items** while playing cards, betting on personal skills or sports teams, buying lottery tickets or scratch-offs, using the Internet, or doing anything else?
  - a. I did not gamble money or personal items during the past 12 months
  - b. Less than once a month
  - c. About once a month
  - d. About once a week
  - e. Daily
- 49. During the past 30 days, on which of the following did you gamble? (Select **all** that apply.)
  - a. I did not gamble during the past 30 days.
    - b. "Scratch-offs"
    - c. Lottery tickets such as Powerball or Megabucks
    - d. Pull tabs or "paper" games other than lotteries
    - e. Dice or coin flips
    - f. Playing cards such as poker or blackjack
    - g. A sport
    - h. A horse or dog race
    - i. Games of personal skill such as bowling, video games, or dares
    - j. Bingo for money
    - k. Money over the internet
    - I. Money in other ways
- 50. During the past 30 days, where did you gamble? (Select **all** that apply.)
  - a. I did not gamble during the past 30 days
  - b. Internet
  - c. Casino
  - d. Harness racing
  - e. Community festival, concert, or other event
  - f. My home
  - g. Another person's home
  - h. Neighborhood store or convenience store
  - i. Park, parking lot, or other public space
  - j. Sporting event
  - k. School property
  - I. Other place

- 51. During the past 30 days, how often have you bet or gambled more than you wanted?
  - a. Never
  - b. Rarely
  - c. Sometimes
  - d. Most of the time
  - e. Always

#### The next 2 questions ask about sexual behavior.

- 52. Have you ever had sexual intercourse?
  - a. Yes
  - b. No
- 53. During the past 3 months, how often did you or your partner use a condom when you had sexual intercourse?
  - a. I have never had sexual intercourse
  - b. I have had sexual intercourse but not during the past 3 months
  - c. Never
  - d. Rarely
  - e. Sometimes
  - f. Most of the time
  - g. Always

#### The next 3 questions ask about body weight.

- 54. How do **you** describe your weight?
  - a. Very underweight
  - b. Slightly underweight
  - c. About the right weight
  - d. Slightly overweight
  - e. Very overweight
- 55. Which of the following are you trying to do about your weight?
  - a. Lose weight
  - b. Gain weight
  - c. Stay the same weight
  - d. I am **not trying to do anything** about my weight

- 56. During the past 30 days, which of the following did you do to lose weight or keep from gaining weight? (Select all that apply.)
  - a. I am not trying to lose weight or keep from gaining weight
  - b. Exercise
  - c. Eat less food, fewer calories, or food low in fat
  - d. Go without eating for 24 hours or more (also called fasting)
  - e. Take any diet pills, powders, or liquids without a doctor's advice
  - f. Vomit or take laxatives
  - g. Something else

The next 9 questions ask about food you ate or drank yesterday and during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.

- 57. Yesterday, how many times did you eat **fruit**? (Foods like apple, banana, orange, or pear. Do not count fruit juices.)
  - a. 0 times
  - b. 1 time
  - c. 2 times
  - d. 3 or more times
- 58. Yesterday, how many times did you eat **green salad**? (Salads that contain lettuce, spinach, or other greens.)
  - a. 0 times
  - b. 1 time
  - c. 2 times
  - d. 3 or more times
- 59. Yesterday, how many times did you eat **vegetables?** (Foods like broccoli, spinach, carrots, tomatoes, or green beans.)
  - a. 0 times
  - b. 1 time
  - c. 2 times
  - d. 3 or more times
- 60. Yesterday, how many times did you drink **milk**? (Count the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one time.)
  - a. 0 times
  - b. 1 time
  - c. 2 times
  - d. 3 or more times
- 7

- 61. Yesterday, how many times did you drink a **can**, **bottle**, **or glass of soda or pop**, such as Coke, Pepsi, or Sprite? (Do **not** include diet soda or diet pop.)
  - a. 0 times
  - b. 1 time
  - c. 2 times
  - d. 3 or more times
- 62. Yesterday, how many times did you have a drink that was high in caffeine, such as coffee or espresso, or energy drinks, such as Red Bull, Monster, or Rockstar? (Do not include soda or pop or tea.)
  - a. 0 times
  - b. 1 time
  - c. 2 times
  - d. 3 or more times
- 63. During the past 7 days, on how many days did you eat **breakfast**?
  - a. 0 days
  - b. 1 day
  - c. 2 days
  - d. 3 days
  - e. 4 days
  - f. 5 days
  - g. 6 days
  - h. 7 days
- 64. During the past 7 days, on how many days did you eat at least one meal or snack from a fast food restaurant, such as McDonalds, Taco Bell, or KFC?
  - a. 0 days
  - b. 1 day
  - c. 2 days
  - d. 3 days
  - e. 4 days
  - f. 5 days
  - g. 6 days
  - h. 7 days
- 65. During the past 7 days, how many meals (breakfast, lunch, or dinner) did you eat with your family?
  - a. 0 meals
  - b. 1 to 3 meals
  - c. 4 to 6 meals
  - d. 7 to 9 meals
  - e. 10 to 12 meals
  - f. 13 to 15 meals
  - g. 16 or more meals

#### The next 4 questions ask about physical activity.

- 66. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)
  - a. 0 days
  - b. 1 day
  - c. 2 days
  - d. 3 days
  - e. 4 days
  - f. 5 days
  - g. 6 days
  - h. 7 days
- 67. On an average school day, how many hours do you watch TV?
  - a. I do not watch TV on an average school day
  - b. Less than 1 hour per day
  - c. 1 hour per day
  - d. 2 hours per day
  - e. 3 hours per day
  - f. 4 hours per day
  - g. 5 or more hours per day
- 68. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPod, an iPad, or tablet, a smartphone, YouTube, Facebook or other social networking tools, and the Internet.)
  - a. I do not play video or computer games or use a computer for something that is not school work
  - b. Less than 1 hour per day
  - c. 1 hour per day
  - d. 2 hours per day
  - e. 3 hours per day
  - f. 4 hours per day
  - g. 5 or more hours per day
- 69. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)
  - a. 0 teams
  - b. 1 team
  - c. 2 teams
  - d. 3 or more teams

# The next 3 questions ask about how your parents or guardians feel about certain behaviors.

- 70. How wrong do your parents/guardians feel it would be for you to use tobacco (for example cigarettes, cigars, or chewing tobacco)?
  - a. Very wrong
  - b. Wrong
  - c. A little wrong
  - d. Not at all wrong
- 71. How wrong do your parents/guardians feel it would be for you to drink beer, wine, or hard liquor (for example vodka, whiskey, or gin)?
  - a. Very wrong
  - b. Wrong
  - c. A little wrong
  - d. Not at all wrong
- 72. How wrong do your parents/guardians feel it would be for you to use marijuana?
  - a. Very wrong
  - b. Wrong
  - c. A little wrong
  - d. Not at all wrong

# The next 14 questions ask about other health-related topics.

- 73. Have you ever been taught about AIDS or HIV infection in school?
  - a. Yes
  - b. No
  - c. Not sure
- 74. Have you ever talked about AIDS or HIV infection with your parents or other adults in your family?
  - a. Yes
  - b. No
  - c. Not sure
- 75. On an average school night, how many hours of sleep do you get?
  - a. 4 or less hours
  - b. 5 hours
  - c. 6 hours
  - d. 7 hours
  - e. 8 hours
  - f. 9 hours
  - g. 10 or more hours

- 76. Has a doctor or nurse ever told you that you have asthma?
  - a. Yes
  - b. No
  - c. Not sure
- 77. During the past 12 months, how many times did you go to an emergency room or urgent care center because of your asthma?
  - a. I do not have asthma
  - b. 0 times
  - c. 1 to 3 times
  - d. 4 to 9 times
  - e. 10 to 12 times
  - f. 13 or more times
- 78. During the past 30 days, on how many days did you not go to school because you were sick?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 or more days
- 79. During the past 30 days, on how many days did you miss class or school without permission (i.e. skipped or "cut")?
  - a. 0 days
  - b. 1 or 2 days
  - c. 3 to 5 days
  - d. 6 to 9 days
  - e. 10 or more days
- 80. When was the last time you saw a doctor or nurse for a check-up or physical exam when you were not sick or injured?
  - a. During the past 12 months
  - b. Between 12 and 24 months ago
  - c. More than 24 months ago
  - d. Never
  - e. Not sure
- 81. When was the last time you saw a dentist for a checkup, exam, teeth cleaning, or other dental work?
  - a. During the past 12 months
  - b. Between 12 and 24 months ago
  - c. More than 24 months ago
  - d. Never
  - e. Not sure

-

- 82. When was the last time you saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue?
  - a. During the past 12 months
  - b. Between 12 and 24 months ago
  - c. More than 24 months ago
  - d. Never
  - e. Not sure
- 83. Besides your parents, how many adults would you feel comfortable seeking help from if you had an important issue or question affecting your life?
  - a. 0 adults
  - b. 1 adult
  - c. 2 adults
  - d. 3 adults
  - e. 4 adults
  - f. 5 or more adults
- 84. How many of your friends would you trust to offer you good advice if you had a really important secret or problem affecting your life?
  - a. 0 friends
  - b. 1 friend
  - c. 2 friends
  - d. 3 friends
  - e. 4 friends
  - f. 5 or more friends
- 85. How often does one of your parents or guardians talk with you about what you are doing in school?
  - a. About every day
  - b. About once or twice a week
  - c. About once or twice a month
  - d. Less than once a month
  - e. Never
- 86. On how many of the past 7 days did you take part in organized after school, evening, or weekend activities (other than sports teams) such as school clubs, community center groups, music/art/dance lessons, drama, church, or other supervised activities?
  - a. 0 days
  - b. 1 day
  - c. 2 days
  - d. 3 days
  - e. 4 days
  - f. 5 days
  - g. 6 days
  - h. 7 days

END OF SURVEY – Thank you for your help!

CASE WESTERN RESERVE UNIVERSITY

# Summit County Youth Risk Behavior Survey

2014 Middle School Item Rationale



Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University

Contents DEMOGRAPHICS – National CORE	3
DEMOGRAPHICS – Local Priority	3
SELF-CARE – Local Priority	4
UNINTENTIONAL INJURY – National CORE	5
UNINTENTIONAL INJURY- Local Priority	7
VIOLENCE RELATED BEHAVIORS – National CORE	7
VIOLENCE RELATED BEHAVIORS – Local Priority	10
DEPRSESION AND SUICIDE – National CORE	13
TOBACCO USE – National CORE	15
TOBACCO USE – Local Priority	16
ALCOHOL USE – National CORE	18
ALCOHOL USE – Local Priority	20
ILLEGAL AND PERSCRIPTION DRUG USE – National CORE	20
ILLEGAL AND PRESCRIPTION DRUG USE – Local Priority	22
MARIJUANA USE - Local Priority	23
GAMBLING BEHAVIOR – Local Priority	23
REPRODUCTIVE HEALTH – National CORE	25
REPRODUCTIVE HEALTH – Local Priority	26
OBESITY AND WEIGHT CONTROL – National CORE	28
OBESITY AND WEIGHT CONTROL – Local Priority	29
DIETARY BEHAVIORS – National CORE	30
DIETARY BEHAVIORS – Local Priority	31
DIETARY BEHAVIORS – Local Priority	34
PHYSICAL ACTIVITY – National CORE	36
OTHER HEALTH-RELATED TOPICS – Local Priority	39
ASTHMA	39
ABSENTEEISM	40
PREVENTATIVE HEALTHCARE	41
POSITIVE YOUTH DEVELOPMENT – Local Priority	42

The following sections are divided between "National CORE" questions – those present in the national Youth Risk Behavior Survey high school survey – and those which are indicated as "Local Priority". The National CORE questions are not necessarily present in the National YRBS middle school survey, but are considered "National" for our purposes of continuity of analysis between the middle and high school surveys in Summit County.

# **DEMOGRAPHICS – National CORE**

#### **QUESTION(S):**

- 1. What is your zip code?
- 2. How old are you?
- 3. What is your sex?
- 4. In what grade are you?
- 5. Are you Hispanic or Latino?
- 6. What is your race?

#### **RATIONALE:**

These are general demographic questions. They are used to break the survey responses into more meaningful categories which allow for examination of risk behaviors among sub-groups.

# **DEMOGRAPHICS – Local Priority**

#### **QUESTION(S):**

7. During the past 12 months, how would you describe your grades in school?

#### **RATIONALE:**

This question is used to assess academic achievement. It is also considered a developmental asset. Developmental assets are grouped into external (support, empowerment, boundaries and expectations, and constructive use of time) and internal (commitment to learning, positive values, social competencies, and positive identity) assets.(1) Grades in school are an internal asset.

#### **REFERENCES:**

1. Leffert N, Benson PL, Scales PC, Sharma A, Drake D, Blyth DA. Developmental assets: measurement and prediction of at-risk behaviors among adolescents. *Applied Developmental Science*. 1998; 2(4):209-230.

#### **QUESTION(S):**

8. Think of where you live most of the time. Which of the following people live there with you?

9. How many times have you changed homes since kindergarten?

10. What is the language you use most often at home?

#### **RATIONALE:**

These questions are used to determine household and family structure. They can be used as risk or protective factors in association with many risk behaviors. Most often, they are used to determine whether a student lives in a two-parent, one-parent, or non-parental guardian home and to examine behaviors with relationship to stability of family structure.(1, 2) Additionally, adverse childhood experiences such as childhood abuse, neglect, and childhood health problems are strongly associated with frequent residential mobility.(3) Finally, language preference and English language proficiency have previously been associated with health-related behaviors, disease prevalence, and access to health care (4, 5) and may have implications for delivery of culturally and linguistically appropriate programming.

#### **REFERENCES:**

- 1. Santelli JS, Lowry R, Brener ND, Robin L. The association of sexual behaviors with socioeconomic status, family structure, and race/ethnicity among US adolescents. *American Journal of Public Health*. 2000; 90:1582-1588.
- 2. Rindfleich A, Burroughs JE, Denton F. Family structure, materialism, and compulsion consumption. *Journal of Consumer Research*. 1997; 25:312-325.
- 3. Dong M, Anda RF, Felitti VJ, et al. Childhood Residential Mobility and Multiple Health Risks During Adolescence and Adulthood: The Hidden Role of Adverse Childhood Experiences. Arch Pediatr Adolesc Med. 2005;159 (12):1104-1110. doi:10.1001/archpedi.159.12.1104.
- 4. Fiscella K, Franks P, Doescher MP, Saver BG. Disparities in health care by race, ethnicity, and language among the insured: findings from a national sample. Med Care 2002;40:52–59.
- 5. Flores G, Abreu M, Tomany-Korman SC. Limited English proficiency, primary language at home, and disparities in children's health care: how language barriers are measured matters. Public Health Rep 2005;120:418–430.

# **SELF-CARE – Local Priority**

#### **QUESTIONS:**

11. How many days of the week do you take care of yourself in the afternoon or evening afterschool without an adult being there?

12. Think of those days that you take care of yourself in the afternoon or evening without an adult being there. How many hours do you usually take care of yourself?

# **RATIONALE:**

These questions measure self-reported, afterschool self-care without an adult present. Participation in a variety of risk behaviors often occurs during the after-school hours, when, due to parental employment, students are more likely to be unsupervised. (1) Adolescents lacking after-school supervision have increased substance use and risk-taking. Conversely, children of parents who "usually" knew the whereabouts of the adolescents are less likely to have such involvement. Child supervision is often also seen as a protective factor.(2)

#### **REFERNECE:**

- 1. Rai, AA. And Stanton, B. et al. Relative influences of perceived parental monitoring and perceived peer involvement on adolescent risk behaviors: an analysis of six cross-sectional data sets. Journal of Adolescent Health, Volume 33, Issue 2, August 2003, Pages 108–118
- J.L. Richardson, B. Radziszewska, C.W. Dent et al. Relationship between after-school care of adolescents and substance use, risk taking, depressed mood, and academic achievement. Pediatrics, 92 (1993), pp. 32–38

# **UNINTENTIONAL INJURY – National CORE**

#### **QUESTION(S):**

15. How often do you wear a seat belt when riding in a car driven by someone else?

#### **RATIONALE:**

This question measures the frequency with which seat belts are worn when riding in a car driven by someone else. In 2006, 1,537 young people ages 15 and under were killed and 203,819 were injured in passenger vehicle crashes; of those injured, approximately 9% had an injury that was so severe they were unable to walk, drive, or continue the activities they normally engaged in prior to the crash.(1) Motor-vehicle related injuries kill more young adults ages 5-19 years than any other single cause in the United States.(2) Safety belts, when used appropriately, reduce the risk of fatal injury to front-seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%. (3) In 2010, among all fatally injured 16-19 year-old occupants, seat belt use among passengers (29%) was considerably lower than among drivers (44%).(4) In 2009, the use of seat belts in passenger vehicles saved an estimated 12,713 lives.(5) In 2011, 8% of high school students nationwide had rarely or never worn a seat belt when riding in a car driven by someone else.(5) During 1991–2011, among students nationwide, a significant linear decrease occurred in the prevalence of rarely or never wearing a seat belt (26%–8%).(6)

#### **REFERENCES:**

1. National Highway Traffic Safety Administration. 2006 Motor Vehicle Occupant Protection Facts. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety

Administration; 2008. Available at http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Assoc iated%20Files/810654.pdf. Accessed May 21, 2012.

- 2. Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed May 21, 2012.
- 3. National Highway Traffic Safety Administration. *Traffic Safety Facts, 2006 Data: Occupant Protection.* Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2007. Available at http://www-nrd.nhtsa.dot.gov/Pubs/810807.PDF. Accessed May 21, 2012.
- 4. Highway Data Loss Institute. *Fatality Facts 2010: Teenagers*. Insurance Institute for Highway Safety; 2012. Available at <u>http://www.iihs.org/research/default.aspx</u>. Accessed May 24, 2012.
- 5. National Highway Traffic Safety Administration. Lives saved in 2009 by restraint use and minimum-drinking-age laws. Washington, D.C.: US Department of Transportation, National Highway Traffic Safety Administration: 2010. Publication no DOT-HS-811-383. Available at <a href="http://wwwnrd.nhtsa.dot.gov/Pubs/811383.pdf">http://wwwnrd.nhtsa.dot.gov/Pubs/811383.pdf</a>. Accessed May 21, 2012.
- 6. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.

#### **QUESTION(S):**

16. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?

#### **RATIONALE:**

This question measures the frequency with which students report having been a passenger in a motor vehicle operated by someone who was under the influence of alcohol. Nearly one third of all traffic-related fatalities involved alcohol impaired drivers (1). In 2008, 22% of 15- to 20-year-old drivers who were killed in motor vehicle crashes and 4% of those injured in crashes had been drinking alcohol. (2) In 2011, 24% of high school students nationwide had ridden in a car or other vehicle driven by someone who had been drinking alcohol one or more times during the 30 days before the survey.(3) During 1991–2011, among students nationwide, a significant linear decrease occurred in the prevalence of riding with a driver (3) who had been drinking alcohol (40%–24%) (3).

#### **REFERENCES:**

 Dept of Transportation (US), National Highway Traffic Safety Administration (NHTSA). Traffic Safety Facts 2010: Alcohol-Impaired Driving. Washington (DC): NHTSA; 2012. Available at URL: <u>http://www-nrd.nhtsa.dot.gov/Pubs/811606.PDF</u>

- National Highway Traffic Safety Administration. Traffic Safety Facts, 2008 Data: Young Drivers. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2009. Available at http://wwwnrd.nhtsa.dot.gov/pubs/811169.pdf. Accessed May 21, 2012.
- 3. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.

# **UNINTENTIONAL INJURY- Local Priority**

#### **QUESTION(S):**

17. During the past 12 months, did you suffer a blow or jolt to your head which caused you to get "knocked out," have memory problems, double or blurry vision, headaches or "pressure" in the head, or nausea or vomiting?

#### **RATIONALE:**

This question measures self-reported head injury or concussions, or concussion-like symptoms. While data related to the long-term effects of such injury in children has not been established, studies have shown that children 8 to 16 have been found to have persistent deficits in processing complex visual stimuli up to three months after a concussion and additional physical and mental health effects are hypothesized.(1) Additionally, compared with similar students without a history of concussion, adolescent athletes with 2 or more concussions also demonstrate statistically significant lower gradepoint averages.(2)

#### **REFERENCES:**

- 1. Brosseau-Lachaine O, Gagnon I, Forget R, Faubert J. Mild traumatic brain injury induces prolonged visual processing deficits in children. Brain Inj. 2008;22(9):657–668
- 2. Moser RS, Schatz P, Jordan BD. Prolonged effects of concussion in high school athletes. Neurosurgery. 2005;57(2):300–306

# **VIOLENCE RELATED BEHAVIORS – National CORE**

#### **QUESTION(S):**

18. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club?

20. During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?

These questions measure violence-related behaviors and school-related violent behaviors. Homicide is the second leading cause of death among all youth ages 15-19 years (8.9 per 100,000) and is the leading cause of death among black youth ages 15-19 years (30.4 per 100,000).(1) Approximately 12% of homicide victims in the United States in 2010 were aged 13-19; of these victims, 93% were killed with a weapon, such as a gun, knife, or club.(2) Firearms intensify violence and increase the likelihood of fatality in a conflict.(3) Of all violent deaths that occurred on school property between 1994 and 2006, 65% involved firearms.(4) Nearly 100% of school districts have a policy prohibiting weapon possession or use by high school students on school property.(5) In 2010, students ages 12-18 were victims of approximately 828,000 nonfatal victimizations at school, including 359,000 violent victimizations, 91,400 of which were serious violent victimizations.(6) Among high school students nationwide in 2011, 17% had carried a weapon, 5% had carried a gun, and 5% had carried a weapon on school property on at least 1 day during the 30 days before the survey.(7) The prevalence of having carried a weapon decreased during 1991–1999 (26%–17%) and then did not change significantly during 1999–2011 (17%–17%).(7) Among high school students nationwide in 2011, 6% had not gone to school on at least 1 day during the 30 days before the survey because they felt they would be unsafe at school or on their way to or from school and 7% had been threatened or injured with a weapon on school property 1 or more times during the 12 months before the survey.(7) Among students nationwide, the prevalence of having not gone to school because of safety concerns did not change significantly during 1993–2011 (4%–6%).(7) Among students nationwide, the prevalence of having been threatened or injured with a weapon on school property did not change significantly during 1993–2003 (7%–9%) and then decreased during 2003–2011 (9%–7%).(7)

- Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed May 22, 2012.
- Department of Justice. Crime in the United States, 2010.Uniform Crime Report Federal Bureau of Investigation Web site. Available at http://www.fbi.gov/aboutus/cjis/ucr/crime-in-theu.s/2010/crime-in-the-u.s.-2010/index-page. Accessed May 22, 2012.
- 3. Cook PJ, Ludwig J. The costs of gun violence against children. Future of Children 2002;12(2):87-99.
- 4. Centers for Disease Control and Prevention. School-associated homicides United States 1992-2006. MMWR 2008;57(02):33-36.
- 5. Jones SE, Fisher CJ, Greene BZ, Hertz MF, Pritzl J. Healthy and safe school environment, part I: results from the School Health Policies and Programs Study 2006. Journal of School Health 2007;77(8):522-543.
- Robers S, Zhang J, Truman J. (2012). Indicators of School Crime and Safety: 2011 (NCES 2012-002/NCJ 236021). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC. Available at http://nces.ed.gov/pubs2012/2012314.pdf. Accessed May 22, 2012.

1. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance – United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

#### **QUESTION(S):**

22. During the past 12 months, have you ever been bullied on school property?

24. During the past 12 months, have you ever been electronically bullied? (Count being bullied through email, chat rooms, instant messaging, websites, or texting.)

# **RATIONALE:**

These questions measure the frequency and severity of bullying behavior. Bullying victimization is associated with depression, (1,2) suicidal ideation, (1,2) self-injury, (2) suicide attempts, (2) increased odds of repeated common health problems,(3) school absenteeism,(4) psychological distress,(3) and feeling unsafe at school.(4) Electronic bullying victimization has been associated with discipline problems in school, skipping school, weapon carrying,(1,5, 11) psychological distress,(6) lower selfesteem, (7) social anxiety, (8) depression, (2) suicidal ideation, (2) self-injury, (2) and suicide attempts. (2) One third of students 12 to 18 report having been bullied at school.(10) In a national survey of 10 to 15 year olds, 64% of youth bullied electronically through mean including e-mail, chat rooms, instant messaging, websites, or texting did not also report being harassed at school.(5,9) While bullying can occur for many reasons, some students are more likely to be targeted, or more likely to report having been bullied.(11) National surveys have found that upward of 80% of GLBTQ youth report having been bullied or harassed related to issues of sexuality or gender identity.(12) Additionally, overweight and obese 11-14 year olds have a higher relative odds of bullying victimization.(13) Data related to bullying based on racial, ethnic or religious background is mixed.(11) Among high school students nationwide in 2011, 20% had been bullied on school property during the 12 months before the survey and 16% had been electronically bullied through e-mail, chat rooms, instant messaging, websites, or texting during the 12 months before the survey.(9)

- 1. Van der Wal MF, de Wit CA, Hirasing RA. Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics* 2003;111(6):1312-1317.
- 2. Kessel Schneider S, O'Donnell L, Stueve A, Coulter RWS. Cyberbullying, school bullying, and psychological distress: a regional census of high school students. *American Journal of Public Health* 2012;102:171-177.
- 3. Rigby K. Consequences of bullying in school. *The Canadian Journal of Psychiatry* 2003;48(9):583-590.
- 4. Glew GM, Fan MY, Katon W, Rivara FR, Kernic MA. Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine* 2005;159:1026-1031.

- 5. Ybarra ML, Diener-West M, Leaf PJ. Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health* 2007;41:S42–S50.
- 6. Kiriakidis SP, Kavoura A. Cyberbullying. A review of the literature on harassment through the internet and other electronic means. *Family & Community Health* 2010;33(2):82-93.
- 7. Patchin JW, Hinduja S. Cyberbullying and self-esteem. Journal of School Health 2010;80:614-621.
- 8. Juvonen J, Gross EF. Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health* 2008;78:496-505.
- 9. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.
- 10. U.S. Department of Education, Institute of Education Science: National Center for Education Statistics. Indicators of School Crime and Safety: 2007. NCES 2008-021. December 2007.
- 11. American Psychological Association: Public Interest Government Relations Office. Bullying and School Climate. Accessed 23 April 2014. www.apa.org/about/gr/issues/cyf/bullying-school-climate
- 12. Kosciw, J.G., Greytak, E.A., Diaz, E.M., & Bartkiewicz, M.J. (2010). The 2009 National School Climate Survey: The experiences of lesbian, gay, bisexual, and transgender youth in our nation's schools. New York: GLSEN.
- 13. Janssen, W.M. Craig, W.F. Boyce et al.Associations between overweight and obesity with bullying behaviors in school-aged children. Pediatrics, 113 (2004), pp. 1187–1194

# **VIOLENCE RELATED BEHAVIORS – Local Priority**

# QUESTION(S):

19. If you wanted to get a handgun, how easy would it be for you to get one?

# **RATIONALE:**

This question measures violence-related behaviors of access to handguns. Homicide is the second leading cause of death among all youth ages 15-19 years (8.9 per 100,000) and is the leading cause of death among black youth ages 15-19 years (30.4 per 100,000).(1) Among high school students nationwide in 2011, 17% had carried a weapon, 5% had carried a gun, and 5% had carried a weapon on school property on at least 1 day during the 30 days before the survey.(2) The prevalence of having carried a weapon decreased during 1991–1999 (26%–17%) and then did not change significantly during 1999–2011 (17%–17%).(2) Approximately 12% of homicide victims in the United States in 2010 were aged 13-19; of these victims, 93% were killed with a weapon, such as a gun, knife, or club.(2) Firearms intensify violence and increase the likelihood of fatality in a conflict. (3) Of all violent deaths that occurred on school property between 1994 and 2006, 65% involved firearms.(4) Nearly 100% of school districts have a policy prohibiting weapon possession

or use by high school students on school property.(5) Weapon carrying a school is associated both with increased risk of suicide and further involvement in other violence related activities.(6, 7) Studies have shown that, typically, males have higher access to firearms, and current access in the home increases the odds of both violent victimization and violent offending significantly.(8)

#### **REFERENCES:**

- Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed May 22, 2012.
- 2. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.
- Department of Justice. Crime in the United States, 2010. Uniform Crime Report Federal Bureau of Investigation Web site. Available at <u>http://www.fbi.gov/aboutus/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/index-page</u>. Accessed May 22, 2012.
- Cook PJ, Ludwig J. The costs of gun violence against children. *Future of Children* 2002;12(2):87-99.
- 5. Centers for Disease Control and Prevention. School-associated homicides United States 1992-2006. *MMWR* 2008;57(02):33-36.
- 6. Jones SE, Fisher CJ, Greene BZ, Hertz MF, Pritzl J. Healthy and safe school environment, part I: results from the School Health Policies and Programs Study 2006. *Journal of School Health* 2007;77(8):522-543.
- Borowsky, IW. Et al. Adolescent Suicide Attempts: Risks and Protectors. Pediatrics 2001; 107:3 485-493; doi:10.1542/peds.107.3.485
- 8. DuRant RH, Kahn J, Beckford PH, Woods ER (1997) The association of weapon carrying and fighting on school property and other health risk and problem behaviors among high school students. Arch Pediatr Adolesc Med 151:360–366.
- 9. Ruback, R. B., Shaffer, J. N., & Clark, V. A. (2011). Easy access to firearms: Juveniles' risks for violent offending and violent victimization. Journal of Interpersonal Violence, 26, 2111-2138.

#### **QUESTION(S)**

21. During the past 12 months, how many times were you in a physical fight?

# **RATIONALE:**

This question measures the frequency and severity of physical fights in general and on school property. Physical fighting is a marker for other problem behaviors(1) and is associated with serious injury-related

12

health outcomes.(2,3) Among high school students nationwide in 2011, 33% had been in a physical fight and 12% had been in a physical fight on school property one or more times during the 12 months before the survey.(4) The percentage of high school students who were in a physical fight decreased during 1991–2009 (42%–31%) and then did not change significantly during 2009–2011 (31%– 33%).(4) The percentage of high school students who were in a physical fight on school property decreased during 1993-2009 (16–11%) and then did not change significantly during 2009–2011 (11%–12%).(4)

# **REFERENCES:**

- 1. Sosin DM, Koepsell TD, Rivara FP, Mercy JA. Fighting as a marker for multiple problem behaviors in adolescents. Journal of Adolescent Health 1995;16:209-215.
- 2. Borowsky IW, Ireland M. Predictors of future fight-related injury among adolescents. Pediatrics 2004;113:530-536.
- 3. Pickett W, Craig W, Harel Y, et al. Cross-national study of fighting and weapon carrying as determinants of adolescent injury. Pediatrics 2005;116:855-863.
- 4. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

# **QUESTION(S):**

23. During the past 12 months, have you ever been bullied away from school property?

25. During the past 12 months, have you ever been teased or name called for any of the following reasons?

# **RATIONALE:**

These questions measure the frequency and severity of bullying behavior. Bullying victimization is associated with depression,(1,2) suicidal ideation,(1,2) self-injury,(2) suicide attempts,(2) increased odds of repeated common health problems,(3) school absenteeism,(4) psychological distress,(3) and feeling unsafe at school.(4) Electronic bullying victimization has been associated with discipline problems in school, skipping school, weapon carrying,(1,5, 11) psychological distress,(6) lower self-esteem,(7) social anxiety,(8) depression,(2) suicidal ideation,(2) self-injury,(2) and suicide attempts.(2) One third of students 12 to 18 report having been bullied at school.(10) In a national survey of 10 to 15 year olds, 64% of youth bullied electronically through mean including e-mail, chat rooms, instant messaging, websites, or texting did not also report being harassed at school.(5,9) While bullying can occur for many reasons, some students are more likely to be targeted, or more likely to report having been bullied or harassed related to issues of sexuality or gender identity.(12) Additionally, overweight and obese 11-14 year olds have a higher relative odds of bullying victimization.(13) Data related to bullying based on racial, ethnic or religious background is mixed.(11)

13

- 1. Van der Wal MF, de Wit CA, Hirasing RA. Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics* 2003;111(6):1312-1317.
- 2. Kessel Schneider S, O'Donnell L, Stueve A, Coulter RWS. Cyberbullying, school bullying, and psychological distress: a regional census of high school students. *American Journal of Public Health* 2012;102:171-177.
- 3. Rigby K. Consequences of bullying in school. *The Canadian Journal of Psychiatry* 2003;48(9):583-590.
- 4. Glew GM, Fan MY, Katon W, Rivara FR, Kernic MA. Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine* 2005;159:1026-1031.
- 5. Ybarra ML, Diener-West M, Leaf PJ. Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health* 2007;41:S42–S50.
- 6. Kiriakidis SP, Kavoura A. Cyberbullying. A review of the literature on harassment through the internet and other electronic means. *Family & Community Health* 2010;33(2):82-93.
- 7. Patchin JW, Hinduja S. Cyberbullying and self-esteem. Journal of School Health 2010;80:614-621.
- 8. Juvonen J, Gross EF. Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health* 2008;78:496-505.
- 9. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.
- 10. U.S. Department of Education, Institute of Education Science: National Center for Education Statistics. Indicators of School Crime and Safety: 2007. NCES 2008-021. December 2007.
- 11. American Psychological Association: Public Interest Government Relations Office. Bullying and School Climate. Accessed 23 April 2014. www.apa.org/about/gr/issues/cyf/bullying-school-climate
- 12. Kosciw, J.G., Greytak, E.A., Diaz, E.M., & Bartkiewicz, M.J. (2010). The 2009 National School Climate Survey: The experiences of lesbian, gay, bisexual, and transgender youth in our nation's schools. New York: GLSEN.
- 13. Janssen, W.M. Craig, W.F. Boyce et al.Associations between overweight and obesity with bullying behaviors in school-aged children. Pediatrics, 113 (2004), pp. 1187–1194

# **DEPRSESION AND SUICIDE – National CORE**

#### **QUESTION(S):**

#### SUMMIT COUNTY HIGH SCHOOL YRBS 2014

26. During the past 12 months, how many times did you do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose?

27. During the past 12 months, did you ever feel so sad and hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?

28. During the past 12 months, did you ever seriously consider attempting suicide?

29. During the past 12 months, how many times did you actually attempt suicide?

#### **RATIONALE:**

These questions measure self-injury reports, sadness, suicide ideation, attempted suicide, and the seriousness of those attempts. Studies have estimated the rate of nonsuicidal self-injury (NSSI) among middle school students to be between 7 & 8%. (1,2) Those engaging in NSSI are more likely than their peers to use tobacco and other drugs and display eating disorders.(1) Suicide is the third leading cause of death among youth ages 10-14 years.(3) A prior suicide attempt is one of the most significant risk factors for a suicide fatality.(4,5) Among high school students nationwide in 2011, 28% felt so sad or hopeless almost every day for 2 or more weeks in a row that they stopped doing some usual activities.(6) Among high school students nationwide in 2011, 16% had seriously considered attempting suicide, 13% had made a plan about how they would attempt suicide, and 8% had attempted suicide one or more times during the 12 months before the survey.(6) The percentage of students who seriously considered attempting suicide decreased during 1991–2009 (29%–14%) and then increased during 2009–2011 (14%–16%).(6)

- Hilt et al. Longitudinal Study of Nonsucicidal Self-injury Among Young Adolescents: Rates, Correlates, and Preliminary Test of an Interpersonal Model. The Journal of Early Adolescence; 2008 28: 455e 1 May 2008 DOI: 10.1177/0272431608316604
- 2. Barracoas, AL et al. Rates of Nonsuicidal Self-Injury in Youth: Age, Sex, and Behavioral Methods in a Community Sample. Pediatrics. July 2012; 130(1):39-45. doi: 10.1542/peds.2011-2094
- 3. Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2014. Accessed 23 April 2014.
- 4. Borowsky IW, Ireland M, Resnick, MD. Adolescent suicide attempts: risks and protectors. *Pediatrics* 2001; 107:485–493.
- 5. Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behavior. *Journal of Child Psychology and Psychiatry* 2006;47(3/4):372–394.
- 6. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61 (No. SS-4):1-162.

# **TOBACCO USE – National CORE**

# **QUESTION(S):**

30. How old were you when you smoked a whole cigarette for the first time?

31. During the past 30 days, on how many days did you smoke cigarettes?

32. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?

#### **RATIONALE:**

These questions measure ever and current smoking patterns, age of initiation, use of alternative tobacco products, and access to tobacco. Cigarette smoking is the leading cause of preventable death in the United States (1) and accounts for approximately 440,000 deaths each year.(2) Cigarette smoking increases risk of heart disease; chronic obstructive pulmonary disease; acute respiratory illness; stroke; and cancers of the lung, larynx, oral cavity, pharynx, pancreas, and cervix.(1,3) In addition, as compared to nonsmokers, cigarette smokers are more likely to drink alcohol, use marijuana and cocaine, engage in risky sexual behaviors, engage in physical fighting, carry a weapon, and attempt suicide.(3-5) If current patterns of smoking behavior persist, an estimated 5.6 million U.S. persons who were born after 1996 (approximately 1 in every 13 Americans) could die prematurely from smoking-related illnesses.(6) In 2006, approximately 64% of schools had adopted policies that 1) prohibited cigarette smoking and smokeless tobacco use among students, faculty and staff, and school visitors in school buildings; outside on school grounds; on school buses or other vehicles used to transport students; and at off- campus, school-sponsored events; and 2) prohibited cigar or pipe smoking by students, faculty and staff, and school visitors.(7) 2012 estimates indicate that 6.7% of middles school students report using tobacco products in the past 30 days, and cigarettes (3.5%) and cigars (2.8%) being the most common forms of tobacco use.(8)

Among high school students nationwide in 2011, 45% had ever tried cigarette smoking, 18% had smoked cigarettes on at least 1 day during the 30 days before the survey, and 5% had smoked cigarettes on school property on at least 1 day during the 30 days before the survey.(9) The percentage of high school students who had ever tried cigarette smoking did not change significantly during 1991–1999 (70%–70%) and then decreased during 1999–2011 (70%–45%).(9) The percentage of high school students who had smoked cigarettes on at least 1 day during the 30 days before the survey increased significantly during 1991–1997 (27%–36%) and then decreased during 1997–2011 (36%–18%).(9)

- 1. U.S. Department of Health and Human Services. *The Health Consequences of Smoking: A Report of the Surgeon General.* U.S. Department of Health and Human Services; Centers for Disease Control and Prevention; National Center for Chronic Disease Prevention and Health Promotion; Office on Smoking and Health; 2004.
- Centers for Disease Control and Prevention. Annual smoking-attributable mortality, years of potential life lost, and productivity losses—United States, 2000–2004. *MMWR* 2008;57(45):1226– 1228.

#### SUMMIT COUNTY HIGH SCHOOL YRBS 2014

- 3. U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2012.
- 4. Everett SA, Malarcher AM, Sharp DJ, Husten CG, Giovino GA. Relationship between cigarette, smokeless tobacco, and cigar use, and other health risk behaviors among U.S. high school students. *Journal of School Health* 2000;70:234-240.
- Substance Abuse and Mental Health Services Administration, *Results from the 2010 National* Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2011. Available at http://www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.htm#4.9. Accessed May 22, 2012.
- 6. U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014
- 7. Kann L, Brener ND, Wechsler H. Overview and summary: School Health Policies and Programs Study 2006. *Journal of School Health* 2007;77(8):385-397.
- Centers for Disease Control and Prevention. Tobacco Product Use Among Middle and High School Students—United States, 2011 and 2012. Morbidity & Mortality Weekly Report 2013;62(45):893– 7
- 9. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

# **TOBACCO USE – Local Priority**

#### **QUESTION(S):**

35. During the past 30 days, on how many days did you smoke cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies?

36. During the past 30 days, how did you usually get your own tobacco? (Count things such as cigarettes, cigars, cigarillos, little cigars, flavored cigars, chewing tobacco, snuff, or dip?

#### **RATIONALE:**

These questions measure cigar smoking patterns and acquisition of tobacco products. Like cigarettes, cigar smoking can cause lung cancer, coronary heart disease, and chronic obstructive pulmonary

17

disease.(1-3) The overall risk of oral and pharyngeal cancer is 7-10 times higher among cigar smokers compared to those who never smoked.(4) In 2011, 13% of high school students nationwide had smoked cigars, cigarillos, or little cigars on at least 1 day during the 30 days before the survey.(4) The percentage of students who had smoked cigars, cigarillos, or little cigars on at least 1 day during the 30 days before decreased during 1997–2005 (22%–14%) and then did not change significantly during 2005–2011 (14%–13%).(4) However, this prevalence is likely underreported due to the lack of branded examples in national surveys. These questions were modified to include common brands and the indication of flavor which has been shown to increase reporting of cigar use, specifically among African American adolescents in urban areas.(5,6) A 2012 nationwide survey found that 50.7% of eighth graders reported that cigarettes were easy for them to obtain.(7) Access to tobacco products is directly related to age of initiation and current use, and identification of means of access offers opportunity for targeted prevention interventions.(8)

#### **REFERENCES:**

- US Department of Health and Human Services. Smoking and Tobacco Control Monograph No. 9: Cigars – Health Effects and Trends. Bethesda, MD: US Department of Health and Human Services, National Cancer Institute; 1998. No 98-4302:217.
- 2. Shaper AG, Wannamethee SG, Walker M. Pipe and cigar smoking and major cardiovascular events, cancer incidence and all-cause mortality in middle-age British men. *International Journal of Epidemiology*. 2003; 32:802-808.
- 3. Rodriguez J, Jiang R, Johnson WC, MacKenzie BA, Smith LJ, Barr RG. The association of pop and cigar use with cotinine levels, lung function, and airflow obstruction: A cross-sectional study. *Annals of Internal Medicine*. 2010; 152:201-210.
- 4. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United State, 2011. MMWR Surveillance Summary 2012; 61 (No. SS-4):1-162.
- 5. Trapl ES, Tercheck JJ, Danosky L, Cofie L, Brooks-Russell A, Frank SH. Complexity of measuring "cigar use" in adolescents: Results from and split sample experiment. *Nicotine & Tobacco Research*. 2011; 4:291-295.
- 6. Tercheck JJ, Larkin EM, Male ML, Frank SH. Measuring cigar use in adolescents: Inclusion of a brandspecific item. *Nicotine & Tobacco Research*. 2009; 11:842-846.
- 7. Johnston, LD, et al. Monitoring the Future study, 2012, www.monitoringthefuture.org/data/12data/pr12cig\_2.pdf
- 8. Campaign for Tobacco Free Kids. Where do Youth Smokers Get Their Cigarettes? Research Factsheet 0073. Accessed 23 April 2014.

# **TOBACCO USE – Local Priority**

#### **QUESTION(S):**

70. How wrong do your parents/guardians feel it would be for you to use tobacco (for example cigarettes, cigars, or chewing tobacco)?

#### **RATIONALE:**

This question is from a set that are required core measures for Drug Free Community Projects. This questions ask students about their perception of the beliefs of their parents and guardians with regard to engaging in tobacco use. A student's perception about risk often influences the likelihood of engaging in the behavior themselves (1). Parents' use of inconsistent and/or unusually harsh or severe punishment with their children places the children at higher risk for substance use and other problem behaviors.(2) The Summit County YRBS Coalition added the term "guardian" to these previously standardized questions to ensure that this addresses children whom are being raised by someone other than their biological parent(s).

#### **REFERENCES:**

- 1. Steinberg L. A social neuroscience perspective on adolescent risk-taking. Developmental Review. 2008;28:78–106.
- Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013. <a href="http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.ypdf">http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.ypdf</a>>.

# **ALCOHOL USE – National CORE**

#### **QUESTION(S):**

35. How old were you when you had your first drink of alcohol other than a few sips?

36. During the past 30 days, on how many days did you have at least one drink of alcohol?

37. During the past 30 days, how did you usually get the alcohol you drank?

#### **RATIONALE:**

This question measures ever alcohol use, age of initiation, current use of alcohol and access to alcohol. Alcohol is used by more young people than tobacco or illicit drugs.(1) Persons who begin drinking alcohol before the age of 15 years are five times as likely to report alcohol dependence or abuse than those who first drank alcohol at age 21 or older.(2) Initiation of alcohol use before 13 years of age also has been associated with an increased risk for suicide.(3-5) Despite a national decline in alcohol use among teens, a 2013 national survey found that about one eighth of all 8th graders report having been drunk in their life and that 10% of 8th grade students report having drank alcohol in the thirty days prior to the survey, with very little difference by gender, or socioeconomic measures.(6) Limiting youth access to alcohol has reduced underage alcohol use and alcohol-related problems.(7-10) However, youth continue to obtain alcohol from a variety of sources, reflecting the need for improved enforcement of

underage drinking laws as well as greater public awareness of restrictions on drinking alcohol by underage youth. Since the mid-1990s, middle school students nationwide have reported significant declines in the ease of acquiring alcohol, and a 2013 estimate indicated that fewer than 60% of 8th graders said that alcohol was "fairly easy" or "very easy" to get.(6,11) For underage drinkers, social access (parents, friends, other adults over 21) often serve as the primary means to acquire alcohol over commercial access points.(7)

#### **REFERENCES:**

- Substance Abuse and Mental Health Services Administration. *Results from the 2010 National Survey* on Drug Use and Health: Summary of National Findings, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011.
- 2. Johnson P, Boles SM, Vaughan R, Herbert D. The co-occurrence of smoking and binge drinking in adolescence. *Addictive Behaviors* 2000;25:779-783.
- 3. Substance Abuse and Mental Health Services Administration. *Alcohol dependence or abuse and age at first use.* The NSDUH Report October 22, 2004. Available at http://oas.samhsa.gov/2k4/ageDependence/ageDependence.cfm. Accessed June 1, 2012.
- 4. Miller JW, Naimi TS, Brewer RD, Jone SE. Binge drinking and associated health risk behaviors among high school students. Pediatrics 2007;119:76-85.
- 5. Bossarte RM, Swahn MH. The associations between early alcohol use and suicide attempts among adolescents with a history of major depression. *Addictive Behaviors* 2011;36:532-535.
- Johnston, L. D., O'Malley, P. M., Miech, R. A., Bachman, J. G., & Schulenberg, J. E. (2014). Monitoring the Future national results on drug use: 1975-2013: Overview, Key Findings on Adolescent Drug Use. Ann Arbor: Institute for Social Research, The University of Michigan.
- 7. Dunn MS, Bartee RT, Perko MA. Self-reported alcohol use and sexual behaviors of adolescents. *Psychological Reports* 2003;92:339-348.
- 8. Young A, Grey M, Abbey A, Boyd CJ, McCabe SE. Alcohol-related sexual assault victimization among adolescents: prevalence, characteristics, and correlates. *Journal of Studies on Alcohol and Drugs* 2008;69:39-48.
- 9. Swahn MH, Bossarte RM, Sullivent EE. Age of alcohol use initiation, suicidal behavior, and peer and dating violence victimization and perpetration among high-risk, seventh-grade adolescents. *Pediatrics* 2008;121:297-305.
- 10. Nelson DE, Naimi TS, Brewer RD, Nelson HA. State alcohol-use estimates among youth and adults, 1993-2005. *American Journal of Preventive Medicine* 2009;36(3):218–224.
- 11. Klepp KI, Schmid LA, Murray DM. Effects of the increased minimum drinking age law on drinking and driving behavior among adolescents. *Addiction Research* 1996;4:237-244.

Prepared by the CWRU Prevention Research Center for Healthy Neighborhoods, July 2014

12. Hearst M.O., Fulkerson J.A., Maldonado-Molina M.M., Perry C.L., and Komro K.A. (2007) Who needs liquor stores when parents will do? The importance of social sources of alcohol among young urban teens. *Preventative Medicine* 44, 471-6.

# **ALCOHOL USE – Local Priority**

#### **QUESTION(S):**

71. How wrong do your parents/guardians feel it would be for you to drink beer, wine, or hard liquor (for example vodka, whiskey, or gin)?

#### **RATIONALE:**

This question is from a set that are required core measures for Drug Free Community Projects. This questions ask students about their perception of the beliefs of their parents and guardians with regard to engaging in alcohol use. A student's perception about risk often influences the likelihood of engaging in the behavior themselves (1). Parents' use of inconsistent and/or unusually harsh or severe punishment with their children places the children at higher risk for substance use and other problem behaviors.(2) The Summit County YRBS Coalition added the term "guardian" to these previously standardized questions to ensure that this addresses children whom are being raised by someone other than their biological parent(s).

#### **REFERENCES:**

- 3. Steinberg L. A social neuroscience perspective on adolescent risk-taking. Developmental Review. 2008;28:78–106.
- Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013. <a href="http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf">http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf</a>>.

# **ILLEGAL AND PERSCRIPTION DRUG USE – National CORE**

#### **QUESTION(S):**

- 38. During your life, how many times have you used marijuana?
- 39. How old were you when you tried marijuana for the first time?
- 40. During the past 30 days, how many times did you use marijuana?

41. During your life, how many times have you used heroin (also called smack, junk, or China White)?

42. During your life, how many times have you used methamphetamines (also called speed, crystal, crank, or ice)?

43. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

47. During the past 12 months, has anyone offered, sold, or given you an illegal drug on school property?

# **RATIONALE:**

These questions measure ever and current use of marijuana and ever use of heroin, methamphetamines, inhalants, synthetic or designer drugs, prescription pain relievers, other prescription drugs, and illegal drug activity on school property. Among youth, illicit drug use is associated with heavy alcohol and tobacco use,(1) violence and delinquency,(2-5) and suicide. (6) Drug abuse may contribute to depression and suicide, unintended pregnancy, school failure, violent behavior, delinquency, and transmission of sexually transmitted diseases, including HIV.(7) All school districts prohibit illegal drug possession or use by students on school property.(7) Adolescent marijuana use is at its highest in 30 years, and teens are now more likely to use marijuana than tobacco.(8) In 2012, a national study showed that 16.5% of eight 8th graders report having used marijuana in their lifetime, 12.7% report use in the past year, 7% report use in the past month and 1.1% of eighth graders report daily use.(8) Among high school students nationwide in 2011, 40% had used marijuana, 3% had used heroin, and 4% had used methamphetamines.(9) In addition, 11% of high school students had sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high.(9) Also, 26% of students had been offered, sold, or given an illegal drug on school property during the 12 months before the survey.(9) The percentage of high school students who had used marijuana one or more times during their life increased during 1991–1999 (31%–47%) and then decreased during 1999–2011 (47%–40%).(9)

- Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings. NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011. Available at: http://www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.pdf. Accessed June 1, 2012.
- Substance Abuse and Mental Health Services Administration. Youth violence and illict drug use. The NSDUH Report 2006;5:1-3. Available at: http://www.oas.samhsa.gov/2k6/youthViolence/youthViolence.pdf. Accessed June 1, 2012.
- 3. Substance Abuse and Mental Health Services Administration. Marijuana use and delinquent behaviors among youths. The NSDUH Report January 9, 2004. Available at http://www.samhsa.gov/data/2k4/MJdelinquency/MJdelinquency.pdf. Accessed June 1, 2012.

- 4. Substance Abuse and Mental Health Services Administration. Inhalant use and delinquent behaviors among young adolescents. The NSDUH Report March 17, 2005. Available at http://oas.samhsa.gov/2k5/inhale/inhale.pdf. Accessed June 1, 2012.
- 5. Substance Abuse and Mental Health Services Administration. Nonmedical stimulant use, other drug use, delinquent behaviors, and depression among adolescents. The NSDUH Report February 28, 2008. Available at http://oas.samhsa.gov/2k8/stimulants/depression.pdf. Accessed June 1, 2012.
- 6. Substance Abuse and Mental Health Services Administration. Substance use and the risk of suicide among youths. The NHSDA Report July 12, 2002. Available at http://oas.samhsa.gov/2k2/suicide/suicide.cfm. Accessed May 19, 2012.
- 7. Everett Jones S, Fisher CJ, Greene BZ, Hertz MF, Pritzl J. Healthy and safe school environment, part I: results from the School Health Policies and Programs Study 2006. Journal of School Health 2007;77(8):522-543.
- 8. Marijuana: Brief Description. National Institute on Drug Abuse: The Science of Drug Abuse & Addiction. Accessed April 2014. <u>http://drugabuse.gov/DrugPages/Marijuana.html</u> March 2014.
- 9. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

# **ILLEGAL AND PRESCRIPTION DRUG USE – Local Priority**

#### **QUESTION(S):**

44. During your life, how many times have you taken synthetic or designer drugs (such as bathsalts, K2, or spice) to get high?

45. During your life, how many times have you used prescription pain relievers or painkillers such as Vicodin, Percocet, Oxy Cotton, Os, Norco, or Vikes) without a doctor's prescription?

46. During your life, what type of prescription drugs have you taken without a doctor's prescription?

#### **RATIONALE:**

These questions measures synthetic/designer drug use, and prescription pain reliever use and other prescription drug use without a doctor's prescription. Drug abuse may contribute to depression and suicide, unintended pregnancy, school failure, violent behavior, delinquency, and transmission of sexually transmitted diseases, including HIV.(1) Prescription drug abuse is reaching prevalence levels near use of marijuana among adolescents. 9.1% of teens aged 12-17 misused prescription drugs in 2005. In 2006, there were as many new abusers of prescription drugs as new users of marijuana.(2) Prescription and over the counter medications are widely available, free or inexpensive, and falsely believed to be safer than illicit drugs. In 2006, 2.1 million teens abused prescription drugs and an additional 2.1 million had misused over the counter cough and cold medications at least once in their lifetime.(3)

#### **REFERENCES:**

- 1. Wu, W., Khan, A. 2005. Adolescent Illicit Drug Use: Understanding and Addressing the Problem. Medscape Public Health & Prevention. 3(2).
- 2. Substance Abuse and Mental Health Services Administration. 2006. Misuse of Prescription Drugs, 2005. Available at http://www.oas.samhsa.gov/prescription/toc.htm. Accessed on June 1, 2009.
- Substance Abuse and Mental Health Services Administration. 2007. Results from the 2006 National Survey on Drug Use and Health: National Findings. Office of Applied Studies, NSDUH Series H-32, DHHS Publication No.SMA 07-4293. Rockville, MD.

#### MARIJUANA USE - Local Priority

#### **QUESTION(S):**

72. How wrong do your parents/guardians feel it would be for you to use marijuana?

#### **RATIONALE:**

This question is from a set that are required core measures for Drug Free Community Projects. This questions ask students about their perception of the beliefs of their parents and guardians with regard to engaging in alcohol use. A student's perception about risk often influences the likelihood of engaging in the behavior themselves (1). Parents' use of inconsistent and/or unusually harsh or severe punishment with their children places the children at higher risk for substance use and other problem behaviors.(2) The Summit County YRBS Coalition added the term "guardian" to these previously standardized questions to ensure that this addresses children whom are being raised by someone other than their biological parent(s).

#### **REFERENCES:**

- 5. Steinberg L. A social neuroscience perspective on adolescent risk-taking. Developmental Review. 2008;28:78–106.
- Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013. <a href="http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf">http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf</a>>.

# **GAMBLING BEHAVIOR – Local Priority**

#### **QUESTION(S):**

48. During the past 12 months, how often did you gamble money or personal items such as while playing cards, betting on personal skills or sports teams, buying lottery tickets or scratch-offs, or using the internet?

- 49. During the past 30 days, on which of the following did you gamble?
- 50. During the past 30 days, where did you gamble?

51. During the past 30 days, how often have you bet or gambled more than you wanted?

#### **RATIONALE:**

These questions were sponsored by the Alcohol and Drug Addiction and Mental Health Services board to address a lack of data around gambling. Problem Gambling refers to any gambling that goes beyond the "normal" bounds of gambling for fun, recreation or entertainment. Compulsive gambling (or pathological gambling) is a recognized and treatable illness, and children of problem gamblers may be at higher risk for a broad range of health, mental health and school-related problems.(3)

Problem gambling is a widespread. Two million (1 percent) of U.S. adults are estimated to meet criteria for pathological gambling in a given year, according to the National Council on Problem Gambling. Another four to six million (2-3 percent) would be considered problem gamblers; that is, they do not meet the full diagnostic criteria for pathological gambling, but meet one of more of the criteria and are experiencing problems due to their gambling behavior. Based on national prevalence data, in Ohio it is estimated that 264,000 adults and approximately 38,000 adolescents exhibit problem gambling behaviors.(2)

Little is known about the course and outcomes of adolescent gambling. A review of 26 gambling prevalence studies conducted in the US and Canada shows both a high level of adolescent involvement in gambling activities and an increase in participation in recent years.(1) Estimates of problem gambling or pathological gambling range between two and four times higher than the adult population, with 4 to 8 percent suffering serious problems and an additional 10 to 14 percent at risk for gambling problems. (4-7)

- 1. Jacobs DF. Youth gambling in North America: Long-term trends and future prospects. In: Derevensky JL, Gupta R, editors. Gambling Problems in Youth: Theoretical and Applied Perspectives. New York, NY: Klewer Academic/Plenum Publishers; 2004. pp. 1–24.
- 2. "Ohio Problem Gambling." Prevention. Ohio Department of Mental Health and Addiction Services, n.d. Web. 9 Sep 2013. <a href="http://mha.ohio.gov/Default.aspx?tabid=505">http://mha.ohio.gov/Default.aspx?tabid=505</a>>.
- 3. "Problem Gambling Quick Facts." Ohio.gov. Ohio for Responsible Gambling, n.d. Web. 19 Sep 2013. <a href="http://www.org.ohio.gov/index.html">http://www.org.ohio.gov/index.html</a>.
- 4. Derevensky JL, Gupta R. Prevalence estimates of adolescent gambling: A comparison of the SOGS-RA, DSM-IV-J, and the GA 20 questions. J Gambl Stud. 2000;16(2/3):227–51.
- 5. Gupta R, Derevensky JL. Adolescent gambling behavior: A prevalence study and examination of the correlates associated with problem gambling. J Gambl Stud. 1998;14(4):319–45.

25

- 6. Shaffer HJ, Hall MN. Estimating the prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. J Gambl Stud. 1996;12(2):193–214.
- 7. Shaffer HJ, Hall MN. Updating and refining prevalence estimated of disordered gambling behavior in the United States and Canada. Can J Public Health. 2001;92(3):168–72.

# **REPRODUCTIVE HEALTH – National CORE**

# **QUESTION(S):**

- 52. Have you ever had sexual intercourse?
- 73. Have you ever been taught about AIDS or HIV infection in school?

# **RATIONALE:**

These questions measure the prevalence of sexual activity whether students report having received HIV prevention education. Early initiation of sexual intercourse is associated with having a greater number of lifetime sexual partners.(1,2) In addition, adolescents who initiate sexual intercourse early are less likely to use contraception(2,3) and are at higher risk for STDs(4) and pregnancy.(5,6) Estimates suggest that while representing 25% of the ever sexually active population, persons aged 15- to 24-years acquire nearly half of all new STDs.(7) Gonorrhea rates are highest among females between the ages of 15 and 19 years (570.9 cases per 100,000 females) and males between the ages of 20 and 24 years (421.0 cases per 100,000 males).(8) Between 2006 and 2009, the rate of HIV diagnoses in the 40 states with mature confidential name-based HIV infection reporting increased 24% among persons ages 13-19 years and 31% among persons aged 20- to 24-years. By the end of 2008, in the 40 states with confidential name-based HIV infection reporting there were an estimated 7,859 persons ages 13-19 years living with a diagnosis of HIV infection and 3,388 living with a diagnosis of AIDS.(9) The percentage of students who ever had sexual intercourse decreased during 1991-2001 (54%-46%) and then did not change significantly during 2001–2011 (46%–47%). In 2006, 88% of high schools taught HIV prevention education in a required health education course.(11) Among high school students nationwide in 2011, 84% of students had ever been taught in school about AIDS or HIV infection.(10) The percentage of students who were taught in school about AIDS or HIV infection increased during 1991–1997 (83%–92%) and then decreased during 1997–2011 (92%–84%).(10)

#### **REFERENCES:**

1. Santelli JS, Brener ND, Lowry R, et al. Multiple sexual partners among U.S. adolescents and young adults. Family Planning Perspectives 1998;30:271–5.

- Martinez G, Copen CE, Abma JC. Teenagers in the United States: Sexual activit contraceptive use, and childbearing, 2006–2010 National Survey of Family Growth. National Center for Health Statistics. *Vital Health Stat* 2011; 23(31). www.cdc.gov/nchs/data/series/sr\_23/sr23\_031.pdf \_Accessed May 8, 2012.
- 3. Manning WD, Longmore MA, Giordano PC. The relationship context of contraceptive use at first intercourse. *Family Planning Perspectives*. 2000;32(3):104–110.
- 4. Kaestle CE, Halpern CT, Miller WC, Ford CA. Young age at first sexual intercourse and sexually transmitted infections in adolescents and young adults. *American Journal of Epidemiology* 2005;161(8):774-780.
- 5. Manlove J, Terry E, Gitelson L, Papillo AR, Russell S. Explaining demographic trends in teenage fertility, 1980–1995. *Family Planning Perspectives* 2000;32(4):166–175.
- 6. Thornberry TP, Smith CA, Howard GJ. Risk factors for teenage fatherhood. *Journal of Marriage* & *Family* 1997;59:505–522.
- 7. Weinstock H, Berman S, Cates W. Sexually transmitted disease among America youth: Incidence and prevalence estimates, 2000. *Perspectives on Sexual and Reproductive Health* 2004;36(1):6–10.
- Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2010. Atlanta: U.S. Department of Health and Human Services; 2011. Available at <u>www.cdc.gov/std/stats10/default.htm</u>. Accessed May 8, 2012.
- Centers for Disease Control and Prevention. Diagnoses of HIV infection and AIDS among adolescents and young adults in the United States and 5 U.S. dependent areas, 2006–2009. *HIV Surveillance Supplemental Report* 2012;17(No.2). Available at http://www.cdc.gov/hiv/surveillance/resources/reports/2009supp\_vol17no2/index. htm. Accessed May 8, 2012.
- 10. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.
- 11. Kann L, Telljohann SK, Wooley SF. Health education: results from the School Health Policies and Programs Study 2006. *Journal of School Health* 2007;77: 408-434.

# **REPRODUCTIVE HEALTH – Local Priority**

#### **QUESTION(S):**

53. During the past 3 months, how often did you or your partner use a condom when you had sexual intercourse?

74. Have you ever talked about AIDS and HIV infection with your parents or other adults in your family?

# **RATIONALE:**

These questions measures whether the student or their partner used a condom during sexual intercourse in the past three months, and if the students have ever talked about AIDS or HIV infections with their parents or other adults in their families. Predictors of condom use include self-efficacy, peer influences, perceived risk for STDs, and outcome expectations.(1-4) Since 1990, teen pregnancy and birth rates in the United States have declined significantly. Researchers cite two main factors: fewer teens are having sex, and among those who are, more are using contraceptives.(5) While this is a positive trend, there are still risks for those teens that are entering into sexual relationships during their adolescent years. (5) In 2011, among the 34% of high school students who were currently sexually active, 60% reported that either they or their partner had used a condom during last sexual intercourse.(6) The percentage of sexually active high school students who used a condom during last sexual intercourse increased during 1991–2003 (46%–63%) and then did not change significantly during 2003–2011 (63%–60%).(6) Between 2006 and 2009, the rate of HIV diagnoses in the 40 states with mature confidential name-based HIV infection reporting increased 24% among persons ages 13-19 years and 31% among persons aged 20- to 24-years. By the end of 2008, in the 40 states with confidential name-based HIV infection reporting there were an estimated 7,859 persons ages 13–19 years living with a diagnosis of HIV infection and 3,388 living with a diagnosis of AIDS.(7) The percentage of students who ever had sexual intercourse decreased during 1991–2001 (54%–46%) and then did not change significantly during 2001-2011 (46%-47%).(6)

- 1. K.A. Moore, B.C. Miller, D. Glei, D.R. Morrison. Adolescent Sex, Contraception, and Childbearing: A Review of Recent Research. Child Trends, Inc, *Washington, DC* (1995)
- 2. K. Basen-Engquist, G.S. Parcel. Attitudes, norms, and self-efficacy: A model of adolescents– HIV-related sexual risk behavior. *Health Educ*, 19 (1992), pp. 263–277
- 3. M.A. Shafer, C.B. Boyer. Psychosocial and behavioral factors associated with risk of sexually transmitted diseases, including human immunodeficiency virus infection, among urban school students. *J Pediatr*, 119 (1991), pp. 826–833
- 4. D.P. Orr, C.D. Langefeld. Factors associated with condom use by sexually active male adolescents at risk for sexually transmitted disease. Pediatrics, 91 (1993), pp. 873–879
- 5. Martin, J., Hamilton, B., Sutton, P., Ventura, S., Menacker, F., Kirmeyer, S., Munson, M. 2007. Births: final data for 2005. *National Vital Statistics Reports*. 56(6).
- 6. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.

 Centers for Disease Control and Prevention. Diagnoses of HIV infection and AIDS among adolescents and young adults in the United States and 5 U.S. dependent areas, 2006–2009. *HIV Surveillance Supplemental Report* 2012;17(No.2). Available at http://www.cdc.gov/hiv/surveillance/resources/reports/2009supp\_vol17no2/index. htm. Accessed May 8, 2012.

# **OBESITY AND WEIGHT CONTROL – National CORE**

#### **QUESTION(S):**

- 13. How tall are you without your shoes on?
- 14. How much do you weight without your shoes on?
- 54. How do you describe your weight?
- 55. Which of the following are you trying to do about your weight?

#### **RATIONALE:**

These questions measure self-reported height and weight, perceptions of body weight, and what students are trying to do about their weight. Data on self-reported height and weight is used to calculate body mass index (BMI) and determine the corresponding BMI-for-age percentile for adolescents. BMI-for-age percentile is a proxy measure of weight status, correlates with body fat (1) and is recommended for assessing weight status in youth ages 2-20. (2) Although BMI calculated from self-reported height and weight underestimates the prevalence of obesity compared to BMI calculated from measured height and weight,(3) self-reported height and weight are useful for tracking BMI trends over time. In addition, obesity prevalence trends from national surveys of adults using self-reported height and weight (4) have been consistent with trend data from national surveys using measured height and weight. (5) It is critical to continue monitoring height and weight because the prevalence of obesity among adolescents has tripled since 1980. (6) Obesity during adolescence is associated with negative psychological and social consequences and health problems such as type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome.(7) Further, obese adolescents are more likely to become obese adults.(8, 9) Adolescent obesity has quadrupled over the past 30 years, and in 2012 more than one third of adolescents were overweight or obese.(10,11)

- 1. Mei Z, Grummer-Strawn LM, Pietrobelli A, Goulding A, Goran MI, Dietz WH. Validity of body mass index compared with other body-composition screening indexes for assessment of body fatness in children and adolescents. *American Journal of Clinical Nutrition* 2002;75(6):978-985.
- 2. Krebs NF, Himes JH, Jacobson D, Nicklas TA, Guilday P, Styne D. Assessment of child and adolescent overweight and obesity. *Pediatrics* 2007;120:S193-S228.

- 3. Brener ND, McManus T, Galuska DA, Lowry R, Wechsler H. Reliability and validity of self-reported height and weight among high school students. *Journal of Adolescent Health* 2003;32:281-287.
- 4. Galuska DA, Serdula M, Pamuk E, Siegel PZ, Byers T. Trends in overweight among US adults from 1987 to 1993: a multistate telephone survey. *American Journal of Public Health* 1996;86:1729-1735.
- 5. Centers for Disease Control and Prevention. Update: Prevalence of overweight among children, adolescents, and adults United States, 1988-1994. *Morbidity and Mortality Weekly Report* 1997;46(9):199-202.
- 6. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999-2010. *JAMA* 2012;307(5):E1.
- 7. Daniels SR, Arnett DK, Eckel RH, et al. Overweight in children and adolescents: Pathophysiology, consequences, prevention, and treatment. *Circulation* 2005;111:1999-2012.
- 8. Guo SS, Wu W, Cameron W, Roche AF. Predicting overweight and obesity in adulthood from body mass index values in childhood and adolescence. *American Journal of Clinical Nutrition* 2002;76:653-658.
- 9. Freedman DS, Khan LK, Serdula MK, Dietz WH, Srinivasan SR, Berenson GS. The relation of childhood BMI to adult adiposity: The Bogalusa Heart Study.*Pediatrics* 2005;115(1):22-27.
- 10. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012. Journal of the American Medical Association 2014;311(8):806-814.
- 11. National Center for Health Statistics. Health, United States, 2011: With Special Features on Socioeconomic Status and Health. Hyattsville, MD; U.S. Department of Health and Human Services; 2012.

# **OBESITY AND WEIGHT CONTROL – Local Priority**

#### **QUESTION(S):**

56. During the past 30 days, which of the following did you do to lose weight or to keep from gaining weight?

#### **RATIONALE:**

This question is a combination of three national core questions created to assess what methods students are using who are trying to maintain or lose weight. Current recommendations promote healthy eating

and physical activity as effective weight control behaviors.(1,2) Unhealthy weight control behaviors include fasting, taking diet pills or laxatives, or inducing vomiting. Engaging in unhealthy weight control behaviors may result in physical and psychological health problems such as obesity, eating disorders such as anorexia and bulimia,(3) and stunted growth.(4) Disordered eating behaviors are correlated with inadequate nutrient intake,(5) low self-esteem, high levels of depression, suicidal ideation, high levels of stress, and alcohol and drug use.(6) Nationwide 2011, 46% of high school students were trying to lose weight.(7) In 2011, 12% of high school students did not eat for 24 or more hours to lose weight or to keep from gaining weight, 5% of high school students had taken diet pills, powders, or liquids without a doctor's advice, and 4% had vomited or taken laxatives to lose weight or keep from gaining weight during the 30 days before the survey.(7) During 1999–2011, the percentage of students who did not eat for 24 or more hours to lose weight or to keep from gaining weight decreased (13%–12%).(7) The percentage of students who took diet pills, powders, or liquids to lose weight or to keep from gaining weight increased during 1999–2001 (8%–9%) and then decreased during 2001–2011 (9%–5%).(7) The percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight did not change significantly during 1995–2003 (5%–6%) and then decreased during 2003-2011 (6%-4%).(7)

#### **REFERENCES:**

- 1. Davis MM, Gance-Cleveland B, Hassink S, Johnson R, Paradis G, Resnicow K. Recommendations for prevention of childhood obesity. *Pediatrics* 2007;120:S229
- 2. Spear BA, Barlow SE, Ervin C, et al. Recommendations for treatment of child and adolescent overweight and obesity. *Pediatrics* 2007;120:S254.
- 3. Neumark-Sztainer D, Wall M, Guo J, Story M, Haines J, Eisenberg M. Obesity, disordered eating, and eating disorders in a longitudinal study of adolescents: How do dieters fare 5 years later? *Journal of the American Dietetic Association* 2006;106: 559 568.
- 4. Golden NH, Katzman DK, Kreipe RE, et al. Eating disorders in adolescents: Position paper of the Society for Adolescent Medicine. *Journal of Adolescent Health* 2003;33:496-503.
- 5. Neumark-Sztainer D, Hannan PJ, Story M, Perry CL. Weight-control behaviors among adolescent girls and boys: Implications for dietary intake. *Journal of the American Dietetic Association* 2004;104:913-920.
- 6. Neumark-Sztainer D, Hannan PJ. Weight-related behaviors among adolescent girls and boys. *Archives of Pediatric and Adolescent Medicine* 2000;154:569-577.
- 7. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.

# **DIETARY BEHAVIORS – National CORE**

#### **QUESTION(S):**

63. During the past 7 days, on how many days did you eat breakfast?

#### **RATIONALE:**

This question measures the frequency of breakfast consumption in the week prior to the survey. Eating breakfast is associated with weight loss and weight loss maintenance,(1) improved nutrient intake,(1) and better cognitive function, academic performance, school attendance rates, psychosocial function, and mood.(2)

#### **REFERENCES:**

- U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary Guidelines for Americans 2010*. 7<sup>th</sup> Edition, Washington, DC: U.S. Government Printing Office, December 2010. Accessed May 16, 2012. www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/PolicyDoc.pdf.
- 2. Rampersaud GC, Pereira M, Girard BL, Adams J, Metzl JD. Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents. *Journal of the American Dietetic Association* 2005;105:743-760.

# **DIETARY BEHAVIORS – Local Priority**

#### **QUESTION(S):**

57. Yesterday, how many times did you eat fruit? (Foods like apple, banana, orange or pear. Do not count fruit juices.)

58. Yesterday, how many times did you eat green salad? (Salads that contain lettuce, spinach, or other greens.)

59. Yesterday, how many times did you eat vegetables? (Foods like broccoli, spinach, carrots, tomatoes, or green beans.)

60. Yesterday, how many times did you drink milk? (Count the milk you drank in a glass or cup, from a carton or with cereal. Count the half pint of milk served at school as equal to one time.)

61. Yesterday, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not include diet soda or diet pop.)

62. Yesterday, how many times did you have a drink that was high in caffeine, such as coffee or espresso, or energy drink, such as Red Bull, Monster, or Rockstar? (Do not include soda or pop or tea.)

#### **RATIONALE:**
These questions measure dietary behaviors, including consumption of fruits and vegetables, and milk, soda pop and beverages high in caffeine.

The fruit and vegetable questions are similar to questions asked of adults on the Centers for Disease Control and Prevention Behavioral Risk Factor Survey 2009 questionnaire.(1) Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. There is probable evidence to suggest that dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer,(2-4) cardiovascular disease,(5) and stroke.(6) Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.(7-9)

Milk is an important source of many nutrients, including calcium.(10) There is evidence that intake of milk and milk products is associated with bone health in children and adolescents and with a lower risk of cardiovascular disease and type 2 diabetes and with lower blood pressure in adults.(10) Although the recommended intake of milk and milk products is 3 cups per day for adolescents, most adolescents consume far less.(10)

In recent years, sugar-sweetened beverage consumption has significantly increased among children and adolescents.(11,12) Among persons ages 2-18 years, soft drinks (i.e. sugar-sweetened beverages) comprised 3% of the total daily calories consumed in 1977–1978 compared to 7% in 1999–2001.(11) Sugar- sweetened beverages are the primary source of added sugars in the diet of US children and adolescents and contributes an average of 173 kcal/day (8.5% of daily energy intake).(12) Consumption of sugar sweetened beverages, including soft drinks, appears to be associated with increased risk of being overweight among children,(13,14) the development of metabolic syndrome and type 2 diabetes,(15) and is associated with a less healthy diet,(16) decreased bone density,(17) and dental decay.(18)

The American Academy of Pediatrics does not consider any amount of caffeine safe for consumption for children and adolescents, and caffeine levels are large and highly varied in energy drinks.(19) Caffeine's effects include increased heart rate, blood pressure, speech rate, motor activity, sleep disturbances, and anxiety for those with anxiety disorders.(20-24) Often adolescents do not differentiate between sports and energy drinks.(19) Estimates for adolescent consumption for energy drinks have growing in recent years, and one 2003 estimate was that 42.3% of adolescents report current use of energy drinks.(25) In The Institute of Medicine recommends that caffeinated products, including energy drinks, be prohibited from schools.(26)

#### **REFERENCES:**

- Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System Survey Questionnaire. Atlanta, GA, U.S. Department of Health and Human Services; Centers for Disease Control and Prevention; 2009. Available at http://www.cdc.gov/brfss/questionnaires/pdf-ques/2009brfss.pdf. Accessed June 5, 2012.
- 2. Key T, Schatzkin A, Willet WC, Allen NE, Spencer EA, Travis RC. Diet, nutrition, and the prevention of cancer. *Public Health Nutrition* 2004;7(1A):187-200.
- 3. Kushi LH, Byers T, Doyle C, et al. American Cancer Society Guidelines on Nutrition and Physical Activity for cancer prevention: reducing the risk of cancer with healthy food choices and physical activity. *CA: A Cancer Journal for Clinicians* 2006; 56:254-281.

Prepared by the CWRU Prevention Research Center for Healthy Neighborhoods, July 2014

- 4. Vainio H, Weiderpass E. Fruit and vegetables in cancer prevention. *Nutrition and Cancer* 2006;54(1):111-42.
- 5. Bazzano LA, He J, Ogden LG, et al. Fruit and vegetable intake and risk of cardiovascular disease in US adults: the first National Health and Nutrition Examination Survey Epidemiologic Follow-up Study. *American Journal of Clinical Nutrition* 2002;76(1):93-99.
- 6. He FJ, Nowson CA, MacGregor GA. Fruit and vegetable consumption and stroke: metaanalysis of cohort studies. *Lancet* 2006;367(9507):320-326.
- 7. Rolls BJ, Ello-Martin JA, Tohill BC. What can intervention studies tell us about the relationship between fruit and vegetable consumption and weight management. *Nutrition Reviews* 2004;62(1):1-17.
- 8. He K, Hu FB, Colditz GA, Manson JE, Willett WC, Liu S. Changes in intake of fruits and vegetables in relation to risk of obesity and weight gain among middle- aged women. *International Journal of Obesity* 2004;28:1569-1574.
- 9. Goss J, Grubbs L. Comparative analysis of body mass index, consumption of fruits and vegetables, smoking, and physical activity among Florida residents. *Journal of Community Health Nursing* 2005;22(1):37-46.
- 10. Tahmassebi J, Duggal M, Malik-Kotru G, et al. Soft drinks and dental health: a review of the current literature. *Journal of Dental Research* 2006;34(1):2-11.
- 11. Nielsen SJ, Popkin BS. Changes in beverage intake between 1977 and 2001. *American Journal of Preventive Medicine* 2004;27(3):205-210.
- 12. Reedy J, Krebs-Smith SM. Dietary sources of energy, solid fats, and added sugars among children and adolescents in the United States. *Journal of the American Dietetic Association* 2010;110:1477–84.
- 13. Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. *American Journal of Public Health* 2007;97(4):667-675.
- 14. Malik V, Schulze M, Hu F. Intake of sugar sweetened beverages and weight gain: a systematic review. *American Journal of Public Health* 2007;97(4):667-675.
- 15. Malik VS, Popkin BM, Bray GA, Despres JP, Willett WC, Hu FB. Sugar- sweetened beverages and risk of metabolic syndrome and type 2 diabetes: a meta- analysis. *Diabetes Care* 2010;33:2477–83.
- 16. Marshall T, Gilmore J, Broffitt B, et al. Diet quality in young children is influenced by beverage consumption. *Journal of the American College of Nutrition* 2005;24(1):65-75.

34

- 17. Whiting S, Healey A, Psiuk S, et al. Relationship between carbonated and other low nutrient dense beverages and bone mineral content of adolescents. *Nutrition Research* 2001; 21(8):1107-1115.
- 18. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary Guidelines for Americans 2010*. 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010. Accessed May 16, 2012. Available at http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/Polic yDoc.pdf.
- Clinical Report--Sports Drinks and Energy Drinks for Children and Adolescents: Are They Appropriate? Committee on Nutrition and the Council on Sports Medicine and Fitness. *Pediatrics* 29 May 2011. DOI: 10.1542/peds.2011-0965
- 20. Bernstrin, GA et al. Caffeine effects on learning, performance and anxiety in normal schoolage children. *Journal of the American Academy of Child and Adolescent Psychiatry*. 1994;33(3):407-415
- 21. Australia New Zealand Food Authority. *Report of the Expert Group on the Safety Aspects of Dietary Caffeine*. Canberra, Australia: Australia New Zealand Food Authority; 2000
- 22. Nawrot, P. et al. Effects of caffeine on human health. *Food Additives and Contaminations*, 2003 20(1):1-30
- 23. Savacoa, MR et al. The association of caffeinated beverages with blood pressure in adolescents. *Arch Pediatr Adolesc Med.* 2004;158(5):437-477.
- 24. Bonnet MH et al. The use of stimulants to modify performance during sleep loss: a review by the Sleep Deprivation and Stimulant Task Force of the American Academy of Sleep Medicine. *Sleep*. 2005;28(9):1163-1187
- 25. O'Dea JA. Consumption of nutritional supplements among adolescents: usage and perceived benefits. *Health Educ Res.* 2003;18(1):98-107.
- 26. Institute of Medicine. *Nutrition Standards for Foods in Schools: Leading the Way toward Healthier Youth.* Washington, DC: National Academic Press; 2007.

#### **DIETARY BEHAVIORS – Local Priority**

#### **QUESTION(S):**

64. During the past 7 days, on how many days did you eat food from a fast food restaurant, such as McDonalds, Burger King, Pizza Hut, Taco Bell, Kentucky Fried Chicken, or Subway?

#### **RATIONALE:**

Diet and nutrition have important links to adolescent health and well-being, as well as to major causes of morbidity and mortality later in life. Eating fast food is typically an unhealthy option and increased consumption is closely linked with obesity. (1) Previous longitudinal studies of adolescent health have found that increases in fast-food consumption are associated with increases of BMI. (2) Individuals who eat fast food one or more times per week are at increased risk for weight gain, overweight, and obesity.(3) Children and adolescents who are obese are likely to be obese as adults(3-8) and are therefore more at risk for adult health problems such as heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis(9). One study showed that children who became obese as early as age 2 were more likely to be obese as adults (6).

#### **REFERENCES:**

- 1. Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013.
- 2. Niemeier, HM et al. Fast food consumption and breakfast skipping: predictors of weight gain from adolescence to adulthood in a nationally representative sample. *Journal of Adolescent Health* 2006 Dec;39(6):842-9.
- 3. Dietary Guidelines Advisory Committee. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010, to the Secretary of Agriculture and the Secretary of Health and Human Services. Washington, DC: U.S. Department of Agriculture; 2010.
- 4. Kushi LH, Byers T, Doyle C, Bandera EV, McCullough M, Gansler T et al. American Cancer Society guidelines on nutrition and physical activity for cancer prevention: reducing the risk of cancer with healthy food choices and physical activity. CA: A Cancer Journal for Clinicians 2006;56:254–281.
- 5. Guo SS, Chumlea WC. Tracking of body mass index in children in relation to overweight in adulthood. American Journal of Clinical Nutrition 1999;70:S145–148
- 6. Freedman DS, Kettel L, Serdula MK, Dietz WH, Srinivasan SR, Berenson GS. The relation of childhood BMI to adult adiposity: the Bogalusa Heart Study. Pediatrics2005;115:22–27.
- Freedman D, Wang J, Thornton JC, et al. Classification of body fatness by body mass index-forage categories among children. Archives of Pediatric and Adolescent Medicine 2009;163:801– 811.
- 8. Freedman DS, Khan LK, Dietz WH, Srinivasan SA, Berenson GS. Relationship of childhood obesity to coronary heart disease risk factors in adulthood: the Bogalusa Heart Study. Pediatrics 2001;108:712–718.
- 9. Office of the Surgeon General. The Surgeon General's Vision for a Healthy and Fit Nation. Rockville, MD, U.S. Department of Health and Human Services; 2010.

#### **QUESTION(S):**

65. During the past 7 days, how many meals (breakfast, lunch, or dinner) did you eat with your family?

#### **RATIONALE:**

This question asks students to identify the frequency of shared meals with their families. Young people who have more opportunities to participate meaningfully in the responsibilities and activities of the family are more likely to develop strong bonds to the family. Additionally, those who feel strongly bonded to their family are less likely to engage in substance use or exhibit other problem behaviors. (1) More frequent family dinners relate to fewer emotional and behavioral problems, greater emotional well-being, more trusting and helpful behaviors towards others and self-reports of higher life satisfaction. (2)

#### **REFERENCES:**

- Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013. <a href="http://www.rch.org">http://www.rch.org</a>
- 2. Elgar, Frank. As Quoted: "Family dinners nourish mental health in adolescents". McGill Newsroom; 20 Mar 2013. Web. 20 Sept 2013. www.mcgill.ca/newsroom/channels/news/family-dinners-nourish-mental-health-adolescents-225489

### **PHYSICAL ACTIVITY – National CORE**

#### **QUESTION(S):**

66. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)

67. On an average school day, how many hours do you watch TV?

68. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPod, an iPad, or tablet, a smartphone, YouTube, Facebook or other social networking tools and the Internet.)

69. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)

#### **RATIONALE:**

These questions measure participation in physical activity, and sports teams as well as time spent watching television (TV) and using a computer or playing video games. Participation in regular physical activity among young people can help build and maintain healthy bones and muscles, maintain body weight and reduce body fat, reduce feelings of depression and anxiety, and promote psychological well-being.(1) Over time, regular physical activity decreases the risk of high blood pressure, heart disease, diabetes, obesity, some types of cancer, and premature death.(1) In 2008, the U.S. Department of Health and Human Services recommended that young people ages 6–17 participate in at least 60 minutes of

physical activity daily.(2) In 2011, 29% of high school students were physically active doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on each of the 7 days before the survey.(3) Estimates indicate that less that 25% of children under 14 are active for at least 30 minutes a day, well below the nationally recommended 225 minutes per week.(23) School physical education classes can increase adolescent participation in physical activity (4-8) and help students develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.(4,9)

Watching TV and using a computer are considered sedentary behaviors. Among youth, time spent watching TV is associated with childhood and adult obesity,(10-14) consumption of fast food, soft drinks, and high-fat snacks,(15-20) and consumption of fewer fruits and vegetables.(15, 21,22) Youth who engage in less than two hours of TV viewing per day tend to be more active.(13) Computer usage and video game playing are associated with physical inactivity among adolescents(11) and young adults.(22) Among high school students nationwide in 2011, 31% of students played video or computer games or used a computer for something that was not school work for 3 or more hours per day on an average school day and 32% watched television 3 or more hours per day did not change significantly during 2003–2005 (22%–21%) and then increased during 2005–2011 (21%–31%).(3) During 1999–2011, a significant linear decrease occurred in the percentage of high school students who watched television 3 or more hours per day for 3 or more hours were day did not change significantly during 2003–2005 (22%–21%) and then increased during 2005–2011 (21%–31%).(3) During 1999–2011, a significant linear decrease occurred in the percentage of high school students who watched television 3 or more hours per day (43%–32%).(3)

- 1. Physical Activity Guidelines Advisory Committee. *Physical Activity Guidelines Advisory Committee Report, 2008.* Washington, DC: U.S. Department of Health and Human Services; 2008.
- 2. U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. Washington, DC, U.S. Department of Health and Human Services; 2008. Available at http://www.health.gov/PAguidelines/pdf/paguide.pdf. Accessed June 4, 2012.
- 3. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2011. *MMWR* Surveillance Summary 2012;61(No. SS-4):1-162.
- 4. Trudeau F, Shephard RJ. Contribution of school programmes to physical activity levels and attitudes in children and adults. *Sports Medicine* 2005;35(2):89-105.
- 5. McKenzie TL, Li DL, Derby CA, Webber LS, Luepker RV, Cribb P. Maintenance of effects of the CATCH physical education program: results from the CATCH-ON Study. *Health Education & Behavior* 2003;30:447-462.
- 6. McKenzie TL, Sallis JF, Prochaska JJ, Conway TL, Marshall SJ, Rosengard P. Evaluation of a two-year middle-school physical education intervention: M- SPAN. *Medicine & Science in Sports & Exercise* 2004;36:1382-1388.
- 7. Pate R, Ward DS, Saunders RP, Felton G, Dishman RK, Dowda M. Promotion of physical activity among high school girls: a randomized controlled trial. *American Journal of Public Health* 2005;95:1582-87.

- 8. Gordon-Larsen P, McMurray RG, Popkin BM. Determinants of adolescent physical activity and inactivity patterns. *Pediatrics* 2000;105:83-91. Epub June 1, 2000. Available at http://pediatrics.aappublications.org/content/105/6/e83.abstract. Accessed June 2, 2012.
- 9. Dishman RK, Motl RW, Saunders R, et al. Enjoyment mediates effects of a school-based physical-activity intervention. *Medicine & Science in Sports & Exercise* 2005;37(3):478-487.
- Fulton JE, Wang X, Yore MM, Carlson SA, Galuska DA, Caspersen CJ. Television viewing, computer usage, and BMI among U.S. children and adolescents. *Journal* of Physical Activity and Health 2009;6(Suppl 1): S28-S35.
- 11. Gordon-Larson P, Adair LS, Popkin BM. Ethnic differences in physical activity and inactivity patterns and overweight status. *Obesity Research* 2002;10(3):141-149.
- 12. Kaur H, Choi WS, Mayo MS, Harris KJ. Duration of television watching is associated with increased body mass index. *Journal of Pediatrics* 2003;143(4):506-511.
- 13. Lowry R, Wechsler H, Galuska D, Fulton J, Kann L. Television viewing and its associations with overweight, sedentary lifestyle, and insufficient consumption of fruits and vegetables among US high school students: differences by race, ethnicity, and gender. *Journal of School Health* 2002; 72(10):413-421.
- 14. Utter J, Neumark-Sztainer D, Jeffery R, Story M. Couch potatoes or french fries: are sedentary behaviors associated with body mass index, physical activity, and dietary behaviors among adolescents? *Journal of the American Dietetic Association* 2003;103(10):1298-1305.
- 15. Coon KA, Tucker KL. Television and children's consumption patterns. A review of the literature. *Minerva Pediatrica* 2001; 54:423-36.
- 16. Utter J, Scragg R, Schaaf D. Associations between television viewing and consumption of commonly advertised foods among New Zealand children and young adolescents. *Public Health Nutrition* 2006;9:606-12.
- 17. Matheson DM, Killen JD, Wang Y, Varady A, Robinson TN. Children's food consumption during television viewing. *American Journal of Clinical Nutrition* 2004;79:1088-94.
- 18. Coon KA, Goldberg J, Rogers BL, Tucker KL. Relationships between use of television during meals and children's food consumption patterns. *Pediatrics* 2001;107:E7.
- 19. Salmon J, Campbell KJ, Crawford DA. Television viewing habits associated with obesity risk factors: a survey of Melbourne schoolchildren. *Medical Journal of Australia* 2006;184:64-7.
- 20. Taveras EM, Sandora TJ, Shih M, Ross-Degnan D, Goldmann DA, Gillman MW. The association of television and video viewing with fast food intake by preschool-age children. *Obesity Research* 2006;14:2034-41.

- 21. Boynton-Jarrett R, Thomas T, Peterson K, Wiecha J, Sobol A, Gortmaker S. Impact of television viewing patterns on fruit and vegetable consumption among adolescents. *Pediatrics* 2003;112:1321-6.
- 22. Fotheringham MJ, Wonnacott RL, Owen N. Computer use and physical inactivity in young adults: public health perils and potentials of new information technologies. *Annals of Behavioral Medicine* 2000;22:269-275.
- 23. Burgeson CR, Wechsler H, Brener ND, Young JC, Spain CG. Physical education and activity: results from the School Health Policies and Programs Study 2000. J Sch Health. 2001; 71: 279–293.

#### **OTHER HEALTH-RELATED TOPICS – Local Priority**

#### ASTHMA

#### **QUESTION(S):**

76. Has a doctor or nurse ever told you that you have asthma?

77. During the past 12 months, how many times did you go to an emergency room or urgent care center because of your asthma?

#### **RATIONALE:**

These questions prevalence of reported asthma as well as urgent care utilization related to asthma in the past year. Approximately 10.1 million (14%) U.S. children <18 years have been diagnosed with asthma at some time in their lives (1). In 2004, children made 7 million visits to doctors' offices and hospital outpatient departments, 754,000 visits to hospital emergency departments, and had 198,000 hospitalizations due to asthma (2). In 2003, an estimated 12.8 million school days were lost due to asthma among school-aged children (2). Among high school students nationwide in 2011, 23% had ever been told by a doctor or nurse that they ever had asthma (3). During 2003–2011, the percentage of high school students nationwide who ever had asthma increased (19%–23%). (3) Additionally, the Summit County YRBS Coalition requested that Asthma questions be included given the lack of the comparable asthma data available.

- 1. National Center for Environmental Health. 2010 Lifetime and Current Asthma Population Estimates and Prevalence Tables. National Health Interview Survey Data Web site. Available at http://www.cdc.gov/asthma/nhis/2010/data.htm. Accessed May 23, 2012.
- 2. Akinbami, Lara. Asthma Prevalence, Health Care Use, and Mortality, 2003-2005. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and

Prevention, National Center for Health Statistics; 2007. Available at http://www.cdc.gov/nchs/data/hestat/asthma03-05/asthma03-05.htm. Accessed June 4, 2013

3. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance – United States, 2011. MMWR Surveillance Summary 2012;61(No. SS-4):1-162.

#### ABSENTEEISM

#### **QUESTION(S):**

78. During the past 30 days, on how many days did you not go to school because you were sick?

79. During the past 30 days, on how many days did you miss a class or school without permission (i.e. skipped or "cut")?

#### **RATIONALE:**

These questions ask students to identify the frequency of absenteeism due to illness as well as truancy over the past thirty days. Absenteeism is associated with a variety of socioeconomic and physical and mental health issues. Identified risk factors include homelessness, teenage pregnancy, school violence and victimization, and parental involvement.(1) Absenteeism a key risk factor for suicide attempt, unsafe sexual behavior, teenage pregnancy, violence, unintentional injury, driving under the influence of alcohol, and tobacco and substance use.(2-6) Chronic absenteeism is associated as well with school dropout,(7) economic deprivation, and marital, social, and psychiatric problems in adulthood.(8)

- 1. Kearney, CA. School Absenteeism and school refusal behavior in youth: A contemporary review. *Clinical Psychology Review:* 28.3(2008). 451-471.
- 2. Chou, L.-C. C.-Y. Ho, C.-Y. Chen, W.J. Chen. Truancy and illicit drug use among adolescents surveyed via street outreach Addictive Behaviors, 31 (2006), pp. 149–154
- 3. Denny, S.J., T.C. Clark, P.D. Watson. Comparison of health-risk behaviours among students in alternative high schools from New Zealand and the USA
- 4. Guttmacher, S. B.C. Weitzman, F. Kapadia, S.L. Weinberg. Classroom-based surveys of adolescent risk-taking behaviors: Reducing the bias of absenteeism. American Journal of Public Health, 92 (2002), pp. 235–237
- 5. Hallfors, D. J.L. Vevea, B. Iritani, H. Cho, S. Khatapoush, L. Saxe. Truancy, grade point average, and sexual activity: A meta-analysis of risk indicators for youth substance use. Journal of School Health, 72 (2002), pp. 205–21
- 6. K.L. Henry, D.H. Huizinga. Truancy's effect on the onset of drug use among urban adolescents placed at risk. Journal of Adolescent Health, 40 (2007), pp. 358.e9–358.e17
- Kogan, S.M. Z. Luo, V.M. Murry, G.H. Brody. Risk and protective factors for substance use among African American high school dropouts. Psychology of Addictive Behaviors, 19 (2005), pp. 382–391

8. US Census Bureau. Educational attainment in the United States: 2004. Washington DC (2005)

#### PREVENTATIVE HEALTHCARE

#### **QUESTION(S):**

80. When was the last time you saw a doctor or nurse for a check-up or physical exam when you were not sick or injured?

#### **RATIONALE:**

This question asks students about seeing a doctor for a check-up and general assessment of health. Nationwide, adolescents have the lowest utilization rate of health care services of any age group. Barriers to care include cost of care; low family income; stigma; distrust; confidentiality and parental consent; lack of medical insurance; embarrassment about and lack of transportation to reproductive health services; lack of knowledge about where or how to access care; and lack of adolescent-friendly services.1

#### **REFERENCES:**

1. Association of State and Territorial Health Officials. Adolescent and School Health Fact Sheet. Association of State and Territorial Health Officials Web site. Available at http://www.astho.org/index.php?template=access.html. Accessed July 24, 2008.

#### **QUESTION(S):**

81. When was the last time you saw a dentist for a checkup, exam, teeth cleaning, or other routine dental work (not for an emergency)?

#### **RATIONALE:**

This questions asked students about seeing a dentist for a check-up and general assessment of oral health. It is estimated that nearly 50% of children and adolescents do not receive appropriate preventative oral health care, as defined by the American Academy of Pediatric Dentistry. (1) Additionally, tooth decay (dental caries) affects children in the United States more than any other chronic infectious disease. Untreated tooth decay causes pain and infections that may lead to problems with eating, speaking, playing, and learning. (2) While many children and adolescents will receive emergency treatment for issues related to oral health, preventive visits can eliminate procedures and spending associated with emergency care. (3)

42

- 1. Yu, SM. Factors That Influence Receipt of Recommended Preventive Pediatric Health and Dental Care. Pediatrics: 110.6 Dec 1, 2002(e73)
- 2. Children's Oral Health; Centers for Disease Control and Prevention Division of Oral Health Oral Health Home: 10 Sept 2013
- 3. Watson, MR. et al. The impact of income on children's and adolescents' preventive dental visits. The Journal of the American Dental Association; 132, November 2001(1580-1587)

#### **QUESTION(S):**

82. When was the last time you saw a doctor, nurse, therapist, social worker, or counselor for a mental health problem?

#### **RATIONALE:**

This question asks students about seeing a doctor, nurse, therapist, social worker or counselor for an issue related to their mental health. Mental health is important to overall health. Mental disorders are chronic health conditions that can continue through the lifespan. Without early diagnosis and treatment, children with mental disorders can have problems at home, in school, and in forming friendships. This can also interfere with their healthy development, and these problems can continue into adulthood (1).

Children's mental disorders affect many children and families. Boys and girls of all ages, ethnic/racial backgrounds, and regions of the United States experience mental disorders. Based on the National Research Council and Institute of Medicine report that gathered findings from previous studies, it is estimated that 13 –20 percent of children living in the United States (up to 1 out of 5 children) experience a mental disorder in a given year and an estimated \$247 billion is spent each year on childhood mental disorders (2). Because of the impact on children, families, and communities, children's mental disorders are an important public health issue in the United States (1).

#### **REFERENCES:**

- 1. Children's Mental Health New Report. Centers for Disease Control and Prevention: CDC Features; 16 May 2013. http://www.cdc.gov/features/childrensmentalhealth/
- 2. National Research Council and Institute of Medicine. Preventing mental, emotional, and behavioral disorders among young people: progress and possibilities. Washington, DC: The National Academic Press; 2009.

#### **POSITIVE YOUTH DEVELOPMENT – Local Priority**

#### **QUESTION(S):**

75. On an average school night, how many hours of sleep do you get?

#### **RATIONALE:**

This question measures the number of hours of sleep students estimate they get on an average school night. Sleep is an important dimension to adolescent health. Most adolescents need slightly more than 9 hours of sleep each night, although this varies slightly among individuals.(1) Adolescents who consistently get less than 8 hours of sleep lose the last two hours of sleep, which are the most important learning processes, such as storing new information.(2) Sleep deprivation can affect school performance through lower grades, decreased alertness and concentration, and an increase in anger, impulsivity, and sadness.(3)

#### **REFERENCES:**

- 1. Wolson, A., Carskadon, M. 1998. Sleep schedules and daytime functioning in adolescents. Soc Res Child Dev
- 8. Smith, C., Lapp, L. 1991. Increases in the number of REMS and REM density in humans following an intensive learning period. Sleep. 14:325-330.
- 9. Noland, H., Price, J., Dake, J., Telljohann, S. 2009. Adolescents' sleep behaviors and perceptions of sleep. Journal of School Health. 79(5): 224-230.

#### **QUESTION(S):**

83. Besides your parents, how many adults would you feel comfortable seeking help from if you had an important issue or question affecting your life?

84. How many of your friends would you trust to offer you good advice if you had a really important secret or problem affecting your life?

#### **RATIONALE:**

These questions asked the student about the number of trusted adults that students felt they have, as well as the number of trusted friends. Over time it has been determined that promoting positive asset building and considering young people as resources could be critical strategies. As a result, the field of youth development began examining the role of protective factors in a young person's environment and how these factors could influence one's choices.(1) Protective factors include, but are not limited to: family support, caring adults, positive peer groups, strong sense of self and self-esteem, and engagement in school and community activities.

#### **REFERENCES:**

1. Positive Youth Development. 2010. Web Site http://www.findyouthinfo.gov/topic\_pyd.shtml. Accessed on September 20, 2010.

#### **QUESTION(S):**

85. How often does one of your parents or guardians ask about what you are doing in school?

#### **RATIONALE:**

Adolescents from households with "authoritative parenting" (meaning that the parents are **consistently involved** in their lives, and have a warm but firm relationship with their children) show consistent advantages in their psychosocial development and mental health. (1) This question addresses the issue of parental monitoring(1) Research has shown that high levels of parental monitoring are associated with less engagement in risk behaviors such as alcohol use, tobacco use, and sexual intercourse.(2) For males and females, increased negotiation is associated with increased risk behavior and sexrelated protective factors (i.e. condom use). Trust established between females and their parents continue to be a strong deterrent for risky behaviors but appear to have little effect on behaviors of males.(1)

#### **REFERENCES:**

- 1. Steinberg, L. "We know some things: Parent-adolescent relationships in retrospect and prospect." *Journal of Research on Adolescence*. 2001. 11(1), 1-19.
- 2. Dishion TJ, McMahon RJ. Parental monitoring and prevention of child and adolescent problem behavior: A conceptual and empirical formulation. *Clinical Child and Family Psychology Review*. 1998; 1:61-75.
- 3. Borawski EA, Ievers-Landis CE, Lovegreen LD, Trapl ES. Parental monitoring, negotiated unsupervised time, and parental trust: The role of perceived parenting practices in adolescent health risk behaviors. *Journal of Adolescent Health*. 2003; 33(2):60-70.

#### **QUESTION(S):**

86. On how many of the past 7 days did you take part in an organized after school, evening, or weekend activities (other than sports teams) such as school clubs, community center groups, music/art/dance lessons, drama, church, or other supervised activities?

**RATIONALE:** This question seeks to assess the frequency of participation in positive activities in the students' community. When opportunities for positive participation are available in a community, children are more likely to become bonded to the community. (1) Evidence suggests that participation and recognition for positive participation in community activities both act as protective factors and lowers adolescents' risk for problem behaviors, such as the use of tobacco, alcohol and marijuana. (1,2)

- Toumbourou, John. "The Communities That Care Youth Survey." Communities That Care, Ltd., 26 Mar 2010. Web. 18 Sep 2013. <a href="http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf">http://www.rch.org.au/uploadedFiles/Main/Content/ctc/Communities\_That\_Care\_Youth\_Survey.pdf</a>>.
- 2. Steinberg L. Adolescent Transitions and Alcohol other Drug Use Prevention. Washington, DC. US Dept of Health and Human Services publication ADM91-1725; 1991:13-51

# Summit County Youth Risk Behavior Survey

### Middle School, High School Comparisons by Cluster

Prepared by: Prevention Research Center for Healthy Neighborhoods (PRCHN) Department of Epidemiology and Biostatistics Case Western Reserve University 11000 Cedar Ave., 4thfloor Cleveland, OH 44106-7069



# With whom do you live?





# With whom do you live?



### Behaviors that Contribute to Unintentional Injury





East Akron

West Akron

North Suburbs

South Suburbs

US, 2013 OH, 2013

Summit. 2013

at Case Western Reserve University

### Behaviors that Contribute to Unintentional Injury







### Behaviors that Contribute to Unintentional Injury







#### Found it easy to get a handgun 50% 37.8% 32.6% 40% 30.9% 29.9% 26.3% 30% 17.5% 16.4% 15.2% 15.5% 13.2% 20% 10% 0% HS MS HS HS MS HS MS MS MS HS Summit, 2013 East Akron West Akron North Suburbs South Suburbs





























at Case Western Reserve University







#### Students perceive parents believe tobacco use is very wrong



















### Marijuana Use





at Case Western Reserve University
### Marijuana Use



#### Students perceive parents believe marijuana use is very wrong





Prevention Research Center at Case Western Reserve University



















Prevention Research Center at Case Western Reserve University

















at Case Western Reserve University













Prevention Research Center at Case Western Reserve University

#### Obesity, Overweight & Weight Control



#### Obesity, Overweight & Weight Control



at Case Western Reserve University

#### **Dietary Behaviors**





## **Physical Activity**





Prevention Research Center at Case Western Reserve University

## **Physical Activity**



at Case Western Reserve University

## **Physical Activity**





### **Other Health-Related Items**



Saw a doctor or nurse for check-up



## **Other Health-Related Items**





## **Other Health Related Behaviors**







Prevention Research Center at Case Western Reserve University

## **Positive Youth Development**







Prevention Research Center at Case Western Reserve University

## Summit County Youth Risk Behavior Survey

#### Prevalence by Grade, 7 - 12

Prepared by:

Prevention Research Center for Healthy Neighborhoods (PRCHN)

Department of Epidemiology and Biostatistics

Case Western Reserve University

11000 Cedar Ave., 4thfloor Cleveland, OH 44106-7069



at Case Western Reserve University

## Behaviors that Contribute to Unintentional Injuries



7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade

#### Rode with a driver who had been drinking alcohol







### Behaviors that Contribute to Unintentional Injuries





50%





#### 40% 36.6% 30% 28.7% 28.7% 31.2% 28.7% 11.6% 11.6% 10% 7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade



Found it easy to get a handgun

#### Did not go to school because of safety concerns 50% 40% 30% 20% 8.5% 8.2% 10% 7.7% 7.5% 10% 5.9% 5.9% 0% 0% 7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade

50% 40% 33.5% 30% 27.5% 26.7% 24.2% 21.3%

7th Grade

Prevention Research Center at Case Western Reserve University

In a physical fight

8th Grade 9th Grade 10th Grade 11th Grade 12th Grade



#### Bullied on school property



#### Bullied away from school property







#### Felt sad or hopeless

30.4%

28.0%

29.3%

Prevention Research Center at Case Western Reserve University

Seriously considered attempting suicide











at Case Western Reserve University

#### **Attempted suicide**

#### Tobacco Use



#### Tobacco Use



#### Tobacco Use



Someone gave tobacco to them

#### Student perception of parents' belief that tobacco use is very wrong




### Alcohol Use

**Current alcohol use** 

#### **Ever drank alcohol**



### Alcohol Use





### Student perception of parents' belief that alcohol use is very wrong





### Marijuana Use

Ever used marijuana







Current marijuana use

### Marijuana use

Student perception of parents' belief that marijuana use is very wrong



## Other Drug Use



## Other Drug Use



# Other Drug Use

#### Ever took prescription pain medication without a doctor's prescription





#### Offered, sold or given an illegal drug on school property





at Case Western Reserve University

# Gambling



# Sexual Behaviors that Contribute to Unintended Pregnancy and STD's

Condom Use

#### Ever had sexual intercourse



# Sexual Behaviors that Contribute to STD's, including HIV Infection

#### Were taught in school about AIDS or HIV infection



#### Talked about AIDS or HIV infection with parents or other adults in their family



7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade



### Obesity, Overweight and Weight Control

**Obese and Overweight** 



### Obesity, Overweight and Weight Control

#### **Described themselves as overweight**



#### Were trying to lose weight





### **Dietary Behaviors**

100% 90% 80% 70.0% 67.7% 66.9% 70% 64.7% 63.5% 56.4% 60% 50% 40% 30% 20% 10% 0% 7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade

#### Did not eat breakfast every day

#### Ate fast food one or more times/week





### **Dietary Behaviors**

Had at least one meal with



# **Physical Activity**

Prevention Research

at Case Western Reserve University

#### Physically active at least 60 minutes per day on 5 or more days/week



#### Did not participate in at least 60 or more minutes of physical activity on any day/week



7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade

Center

### **Physical Activity**

50%



Watched television 3 or more

#### Used computers 3 or more hours/day



7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade



Prevention Research Center at Case Western Reserve University



#### Saw a doctor or nurse for a routine check-up

Saw a dentist for a routine check-up









#### Ever been to the emergency room or urgent care because of asthma



at Case Western Reserve University



Missed school because they were

#### Missed class or school without permission





at Case Western Reserve University

### Positive Youth Development

Prevention Research Center at Case Western Reserve University

#### 100% 90% 80% 70% 58.0% 57.5% 57.4% 56.2% 55.7% 60% 52.7% 50% 40% 30% 20% 10% 0% 7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade

Spent at least one day in clubs or

organizations outside of school

#### Parents talk with student almost every day about school



7th Grade 8th Grade 9th Grade 10th Grade 11th Grade 12th Grade

### **Positive Youth Development**

Prevention Research Center at Case Western Reserve University



#### One or more supportive adults



#### One or more trusted friends

### **Positive Youth Development**

#### Eight or more hours of sleep

