

Population Health Vital Statistics Brief:

Drug Overdoses, YTD July 2021

The *Population Health Vital Statistics Data Brief* series was created to provide regular updates to the 2016 Community Health Assessment and to provide the community with additional important information about population health. For more information on the Community Health Assessment and to access other reports in the *Vital Statistics Data Brief* series, please visit scph.org/assessments-reports

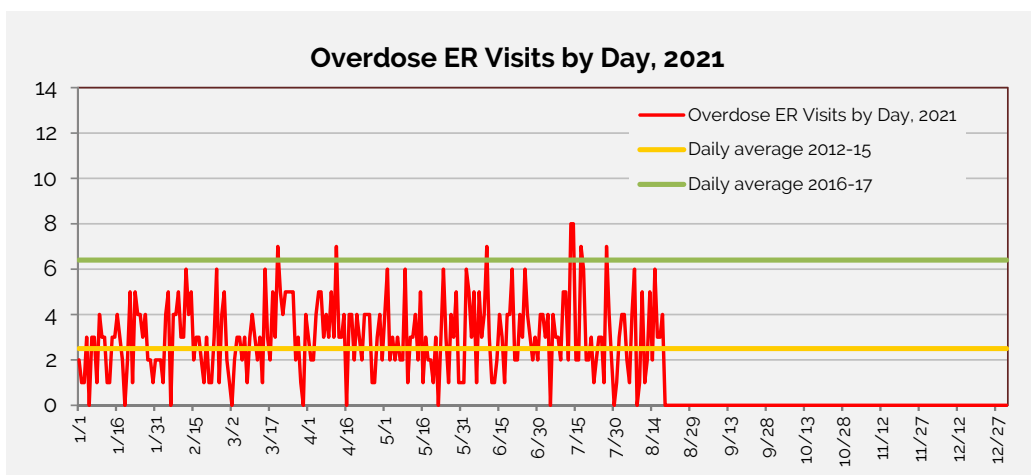


Summit County Public Health Population Health Division
1867 W. Market St., Akron, Ohio 44313 (330) 923-4891
www.scphoh.org

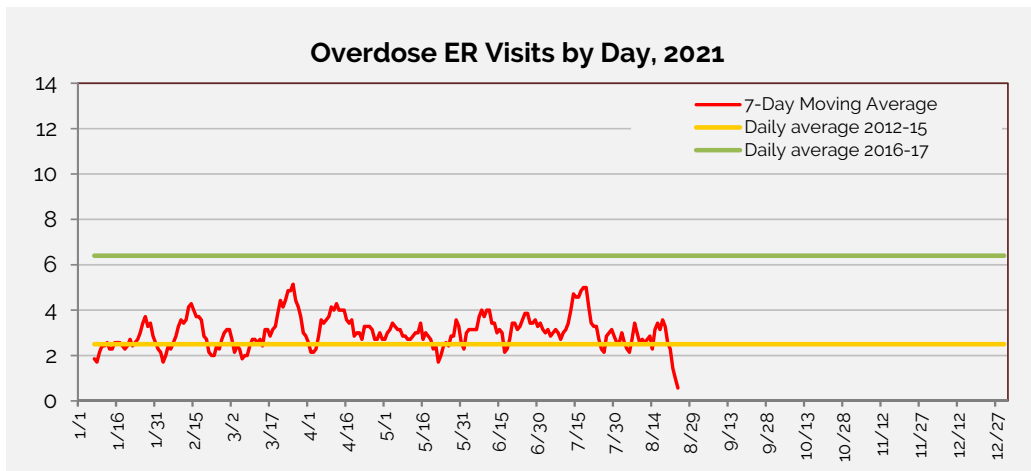
Drug Overdose Visits to Hospital Emergency Rooms

From January 1, 2021 to July 31, 2021, emergency rooms serving Summit County residents have treated an estimated 642 drug overdoses (OD); a 7-day average of 2.6 overdoses per day. as of 7/31* Overdoses in 2021 have fluctuated in a relatively narrow range (between 2.0 and 4.0 per day) throughout the year to date, and are currently just above the 2.5 per day average of the 2012-2015 pre-Carfentanyl period. After hitting a low of 1.7 per day in early January, the 7-day moving average rose through January, then settled into a pattern of fluctuating around about 3 cases per day.

Multiple OD visits (more than one visit to an ER in the same hospital system) -- A total of 25 people visiting an ER for an overdose in 2021 made more than one visit (3.6% of the total).



* Drug overdose data is retrieved from the state's EpiCenter surveillance tool. "Overdose" cases include all emergency visits by a Summit County resident to any medical provider in which drugs were identified as the cause of traumatic injury. Overdose cases were further refined by selecting only those cases where the case notes included the terms "OD" or "overdose." Traumatic injuries due to drugs caused by suicide attempts, allergic reactions to normal medications, or accidental overdoses of everyday drugs (such as Tylenol or Ibuprofen) were removed where identified. Zip codes refer to the zip code of residence of the patient visiting the ER. Data cited in this report represents the full-day totals from the day before the report's release.



It is important to note that these are estimated figures rather than a full and final count because initial diagnoses and/or details of a particular case may change from a patient's initial examination to his or her final outcomes, and because the limited case notes field in EpiCenter may not include all details necessary to firmly classify a case as an overdose.

It is also important to note that case notes available through EpiCenter rarely identify the specific drug or drugs involved in an overdose. Therefore the figures here can be associated with any drug, not just heroin and/or fentanyl.

Figure 1a and 1b: Visits to the ER Due To Drug Overdoses By Day (top figure) and By Seven-Day Moving Average (bottom figure) -- Note: Because day-to-day total ER visits tend to fluctuate, a seven-day simple moving average chart is included to more clearly examine trends in the data. *Source: EpiCenter*

QR code link to SCPH Drug Dashboards



Demographic and Geographic Profile of Overdoses, YTD 2021

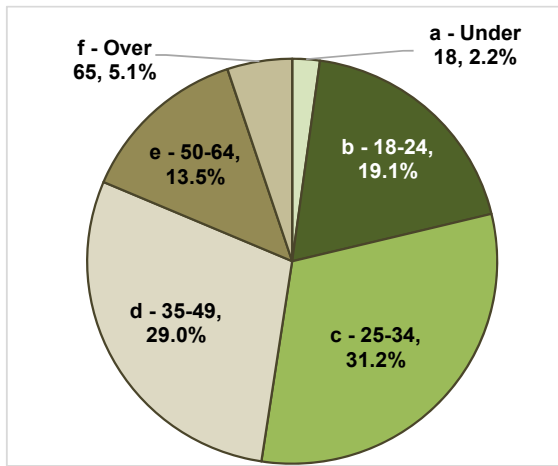


Figure 3 Age of ER Visitors. Source: EpiCenter/SCPH

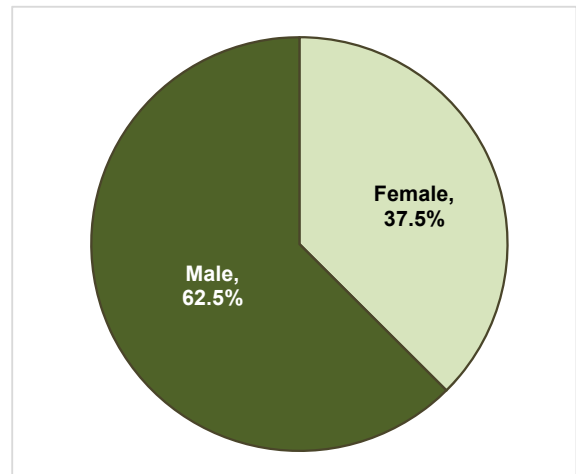


Figure 4: Sex of ER Visitors. Source: EpiCenter/SCPH

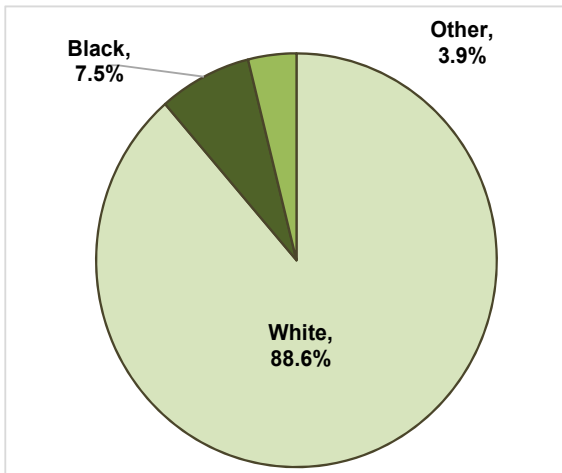


Figure 5: Race of ER Visitors. Source: EpiCenter/SCPH

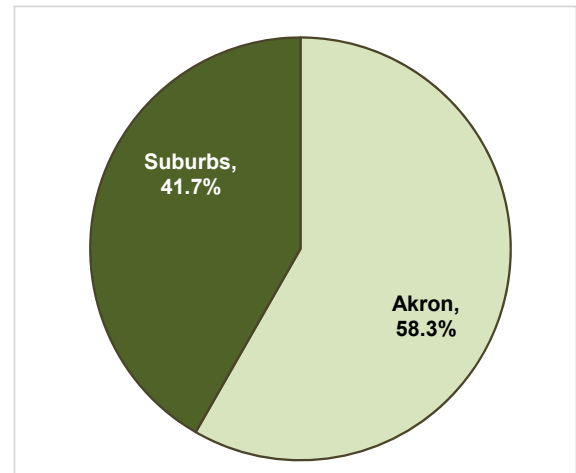


Figure 6: Location of ER Visitors. Source: EpiCenter/SCPH

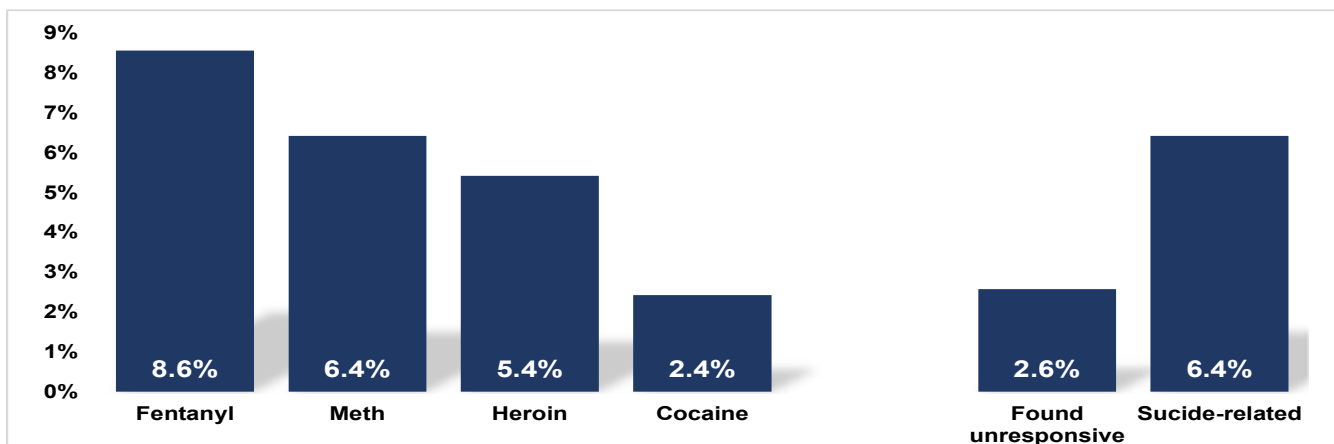


Figure 7: Specific Situations / Conditions of ER Visitors Mentioned In Case Notes. Source: EpiCenter/SCPH

Number and Percent of Overdoses by Zip Code, January 1 - December 31, 2021

Zip Code	YTD 2021	Trend
44203	67	
44306	60	
44311	55	
44314	53	
44312	43	
44221	38	
44305	37	
44310	36	
44320	36	
44224	27	
44319	27	
44301	24	
44685	24	
44307	19	
44067	17	
44223	16	
44278	14	
44313	13	
44087	12	
44302	11	
44056	10	
Total	698	

Figure 8a: Number and Percent of ER Visits Due to Drug Overdoses, YTD 2021

Source: EpiCenter and SCPH. Note: Specific figures for zip codes with fewer than 10 overdoses are not shown to preserve confidentiality.

Emergency Room Visits Due to Drug Overdose, Summit County by Home Zip Code of Patient, All Summit County Provider Types, As Of August, 2021

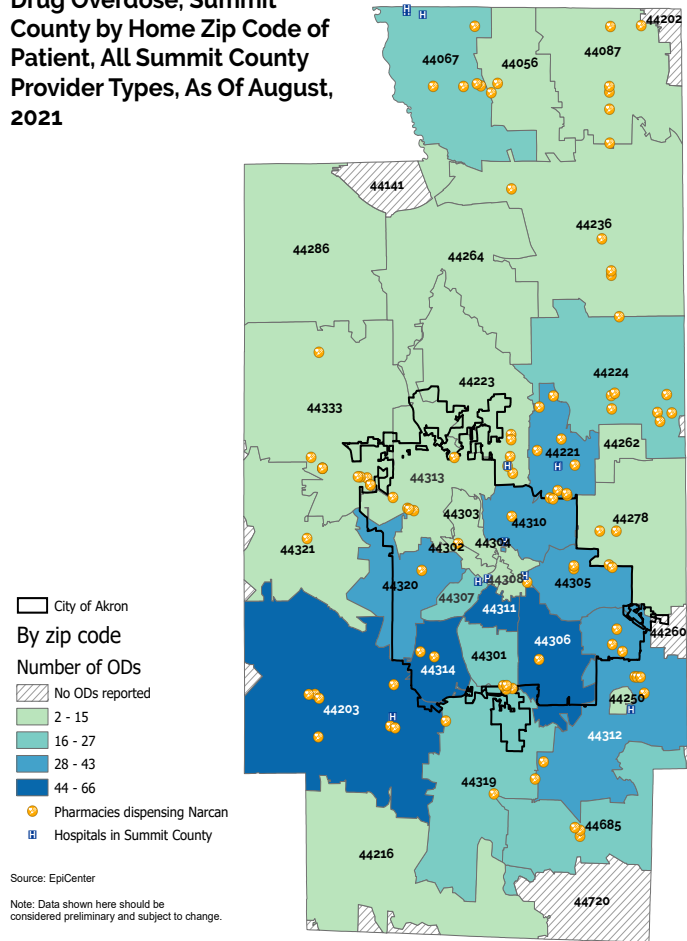
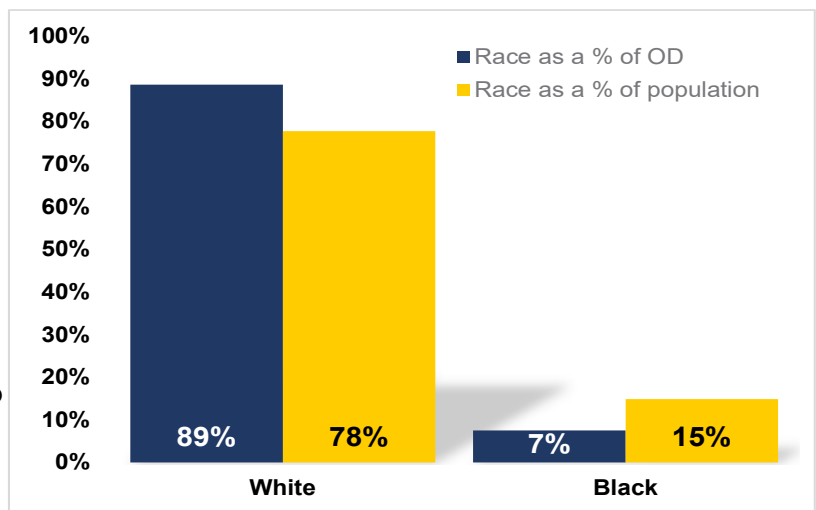


Figure 8b: Number and Percent of ER Visits Due to Drug Overdoses, YTD 2021

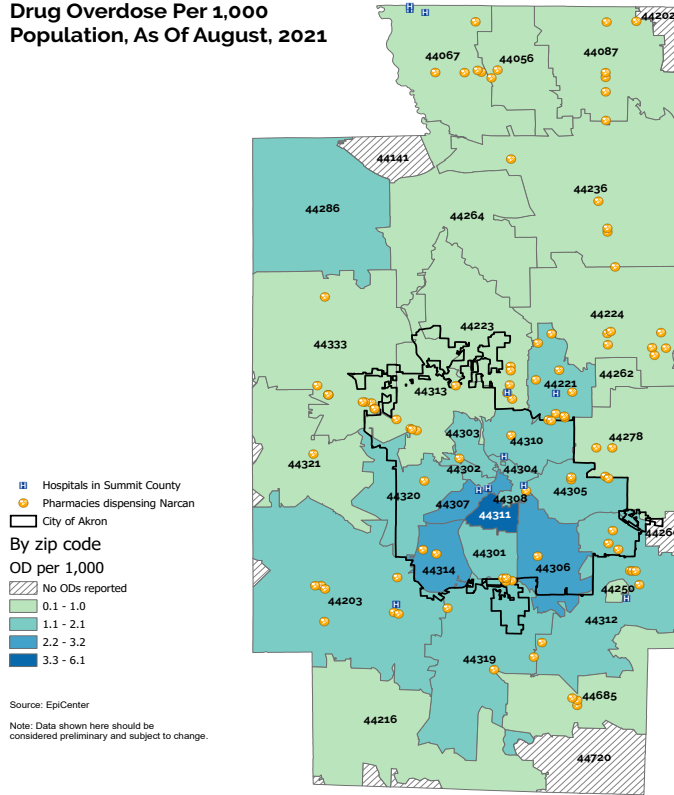
Source: EpiCenter/SCPH.

Figure 8c: Racial Distribution of Drug Overdoses, YTD 2021

Source: EpiCenter/SCPH.



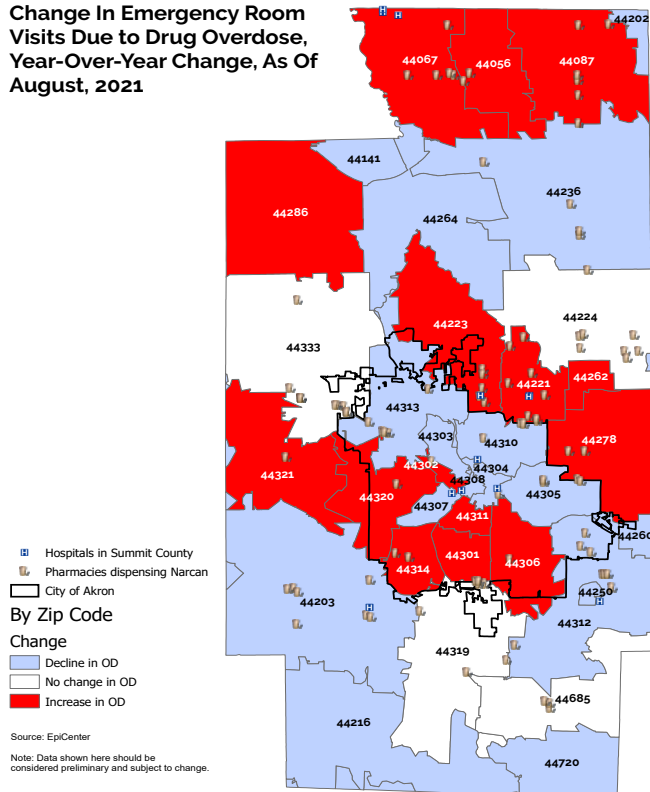
Emergency Room Visits Due to Drug Overdose Per 1,000 Population, As Of August, 2021



Overdoses Per 1,000 by Zip Code - Figure 9 shows the number of overdoses per 1,000 population by zip code. The heaviest concentration of overdoses per 1,000 population remain in zip codes in the central and southeast portions of the county.

Figure 9: Drug Overdoses Per 1,000 Population, YTD 2021
Source: EpiCenter, U.S. Census Bureau, Ohio Pharmacy Board (Narc)

Change In Emergency Room Visits Due to Drug Overdose, Year-Over-Year Change, As Of August, 2021



Change In Overdoses by Zip Code - Figure 10 shows the change in overdoses by patient zip code on a year-over-year basis, comparing totals for Year-To-Date 2019 with totals for Year-To-Date 2020. Nineteen zip codes have shown year-over-year increases as of July 2021, while the rest have either shown no change or have improved. So far, zip code 44306 has had the largest increase (19 more ODs than this time last year), while 44305 has had the largest decrease (11 fewer ODs than this time last year).

Figure 10: Change in Number of Overdoses, YTD 2020 to YTD 2021
Source: EpiCenter

Drug Use Among Teens

Since 2013, Summit County Public Health and the Summit County ADM Board have collaborated to conduct an expanded Youth Risk Behavior Survey (YRBS) in Summit County. The YRBS, which was conducted in 2013 and again in 2018, was administered by the Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University. The survey focused on both middle school (grades 7-8) and high school students (grades 9-12).

Alcohol and other substance abuse is one of the major focal points of the YRBS. The issue of teen use and abuse of substances is especially important because the teen years are often the time when patterns of abuse begin to develop.

Figures 11 and 12 below show the percentage of both middle and high school students who have ever used each of the substances mentioned. Nearly one-in-four middle school students used alcohol at least once in 2013; a figure which fell to just 16% by 2018. The same pattern holds for each of the substances students were asked about (Figure 11). All of the decreases were statistically significant. Only the use of synthetic drugs remained unchanged at about 2%.

Figure 12 presents the same data for high school students. Like middle schoolers, self-reported substance abuse among high school students fell significantly for all substances students were asked about. Though all the declines are good news, the drop in the percent of students who report using prescription pain relievers without a prescription may be the most important. The percent who say they ever used prescription pain killers fell from 16% to just 6% between 2013 and 2018.

For many, the pathway to addiction begins with the abuse of prescription opioids. A decline in the abuse of these drugs among middle and high school students means significantly fewer teens are at risk of becoming trapped in the deadly cycle of opiate addiction as they get older.

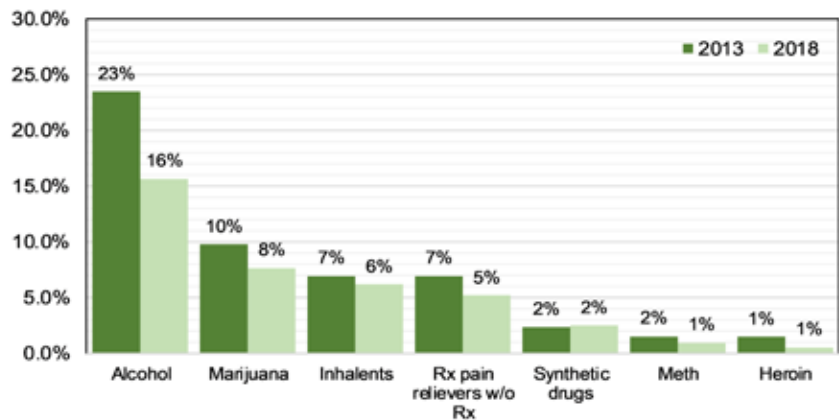


Figure 11: Percent of Middle School Students Ever Using Each Substance, Summit County, 2013 & 2018

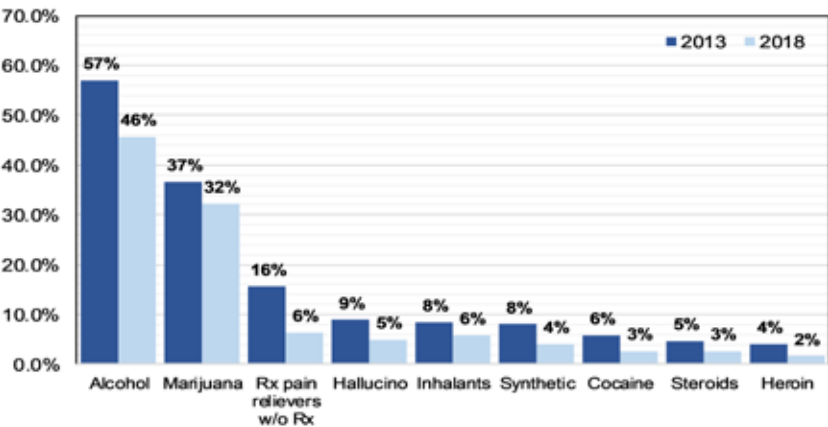


Figure 12: Percent of High School Students Ever Using Each Substance, Summit County, 2013 & 2018

Trends In Substance Abuse, Akron-Canton Region

Table 15 below presents data from "Surveillance of Drug Abuse Trends in the State of Ohio, June 2019 - January 2020" published by the *Ohio Substance Abuse Monitoring Network (OSAM)*. The data in this report highlights emerging trends in the previous six month period and provides some insight on how those trends impact today's overdose picture. The report relies primarily on input by focus groups made up of drug users, community professionals, service providers, and law enforcement. The report's primary conclusions can be found below:

"Crack cocaine, fentanyl, heroin, marijuana, methamphetamine, Neurontin® (gabapentin), powdered cocaine, sedative-hypnotics and Suboxone® (buprenorphine) remain highly available in the Akron-Canton region."

"Changes in availability during the past six months include: increased availability for methamphetamine; likely increased availability for fentanyl and marijuana; and decreased availability for prescription opioids and prescription stimulants."

"In addition to reporting current high availability of marijuana, participants and community professionals reported current high availability of high-grade marijuana extracts and concentrates (aka "dabs"), particularly noting the current high availability of cannabis vape cartridges."

"Respondents discussed the ease of masking marijuana use by using cartridges containing THC in vaporizers (vape pens or e-cigarettes), noting that no odor is emitted. A law enforcement officer remarked, "Those cartridges are everywhere, thousands of them."

Ohio Substance Abuse Monitoring Network (OSAM) Drug Assessment Summary, June 2019 - January 2020, Akron-Canton Region (Summit, Portage, Stark, Tuscarawas, and Carroll Counties)

Akron-Canton Region	Current Availability ²			Quality ³	Price per gram	Change in Availability		
	Users	Law Enforcement	Treatment Providers	Users		Users	Law Enforcement	Treatment Providers
Powdered cocaine	10	10	6	5	\$25 - \$80	No change	No change	No change
Crack cocaine	10	4	7	5	\$30 - \$100	No change	No change	No change
Heroin ^{1, 4}	10	3 (just heroin)	2 (just heroin)	10	\$60 - \$140	↓	No change	↓
Fentanyl / carfentanil ⁷	10	10	10	10	\$80 - \$100	↑	No change	No change
Prescription opioids	3	8	4-5	-- ⁵	Varies ⁸	↓	↓	↓
Suboxone	10	2	7	-- ⁵	Varies ⁸	↑	No change	↓
Sedative-Hypnotics	10	2-3	5	-- ⁵	Varies ⁸	↓	↑	↓
Marijuana	10	10	10	-- ⁶	\$10-\$60 (for extracts)	↑	↑	↑
Methamphetamine	10	10	10	10	\$10 - \$30	↑	↑	↑
Prescription stimulants	7	6	4-6	-- ⁵	Varies ⁸	No change	No change	No change
Ecstasy / Molly	5 (Molly) / 5 (Ecstasy)	Not rated	2 (Molly) / 5 (Ecstasy)	8 (Molly) / 7-8 (Ecstasy)	\$60-80 (Molly) / \$25 (Ecstasy)	↑	No change	No change

¹ Users, treatment providers, and law enforcement all report that unadulterated heroin is rarely seen in the region; "heroin" is composed of mostly or entirely fentanyl or one of its analogs. In fact, heroin is sometimes used to reduce the potency of fentanyl.

² *Current availability* is rated by users on a 0 to 10 scale, where 0 means "impossible to get" and 10 means "easy to get"

³ *Quality* is rated by users on a 0 to 10 scale, where 0 means "poor quality" and 10 means "high quality"

⁴ Participants (drug users and former users) report that quality was going down even though what's being sold is mostly fentanyl. According to those in OSAM focus groups, dealers were deliberately reducing quality both to make more money and to reduce the chances of being charged with murder if users die. Some dealers are reported to be mixing meth into heroin to reduce the odds of an overdose. Evidence suggests that users are also switching from heroin to meth to reduce the chances of dying of an overdose.

⁵ The quality of prescription medications remain the same as when they were dispensed in the case of dealers simply selling legitimate products illegally. Users of illegally-obtained prescription medications have no idea what substances they might contain, or how powerful the resulting drug might be.

⁶ Quality varies by type of product (i.e., marijuana vs. an extract or concentrate).

⁷ Fentanyl and carfentanil are not often found in pure form, though law enforcement does report that some users seek out pure fentanyl. These substances are most often used to increase the power and addictiveness of other drugs rather than sold on their own.

⁸ Prices vary widely depending on the drug. For example, the price of Dilaudid is about \$15-20 for an 8 mg pill, \$50 for 100 mg of morphine, \$15-20 for 10 mg of Percocet, or \$12 for 20 mg Oxycontin pill. The latest Drug Trends report shows a rough estimate of cost at about \$1-\$2 per milligram.

Trends In Overdose Deaths

Total overdose deaths rose sharply from 2013 to 2016, then began a rapid decline in 2018 (see Figure 16a). Opiates such as heroin, fentanyl, and carfentanil drove the sharp increases over the past several years. However, the mix of drugs driving overdoses today appears to be changing.

Figures 16b and 16c show selected drugs that have been included on the death certificates of drug poisoning victims over the past several years. From 2012-2021, 1,182 people who died of drug poisoning had a prescription opiate mentioned on their death certificate. A total of 1,085 had either fentanyl or a fentanyl analog mentioned, while 343 mentioned carfentanil from 2016 to 2021.

Figure 16c shows trends in the drugs contributing to the overdose epidemic. Since 2014, prescription opiates and fentanyl have been the most common substances, with each drug being found in three quarters or more of overdose victims. As a percentage of total overdoses, all but one drug peaked or leveled off in 2017 or before; prescription opiates and fentanyl peaked in 2016; carfentanil and cocaine peaked in 2017. Heroin peaked in 2013 (included on 40% of death certificates) then dropped to only 3% by 2020.

The one drug that has shown a sustained increase since 2014 is methamphetamine (though it leveled off since 2020). From 2012-15, Summit County averaged 3 deaths per year involving methamphetamine. Between 2016 and 2019, the county averaged nearly 35 deaths involving methamphetamine annually. Methamphetamine was mentioned on 43% of all drug poisoning-related death certificates in 2019; nearly as high as heroin at it's peak and 10 percentage points higher than carfentanil. Deaths involving fentanyl and prescription opiates appear to have increased from 2019-2021.

* The ODH death certificate data for 2020-2021 are incomplete. Summit County Medical Examiner's Office data currently show a total of 216 overdose deaths in 2020 and 97 so far in 2021.

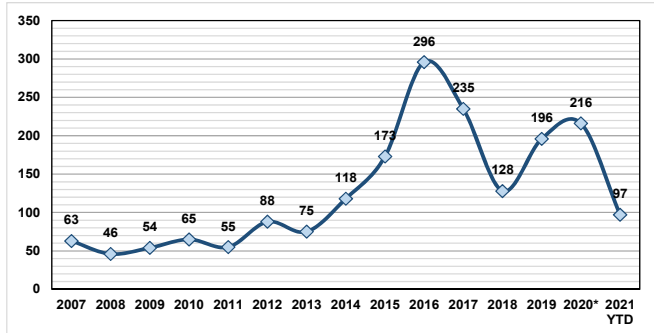


Figure 16a: Drug Overdose Deaths, 2007-2021 YTD, Source: ODH Death Records, SCPH

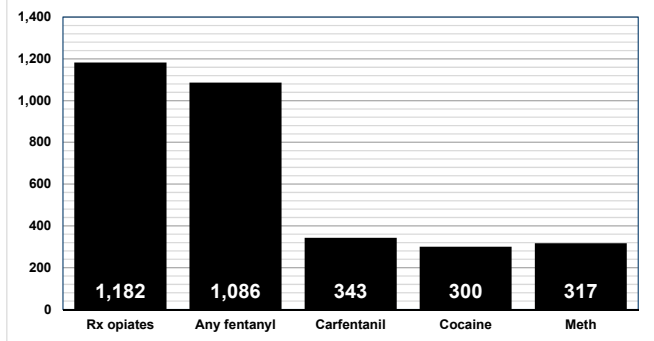


Figure 16b: Overdoses Involving Selected Drugs, 2012-2021 YTD Source: ODH Death Records, SCPH

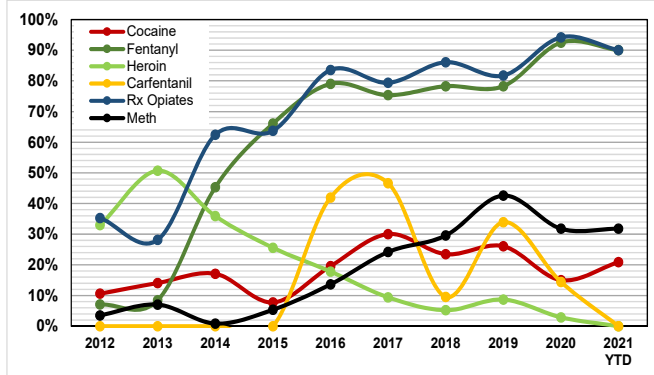


Figure 16c: Most Common Specific Drugs Mentioned On Death Certificates As A Percent of All Poisoning Deaths, 2012-2021 YTD Source: ODH Death Records, SCPH (Note: Since many overdose fatalities involve multiple drugs, totals will not add up to 100%).

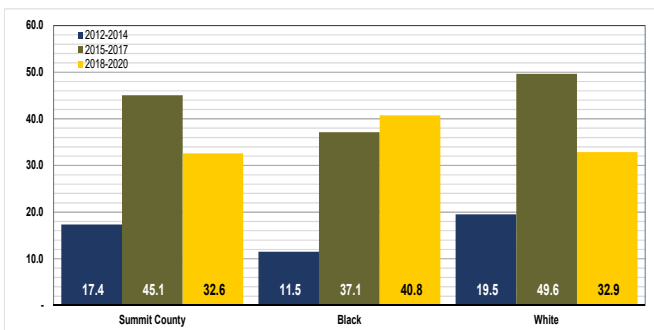


Figure 17: Age-Adjusted Drug Poisoning Deaths Per 1,000 Population, Total And By Race, 2012-2020 (primary underlying cause of death X40 - X44), Source: ODH Death Records, SCPH.

Demographics of Drug-Related Deaths, 2012-2020

Drug-related death rates by race have evolved over time. Both black and white rates experienced a significant rise between the 2012-2014 and 2015-2017 periods. However, the white rate declined from 2018-2019, from 49.6 per 1,000 in 2015-17 to 32.9 per 1,000 in 2018-20. For African-Americans in the same periods, the rate rose from 37.1 to 40.8 per 1,000. From 2012-2014, the African-American drug-related death rate was just 59% as high as the white rate. By 2015-2017, the African-American rate was nearly 75% as high as the white rate. By 2018-2020, the African-American rate passed the white rate (124%).

What these figures make clear is that the overdose epidemic remains a community-wide crisis. The epidemic is striking all parts of the community; city

and suburban, white and African-American, male and female, young and old. Figures 18 to 21 present some basic demographic information about drug poisoning deaths over time (for deaths where data is currently available):

- In 2012-2014, the biggest age group was 45-54, which accounted for 29% of overdose deaths. By 2018-2020, the 25-34 and 35-44 age groups were the highest at 27% each.
- Male deaths were more than double the rate of female deaths in all three time periods.
- More than half of drug poisoning deaths were among those with an educational attainment of high school graduate / GED or less in all three time periods.

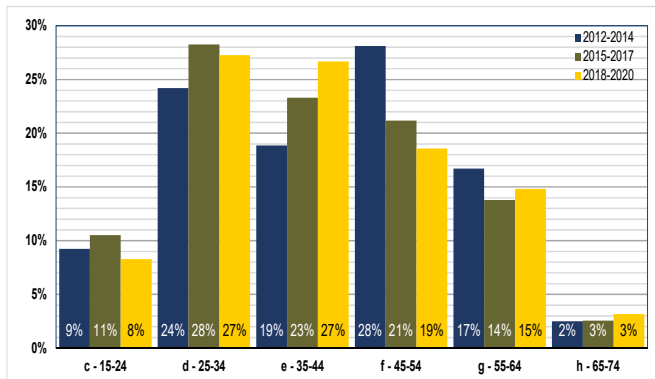


Figure 18 Age At Death of Persons Dying of Accidental Drug Poisoning, 2012-2020. Source: Ohio Department of Health Death Records, SCPH

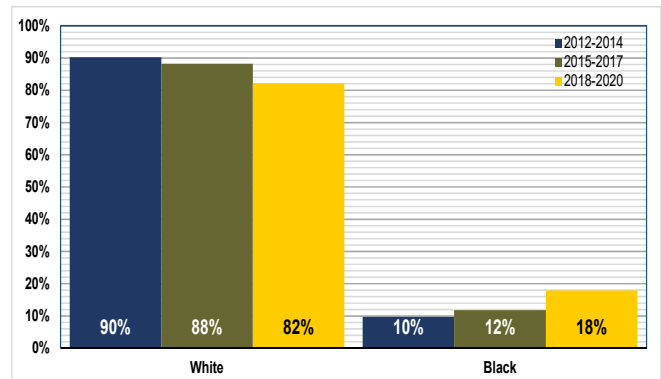


Figure 19: Race of Persons Dying of Accidental Drug Poisoning, 2012-2020. Source: Ohio Department of Health Death Records, SCPH

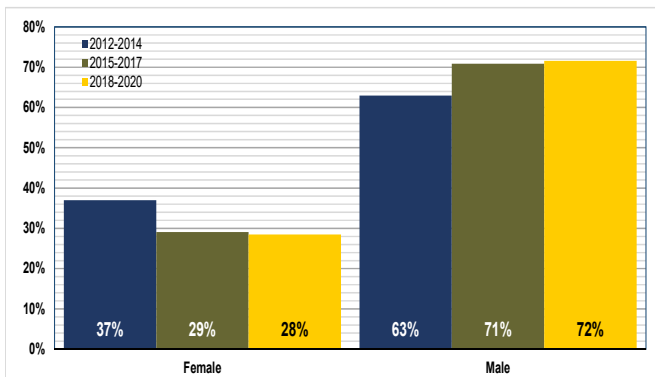


Figure 20: Sex of Persons Dying of Accidental Drug Poisoning, 2012-2020. Source: Ohio Department of Health Death Records, SCPH

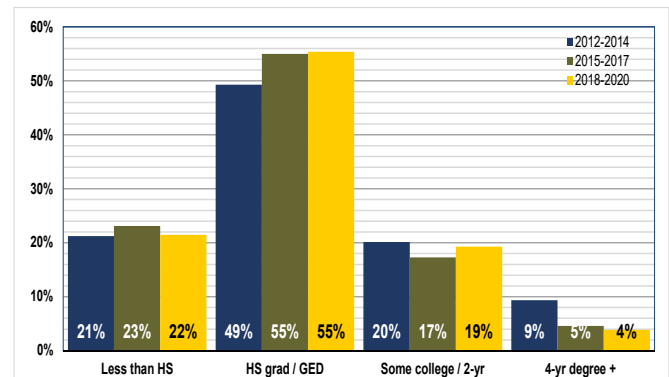


Figure 21: Educational Attainment of Persons Dying of Accidental Drug Poisoning, 2012-2020. Source: Ohio Department of Health Death Records, SCPH