

WYANDOT COUNTY 2018

COMMUNICABLE DISEASE REPORT

The communicable disease summary of reportable infectious diseases for January 2018—December 2018.

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ANNUAL COMMUNICABLE DISEASES

Wyandot County saw an 8.28% decrease in communicable disease cases from 2017 to 2018 (157 cases and 144 cases, respectively). **Figure 1.** shows the number of communicable disease cases occurring annually for the last five years.



Communicable Disease Highlights

Numerous infectious diseases were reported during 2018; however, the most frequently reported illnesses were chlamydia (53 cases), influenza-associated hospitalizations (26), campylobacteriosis (17 cases) Hepatitis C (17 cases), and gonorrhea (8 cases). All of these diseases were also in the top five diseases reported in 2017 and chlamydia, campylobacteriosis, influenza-associated hospitalizations, and Hepatitis C were also in the top five diseases reported during 2015 and 2016.

Table 1. on Page 4 illustrates all of the diseases reported in the community and the number of cases for eachof these illnesses. The remainder of this document provides epidemiological data on each of theseillnesses as well as brief demographic information on the cases and disease trends over the past five years.

ANNUAL COMMUNICABLE DISEASES

| Class B Reportable Diseases | | | | | |
|---|-----|--|--|--|--|
| Campylobacteriosis | 17 | | | | |
| Chlamydia | 53 | | | | |
| Giardiasis | 3 | | | | |
| Gonorrhea | 8 | | | | |
| Hepatitis A | 3 | | | | |
| Hepatitis B - Perinatal Infection | 1 | | | | |
| Hepatitis B | 4 | | | | |
| Hepatitis C | 17 | | | | |
| Influenza-associated hospitalization | 26 | | | | |
| Legionnaires' Disease | 1 | | | | |
| Salmonella | 6 | | | | |
| Streptococcus pneumoniae | 3 | | | | |
| Varicella | 1 | | | | |
| West Nile virus disease | 1 | | | | |
| Total: | 144 | | | | |
| Class C Reportable Diseases - Outbreaks | | | | | |
| Hand Foot and Mouth Disease | 1 | | | | |
| Unknown Gastrointestinal Illness | 2 | | | | |
| Total: | 3 | | | | |

Table 1. Communicable Diseases Reported in Wyandot County, 2018



Notes:

- Case counts include confirmed, probable, and suspect disease classifications
- Sexually transmitted infections include chlamydia and gonorrhea
- Enteric illnesses include campylobacteriosis, giardia, and salmonella
- Vaccine preventable illnesses include Hepatitis A, Hepatitis B, influenza-associated hospitalizations, Streptococcus
- pneumoniae, and varicella
- Bloodborne pathogens include Hepatitis C
- Vectorborne illnesses include West Nile virus disease
- Other illnesses include Legionnaires' disease

CHLAMYDIA

DEMOGRAPHICS

| DEMOGRAPHICS | | | Chla | mydia | a Case | es by | Mon | th in | Wya | ndot | Cour | 1ty, 2 | 018 | |
|-----------------------|-------------------------------------|---------------------|-----------------|------------------|-------------------|----------------|---------------|-------|--------|--------|--------|--------|-----|-----|
| Number of Cases: | 53 | 9 | | | | | 8 | | 8 | | | | | |
| Average Age: | 20.8 years | ہ میں 7 | | | | | | | | 7 | 6 | | | |
| Median Age: | 20.0 years | و عور | - | | | | ÷ | | t | ÷ | Ŭ | | | |
| Age Range: | 16-49 years | o jo zag | 4 | | 4 | 2 | | | | | | 4 | | 4 |
| Female: | 71.7% | 3 Num | | | | | ÷ | 2 | t | | | | 2 | ÷ |
| Male: | 28.3% | 1 | | 1 | | | | | | | | | | |
| Change from 2017: | -7.0% | 0 | lan | Feb | Mar | Apr | May | lun | Jul | Aug | Sen | Oct | Nov | Dec |
| EPIDEMIOLOGY | | | Jan | 100 | TTA | , bi | inay | Jun | Jui | / lug | 565 | 000 | | Dec |
| Infectious Agent: | Chlamydia tracho | <i>matis</i> b | acteri | а | | | | | | | | | | |
| Case Definition: | Isolation of Chlan | nydia tra | achom | <i>atis</i> f | rom a | clini | cal sp | ecim | en | | | | | |
| Symptoms: | Men may suffer fr while women ma | rom paii y exper | nful u ience | rinatio vagin | on, ur al dise | inary charg | r frequ ge | uency | r, and | l peni | le dis | char | зе; | |
| Source: | Humans | | | | | | | | | | | | | |
| Mode of Transmission: | Sexually transmit | ted | | | | | | | | | | | | |
| Incubation Period: | 7-21 days | | | | | | | | | | | | | |

Abstinence, condom use, and identification and treatment of sexual contacts of Prevention: those proven to be or suspected of being infected with Chlamydia trachomatis



INFLUENZA-ASSOCIATED HOSPITALIZATIONS

DEMOGRAPHICS

| Number of Cases: | 26 |
|-------------------|-------------|
| Average Age: | 65.9 years |
| Median Age: | 66.5 years |
| Age Range: | 15-95 years |
| Female: | 53.8% |
| Male: | 46.2% |
| Change from 2017: | -3.7% |



0

Feb Mar Apr May Jun

0

0

0

Jul Aug Sep Oct Nov Dec

0

EPIDEMIOLOGY

| Infectious Agent: | Two main types of Influenza virus: Influenza A and Influenza B; both types include different strains that tend to change from year to year |
|-----------------------|--|
| Case Definition: | An illness compatible with influenza virus infection that results in hospitalization |
| Symptoms: | Fever, body aches, headache, malaise, nonproductive cough, sore throat, and runny nose |
| Source: | Humans |
| Mode of Transmission: | Direct person-to-person contact through droplet spread or via articles recently contaminated with nasopharyngeal secretions. |
| Incubation Period: | 1-4 days |
| Prevention: | The best prevention is annual vaccination; washing hands after sneezing, coughing or using a tissue; cough into sleeve and not into hands |

0

Jan



CAMPYLOBACTERIOSIS

DEMOGRAPHICS

| Number of Cases: | 17 |
|-------------------|------------|
| Average Age: | 44.5 years |
| Median Age: | 43 years |
| Age Range: | 1-82 years |
| Female: | 64.7% |
| Male: | 35.3% |
| Change from 2017: | -48.5% |



EPIDEMIOLOGY

| Infectious Agent: | Campylobacter organisms, most commonly Campylobacter jejuni |
|-----------------------|---|
| Case Definition: | Isolation or detection of Campylobacter species with or without diarrhea |
| Symptoms: | Diarrhea (frequently bloody), abdominal cramps, malaise, fever, headache, nausea, and vomiting |
| Source: | Poultry, cattle, puppies, kittens, swine, sheep rodents, and birds |
| Mode of Transmission: | Fecal-orally through undercooked meat, contaminated food or raw milk, or direct contact with infected pets, livestock or infants. |
| Incubation Period: | 1-10 days |
| Prevention: | Cook meats thoroughly, avoid cross-contamination of foods with raw meat juices, avoid unpasteurized milk and untreated water, and washing hands after contact with animals, bowel movements, changing diapers, and before eating or preparing food. |



HEPATITIS C

DEMOGRAPHICS

| Number of Cases: | 17 |
|-------------------|-------------|
| Average Age: | 40.1 years |
| Median Age: | 32.0 years |
| Age Range: | 21-68 years |
| Female: | 52.9% |
| Male: | 47.1% |
| Change from 2017: | 13.3% |



EPIDEMIOLOGY

| Infectious Agent: | Hepatitis C virus |
|-----------------------|--|
| Case Definition: | A positive test for Hepatitis C virus antibodies or detection of the Hepatitis C virus |
| Symptoms: | Those infected may be asymptomatic; however, some may experience nausea, vomiting, abdominal pain, loss of appetite, dark urine, and/or jaundice |
| Source: | Human blood |
| Mode of Transmission: | Injection drug use through the sharing of needles and other drug paraphernalia contaminated with infected blood; non-professional tattooing or in-home tattooing through shared needles or contaminated equipment; sexual transmission inefficiently spreads the virus (rare) |
| Incubation Period: | 2 weeks—6 months |
| Prevention: | No vaccine is available |



GONORRHEA

DEMOGRAPHICS

| Number of Cases: | 8 |
|-------------------|-------------|
| Average Age: | 26.5 years |
| Median Age: | 21.0 years |
| Age Range: | 15-58 years |
| Female: | 62.5% |
| Male: | 37.5% |
| Change from 2017: | 60.0% |



EPIDEMIOLOGY

| Infectious Agent: | Neisseria gonorrhoeae bacteria |
|-----------------------|---|
| Case Definition: | Isolation of Neisseria gonorrhoeae from a clinical specimen |
| Symptoms: | Men suffer from painful, frequent urination, and penile discharge; women may experience vaginal discharge, painful urination, and vaginal bleeding between menstrual cycles |
| Source: | Humans |
| Mode of Transmission: | Sexually transmitted |
| Incubation Period: | 3-8 days |
| Prevention: | Abstinence, condom use, and identification and treatment of sexual contacts of those proven to be or suspected of being infected with <i>Neisseria gonorrhoeae</i> |



TIMELINESS OF REPORTING

Timely reporting of infectious diseases is important in identifying potential outbreaks and in reducing disease burden. Public health relies on health care providers and laboratories for identification and prompt reporting of these infectious diseases. Timeliness requirements for each reportable disease is dependent of the infectious nature and severity of the disease.

Reporting lag is defined as the difference between the date the case was reported to the local health department and the date of diagnosis. For Class A diseases, median and mean lag time values should be less than 1 since these illnesses are required to be reported to the health department immediately, and for Class B and C diseases, mean and median lag time values should be less than 2 since these illness should be reported to the health department to the health department by the end of the next business day.

Table 2 illustrates the lag time for select reportable diseases reported in Wyandot County during 2018.

| Table 2. Reporting Lag Time for Selected Reportable Diseases in Wyandot County, 2017 | | | | | | | |
|--|-----------------------------|-------|--------|--------|--|--|--|
| Reportable Disease | Reporting Requirement | Cases | Median | Mean | | | |
| | | (N) | (Days) | (Days) | | | |
| Campylobacteriosis | By end of next business day | 17 | 3 | 4.2 | | | |
| Cryptosporidiosis | By end of next business day | 0 | N/A | N/A | | | |
| <i>E. coli</i> O157:H7 | By end of next business day | 0 | N/A | N/A | | | |
| Giardia | By end of next business day | 3 | 1 | 2 | | | |
| Influenza-Associated | | 26 | 2 | 2.4 | | | |
| Hospitalization | By end of next business day | 26 | 2 | 2.4 | | | |
| Legionnaires' Disease | By end of next business day | 1 | 12 | 12 | | | |
| Pertussis | By end of next business day | 0 | N/A | N/A | | | |
| Salmonella | By end of next business day | 6 | 1 | 1 | | | |
| Shigella | By end of next business day | 0 | N/A | N/A | | | |
| Notes: | | | | | | | |

Reporting lag time is the difference between the date the case was reported to the local health department and the case's date of diagnosis

Date of diagnosis defaulted to lab specimen collection date or illness onset date if blank

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