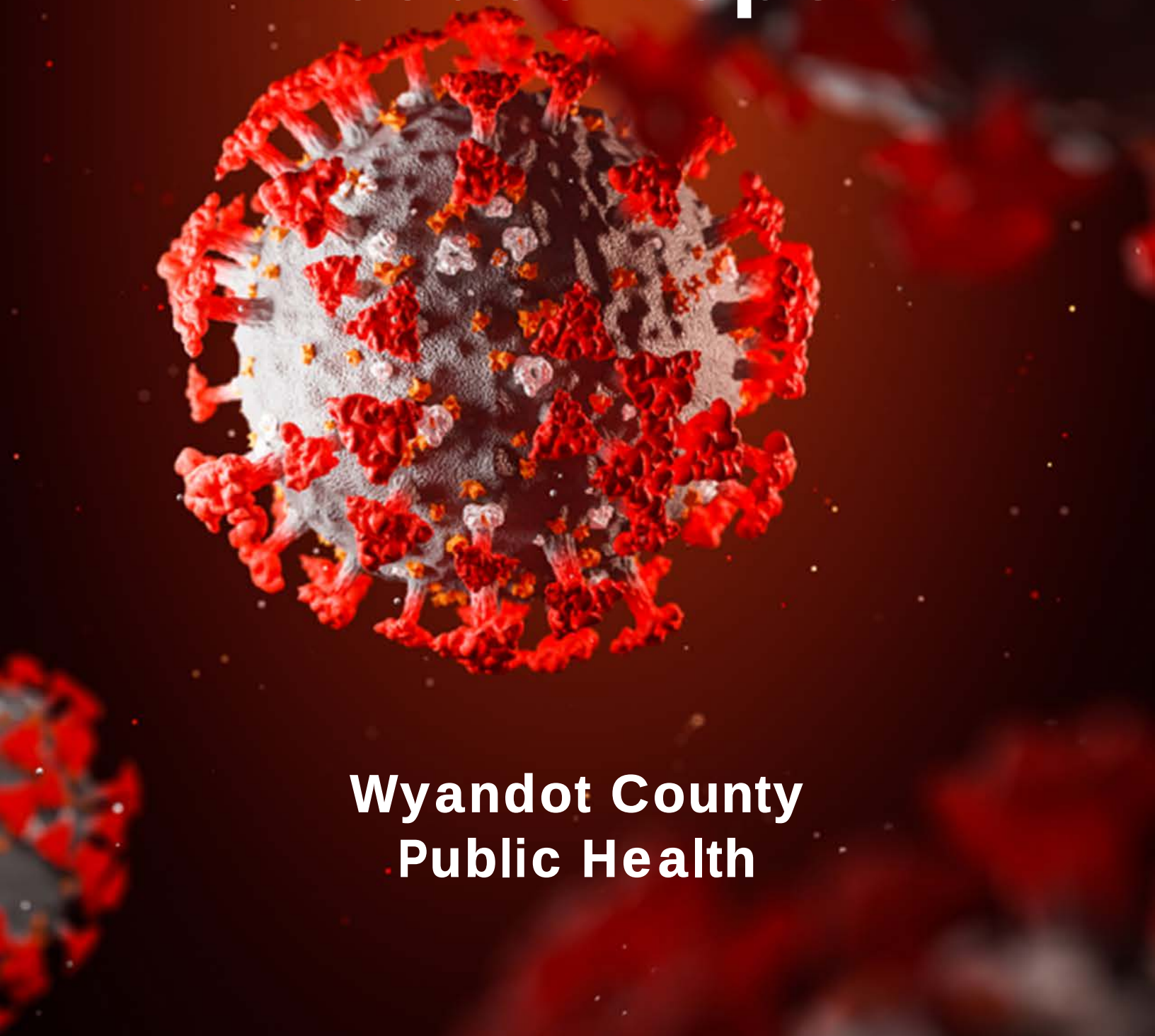
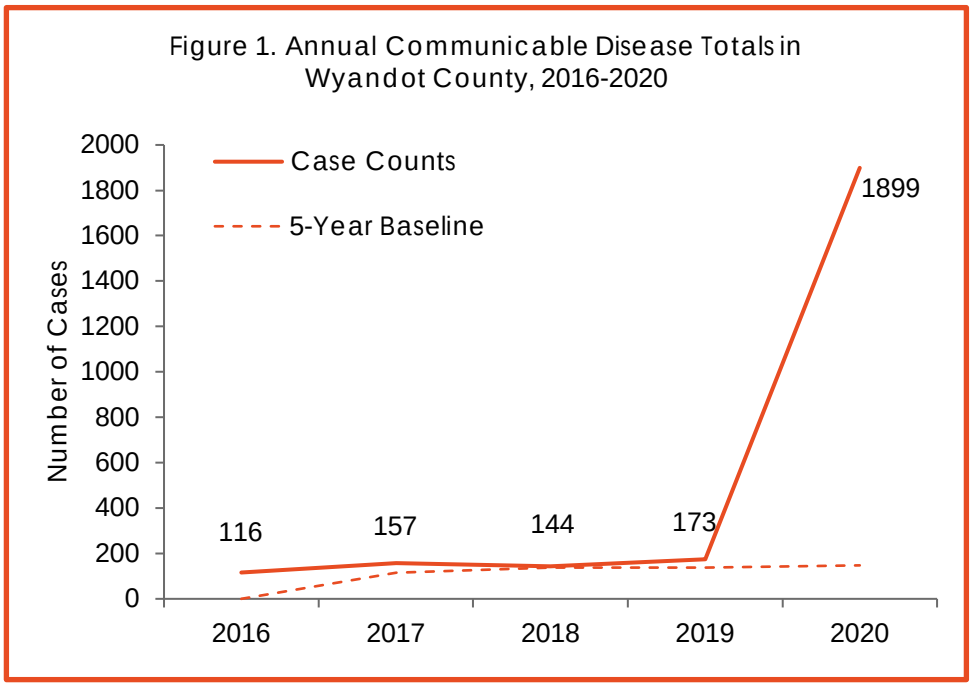
2020 Annual Communicable Disease Report



Wyandot County
Public Health

Communicable Disease Summary

Nearly 90 diseases are reportable in the state of Ohio. Anytime a person is diagnosed with one of these diseases, the local health department must be notified (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 partner agencies in the treatment and management of contagious diseases. This report provides an overview to facilitate an understanding of the reportable diseases affecting the health of Crawford County residents.



Due to the Coronavirus Disease 2019 (COVID-19) pandemic, Wyandot County saw an 997.7% increase in communicable disease cases from 2019 to 2020 (173 cases and 1,899 cases, respectively). Overall, 56.4% of cases were female, 43.6% were male. Cases ranged in age from 3 weeks to 104 years old with an average age of 47.3 years and a median age of 47 years. **Figure 1**. shows the number of communicable disease cases occuring annually for the past five years. The most frequently reported illnesses were COVID-19 (1.783 cases), chlamydia (54 cases), Hepatitis C (18 cases), gonorrhea (13 cases), and influenza-associated hospitalization (9 cases). Chlamydia, Hepatitis C, and gonorrhea have continued to be in the top five most reported diseases since 2015 and influenza-associated hospitalizations has been since 2017.

Table 1. on Page 3 lists the diseases and outbreaks reported in the community in 2020 and the number of cases for each of these illnesses. Additionally, **Figure 2.** on Page 4 categorizes those illnesses by type. The remainder of this document provides epidemiological information as well as brief demographic information on the cases and disease trends for each of the top five illnesses 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 A – 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* spp.
  - CP-CRE *Escherichia coli*
  - CP-CRE *Klebsiella* spp.
  - CP-CRE other
- Chancroid
- *Chlamydia trachomatis* infections
- Coccidioidomycosis
- 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)
- Psittacosis
- Q fever
- Rubella (congenital)
- *Salmonella* Paratyphi infection
- *Salmonella* Typhi infection (typhoid fever)
- Salmonellosis
- 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.

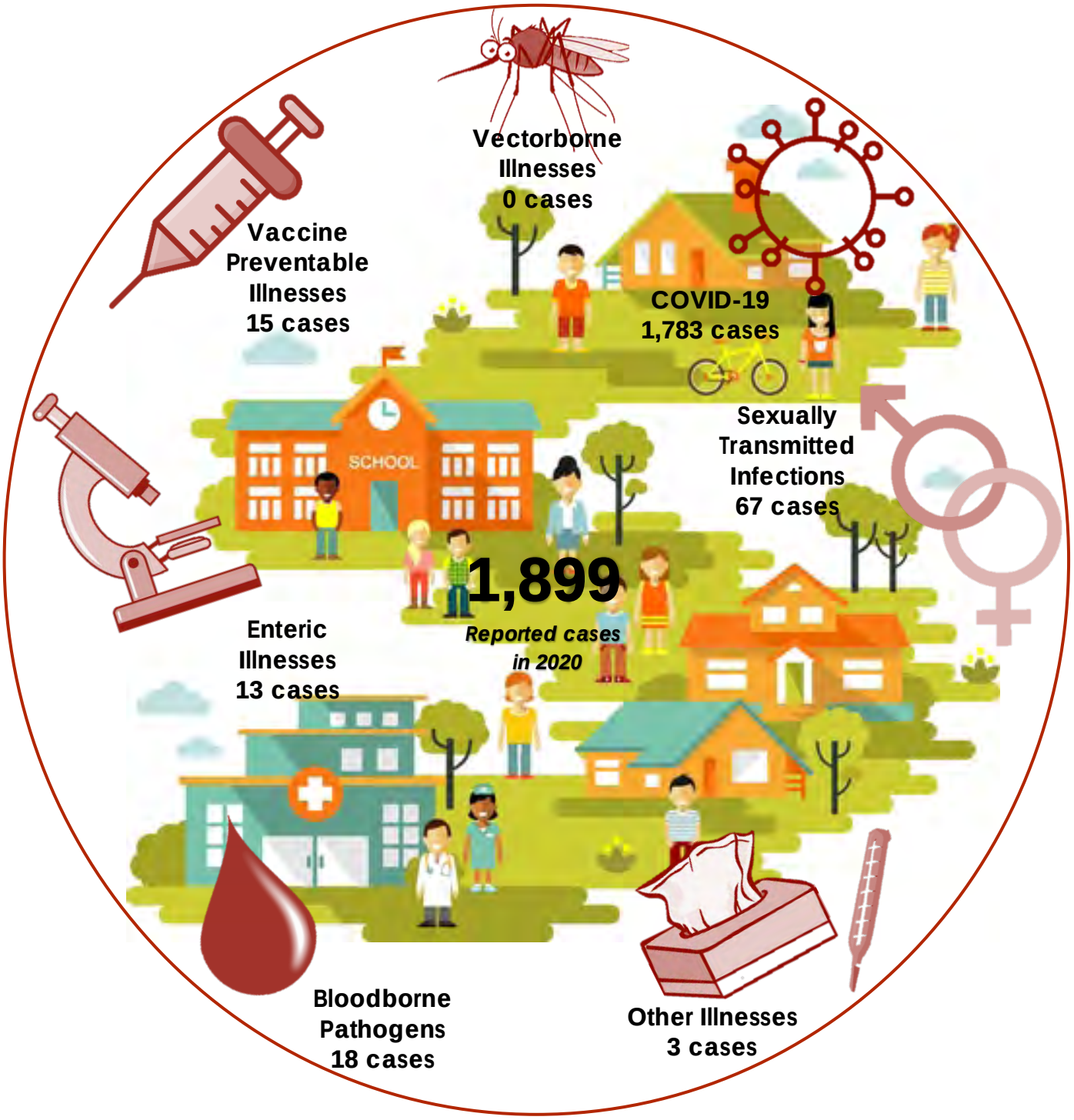
Ohio Department of Health

Communicable Diseases Reported

Table 1. Communicable Disease Cases[1] Reported in Wyandot County, 2020	
Class A Reportable Diseases	
Coronavirus Disease 2019 (COVID-19)	1,783
Class B Reportable Diseases	
Campylobacteriosis	5
Chlamydia	54
Cryptosporidiosis	1
Giardiasis	1
Gonorrhea	13
Hepatitis B (including delta)	3
Hepatitis C	17
Hepatitis C, perinatal infection	1
Influenza-Associated Hospitalization	9
Salmonella	5
Shigella	1
Streptococcal Disease - Group A - invasive	1
Streptococcus pneumoniae - invasive	1
Varicella	2
Vibriosis	1
Total	**1,899**
Class C Reportable Diseases – Outbreaks[2]	
Coronavirus Disease 2019 (COVID-19)	7
Influenza	1
Total	**8**

[1]Case counts include confirmed, probable and suspected disease classifications
[2]COVID-19 cases only include confirmed and probable disease classifications
[3]Outbreaks are two or more cases that are epidemiologically linked

Types of Diseases Reported



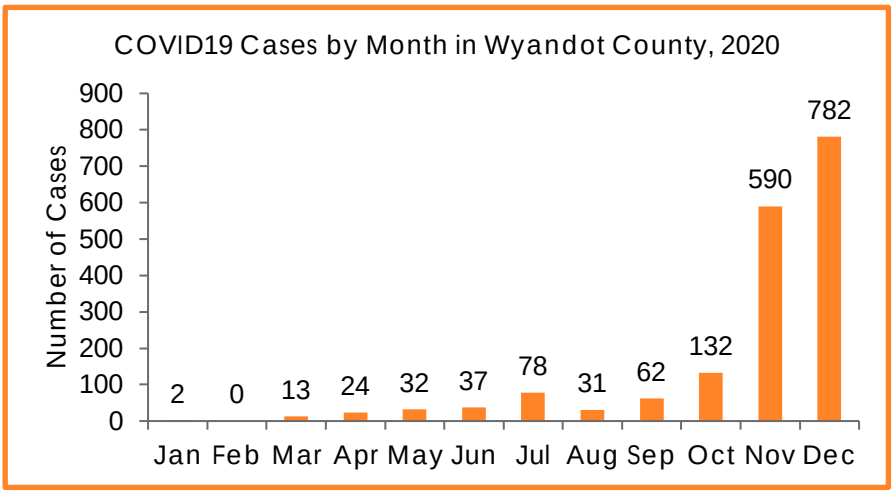
Notes:
All other disease cases include confirmed, probable, and suspect disease classifications
Case counts for COVID-19 include confirmed and probable disease classifications.
Sexually transmitted infections include chlamydia and gonorrhea
Enteric illnesses include campylobacteriosis, cryptosporidiosis, *E. coli*, salmonella, shigella, and yersiniosis
Vaccine-preventable illnesses include Hepatitis A, Hepatitis B, influenza-associated hospitalizations, and *Streptococcus pneumonia*
Bloodborne pathogens include Hepatitis C and perinatal Hepatitis C
Other illnesses include Hepatitis E and bacterial meningitis

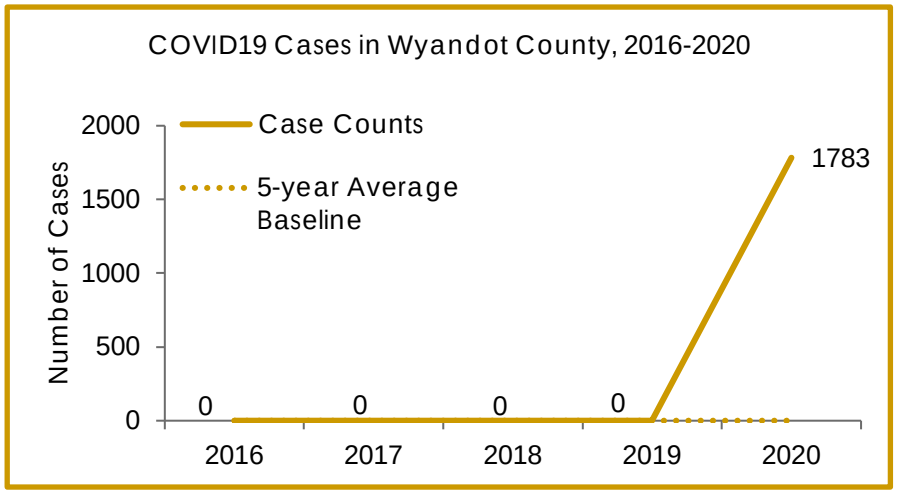
Coronavirus Disease 2019 (COVID-19)

This illness is caused by the novel species of the Coronaviridae virus family- SARS-CoV-2. People often develop symptoms 1-14 days after exposure. Prevention includes avoiding those ill with COVID-19, social distancing, wearing a cloth facemask that covers the mouth and nose, handwashing, disinfecting frequently touched surfaces, and vaccination.

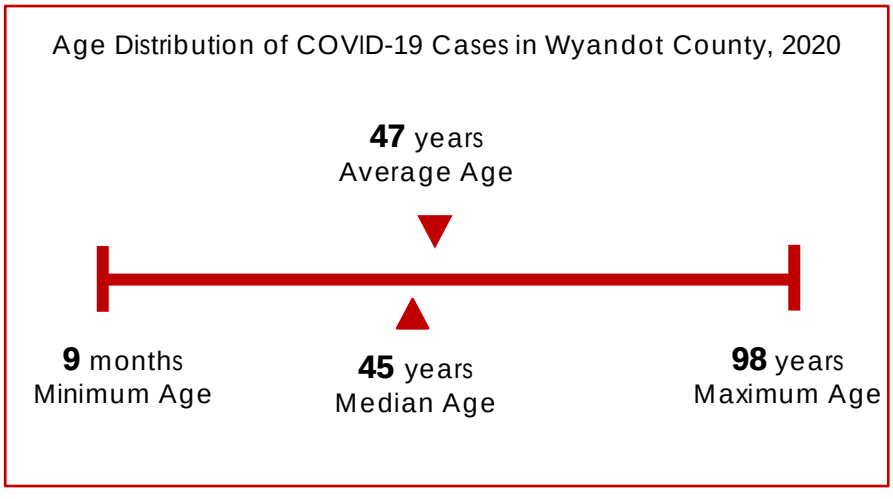
1,783

Reported cases of COVID-19





Case Demographics

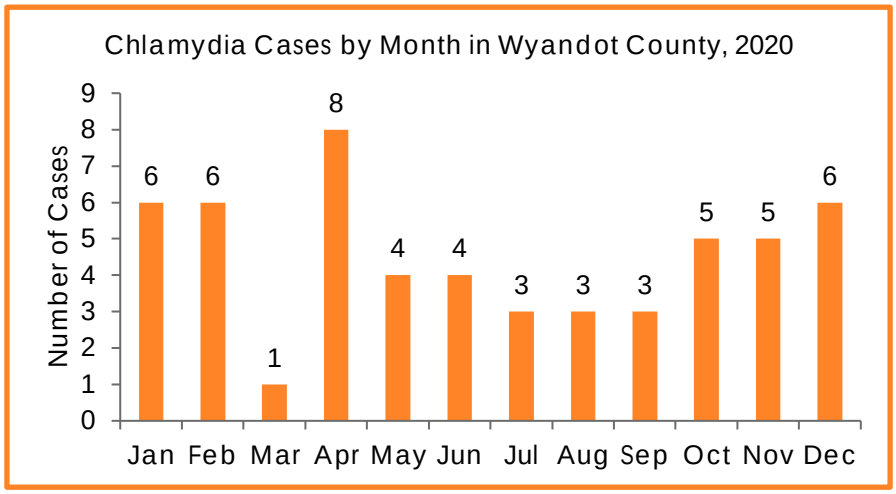


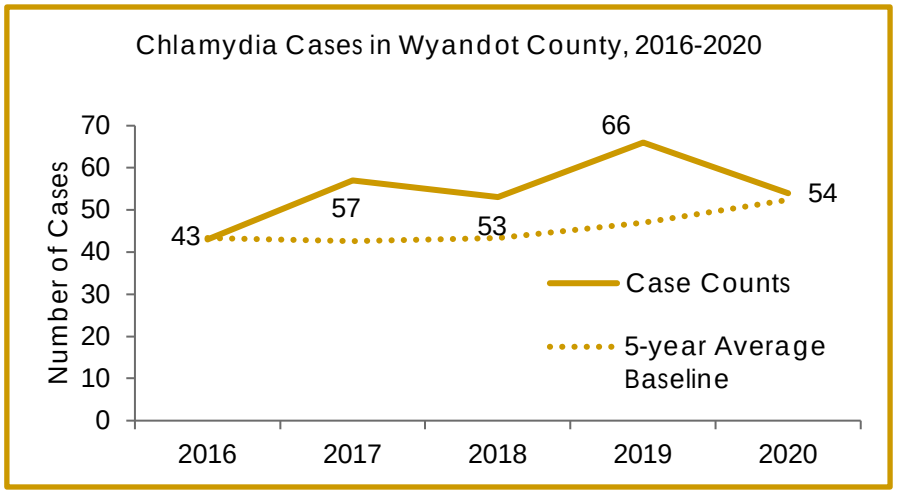
Chlamydia

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.

54

Reported cases of Chlamydia

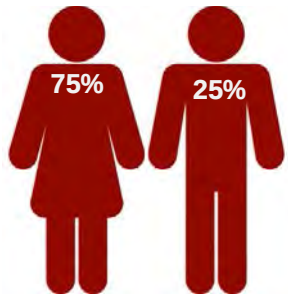


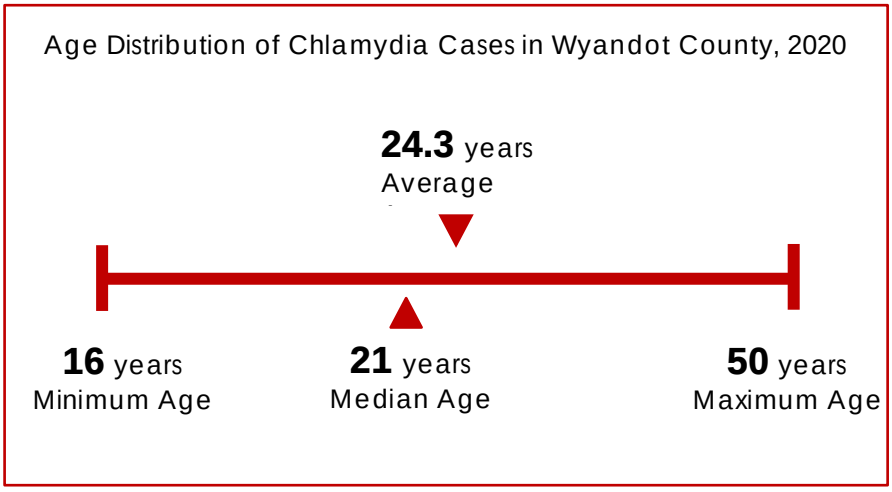


18.8%

Decrease from previous year

Case Demographics



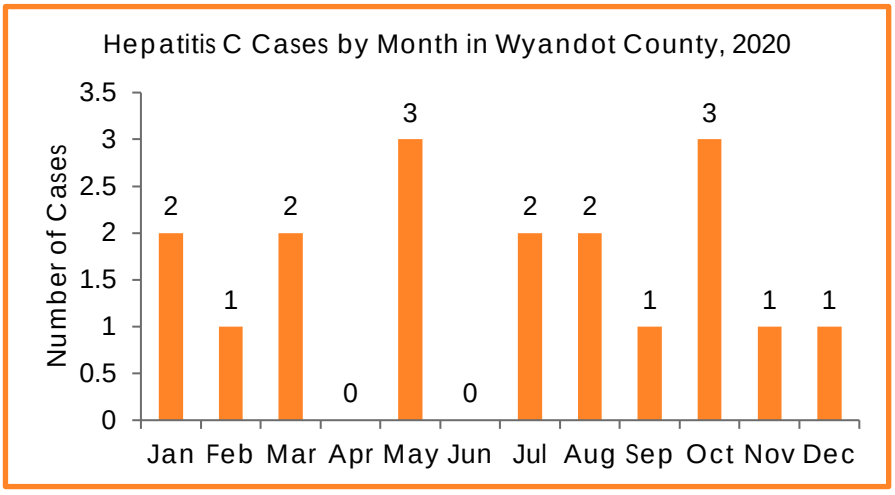


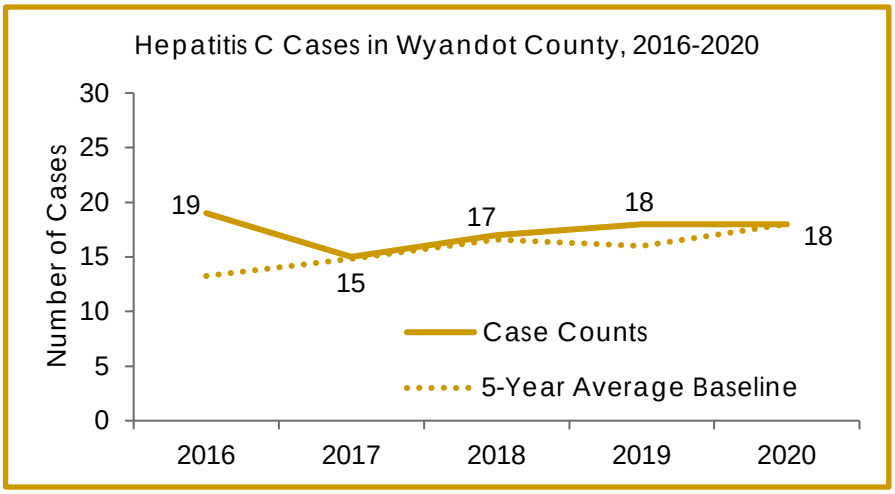
Hepatitis C

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.

18

Reported cases of Hepatitis C

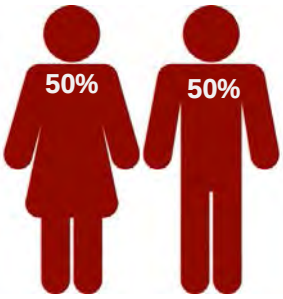


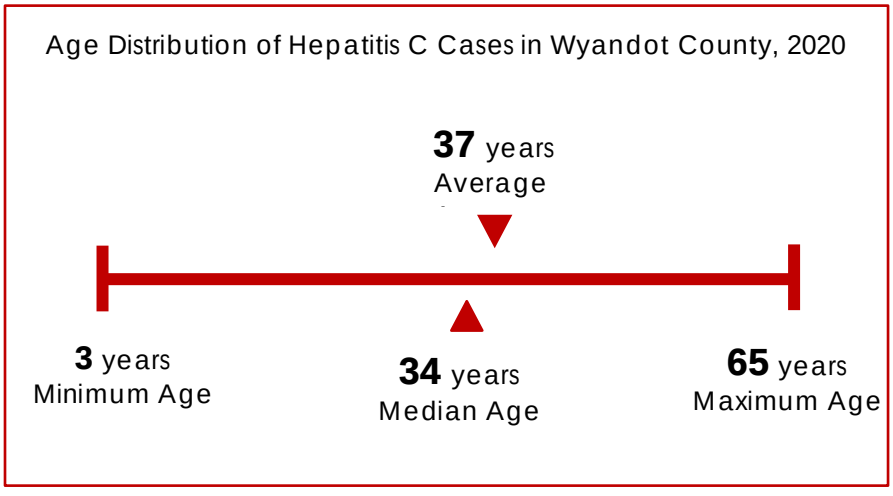


0%

Change from previous year

Case Demographics



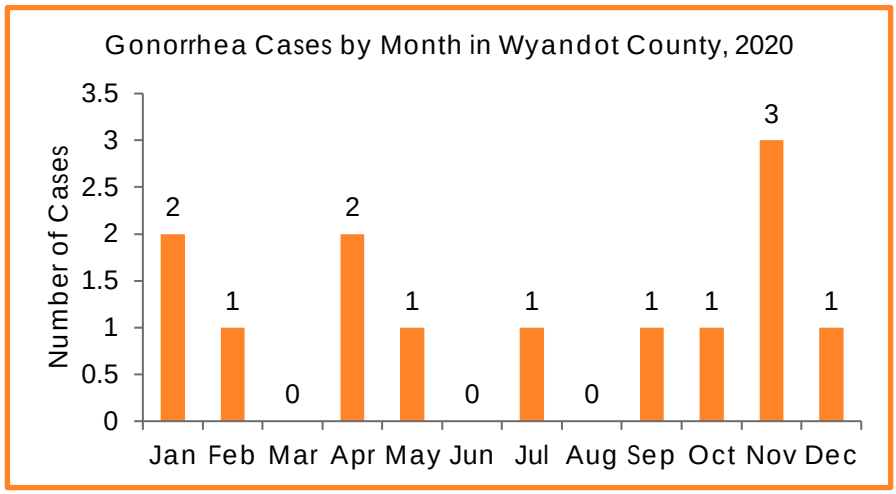


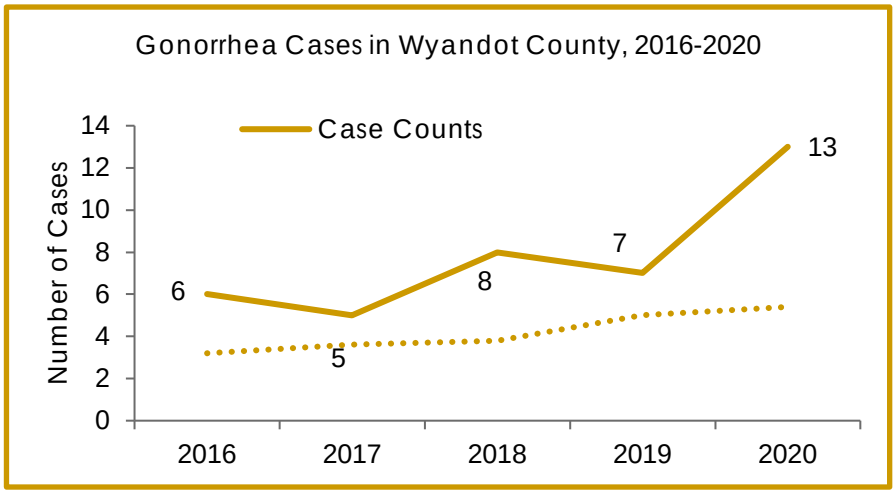
Gonorrhea

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.

13

Reported cases of Gonorrhea

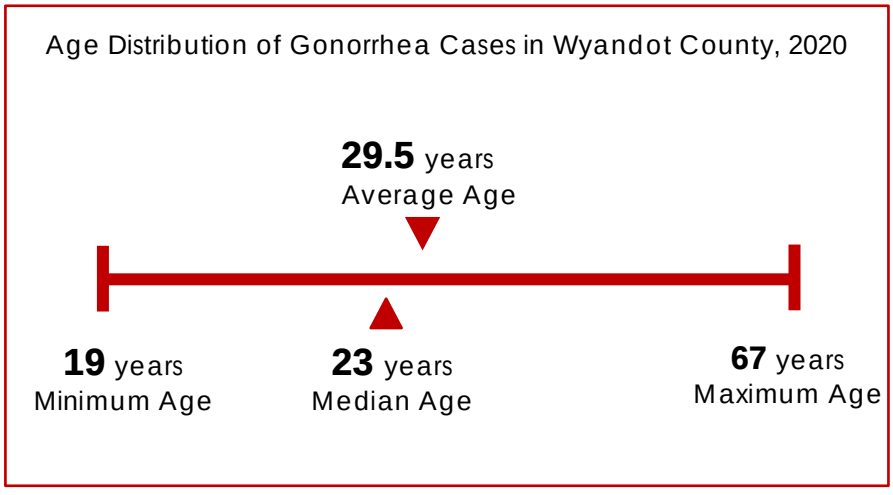




85.7

Increase from previous year

Case Demographics

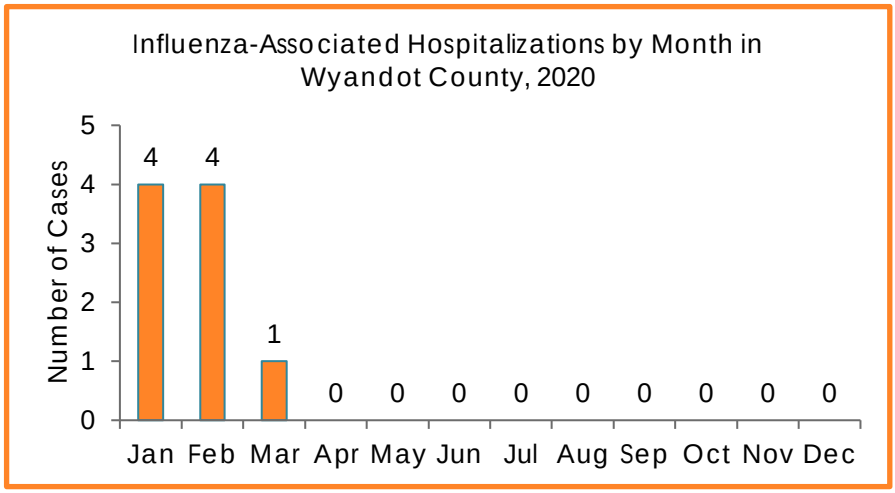


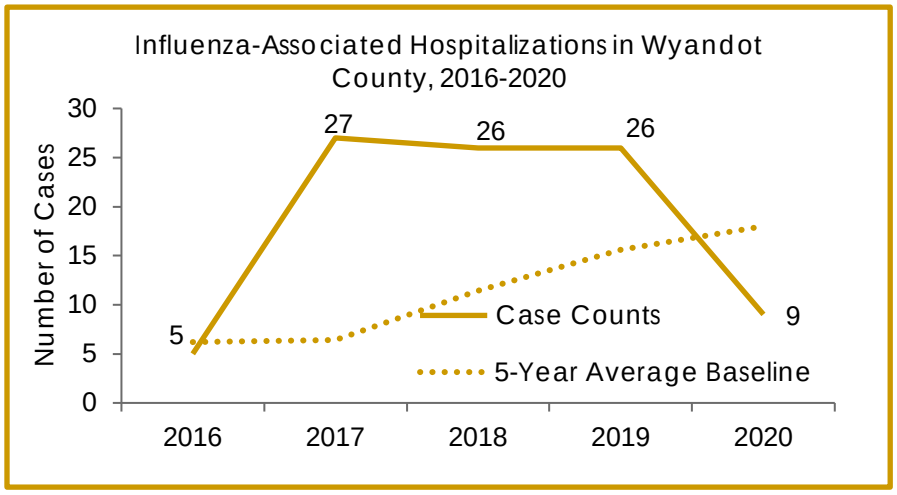
Influenza-Associated Hospitalizations

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.

9

Reported cases of influenza-associated hospitalizations

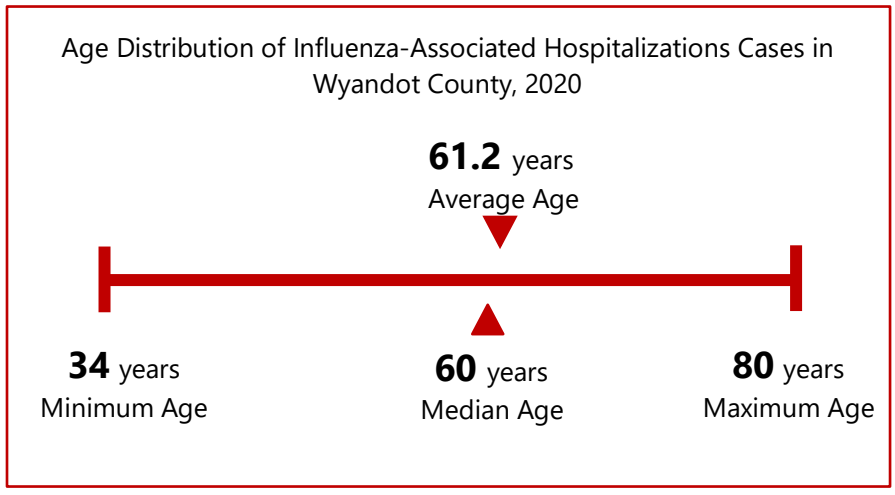




65.4

Decrease from previous year

Case Demographics



Variable Completeness

Variable completeness is a quality assurance indicator used to determine if key data elements are reported to the local health department and, if they are missing, if the disease investigators are asking for the information during their interviews. This year, some of these data elements were not routinely gathered due to the overwhelming number of cases reported during the pandemic. 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 the effectiveness of public health interventions to stop the spread of disease.

Table 2. Reportable Disease Variable Completeness

Reportable Disease	Age	Race	Ethnicity	Sex	Illness Onset Date
Campylobacteriosis	100.0%	100.0%	100.0%	100.0%	100.0%
Chlamydia infection	100.0%	100.0%	100.0%	100.0%	N/A
COVID-19	100.0%	97.3%	99.0%	99.9%	84.0%
Cryptosporidiosis	99.9%	100.0%	100.0%	100.0%	100.0%
Giardiasis	100.0%	100.0%	100.0%	100.0%	100.0%
Gonococcal infection	100.0%	100.0%	100.0%	100.0%	N/A
Hepatitis B (including delta) - acute	100.0%	100.0%	100.0%	100.0%	100.0%
Hepatitis B (including delta) - chronic	100.0%	100.0%	100.0%	100.0%	N/A
Hepatitis C - acute	100.0%	100.0%	100.0%	100.0%	N/A
Hepatitis C - chronic	100.0%	94.7%	94.7%	100.0%	N/A
Hepatitis C - Perinatal Infection	100.0%	100.0%	100.0%	100.0%	100.0%
Influenza-associated hospitalization	100.0%	100.0%	100.0%	100.0%	90.0%
Salmonellosis	100.0%	100.0%	100.0%	100.0%	100.0%
Shigellosis	100.0%	100.0%	100.0%	100.0%	100.0%
Streptococcal - Group A -invasive	100.0%	100.0%	100.0%	100.0%	100.0%
Streptococcus pneumoniae - invasive	100.0%	100.0%	100.0%	100.0%	100.0%
Syphilis - secondary	100.0%	100.0%	100.0%	100.0%	N/A
Syphilis - stage Unknown	100.0%	100.0%	100.0%	100.0%	N/A
Varicella	100.0%	100.0%	100.0%	100.0%	66.7%
Vibriosis	100.0%	100.0%	100.0%	100.0%	100.0%

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Prepared by the Union County Health Department's epidemiologists.

All data was queried from the Ohio Disease Reporting System's

Data Extract on February 1, 2021.

Wyandot County
Public Health
Prevent. Promote. Protect.