

# **Summit County Public Health Influenza Surveillance Report**

2018 - 2019 Season





# Flu Surveillance Week 6 (11/11/2018 to 11/17/2018) Centers for Disease Control and Prevention MMWR Week 46

## **Summit County Surveillance Data:**

During Week 6, influenza-related activity remained low in Summit County, but showed signs of increasing.

|  | Week 5<br>MMWR 45<br>N (%) <sup>1</sup> | Week 6<br>MMWR 46<br>N (%)¹ | Percent<br>change from<br>previous week | Number of<br>weeks<br>increasing or<br>decreasing |
|--|---|-----------------------------|---|---|
| Lab Reports                                    |   |                             |   |   |
| Test Performed                                 | 425                                     | 453                         | + 6.6%                                  | 个5  |
| Positive Tests (Number and %)                  | 0 (0.0)                                 | 5 (1.1)                     | + 100%                                  | <b>↑1</b>   |
| Influenza A (Number and %)                     | 0 (0.0)                                 | 3 (0.7)                     | + 100%                                  | <b>↑1</b>   |
| Influenza B (Number and %)                     | 0 (0.0)                                 | 2 (0.4)                     | + 100%                                  | ↑1  |
| Influenza hospitalizations:                    | 0                                       | 1                           | + 100%                                  | <b>↑1</b>   |
| Influenza ILI Community Report:                |   |                             |   |   |
| Long-term Care Facilities                      | 3                                       | 0                           | - 100%                                  | <b>↓1</b>   |
| Correctional & Addiction Facilities            | 0                                       | 0                           |   |   |
| Physician Offices & Clinics                    | 5                                       | 1                           | - 80%                                   | <b>↓1</b>   |
| Pharmacy Prescriptions                         |   |                             |   |   |
| Amantidine                                     | 0                                       | 3                           | + 100%                                  | <b>↑1</b>   |
| Rimantidine Flumadine                          | 0                                       | 0                           |   |   |
| Relenza  | 0                                       | 0                           |   |   |
| Oseltamivir Tamiflu                            | 1                                       | 1                           | NC                                      | NC  |
| Total antiviral prescriptions                  | 1                                       | 4                           | + 300%                                  | <b>↑1</b>   |
| Schools absenteeism daily rate <sup>2</sup>    | 6.5                                     | 6.4                         | - 1.5%                                  | <b>↓</b> 1  |
| Deaths   |   |                             |   |   |
| Pneumonia associated                           | 4 (4.7)                                 | 5 (5.0)                     | + 5.2%                                  | ↑2  |
| Influenza associated                           | 0                                       | 0                           |   |   |
| Emergency room visits (EpiCenter) <sup>3</sup> |   |                             |   |   |
| Constitutional Complaints                      | 468 (8.2)                               | 467 (8.2)                   | NC                                      | NC  |
| Fever and ILI                                  | 69 (1.2)                                | 74 (1.3)                    | +8.3%                                   | ↑2  |

- 1) N and % are reported when available; NC = no change
- 2) Absence is for any reason. Percent is from total number of students enrolled. Data was collected from 7 schools or school districts throughout Summit County ( $n = ^37,000$  students)
- 3) Percent is from total number of emergency room interactions

**Note:** Data is provisional and may be updated as more information is received. Percentages should be interpreted with caution. Small changes in number can result in large changes in percent. When a percentage, or prevalence, is available in this table, the percent change will be calculated from those values

**Zero** deaths related to influenza were reported during Week 6, and there were five total deaths associated with pneumonia. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza.

Acute Care Hospitalizations: There was one flu-related hospitalization reported during Week 6. (Figure 2)

#### **COMMUNITY ILI REPORTS:**

Influenza like Illness (ILI) as defined by the CDC is fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat without a known cause other than influenza.

**Long Term Care Facilities:** There were 0 cases of ILI reported.

**Correctional and Inpatient Addiction facilities:** There were 0 cases of ILI reported.

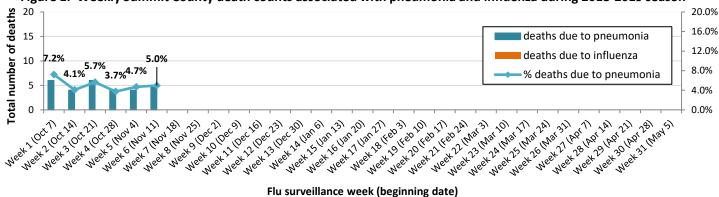
**Physician offices and clinics:** During Week 6, there was 1 case of ILI reported.

**Pharmacies:** Four prescription for antiviral medications was reported during Week 6.

**School absenteeism** includes absences regardless of reason. In Week 6, the absence rate was 6.4%, a slight decrease of 1.5% over the Week 5 rate.

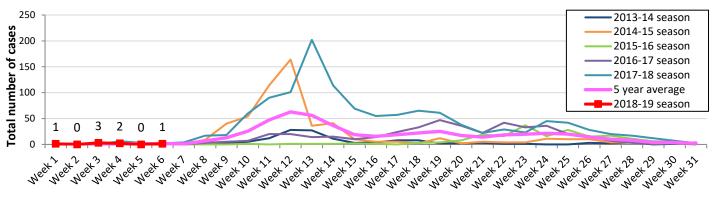
Lab reports: During the Week 6, Summit County labs performed 453 tests, of which 5 tested positive (3 flu A, 2 flu B). (Figure 4) As more hospitals replace the rapid flu test with BIOFIRE respiratory panels, the number of tests performed will likely increase this year.

Figure 1. Weekly Summit County death counts associated with pneumonia and influenza during 2018-2019 season



**Influenza-associated hospitalization**: Summit County hospitals reported one influenza-associated hospitalization in Week 6. **Figure 2** displays weekly confirmed hospitalization count for Summit County **(cumulative count to date =7).** 

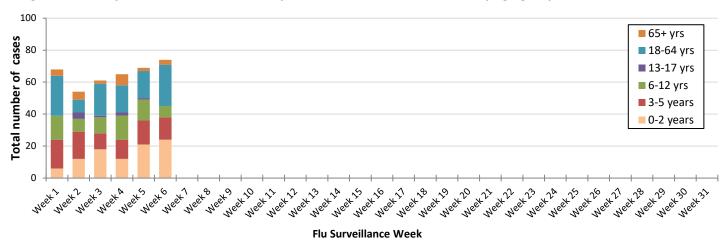
Figure 2. Summit County influenza-associated hospitalizations by week, 2018-2019 and previous five seasons

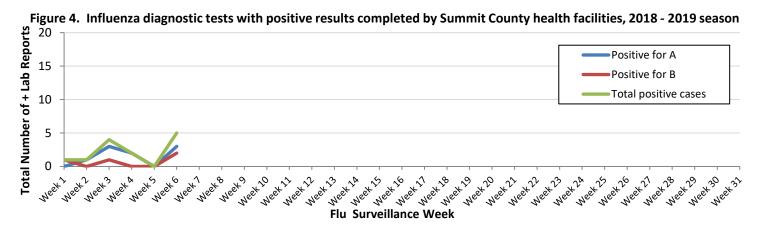


**EpiCenter** collects and analyzes health related data in real time to provide information about the health of the community. This system tracks ER visits related to constitutional complaints and fever and ILI. **Figure 3** displays the weekly number of ER visits related to ILI and flu symptoms in Summit County, and there were 74 ILI-related visits reported during Week 6. This was not a significant change from the previous week, but there has been an increasing trend I ILI-related visits since Week 2.

Flu surveillance week

Figure 3. Weekly ER visits in Summit County related to Fever + ILI stratified by age groups, 2018 to 2019 season





# **Ohio Influenza Activity:**

## Current Ohio Activity Level (Geographic Spread) - Local

Definition: Increased ILI in 1 region; ILI activity in other regions is not increased AND recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI, OR 2 or more institutional outbreaks (ILI or lab confirmed) in 1 region; ILI activity in other regions is not increased AND recent (within the past 3 weeks) lab evidence of influenza in region with the outbreaks; virus activity is no greater than sporadic in other regions.

During MMWR Week 46, public health surveillance data sources indicate minimal intensity for influenza-like illness (ILI) in outpatient settings reported by Ohio's sentinel providers. The percentage of emergency department visits with patients exhibiting constitutional symptoms are slightly above baseline levels statewide; fever and ILI specified ED visits are below baseline levels. Reported cases of influenza-associated hospitalizations are below the seasonal threshold\*. There were 20 influenza-associated hospitalizations reported during MMWR Week 46.

## Ohio Influenza Activity Summary Dashboard (November 11 – November 17, 2018):

| Data Source   | Current week value | Percent Change from last week <sup>1</sup> | # of weeks <sup>2</sup> | Trend Chart <sup>3</sup>      |
|---|--------------------|--|-------------------------|-------------------------------|
| Influenza-like Illness (ILI) Outpatient Data<br>(ILINet Sentinel Provider Visits)     | 0.67%              | -27.96%                                    | <b>↓ 1</b>              | 40 - 2017 Week Number 20-2010 |
| Thermometer Sales (National Retail Data<br>Monitor)                                   | 1135               | -3.70%                                     | ↓1                      | 40 - 2017 Weak Number 20-2018 |
| Fever and ILI Specified ED Visits<br>(EpiCenter)                                      | 1.71%              | -4.47%                                     | ↓1                      | 40 - 2017 Week Number 20-2018 |
| Constitutional ED Visits (EpiCenter)  | 8.66%              | 0.70%                                      | <b>↑</b> 2              | 40 - 2017 Wech Number 20-2010 |
| Confirmed Influenza-associated<br>Hospitalizations (Ohio Disease Reporting<br>System) | 20                 | 42.86%                                     | <b>↑</b> 2              | 40 - 2017 Week Number 20-2018 |
| Outpatient Medical Claims Data <sup>4</sup>   | 0.43%              | 34.38%                                     | <b>↑</b> 3              | 40 - 2017 Week Number 20-2010 |

<sup>1</sup>Interpret percent changes with caution. Large variability may be exhibited in data cources with low weekly values.

4Medical Claims Data provided by athenahealth®

Source: https://www.odh.ohio.gov/en/seasflu/Ohio-Flu-Activity

<sup>&</sup>lt;sup>2</sup>Number of weeks that the % change is increasing or decreasing.

<sup>&</sup>lt;sup>3</sup>Black lines represent current week's data; red lines represent baseline averages

## **National Influenza Activity**

Influenza activity in the United States remains low, although small increases in activity were reported. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate, with influenza A(H1N1)pdm09 viruses reported most commonly by public health laboratories since September 30, 2018. Below is a summary of the key influenza indicators for the week ending November 17, 2018:

- <u>Viral Surveillance:</u> Influenza A viruses have predominated in the United States since the beginning of July. The percentage of respiratory specimens testing positive for influenza in clinical laboratories was low.
  - Virus Characterization: The majority of influenza viruses characterized antigenically and genetically are similar to the cell-grown reference viruses representing the 2018–2019 Northern Hemisphere influenza vaccine viruses.
  - Antiviral Resistance: All viruses tested since late May show susceptibility to the antiviral drugs oseltamivir, zanamivir, and peramivir.
- <u>Influenza-like Illness Surveillance:</u> The proportion of outpatient visits for influenza-like illness (ILI) remained at 1.9%, which is below the national baseline of 2.2%. Two of 10 regions reported ILI at or above their region-specific baseline level (see **Figure 5**).
  - ILI State Activity Indictor Map (Figure 6): Three states experienced moderate ILI activity, New York City and eight states experienced low ILI activity; the District of Columbia and 39 states experienced minimal ILI activity; and Puerto Rico had insufficient data.
- Geographic Spread of Influenza: The geographic spread of influenza in one state was reported as regional; Guam and 14 states reported local activity; and the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 35 states reported sporadic activity (see Figure 7).
- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- <u>Influenza-associated Pediatric Deaths:</u> One influenza-associated pediatric death was reported to CDC for week 46.

Figure 5. Percentage of visits for influenza-like illness (ILI) reported by the U.S. Outpatient Influenza-like Surveillance Network (ILINet), weekly national summary, 2018-2019 and selected previous seasons

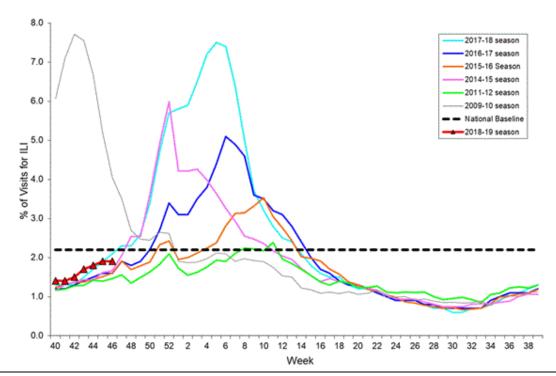


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet

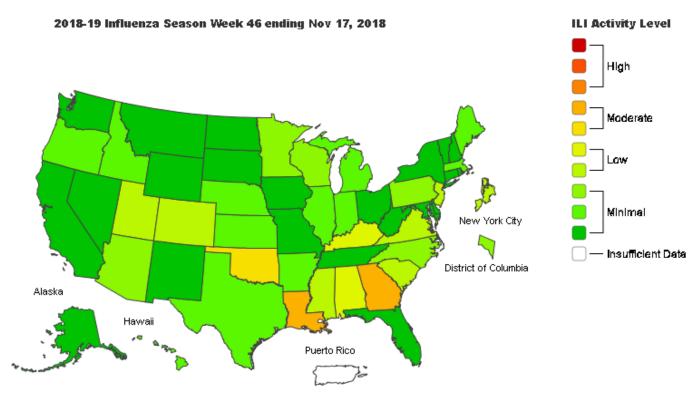
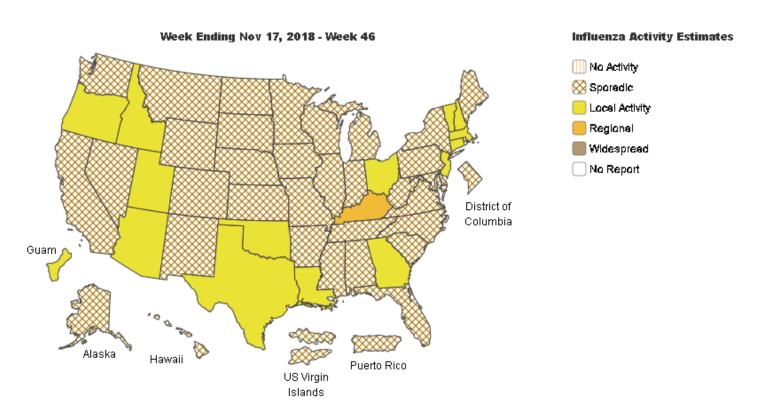


Figure 7. Weekly influenza activity (geographic spread) estimates reported by state and territorial epidemiologists



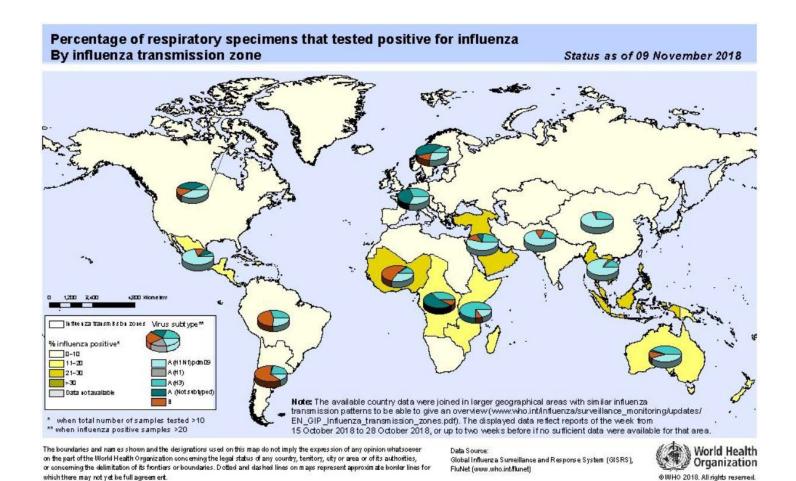
Source: <a href="https://www.cdc.gov/flu/weekly/">https://www.cdc.gov/flu/weekly/</a>

## **Global Surveillance:**

Influenza Update N° 328, World Health Organization (WHO), published 11/12/2018, based on data up to 10/28/2018. The Update is published every two weeks.

## **Summary**

- In the temperate zone of the northern hemisphere influenza activity remained at inter-seasonal levels. Increased influenza detections were reported in some countries of Southern and South-East Asia. In the temperate zones of the southern hemisphere, influenza activity returned to nearly inter-seasonal levels. Worldwide, seasonal influenza subtype A viruses accounted for the majority of detections.
- National Influenza Centres (NICs) and other national influenza laboratories from 104 countries, areas or territories reported data to FluNet for the time period from 15 October 2018 to 28 October 2018 (data as of 2018-11-09 03:38:30 UTC). The WHO GISRS laboratories tested more than 84313 specimens during that time period. 2145 were positive for influenza viruses, of which 1845 (86%) were typed as influenza A and 300 (14%) as influenza B. Of the sub-typed influenza A viruses, 905 (64.5%) were influenza A(H1N1)pdm09 and 499 (35.5%) were influenza A(H3N2). Of the characterized B viruses, 54 (52.4%) belonged to the B-Yamagata lineage and 49 (47.6%) to the B-Victoria lineage.



Source: <a href="https://www.who.int/influenza/surveillance">https://www.who.int/influenza/surveillance</a> monitoring/updates/latest update GIP surveillance/en/

## **Influenza News:**

# Do parents have selective hearing about flu vaccine for children?

November 19, 2018 Volume 33, Issue 1



Annual flu vaccination is recommended for all children 6

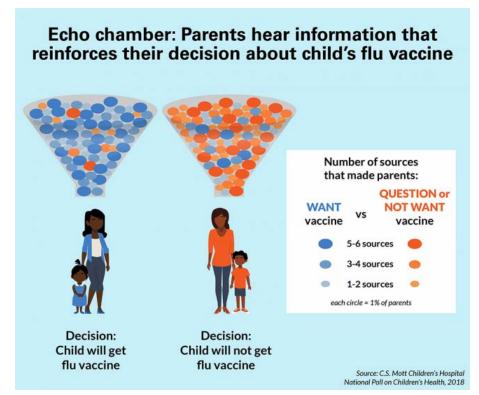
months and older due to the risk of death or serious complications from influenza. However, the vaccine rate among US children is much lower for flu vaccine than for other childhood vaccines. The C.S. Mott Children's Hospital National Poll on Children's Health asked a national sample of parents about what influences their decision to get or not get flu vaccine for their child.

Two thirds of parents said their child would get flu vaccine this year, while 34% said their child was unlikely to do so. Most parents indicated their child's health care provider strongly (51%) or mostly (26%) recommends flu vaccine; 21% did not recall the provider making a recommendation, while 2% said the provider recommended against flu vaccine.

In making decisions about flu vaccine, 48% of parents said they usually follow the recommendation of their child's health care provider, while 38% said they make their own decision based on what they read or hear. Among parents who usually follow the recommendation of their child's health care provider, 87% said their child would get flu vaccine this year. However, among parents who decide based on what they read or hear, only 56% said their child would get flu vaccine this year.

Parents who said their child would get flu vaccine this year reported four times more positive sources (those that made them want flu vaccine for their child) than negative sources (those that made them question or not want flu vaccine). The positive sources that made these parents want to get flu vaccine included comments from the child's health care provider (67%) or nurses/medical staff (59%), comments from family or close friends (47%) or other parents (42%), parenting books or magazines (34%), and Internet sites (33%).

In contrast, parents who said their child would not get flu vaccine this year this year reported seven times more negative sources than positive sources about flu vaccine. The most frequent sources that made these parents question or not want flu vaccine for their child included comments from family or close friends (45%) or other parents (44%), Internet sites (40%), comments from the child's health care provider (35%) or nurses/medical staff (32%), and parenting books or magazines (32%).



#### Implications

In the last flu season, spanning Fall 2017 through Spring 2018, a record-setting 180 children died from influenza. Less than sixty percent of children had received flu vaccine, even though annual flu vaccine has been recommended for children 6 months and older since 2010. Children who do not get flu vaccine, even those who are otherwise healthy, are at increased risk for death or serious influenza-related illness.

This Mott Poll report identifies the two main approaches that parents use to decide whether their child will get flu vaccine. The first approach, used by about half of parents, is following the advice and recommendation of the child's health care provider. Parents in this group may have questions or concerns about flu vaccine, but rely on a doctor or other health professional with scientific expertise to explain why vaccination is necessary, and to address questions about flu vaccine safety and effectiveness.

When parents follow the health care provider's recommendation, children usually get flu vaccine. However, this is not always the case: 1 in 5 parents in this Mott Poll did not recall the provider giving a specific recommendation about flu vaccine.

Whether in the absence of a provider recommendation, or due to parental preference, nearly 4 in 10 parents decided about flu vaccine for their child based on what they read and hear. Parents who take this approach may encounter a range of information sources. Some of those sources may offer accurate information, while others offer misinformation, such as suggesting that flu vaccine causes the flu, that influenza is not a serious disease, or that healthy children do not suffer serious consequences from influenza. In many cases, parents have limited expertise that would help them distinguish accurate information from misinformation; this can lead parents to make a decision about flu vaccine that may not be in the best interest of their child's health.

A noteworthy finding from this Mott Poll is that there may be somewhat of an echo chamber of information sources about flu vaccine for children. Parents who decided to get flu vaccine for their child reported hearing or seeing information about flu vaccine that is largely in favor of flu vaccine — in fact, these parents reported four times as many information sources that prompted them to want to get their child vaccinated. The opposite was true for parents who decided that their child will not get flu vaccine: they reported seven times as many information sources that made them question or not want to have their child vaccinated. In both cases, parents recalled information that supported their flu vaccine decision.

The reason for this echo chamber may be multifaceted. Some parents may seek out specific people and information sources who support their already-established opinions on vaccines, creating an information environment that confirms their decision and shuts out dissenting views. Other parents may encounter a broader range of information but have "selective hearing" in remembering only those sources that support their decision on whether their child will get flu vaccine.

Overall, findings suggest that child health providers play a critical role in helping many parents understand the importance of annual flu vaccine for children. However, for many parents, child health providers are not the sole influence, or even the primary influence, on decisions about flu vaccine. As such, other mechanisms are needed to convey accurate information, in language parents can understand, about the importance of annual flu vaccine for children.

A pdf of the full report can be downloaded at the website below:

Source Article: <a href="https://mottpoll.org/reports/do-parents-have-selective-hearing-about-flu-vaccine-children">https://mottpoll.org/reports/do-parents-have-selective-hearing-about-flu-vaccine-children</a>

# **CDC Influenza Webinar Opportunity!**

**#How I Recommend Flu Vaccine: How to Make Recommendations that Matter to Patients** 

### December 5, 2018 1-2 p.m. EST

Every year, large numbers of Americans get sick and die as a result of seasonal flu. Yet, many of your patients may underestimate flu's severity or their own susceptibility to catching it. If patients don't



understand that they are at risk and that risk could be serious, they may not prioritize getting their seasonal flu vaccines. This webinar will assist healthcare professionals with making recommendations and addressing important questions from patients.

### **Webinar Objectives:**

- Understand burden and severity of last year's flu season
- Describe flu vaccine benefits, including averted potential flu burden
- Describe how to make a strong and effective flu vaccine recommendation to patients and why your recommendation matters
- Illustrate how to properly administer flu vaccine

**About this report:** Reporting agencies include labs, hospitals, long-term care and community-based care providers, physician offices, university clinic, pharmacies, and schools. Agencies are distributed throughout Summit County and report different indicators of flu activity including total lab tests, numbers of positive tests and type, antiviral prescriptions filled, school absences, and influenza like illness (ILI). Hospitalizations are lab confirmed for influenza and are obtained from the Ohio Disease Reporting System. Number of deaths associated with influenza and pneumonia are gathered from the Summit County Office of Vital Records death listings. Emergency room visits for complaints related to influenza are obtained by syndromic surveillance system (Epicenter). Special thanks to all agencies who report Influenza related data weekly.

Reporting from participants may not be complete each week. Numbers may change as updated reports are received. For questions, please contact Joan Hall or Tracy Rodriguez at the Summit County Public Health Communicable Disease Unit (330-375-2662 or cdu@schd.org). Report was issued on November 26, 2018.