Butler County General Health District
Hepatitis A Outbreak Investigation Update (11/4/19)

Hepatitis A Cases
Butler County Residents, 2018-2019

- Total # of Confirmed Cases: 409*
- Outbreak-Linked Cases: 408† (as of 11/4/19)
- Total Number of Deaths: 2
- First Case Reported: 1/9/2018
- Last Case Reported (so far): 9/9/2019
- Age Range: 3-84

The average number of confirmed Hepatitis A cases in Butler County in the past (2013-2017) was 0 to 1 case per year.

Note: On May 28, 2019, with much discussion with the Centers for Disease Control and Prevention (CDC), the Ohio Department of Health (ODH) updated the working case definition regarding the state-wide community Outbreak of Hepatitis A. The new case definition now includes all the previous cases that had not previously been deemed linked to the outbreak. The new case definition can be found on page 4 of this report. As the outbreak’s pace slows down in Butler County and across the state, ODH in conjunction with the local health jurisdiction have continued to refine and investigate all cases in the state. In recent weeks, old cases have been reviewed to determine if they still belong in the outbreak, and those whose linkage to the outbreak has been questioned have been reevaluated. In the course of the investigation, a number of cases were determined to longer fit the confirmed case definition of the disease. Of the three cases in Butler County that were not linked to the outbreak, two have been identified as fitting the outbreak as defined on page 4, and one case has been excluded while remaining a confirmed case of disease. Please direct any questions you may have regarding the new case definition to the Butler County General Health District (513)-863-1770.

Due to delays in reporting, the numbers of confirmed cases on Figure 1 are subject to change between weekly reports and confirmed case counts for the most recent weeks are more likely to increase.

*Data is provisional – only confirmed Hepatitis A cases are included in counts. Report reflects time period of the 2018-2019 Ohio Hepatitis A Outbreak (Jan 2018 – Present), measured in MMWR week intervals, unless otherwise noted. Data accessed from the Ohio Disease Reporting System (ODRS) on 11/04/2019.

**Case that was reported on 09/09/2019 has an actual onset date of February, 2019

† Case definitions for confirmed outbreak-linked cases are those that meet ODH-specified clinical and laboratory criteria, which are provided on page 4 of this report.
Outbreak-Linked Hepatitis A Cases – Demographic Information
Butler County Residents, 2018-2019
(as of 11/04/2019)

The Ohio Department of Health has declared a community outbreak of hepatitis A after observing an increase in cases linked to certain risk factors since the beginning of 2018. Outbreaks of hepatitis A are occurring in several states across the US, including Indiana, Kentucky, Michigan and West Virginia.

Source: https://www.odh.ohio.gov/hepa

Figure 2. Outbreak-Linked Hepatitis A Cases by Facility of Diagnosis
Butler County Residents, 2018-2019

Figure 3. Confirmed Hepatitis A Cases by City of Residence and Date Reported
Butler County Residents 2018-2019 (Top Three Cities)

Table 1: Outbreak-Linked Cases by City (Top Three Cities)

<table>
<thead>
<tr>
<th>City</th>
<th>Number of Cases</th>
<th>% of Outbreak-linked cases</th>
<th>Rate of Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamilton</td>
<td>195</td>
<td>47.8%</td>
<td>31 per 10,000</td>
</tr>
<tr>
<td>Middletown</td>
<td>118</td>
<td>28.9%</td>
<td>24 per 10,000</td>
</tr>
<tr>
<td>Fairfield + Fairfield Township</td>
<td>33</td>
<td>8.1%</td>
<td>8 per 10,000</td>
</tr>
</tbody>
</table>

Figure 3 and Table 1 show data for the cities in Butler County with the highest numbers of outbreak-linked cases of Hepatitis A as of 11/04/19
ODH Update: Ohio Hepatitis A Outbreak Cases

ODRS Outbreak Title: Hepatitis A Statewide Community Outbreak 2018

Hepatitis A Outbreak Summary (November 4, 2019):

- Number of cases: 3374
- Illness onset range: 01/05/2018 - 10/24/2019
- Age range: 1-89 years
- Gender: 61% male
- Number of hospitalizations: 2064 (61%)
- Number of deaths: 16
- Number of counties with cases: 82 (93%)

For more information, please call the Ohio Department of Health Bureau of Infectious Diseases at (614) 995-5599.
Page Updated: 11/4/2019
Source: https://www.odh.ohio.gov/hepa
Ohio Hepatitis A Outbreak Case Definition:

CLINICAL CRITERIA

An acute illness with a discrete onset since January 1, 2018 of any sign or symptom consistent with acute viral hepatitis (e.g., fever, headache, malaise, anorexia, nausea, vomiting, diarrhea and abdominal pain),

AND

• Jaundice or elevated total bilirubin levels ≥3.0 mg/dL, OR
• Elevated aspartate aminotransferase (AST) or alanine aminotransferase (ALT) levels (>200 IU/L)

AND

• The absence of a more likely diagnosis

LABORATORY CRITERIA

• Immunoglobulin M (IgM) antibody to hepatitis A virus (anti-HAV) positive, OR
• Nucleic acid amplification test (NAAT) for hepatitis A virus RNA positive (including PCR or genotype testing)

CONFIRMED HEPATITIS A OUTBREAK CASE

• A case that meets the clinical criteria and is IgM anti-HAV positive, OR
• A case that has hepatitis A virus RNA detected by NAAT (such as PCR or genotyping), OR
• A case that meets the clinical criteria and occurs in a person who has an epidemiologic link (household contact, drug partner, or sexual contact) with a laboratory-confirmed hepatitis A case 15–50 days prior to onset of symptoms

EXCLUSIONS

A case will be excluded if any of the following conditions apply:

• In the absence of known risk factors (injection or non-injection drug use, men who have sex with men, homelessness, or incarceration), any case that occurs in a patient who reports travel to a country or U.S. territory with endemic hepatitis A during the 15–50 days before symptom onset, OR
• Any case that is linked to a foodborne outbreak by related sequencing, OR
• In the absence of known risk factors (injection or non-injection drug use, men who have sex with men, homelessness, or incarceration), any case that is epi-linked to a foodborne outbreak, OR
• Any case with a specimen collected within four weeks of symptom onset that is negative for HAV RNA

For more information, please call the Ohio Department of Health Bureau of Infectious Diseases at (614) 995-5599.
Page Updated: 11/04/2019
Source: https://www.odh.ohio.gov/hepa
Hepatitis A Outbreak Cases by County, Ohio, 2018-2019

November 4, 2019

[Map of Ohio showing the distribution of hepatitis A cases by county, with a legend indicating the number of cases in different color-coded regions.]

Data analyzed 11/04/19, Outbreak Response and Bioterrorism Investigation Team, Bureau of Infectious Diseases, Ohio Department of Health, 2019.

Page Updated: 11/04/2019
Source: https://www.odh.ohio.gov/hepa
Please direct any questions/comments/concerns regarding this report to:
Jordan Luttrell-Freeman, Epidemiologist (BCGHD) –Luttrell-FreemanJ@butlercountyohio.org/ (513) 887-5248
What is Public Health Doing to Decrease the Number of Hepatitis A Cases in Butler County?

Every case is interviewed and all contacts are assisted to get vaccinated. In addition:

**Vaccination**
- As of 11/04/19
- 2,628 Vaccinations given to high risk groups (illicit drug users, incarcerated, homeless, and men who have sex with men) by the three public health departments / districts in Butler County. Additional vaccinations have been given by providers and clinics.

**Education**
- As of 11/04/19
- 30,112 Information given to health care and drug treatment providers, hospitals, clinics, restaurants, homeless shelters, jails, and the public via fliers, faxes, website, social media.

**Policy Change**
- As of 11/04/19
- 15 Policy changes requested of healthcare and drug treatment providers, insurance companies, restaurants.

**Sanitation**
- As of 11/04/19
- 26,340 Information cards about sanitizing to prevent Hepatitis A given to restaurants, food service workers.