2019 Annual Communicable Disease Report

Fayette County Public Health
Nearly 90 diseases are reportable in the state of Ohio; meaning the local health department must be notified anytime a person is diagnosed with one of these diseases (please see Page 2 for a complete list of these illnesses). Local health departments use this data for both community-wide surveillance and to assist physicians and/or partner agencies in the treatment and/or management of contagious diseases. This report provides an overview to facilitate an understanding of the reportable diseases affecting the health of our residents.

Fayette County saw a 6.1% decrease in communicable disease cases from 2018 to 2019 (214 cases and 201 cases, respectively). Figure 1. below shows the number of communicable disease cases occurring annually for the past five years.

The most frequently reported illnesses were chlamydia (66 cases), Hepatitis C (35 cases), Influenza-Associated Hospitalizations (30 cases), Gonorrhea (14 cases), and Hepatitis A (21 cases). Chlamydia, and Hepatitis C have been the top two reported diseases since 2015. Gonorrhea has also been in the top 5 diseases since 2015 and influenza-associated hospitalizations have been in the top 5 diseases for the last two years. New in 2019 to the list of top 5 reported diseases is Hepatitis A due to the statewide Hepatitis A outbreak of which Fayette was affected by. Table 1. on Page 3 lists the diseases reported in the community in 2019 and the number of cases for each of these illnesses. There were no outbreaks reported in Fayette County in 2019. Additionally, Figure 2. on Page 4 categorizes those illnesses by type. The remainder of this document provides epidemiological information for each of the top five illnesses as well as brief demographic information on the cases and disease trends over the past five years.
Ohio Reportable Diseases

Know Your ABCs: A Quick Guide to Reportable Infectious Diseases in Ohio
From the Ohio Administrative Code Chapter 3701-3: Effective August 1, 2019

### Class A:
Diseases of major public health concern because of the severity of disease or potential for epidemic spread — report immediately via telephone upon recognition that a case, a suspected case, or a positive laboratory result exists.

- Anthrax
- Botulism, foodborne
- Cholera
- Diphtheria
- Influenza — novel virus infection
- Measles
- Meningococcal disease
- Middle East Respiratory Syndrome (MERS)
- Plague
- Rabies, human
- Rubella (not congenital)
- Severe acute respiratory syndrome (SARS)
- Smallpox
- Tularemia
- Viral hemorrhagic fever (VHF), including Ebola virus disease, Lassa fever, Marburg hemorrhagic fever, and Crimean-Congo hemorrhagic fever

Any unexpected pattern of cases, suspected cases, deaths or increased incidence of any other disease of major public health concern, because of the severity of disease or potential for epidemic spread, which may indicate a newly recognized infectious agent, outbreak, epidemic, related public health hazard or act of bioterrorism.

### Class B:
Disease of public health concern needing timely response because of potential for epidemic spread — report by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known.

- Amebiasis
- Arboviral neuroinvasive and non-neuroinvasive disease: Chikungunya virus infection
- Eastern equine encephalitis virus disease
- LaCrosse virus disease (other California serogroup virus disease)
- Powassan virus disease
- St. Louis encephalitis virus disease
- West Nile virus infection
- Western equine encephalitis virus disease
- Yellow fever
- Zika virus infection
- Other arthropod-borne diseases
- Babesiosis
- Botulism
- Infant wound
- Brucellosis
- Campylobacteriosis
- *Candida auris*
- Carbapenemase-producing carbapenem-resistant Enterobacteriaceae (CP-CRE)
- *CP-CRE Enterobacter sp.*
- *CP-CRE Escherichia coli*
- *CP-CRE Klebsiella spp.*
- *CP-CRE other*
- Chancroid
- *Chlamydia trachomatis* infections
- Coccioidiomycosis
- Creutzfeldt-Jakob disease (CJD)
- Cryptosporidiosis
- Cyclosporiasis
- Dengue
- *E. coli O157:H7* and *Shiga toxin-producing E. coli* (STEC)
- *Ehrlichiosis/anaplasmosis*
- Giardiasis
- Gonorrhea (*Neisseria gonorrhoeae*)
- *Haemophilus influenzae* (invasive disease)
- Hantavirus
- Hemolytic uremic syndrome (HUS)
- Hepatitis A
- Hepatitis B (non-perinatal)
- Hepatitis B (perinatal)
- Hepatitis C (non-perinatal)
- Hepatitis C (perinatal)
- Hepatitis D (delta hepatitis)
- Hepatitis E
- Influenza-associated hospitalization
- Influenza-associated pediatric mortality
- Legionnaires’ disease
- Leprosy (Hansen disease)
- Leptospirosis
- Listeriosis
- Lyme disease
- Malaria
- Meningitis:
  - Aseptic (viral)
  - Bacterial
- Mumps
- Pertussis
- Poliomyelitis (including vaccine-associated cases)
- Pottatocosis
- Q fever
- Rubella (congenital)
- Salmonella Paratyphi infection
- Salmonella Typhi infection (typhoid fever)
- Salmonelllosis
- Shigellosis
- Spotted Fever Rickettsiosis, including Rocky Mountain spotted fever (RMSF)
- *Staphylococcus aureus*, with resistance or intermediate resistance to vancomycin (VRSA, VISA)
- Streptococcal disease, group A, invasive (IGAS)
- Streptococcal disease, group B, in newborn
- Streptococcal toxic shock syndrome (STSS)
- *Streptococcus pneumoniae*, invasive disease (ISP)
- Syphilis
- Tetanus
- Toxic shock syndrome (TSS)
- Trichinellosis
- Tuberculosis (TB), including multi-drug resistant tuberculosis (MDR-TB)
- Varicella
- Vibriosis
- Yersiniosis

### Class C:
Report an outbreak, unusual incident or epidemic of other diseases (e.g. histoplasmosis, pediculosis, scabies, staphylococcal infections) by the end of the next business day.

- Outbreaks:
  - Community
  - Foodborne
  - Healthcare-associated
  - Institutional
  - Waterborne
  - Zoonotic

### NOTE:
Cases of AIDS (acquired immune deficiency syndrome), AIDS-related conditions, HIV (human immunodeficiency virus) infection, perinatal exposure to HIV, all CD4 T-lymphocyte counts and all tests used to diagnose HIV must be reported on forms and in a manner prescribed by the Director.
### Table 1. Communicable Disease Cases\(^1\) Reported in Fayette County, 2019

<table>
<thead>
<tr>
<th>Class B Reportable Diseases</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brucellosis</td>
<td>1</td>
</tr>
<tr>
<td>Campylobacteriosis</td>
<td>3</td>
</tr>
<tr>
<td>Chlamydia infection</td>
<td>66</td>
</tr>
<tr>
<td>Coccidioidomycosis</td>
<td>1</td>
</tr>
<tr>
<td>Giardiasis</td>
<td>2</td>
</tr>
<tr>
<td>Gonococcal infection</td>
<td>14</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>21</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>12</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>35</td>
</tr>
<tr>
<td>Influenza-associated hospitalization</td>
<td>29</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>1</td>
</tr>
<tr>
<td>Lyme Disease</td>
<td>4</td>
</tr>
<tr>
<td>Meningitis - aseptic/viral</td>
<td>1</td>
</tr>
<tr>
<td>Meningitis - bacterial (Not N. meningitidis)</td>
<td>1</td>
</tr>
<tr>
<td>Pertussis</td>
<td>2</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>4</td>
</tr>
<tr>
<td>Shigellosis</td>
<td>1</td>
</tr>
<tr>
<td>Syphilis</td>
<td>1</td>
</tr>
<tr>
<td>Vibriosis (not cholera)</td>
<td>1</td>
</tr>
<tr>
<td>Yersiniosi</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>201</td>
</tr>
</tbody>
</table>

\(^1\)Case counts include confirmed, probable and suspected disease classifications

\(^2\)Outbreaks are two or more cases that are epidemiologically linked
Figure 2. Types of Communicable Diseases Reported in Fayette County, 2019

- Sexually Transmitted Infections: 40%
- Vaccine-Preventable Infections: 32%
- Bloodborne Pathogens: 17%
- Enteric Illnesses: 7%
- Vectorborne Illnesses: 2%
- Other Illnesses: 2%

Reported cases in 2019: 201

Types of Diseases Reported:

- Sexually Transmitted Infections: 66 cases (Chlamydia: 66, Gonorrhea: 14, Syphilis: 1)
- Enteric Illnesses: 13 cases (Brucellosis: 1, Campylobacteriosis: 3, Giardia: 2, Salmonella: 4, Shigella: 1, Vibriosis: 1, Yersiniosis: 1)
- Vaccine-Preventable Illnesses: 64 cases (Hepatitis A: 21, Hepatitis B: 12, Influenza-Associated Hospitalisations: 29, Pertussis: 2)
- Bloodborne Illnesses: 36 cases (Hepatitis C: 35, Lyme Disease: 4)
- Vectorborne Illnesses: 4 cases (Coccidiomyces: 1, Legionnaires’ Disease: 1, Meningitis, aseptic: 2, Meningitis, bacterial: 1)
- Other Illnesses: 4 cases
Chlamydia

This sexually transmitted infection is caused by the bacteria Chlamydia trachomatis. People often develop symptoms 7-21 days after exposure. Prevention includes abstinence, appropriate condom use, and identification and treatment of sexual contacts of those infected with chlamydia.

66
Reported cases of Chlamydia

7.0%
Decrease from previous year

Case Demographics

Age Distribution of Chlamydia Cases in Fayette County, 2019

22.4 years
Average Age

21 years
Median Age

12 years
Minimum Age

56 years
Maximum Age
Hepatitis C

This bloodborne infection is caused by the Hepatitis C virus. It is transmitted mainly through injection drug use. It may also occur sexually or through inadequately cleaned medical devices, exposure to blood in the workplace or exposure during childbirth. Individuals often become ill 2 weeks-6 months after exposure. Currently no vaccine is available to prevent this infection.

Reported cases of Hepatitis C

Minimum Age: 24 years
Average Age: 37.1 years
Median Age: 35 years
Maximum Age: 71 years

Decrease from previous year: 14.6%
Influenza is caused by person-to-person spread of the Influenza A or B virus. Only individuals who are hospitalized due to influenza illness are shown below. Individuals become ill 1-4 days after exposure to the influenza virus. Prevention includes annual vaccination, social distancing, and proper cough and sneeze etiquette.

**Case Demographics**

- **33.3%** Male
- **60.0%** Female
- **6.7%** Unknown

**Age Distribution of Influenza-Associated Hospitalization Cases in Fayette County, 2019**

- **60.6 years** Average Age
- **6 years** Minimum Age
- **65 years** Median Age
- **102 years** Maximum Age

**Influenza-Associated Hospitalization Cases by Month in Fayette County, 2019**

- January: 1 case
- February: 9 cases
- March: 15 cases
- April: 2 cases
- May: 0 cases
- June: 0 cases
- July: 0 cases
- August: 0 cases
- September: 0 cases
- October: 0 cases
- November: 0 cases
- December: 1 case

**Influenza Associated Hospitalization Cases in Fayette, 2015-2019**

- 2015: 5 cases
- 2016: 8 cases
- 2017: 9 cases
- 2018: 17 cases
- 2019: 30 cases

**Increase from previous year**

- **76.5%**

**Reported cases of influenza-assoc. hospitalization**

- **30** cases
**Hepatitis A**

This infection is caused by the Hepatitis A virus, of which humans are the only source. It is transmitted fecal-orally, often through contaminated food. Individuals often become ill 15-50 days after exposure. The best way to prevent this illness is through vaccination. A state-wide community outbreak of Hepatitis A occurred during 2019 in Ohio.

**21 Reported cases of Hepatitis A**

![Graph showing Hepatitis A cases by month in Fayette County, 2019]

![Graph showing Hepatitis A cases in Fayette, 2015-2019]

**Case Demographics**

![Image showing case demographics]

**Age Distribution of Hepatitis A Cases in Fayette County, 2019**

- **25.8 years** Average Age
- **4 years** Minimum Age
- **26 years** Median Age
- **58 years** Maximum Age
Gonorrhea

This infection is caused by the sexually transmitted bacteria Neisseria gonorrhoeae. People often develop symptoms 3-8 days after exposure. The best prevention for this infection includes abstinence, appropriate condom use, and identification and treatment of sexual contacts of those infected with gonorrhea.

14
Reported cases of gonorrhea

Gonorrhea Cases by Month in Fayette County, 2019

27.9 years
Average Age

18 years
Minimum Age

27 years
Median Age

43 years
Maximum Age

Case Demographics

75.0% 25.0%

Gonorrhea Cases in Fayette, 2015-2019

44.0%
Decrease from previous year

Gonorrhea Cases by Month in Fayette County, 2019

Minimum Age

18 years
Median Age

43 years
Maximum Age
Variable completeness is a quality assurance indicator used to determine if key data elements are reported to the local health department and, if not, if the communicable disease staff are asking for the information during their investigations. Age, race, sex, and ethnicity are important in identifying populations most at risk for these illnesses, especially during outbreaks. Illness onset dates help disease investigators during outbreaks to determine when it began and when it ended. This information also aids investigators in determining if any public health interventions to stop disease spread are working.

<table>
<thead>
<tr>
<th>Reportable Disease</th>
<th>Age</th>
<th>Race</th>
<th>Ethnicity</th>
<th>Sex</th>
<th>Illness Onset Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brucellosis</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Campylobacteriosis</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>67%</td>
</tr>
<tr>
<td>Chlamydia infection</td>
<td>100%</td>
<td>100%</td>
<td>91%</td>
<td>100%</td>
<td>N/A</td>
</tr>
<tr>
<td>Coccidioidomycosis</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Giardiasis</td>
<td>100%</td>
<td>100%</td>
<td>50%</td>
<td>100%</td>
<td>50%</td>
</tr>
<tr>
<td>Gonococcal infection</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>N/A</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>100%</td>
<td>100%</td>
<td>94%</td>
<td>100%</td>
<td>57%</td>
</tr>
<tr>
<td>Hepatitis B (including delta) - acute</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Hepatitis B (including delta) - chronic</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>8%</td>
</tr>
<tr>
<td>Hepatitis C - acute</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
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<tr>
<td>Hepatitis C - chronic</td>
<td>100%</td>
<td>100%</td>
<td>95%</td>
<td>98%</td>
<td>5%</td>
</tr>
<tr>
<td>Immigrant Investigation</td>
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<td>100%</td>
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<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Influenza-associated hospitalization</td>
<td>100%</td>
<td>100%</td>
<td>97%</td>
<td>94%</td>
<td>76%</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Lyme Disease</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>25%</td>
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<tr>
<td>Meningitis - aseptic/viral</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Meningitis - bacterial (Not N. meningitidis)</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Pertussis</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>67%</td>
</tr>
<tr>
<td>Q fever, chronic</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>100%</td>
<td>90%</td>
<td>75%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Shigellosis</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Streptococcal - Group A - invasive</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>N/A</td>
</tr>
<tr>
<td>Varicella</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Vibriosis (not cholera)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Yersiniosis</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Prepared by the Union County Health Department's Epidemiologists.

All data was queried from ODRS Data Extract on January 23, 2020.

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