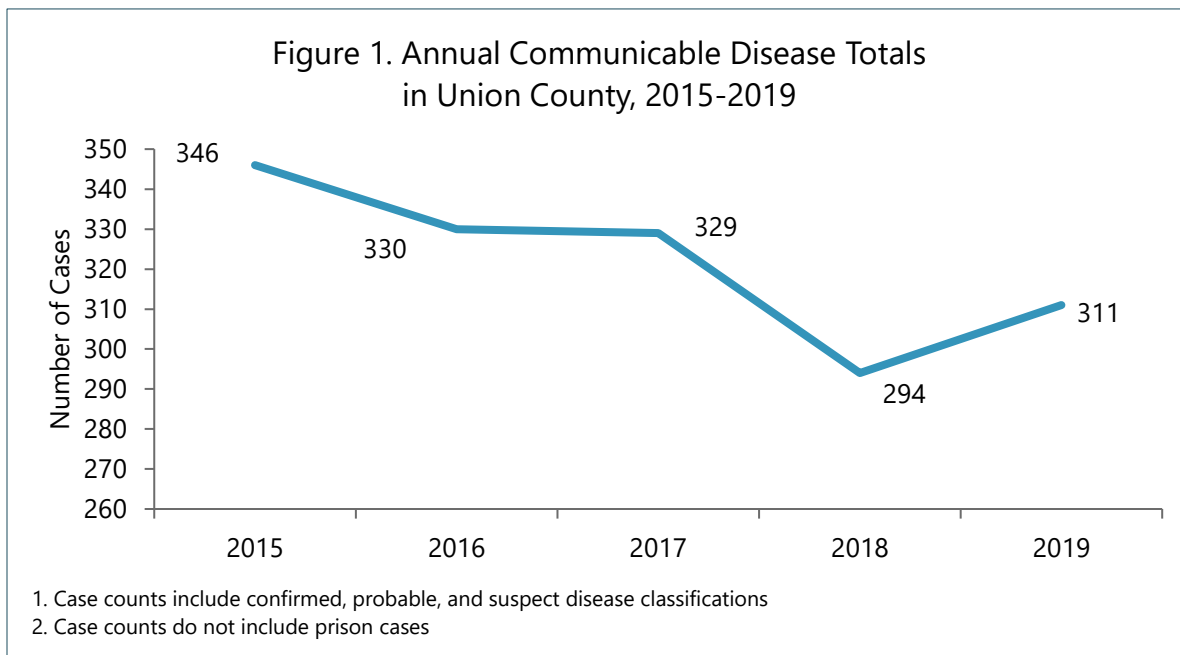

2019 Annual Communicable Disease Report

**Union County
Health Department**

Communicable Disease Summary

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.

Union County saw a 5.5% increase in communicable disease cases from 2018 to 2019 (294 cases and 311 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 (129 cases), Hepatitis C (49 cases), gonorrhea (23 cases), varicella (20 cases), and campylobacteriosis (16 cases). Chlamydia, Hepatitis C, gonorrhea, and campylobacteriosis have continued to be in the top five most reported diseases since 2015. In 2018, campylobacteriosis dropped off this list but made a reappearance as the fifth most reported disease in 2019. **Table 1.** on Page 3 lists the diseases and outbreaks reported in the community in 2019 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 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 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:

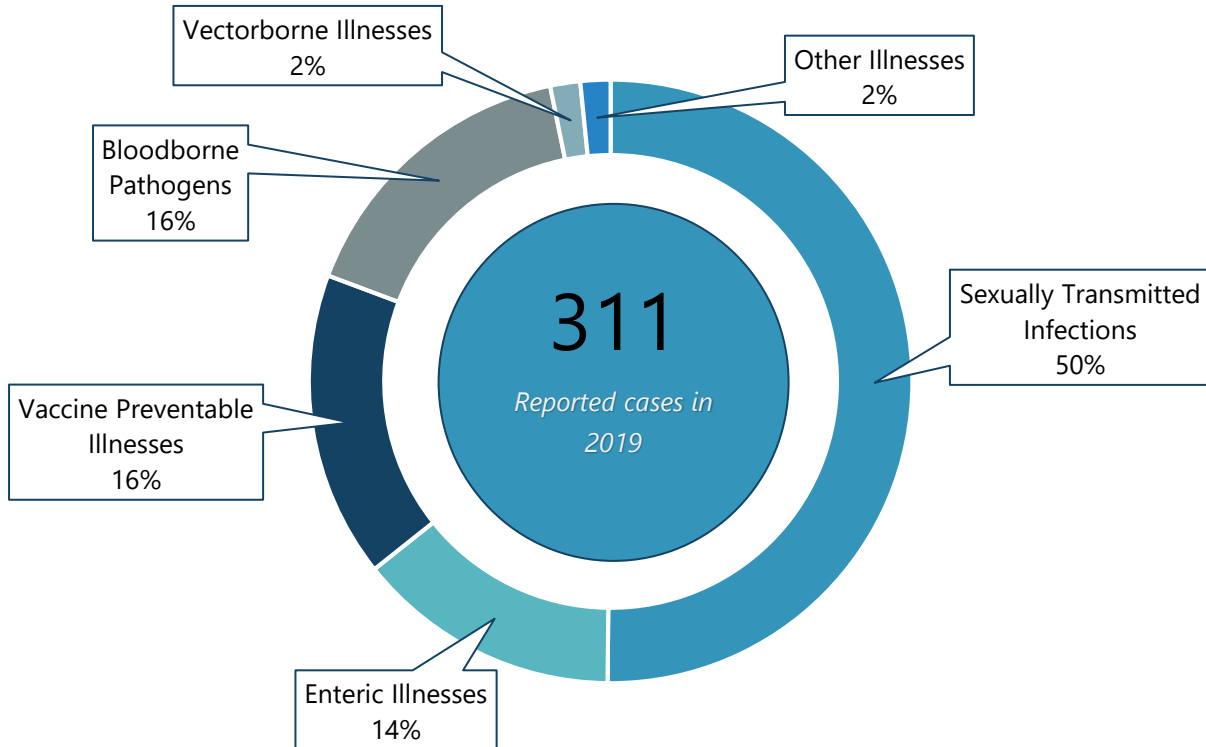
Cases of AIDS (acquired immune deficiency syndrome), AIDS-related conditions, HIV (human immunodeficiency virus) infection, perinatal exposure to HIV, all CD4 T-lymphocyte counts and all tests used to diagnose HIV must be reported on forms and in a manner prescribed by the Director.

Communicable Diseases Reported

Table 1. Communicable Disease Cases ¹ Reported in Union County, 2019	
Class B Reportable Diseases	
Campylobacteriosis	16
Chlamydia	129
Cryptosporidiosis	5
Cyclosporiasis	2
<i>E. coli</i>	3
Ehrlichiosis	1
Giardia	1
Gonorrhea	23
<i>Haemophilus influenzae</i> , invasive disease	1
Hepatitis A	4
Hepatitis B (including delta)	6
Hepatitis C	49
Hepatitis C, perinatal infection	1
Influenza-Associated Hospitalization	13
Legionnaires' Disease	1
Lyme Disease	3
Meningitis, aseptic/viral	3
Pertussis	4
Salmonella	15
Shigella	1
Spotted Fever Rickettsiosis	1
Streptococcal, Group A -invasive	1
<i>Streptococcus pneumoniae</i>	3
Syphilis	4
Varicella	20
Yersiniosis	1
Total	311
Class C Reportable Diseases – Outbreaks ²	
Hand Foot and Mouth Disease	1
Influenza	1
Norovirus	2
Strep Throat	1
Unknown Gastrointestinal Illness	1
Varicella	1
Total	7
¹ Case counts include confirmed, probable and suspected disease classifications	
² Outbreaks are two or more cases that are epidemiologically linked	

Types of Diseases Reported

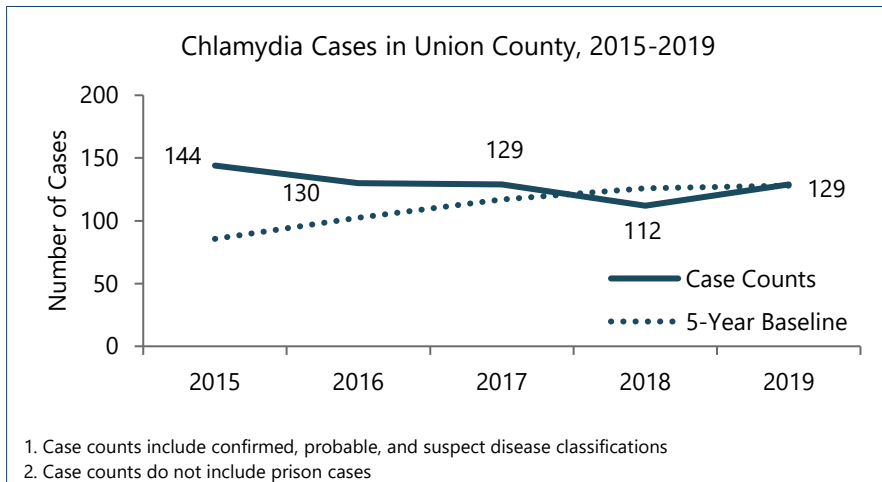
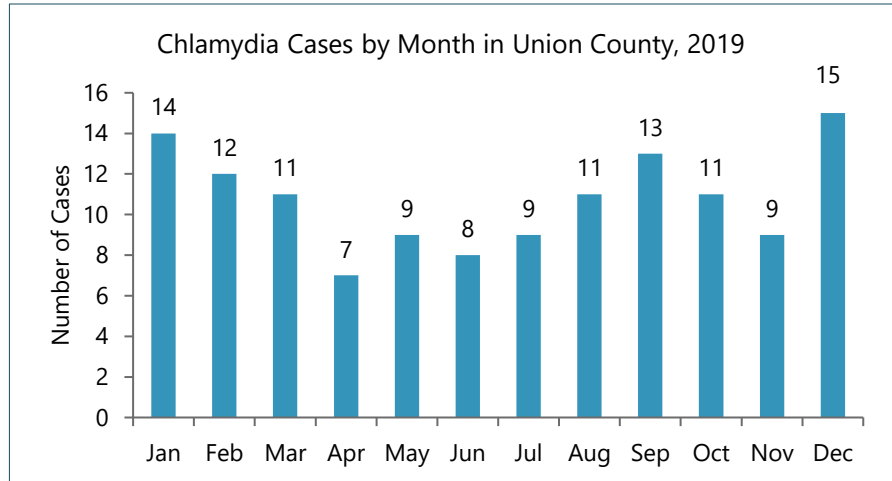
Figure 2. Types of Communicable Diseases Reported in Union County, 2019



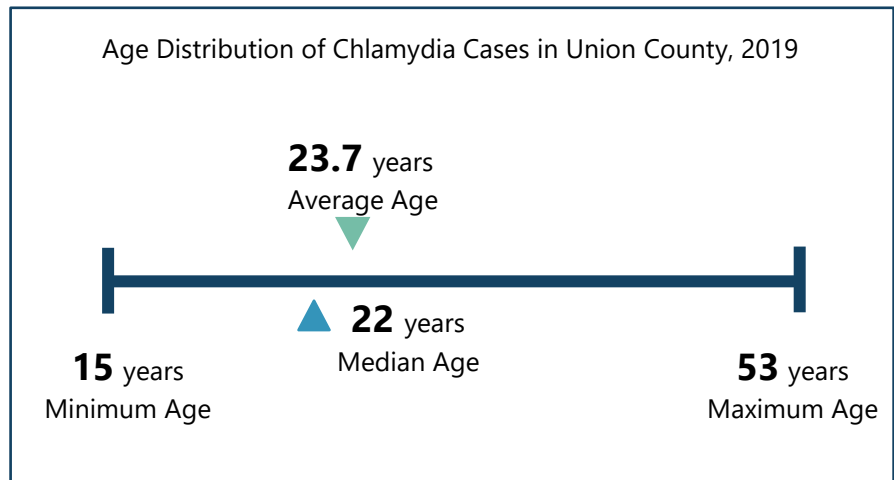
Sexually Transmitted Infections	Enteric Illnesses	Vaccine-Preventable Illnesses	Bloodborne Illnesses	Vectorborne Illnesses	Other Illnesses
Chlamydia (129) Gonorrhea (23) Syphilis (4)	Campylobacteriosis (16) Cryptosporidiosis (5) Cyclosporiasis (2) <i>E. coli</i> (3) Giardiasis (1) Salmonellosis (15) Shigellosis (1) Yersiniosis (1)	<i>Haemophilus influenzae</i> (1) Hepatitis A (4) Hepatitis B (6) Influenza-Associated Hospitalizations (13) Pertussis (4) <i>Streptococcus pneumoniae</i> (3) Varicella (20)	Hepatitis C (49) Hepatitis C, perinatal infection (1)	Ehrlichiosis (1) Lyme Disease (3) Spotted Fever Rickettsiosis (1)	Legionnaires' Disease (1) Meningitis, aseptic (3) Streptococcal, Group A—Invasive (1)
Total: 156	Total: 44	Total: 51	Total: 50	Total: 5	Total: 5

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.

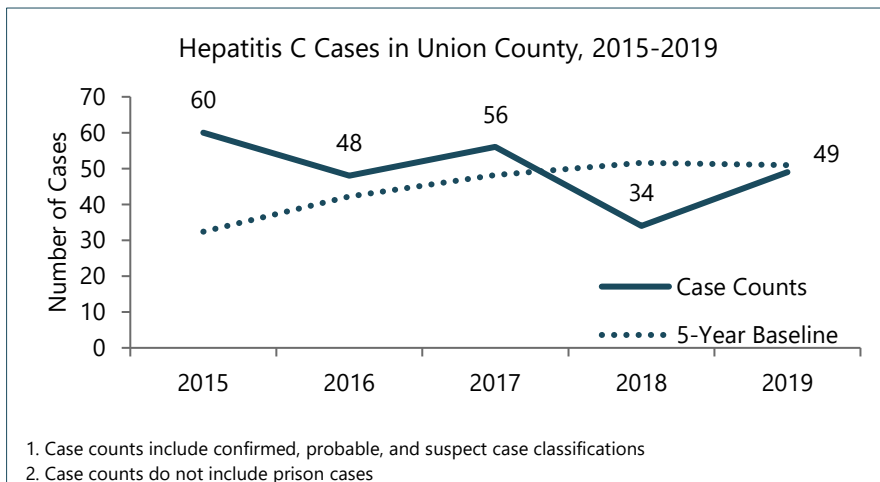
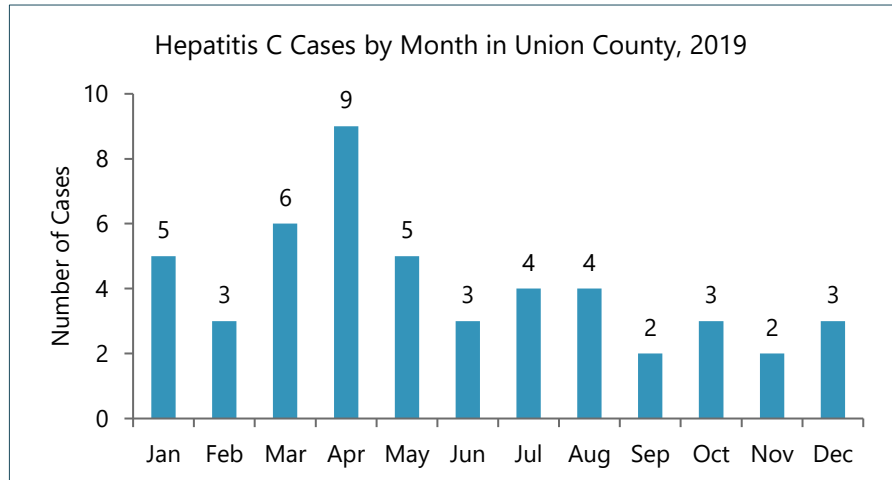
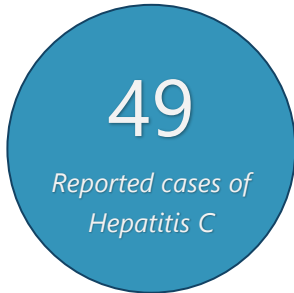


Case Demographics

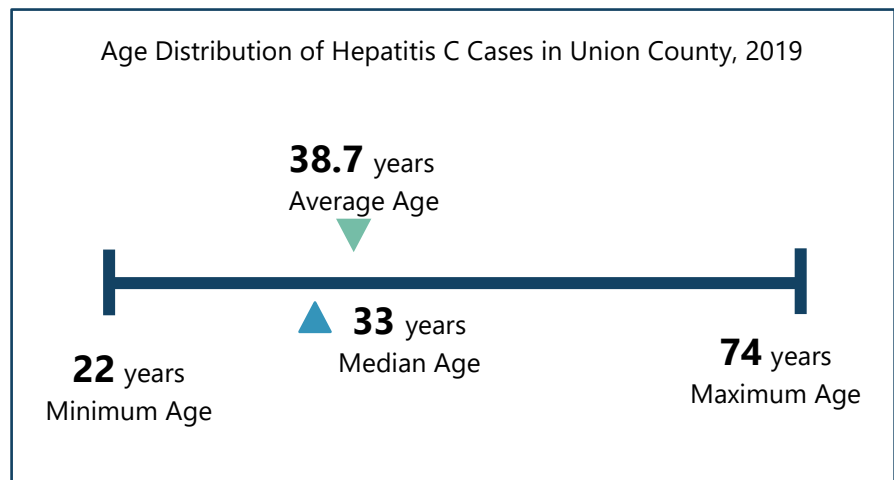


Hepatitis C

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.

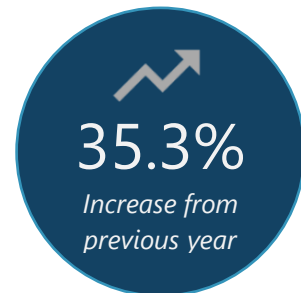
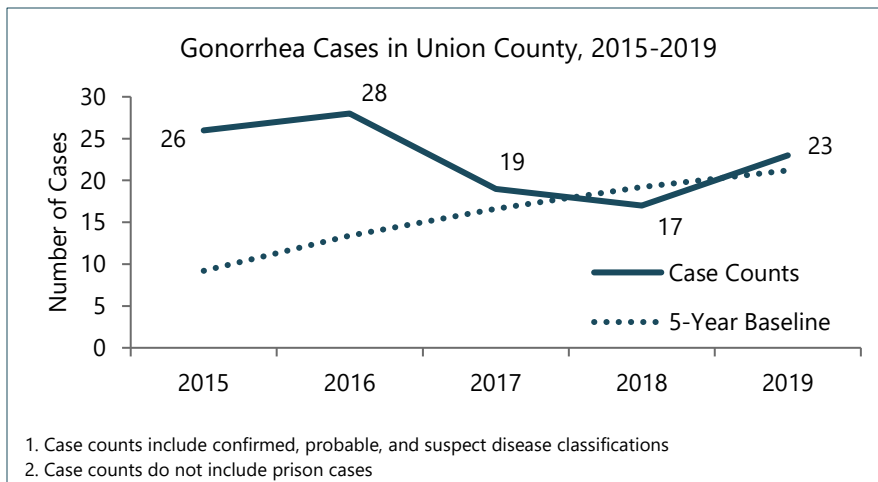
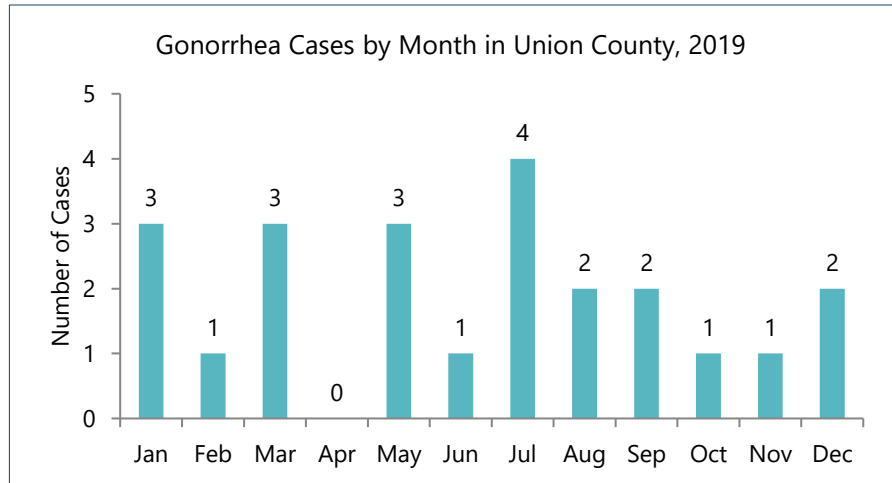


Case Demographics

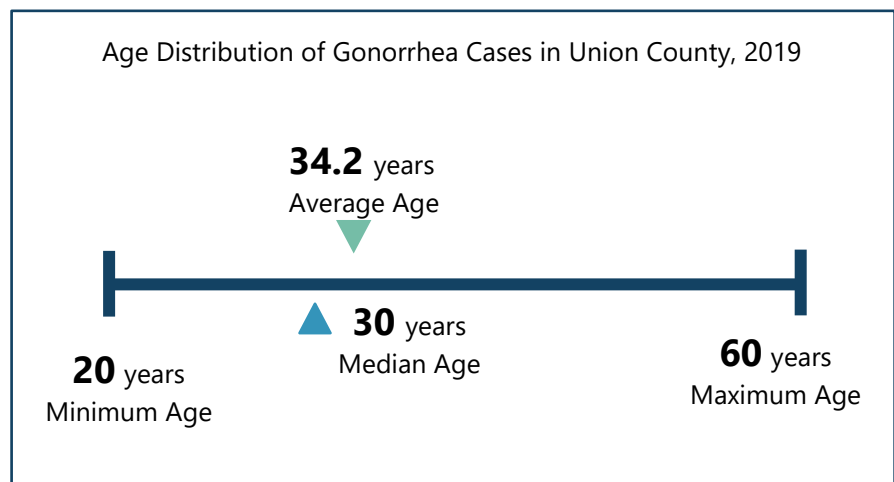


Gonorrhea

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.

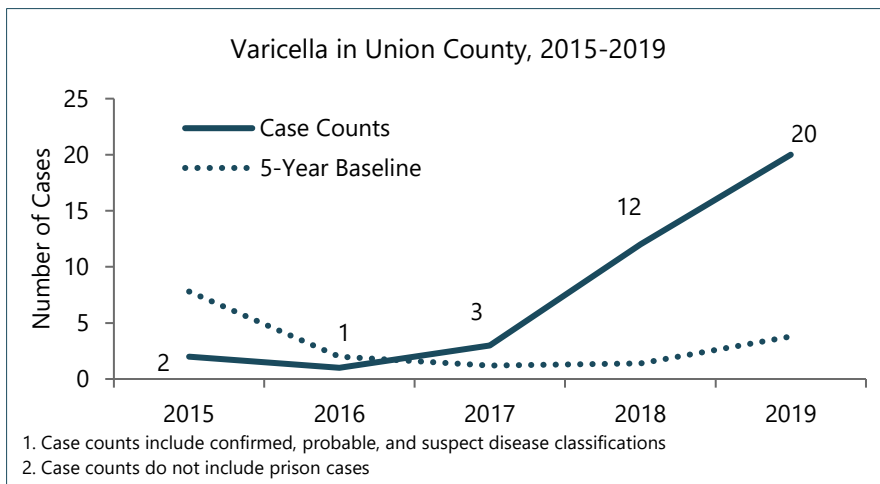
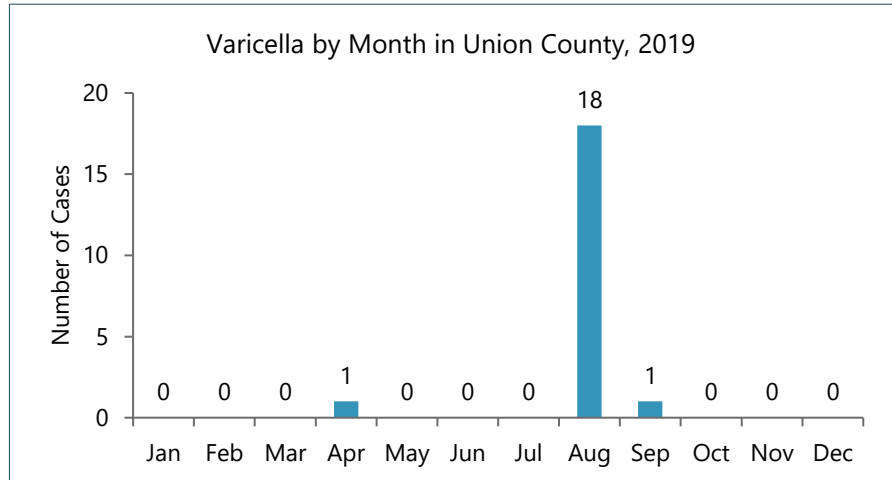


Case Demographics

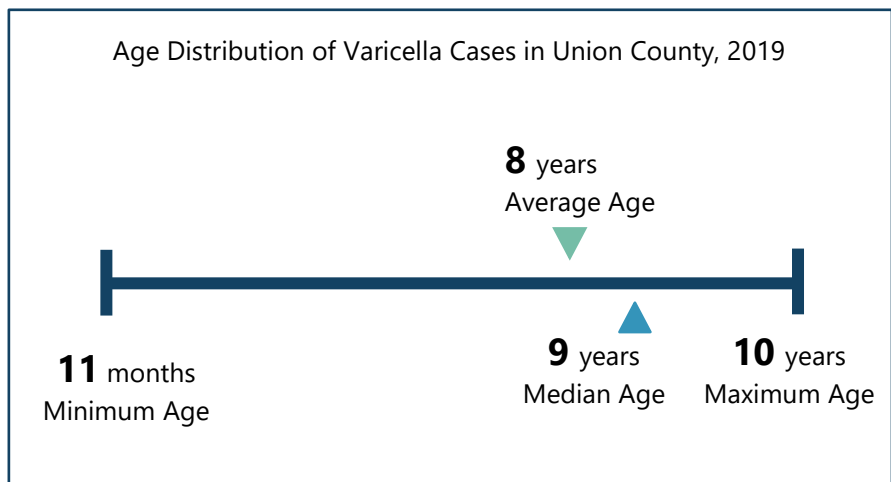


Varicella

This infection is caused by the Varicella-zoster virus. The disease spreads through direct contact with drainage from lesions, droplets, or airborne respiratory secretions. Individuals often become ill 14-16 days after exposure. The best prevention is vaccination.

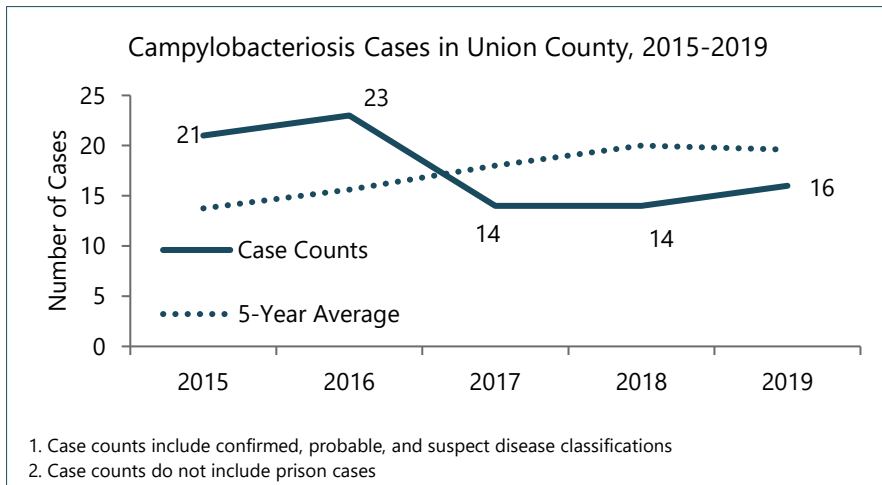
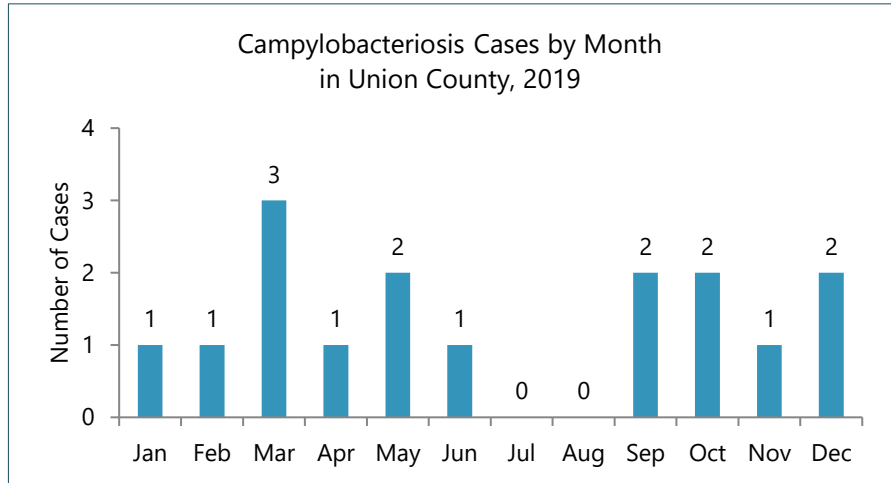
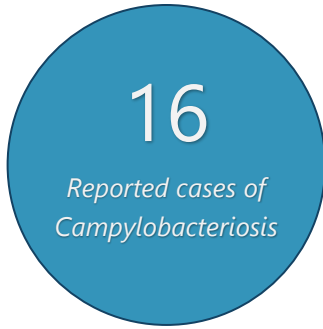


Case Demographics

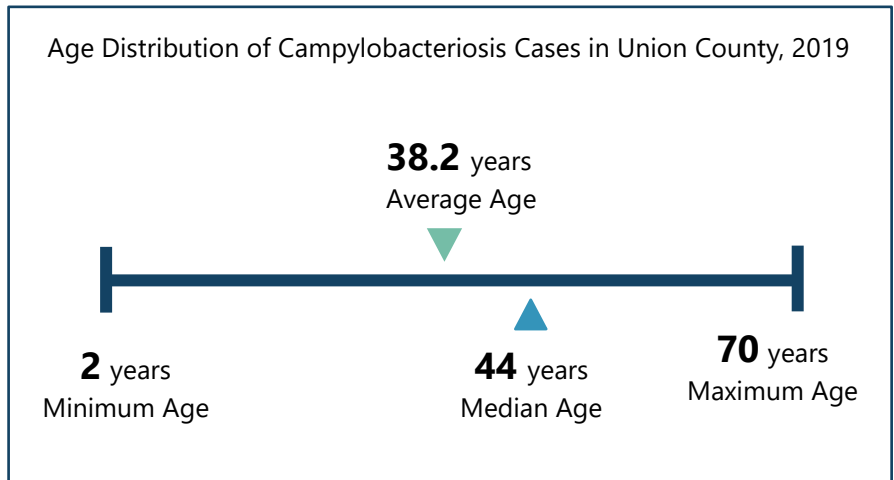


Campylobacteriosis

This infection is caused by the *Campylobacter* bacteria. It is commonly found in many wild/domestic animals including poultry, cattle, dogs, and cats. It is spread fecal-orally; primarily by eating raw or undercooked poultry or food contaminated by raw or undercooked poultry. Individuals often become ill 2-4 days after exposure. Prevention includes hand washing, safe food preparation and storage, and avoidance of unpasteurized milk or untreated water.



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 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 2. Reportable Disease Variable Completeness

Reportable Disease	Age	Race	Ethnicity	Sex	Illness Onset Date
Campylobacteriosis	100%	45%	94%	100%	94%
Chlamydia	100%	99%	88%	100%	N/A
Cryptosporidiosis	100%	100%	100%	100%	100%
Cyclosporiasis	100%	100%	100%	100%	100%
<i>E. coli</i>	100%	100%	100%	100%	67%
Ehrlichiosis	100%	100%	100%	100%	100%
Giardia	100%	100%	100%	100%	100%
Gonorrhea	100%	90%	86%	100%	N/A
<i>Haemophilus influenzae</i> , invasive disease	100%	100%	100%	100%	0%
Hepatitis A	100%	83%	100%	100%	100%
Hepatitis B (including delta)	100%	100%	100%	100%	N/A
Hepatitis C	100%	85%	91%	100%	N/A
Hepatitis C, perinatal infection	100%	100%	100%	100%	N/A
Influenza-Associated Hospitalization	100%	94%	100%	100%	94%
Legionnaires' Disease	100%	50%	100%	100%	100%
Lyme Disease	100%	100%	100%	100%	100%
Meningitis, aseptic/viral	100%	100%	100%	100%	100%
Pertussis	100%	100%	100%	100%	60%
Salmonella	100%	87%	100%	100%	87%
Shigella	100%	100%	100%	100%	100%
Spotted Fever Rickettsiosis	100%	100%	100%	100%	0%
Streptococcal, Group A -invasive	100%	100%	75%	100%	75%
<i>Streptococcus pneumoniae</i>	100%	100%	75%	100%	50%
Syphilis	100%	100%	100%	100%	N/A
Varicella	100%	93%	93%	100%	90%
Yersiniosis	100%	100%	100%	100%	100%

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Prepared by the Union County Health Department's Epidemiologists.

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

