

2023 Annual Communicable Disease Report



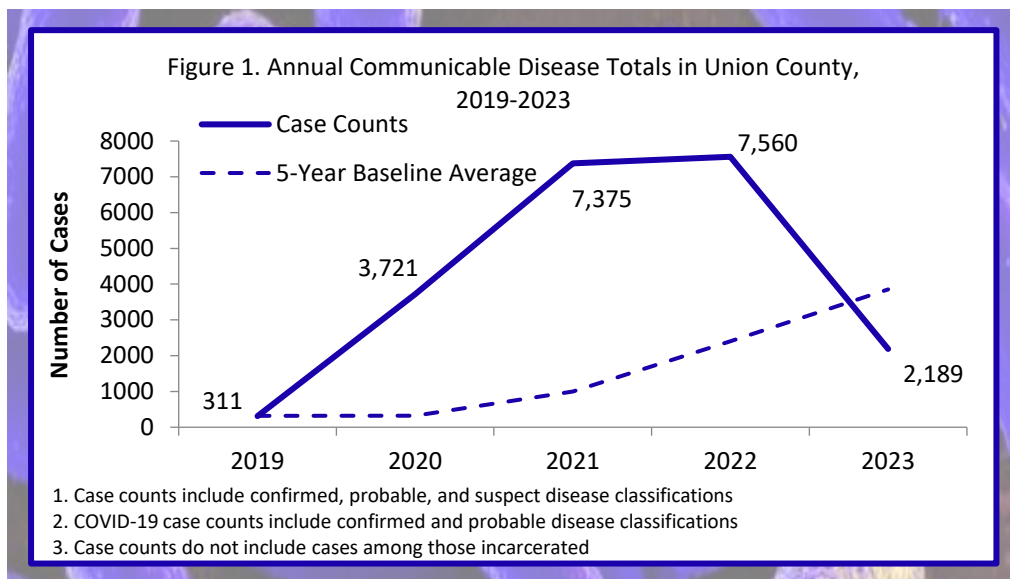
**UNION COUNTY
HEALTH DEPARTMENT**

[The front cover photo is of *Escherichia coli*
taken by The National Institute of Allergy and Infectious Diseases (NIAID)]

Communicable Disease Summary

This report provides an overview of the reportable diseases occurring within Union County, Ohio. Nearly 90 diseases are reportable to public health officials per Ohio Administrative Code 3701-3 (see Page 3 for a complete list of these illnesses). These diseases are broken down into classes based on their severity and potential for epidemic spread. Each class of disease has a different timeframe in which they are required to be reported to the local health department. Class A diseases must be reported by telephone within one hour while Class B and C diseases are required to be reported by the end of the next business day. Class B diseases are reported by fax or direct entry into the Ohio Disease Reporting System (ODRS) and Class C diseases are primarily reported by telephone. Using ODRS, health departments monitor the health of the community, investigate how individuals became ill, provide education to those ill, and assist medical providers in the treatment and management of these contagious diseases.

In 2023, Union County saw a 71.0% decrease in communicable disease cases from 2022 (7,560 and 2,189 cases, respectively). Overall, 58.0% of cases were female and 41.9% were male. Cases ranged in age from 4 days to 100 years old with an average age of 42.9 years and a median age of 41 years. The most frequently reported illnesses were COVID-19 (1,925 cases), chlamydia (115 cases), gonorrhea (23 cases), Hepatitis C (18 cases), and salmonella (16 cases). Figure 1. shows the number of disease cases occurring annually over the past five years. Table 1. on Page 4 lists the diseases reported in the community in 2023 and the number of cases for each of these illnesses. Additionally, the figure on Page 5 categorizes those illnesses by type. The remainder of this document provides epidemiological information, brief demographic information, and disease trends for each of the top five illnesses reported over the past five years.



Ohio's Reportable Diseases^{1,2}

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 *Moraxella* 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.

¹COVID-19 was added as a Class A disease in 2021 then moved to a Class B in 2023.

²Mpox formerly known as monkeypox was added as a Class A disease in 2023

Diseases Reported in 2023

Table 1. Communicable Disease Cases¹ Reported in Union County, 2023

| | Number of Cases ² | Case Rate ³ |
|--|------------------------------|------------------------|
| Class B Reportable Diseases | | |
| Campylobacteriosis | 15 | 22 |
| Chlamydia | 115 | 172 |
| Coccidioidomycosis | 1 | 1 |
| Coronavirus Disease 2019 (COVID-19) ⁴ | 1,925 | 2,878 |
| Cryptosporidiosis | 4 | 6 |
| Cyclosporiasis | 3 | 4 |
| E. coli, Shiga Toxin-Producing | 5 | 7 |
| Giardiasis | 2 | 3 |
| Gonorrhea | 23 | 34 |
| <i>Haemophilus influenzae</i> (invasive disease) | 1 | 1 |
| Hepatitis A | 2 | 3 |
| Hepatitis B (including delta) | 9 | 13 |
| Hepatitis C | 17 | 25 |
| Hepatitis C - Perinatal Infection | 1 | 1 |
| Influenza-Associated Hospitalization | 6 | 9 |
| Legionnaires' Disease | 1 | 1 |
| Listeriosis | 2 | 3 |
| Lyme Disease | 7 | 10 |
| Meningitis - aseptic/viral | 2 | 3 |
| Meningitis - bacterial (Not <i>N. meningitidis</i>) | 1 | 1 |
| Mumps | 1 | 1 |
| Pertussis | 1 | 1 |
| Salmonella Typhi | 1 | 1 |
| Salmonellosis | 15 | 22 |
| Shigellosis | 2 | 3 |
| Streptococcal Disease - Group A -invasive | 3 | 4 |
| Streptococcal Disease - Group B - in newborn | 1 | 1 |
| <i>Streptococcus pneumoniae</i> - invasive antibiotic resistance | 2 | 3 |
| Syphilis | 10 | 15 |
| Tuberculosis | 2 | 3 |
| Varicella | 4 | 6 |
| Vibriosis (not cholera) | 2 | 3 |
| Yersiniosis | 3 | 4 |
| Grand Total | 2,189 | 3,272 |
| Class C Reportable Diseases (Outbreaks) | | |
| Coronavirus Disease 2019 (COVID-19) | 14 | |
| Conjunctivitis | 2 | |
| Gastrointestinal Illness, Unknown | 1 | |
| Hand, Foot, and Mouth Disease | 2 | |
| Strep Throat | 6 | |
| Grand Total | 25 | |

¹Case counts include confirmed, probable and suspected disease classifications

²Case counts do not include cases occurring among those incarcerated in Union County

³Case rates per 100,000 people

⁴COVID-19 cases only include confirmed and probable disease classifications

Types of Diseases Reported



Notes:

Case counts include confirmed, probable, and suspect disease classifications

Case counts for COVID-19 include confirmed and probable disease classifications

Sexually transmitted infections include chlamydia, gonorrhea, and syphilis

Enteric illnesses include campylobacteriosis, cryptosporidiosis, cyclosporiasis, *E. coli*, giardia, listeria, salmonella, shigella, vibriosis, and yersiniosis

Vaccine preventable illnesses include *Haemophilus influenzae*, Hepatitis A, Hepatitis B, influenza-associated hospitalizations, mumps, pertussis, *Streptococcus pneumoniae*, and varicella

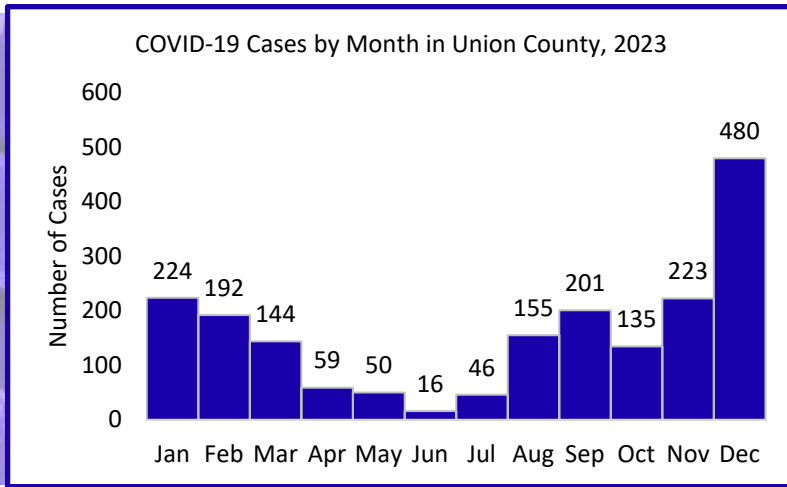
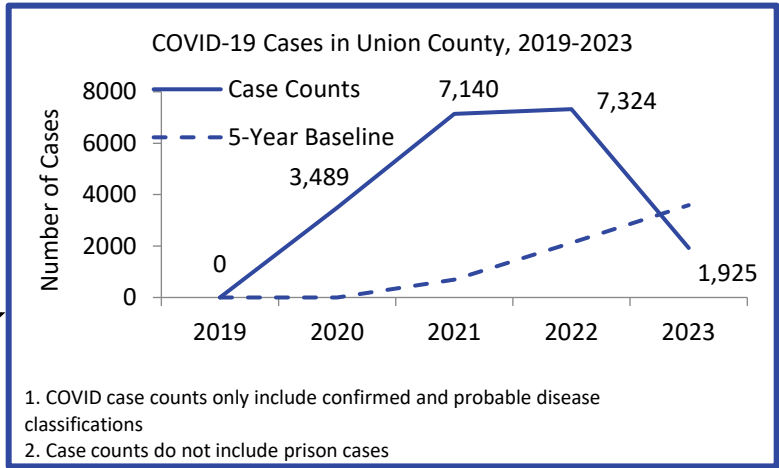
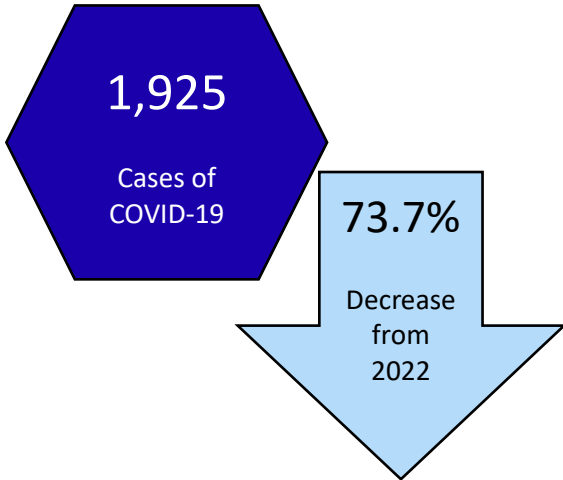
Bloodborne pathogens include Hepatitis C and perinatal Hepatitis C

Vectorborne illnesses include Lyme disease

Other illnesses include coccidioidomycosis, Legionnaires' disease, viral meningitis, bacterial meningitis, streptococcal disease, and tuberculosis

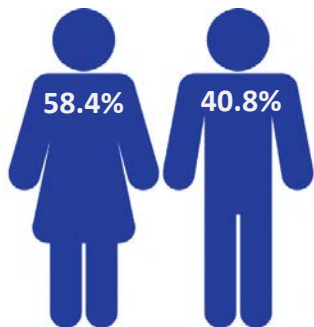
COVID-19

This illness is caused by the species of the Coronaviridae virus family- SARS-CoV-2. First discovered in Wuhan, China in 2019, this virus quickly transmitted worldwide causing the COVID-19 pandemic. 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, and disinfecting frequently touched surfaces. Vaccination reduces likelihood of serious illness.

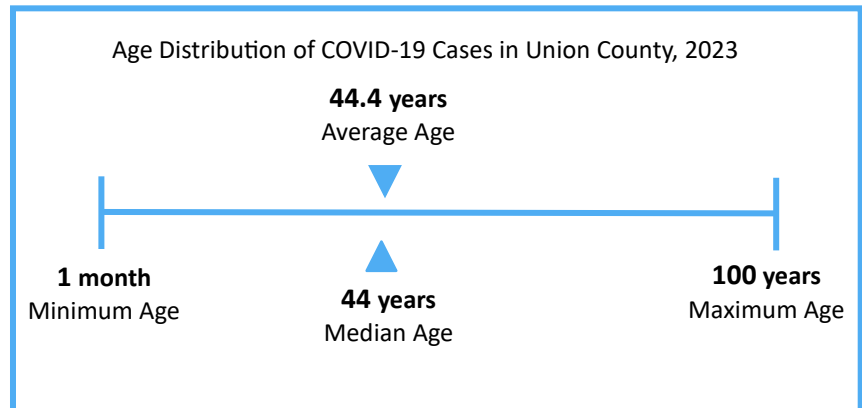


Did you know?
Everyone aged 5 years and older should get 1 dose of an updated COVID-19 vaccine to protect against serious illness

Case Demographics

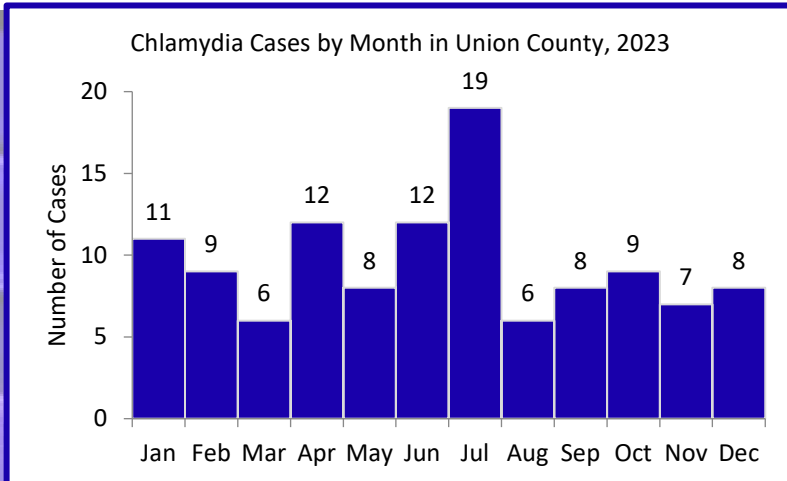
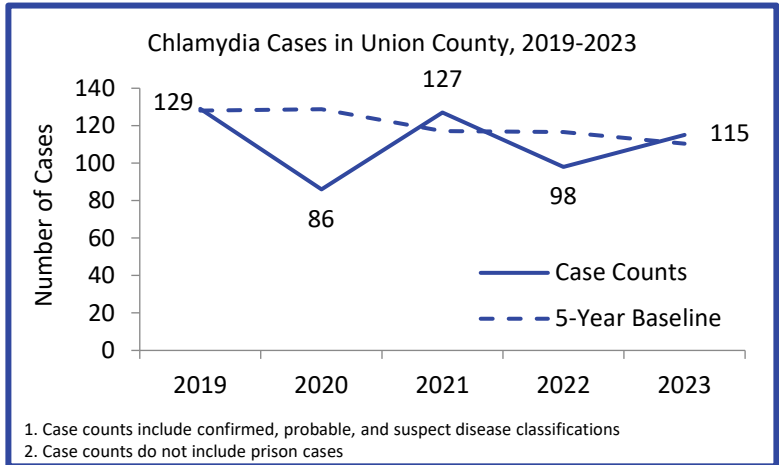
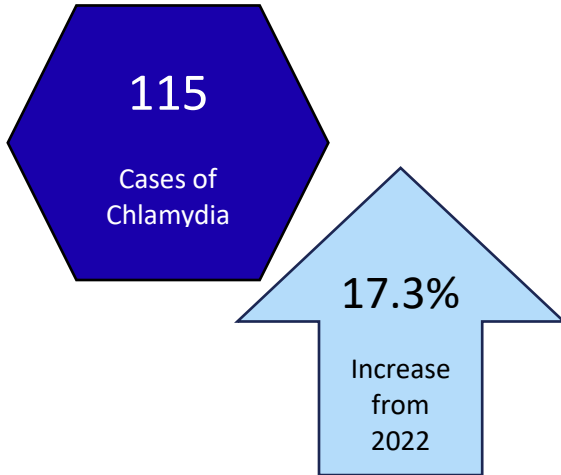


Unknown: 0.8%



Chlamydia

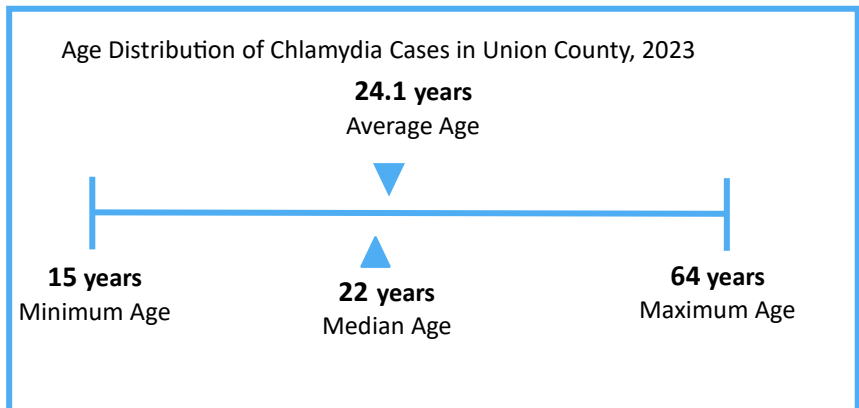
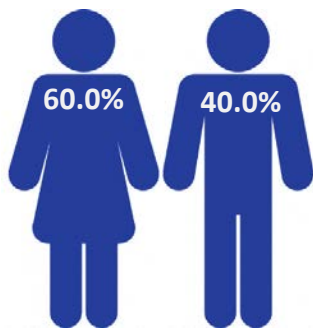
This sexually transmitted infection is caused by the bacteria *Chlamydia trachomatis*. People often develop symptoms 7-21 days after exposure. Prevention includes abstinence, appropriate condom use, and identification and treatment of sexual contacts of those infected with Chlamydia.



Did you know?

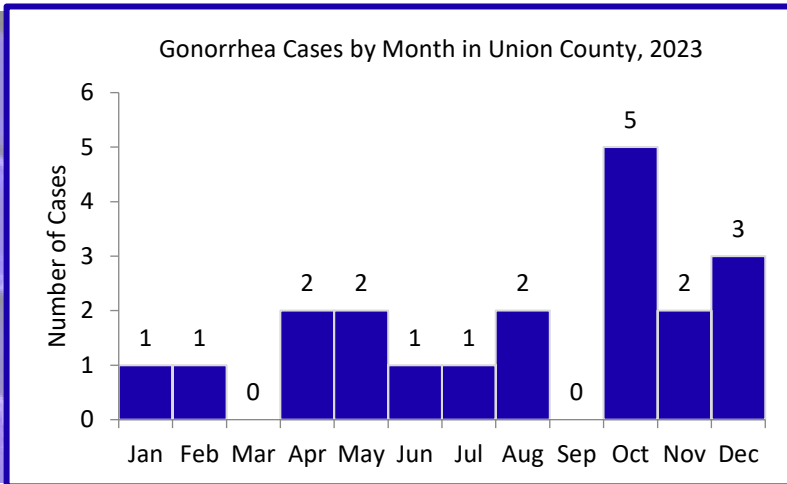
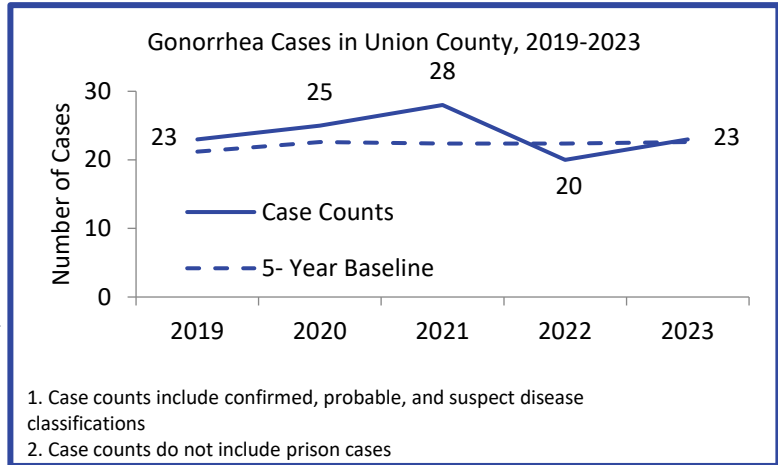
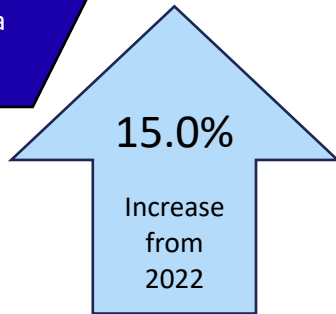
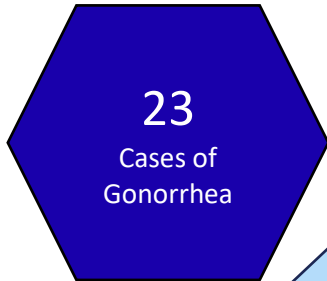
In 2022, 1,649,716 chlamydia cases were reported, making it the most common nationally notifiable sexually transmitted infection in the U.S. for that year

Case Demographics



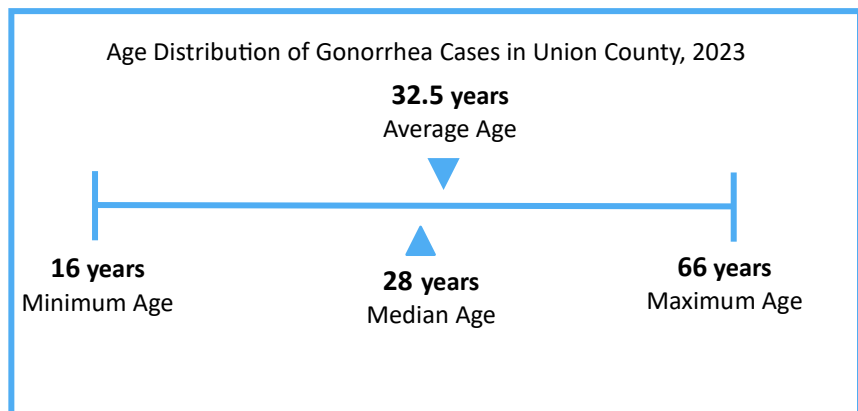
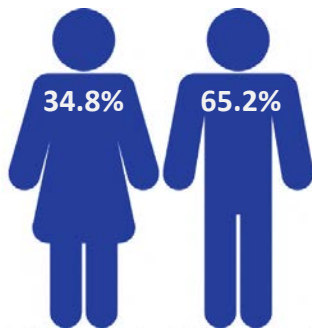
Gonorrhea

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.



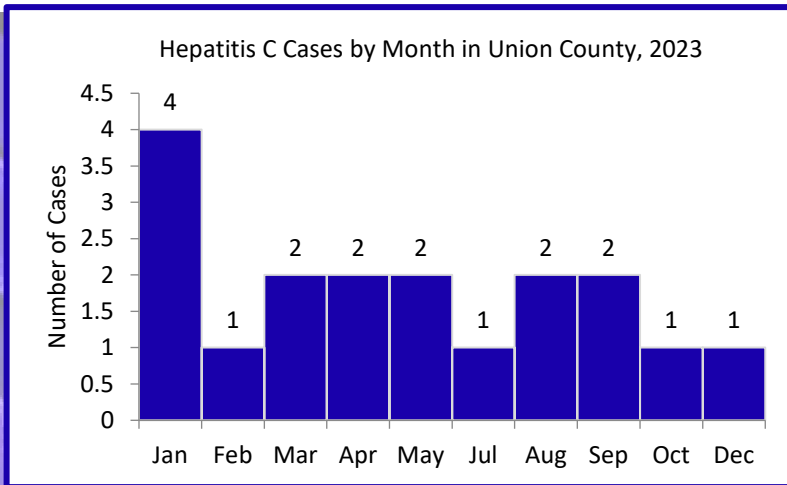
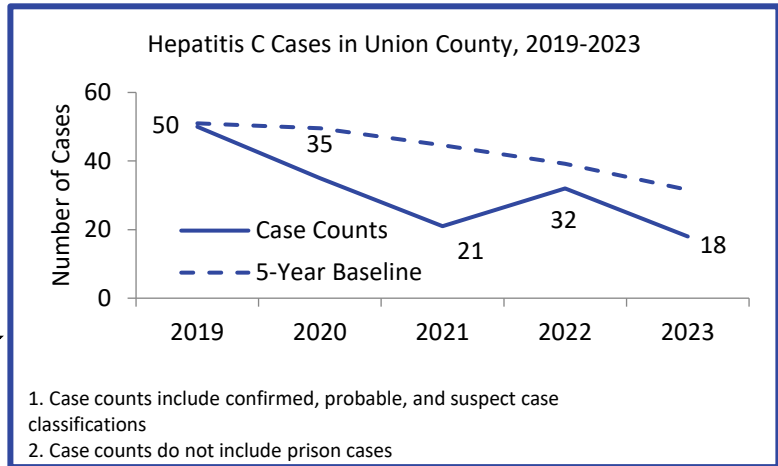
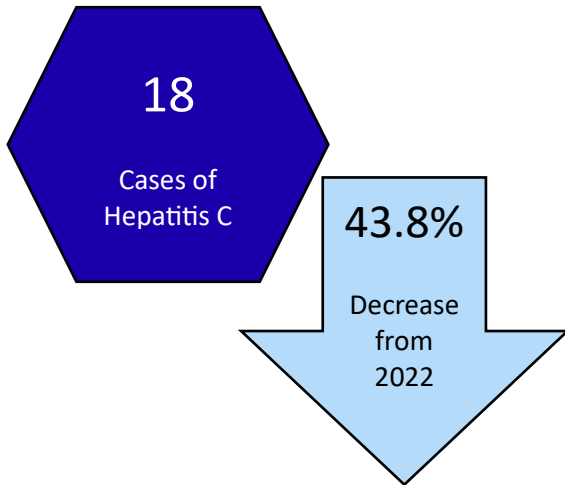
Did you know?
Since 2013, rates of reported gonorrhea have been higher among men compared to women

Case Demographics



Hepatitis C

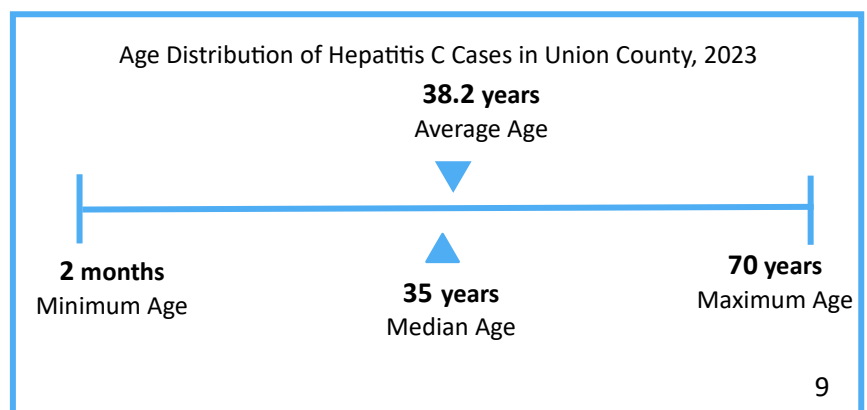
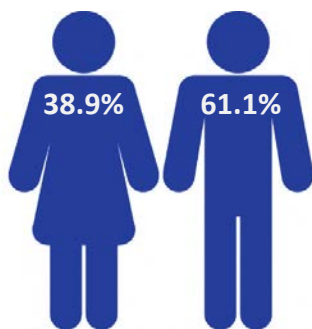
This bloodborne infection is caused by the Hepatitis C virus. Transmission mainly occurs through injection drug use; however, it may also occur sexually, through inadequately cleaned medical devices, exposure to blood in the workplace, or through birth. Individuals often become ill 2 weeks to 6 months after exposure. Currently no vaccine is available for this infection.



Did you know?

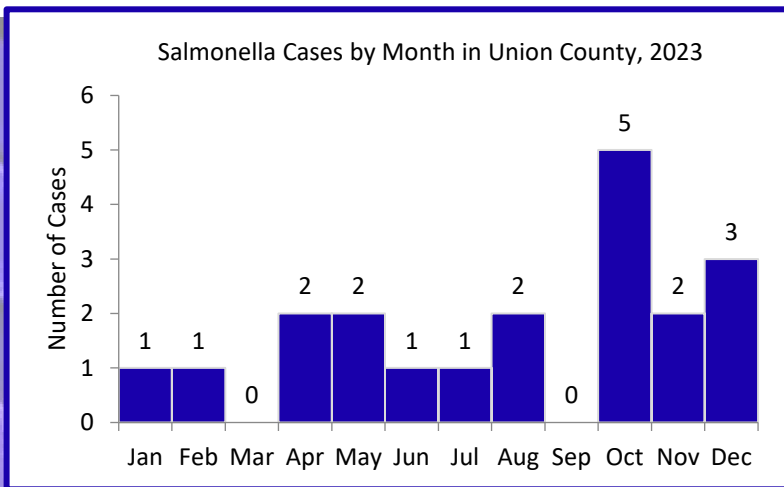
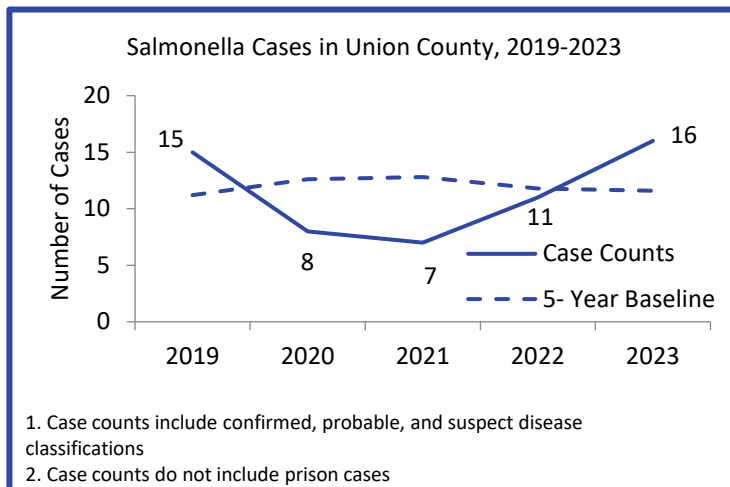
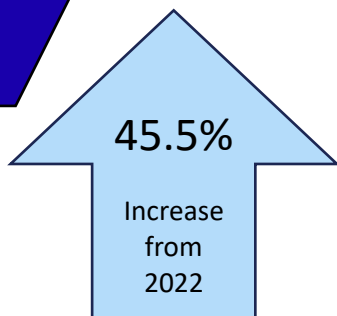
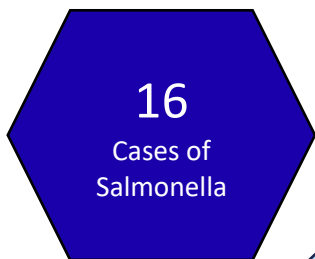
There has been a shift in newly reported chronic Hepatitis C from those 65+ years old to persons aged 30–39 years followed by those aged 40–49 years.

Case Demographics



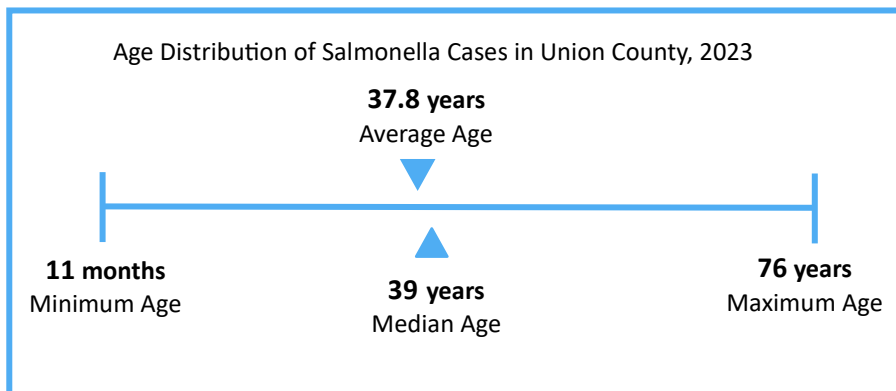
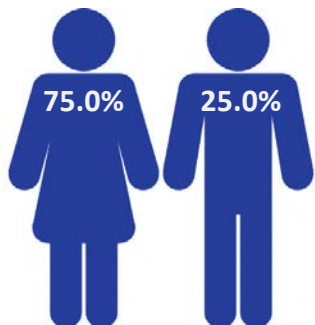
Salmonella

There are over 2,500 different types of the Salmonella bacteria. Transmission occurs fecal-orally, from animals, or from ingestion of tainted food or water. Individuals with this illness become ill 6-72 hours after exposure. Prevention includes thoroughly cooking meats and eggs, avoiding cross-contaminating food with raw meat juices and by washing hands after contact with animals and before preparing foods.



Did you know?
CDC estimates there are about 1.35 million cases of salmonella, with 26,500 hospitalizations and 420 deaths annually in the US

Case Demographics



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UNION COUNTY
HEALTH DEPARTMENT

Prepared by the Union County Health Department's epidemiologist.

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

Data Extract on February 7, 2024

