

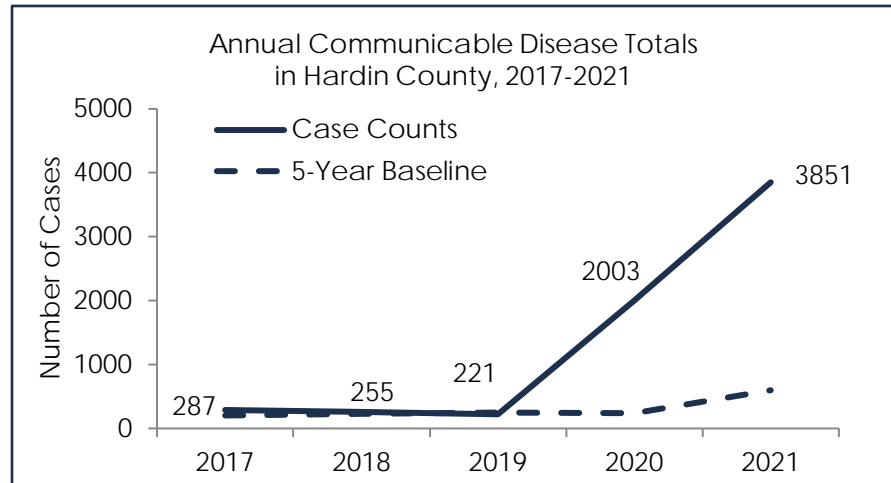
# Annual Communicable Disease Report 2021

Hardin County

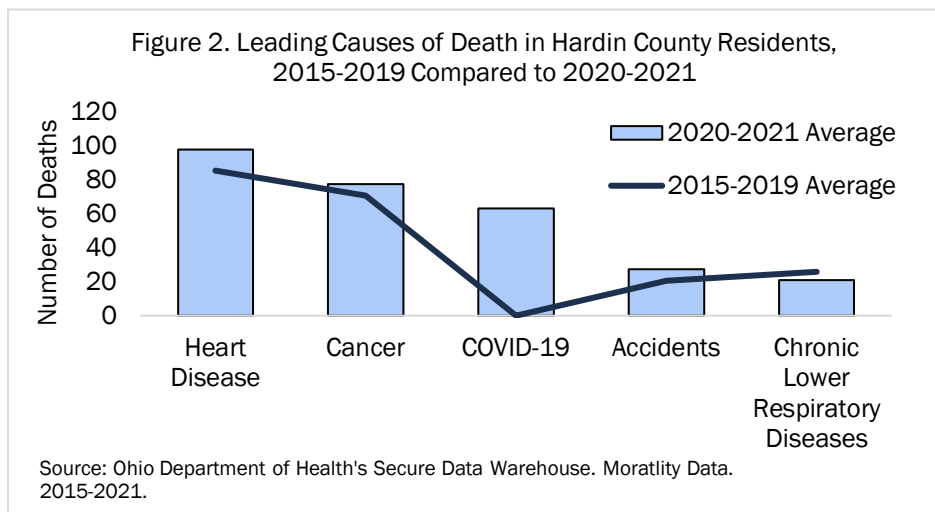
# Communicable Disease Summary

Nearly 90 diseases are reportable in the state of Ohio (please see Page 3 for a complete list of these illnesses). The local health department must be notified anytime one of these diseases is diagnosed. Through this data, health departments monitor the health of the community and assist medical providers in the treatment and management of these contagious diseases. This report provides an overview of the reportable diseases affecting the health of Hardin County residents.

Due to the ongoing Coronavirus Disease 2019 (COVID-19) pandemic, Hardin County saw a 92% increase in communicable disease cases from 2020 to 2021 (2,003 cases and 3,851 cases, respectively). Overall, 53.7% of cases were female, 46.1% were male. Cases ranged in ages from 1 day to 99



years old with an average age of 39.6 years and a median age of 37 years. **Figure 1.** shows the number of disease cases occurring annually over the past five years. The most frequently reported illnesses were COVID-19 (3,670 cases), chlamydia (74 cases), Hepatitis C (40 cases), Hepatitis B (17 cases), and gonorrhea (9 cases). **Table 1.** on Page 4 lists the diseases reported in the community in 2021 and the number of cases for each of these illnesses. Additionally, **Figure 3.** on Page 5 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.



**Figure 2.** illustrates the leading causes of death pre-pandemic and during the pandemic. Over the past two years, COVID-19 has become one of the leading causes of death.

# Ohio's Reportable Diseases<sup>1</sup>

## 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.

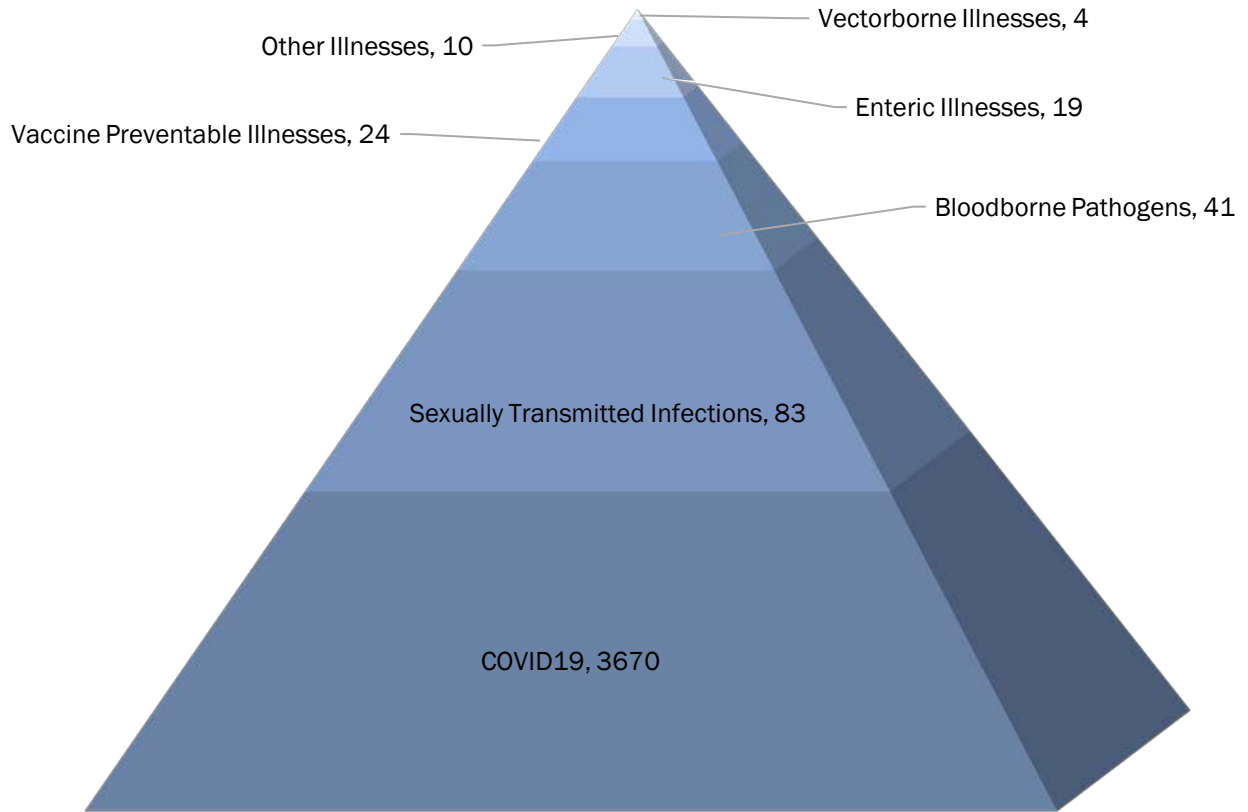
<sup>1</sup>COVID-19 was added as a Class A disease in 2021.

# Diseases Reported in 2021

Table 1. Communicable Disease Cases <sup>1</sup> Reported in Hardin County, 2021		
Class A Reportable Diseases		
	Case Count	Rate per 100k <sup>3</sup>
COVID-19	3,670	11,955.96
Class B Reportable Diseases		
Campylobacteriosis	7	22.80
Chlamydia	74	241.07
Carbapenemase-Producing Carbapenem-Resistant <i>Enterobacteriaceae</i> (CP-CRE)	2	6.52
Cryptosporidiosis	4	13.03
<i>E. coli</i> , Shiga Toxin-Producing (O157:H7, Not O157, Unknown Serotype)	1	3.26
Giardia	1	3.26
Gonorrhea	9	29.32
Hepatitis A	4	13.03
Hepatitis B	17	55.38
Hepatitis B, perinatal infection	1	3.26
Hepatitis C	40	127.05
Hepatitis C, perinatal infection	1	3.26
Influenza-Associated Hospitalization	1	3.26
Legionnaires' Disease	3	9.77
Lyme Disease	2	6.52
Salmonella	4	13.03
<i>Streptococcal</i> Disease- Group A -invasive	6	19.55
<i>Streptococcus pneumoniae</i> - invasive antibiotic resistance unknown or non-resistant	1	3.26
Tuberculosis	1	3.26
Typhus Fever	1	3.26
West Nile Virus Disease	1	3.26
<b>Grand Total</b>	<b>3,851</b>	<b>12,545.61</b>
<sup>1</sup> Case counts include confirmed, probable and suspected disease classifications		
<sup>2</sup> COVID-19 cases only include confirmed and probable disease classifications		
<sup>3</sup> Case rates per 100,000 people were based on the U.S. Census Bureau's 2020 population counts		

# Types of Diseases Reported

Figure 3. Types of Communicable Diseases Reported in Hardin County, 2021



Notes:

Sexually transmitted infections include chlamydia and gonorrhea

Enteric illnesses include campylobacteriosis, CP-CRE, cryptosporidiosis, *E. coli*, giardia, and salmonella

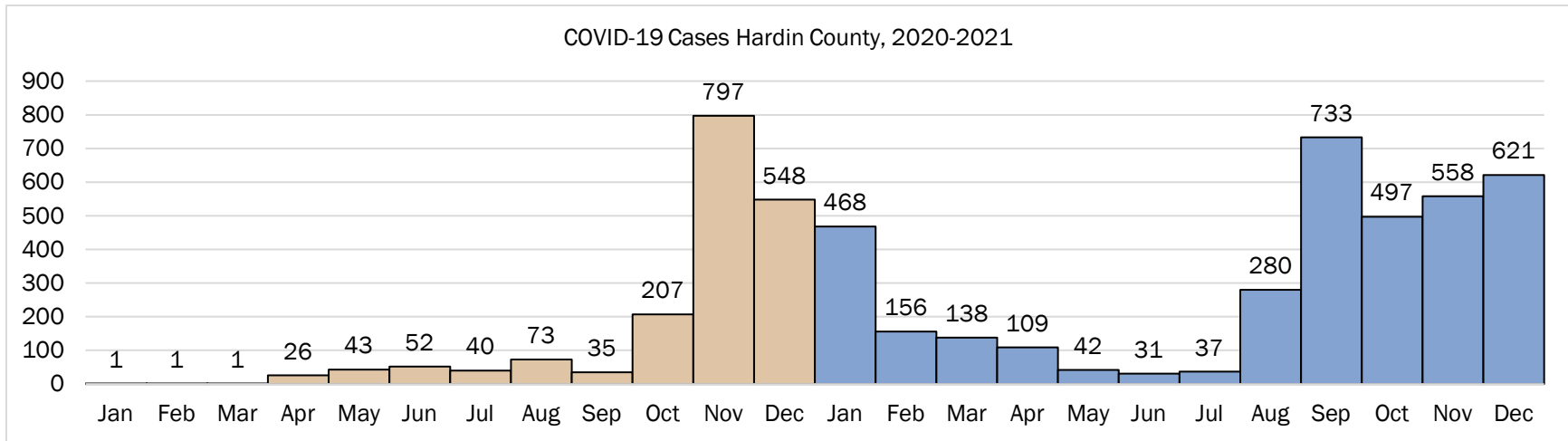
Vaccine preventable illnesses include Hepatitis A, Hepatitis B, perinatal Hepatitis B, influenza-associated hospitalizations, and *Streptococcus pneumoniae*

Bloodborne pathogens include Hepatitis C and perinatal Hepatitis C

Vectorborne illnesses include Lyme disease, typhus fever, and West Nile virus

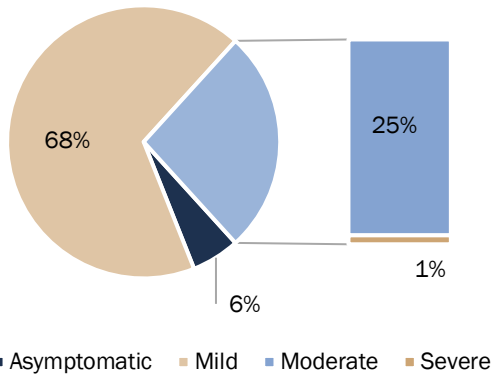
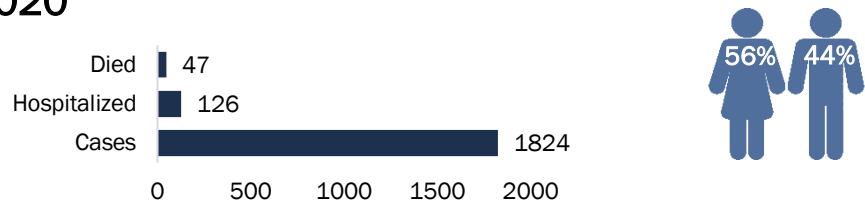
Other illnesses include Legionnaires' disease, *Streptococcal* disease, and tuberculosis

# COVID-19 2020-2021



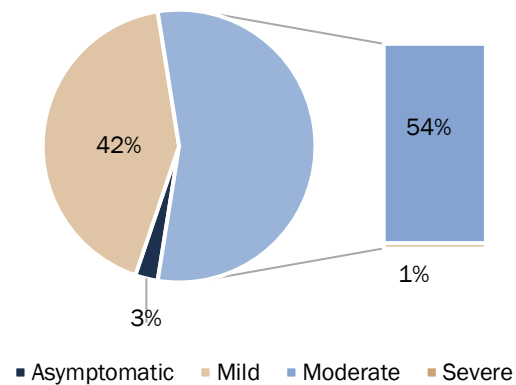
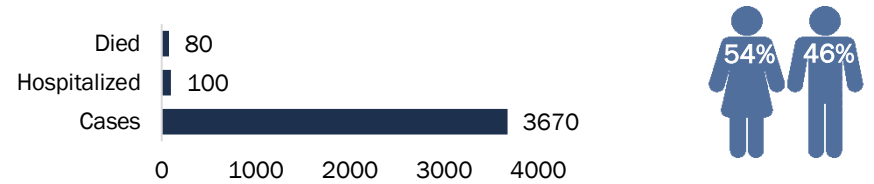
## Case Demographics, by year

### 2020



Min. Age	<1 year
Avg. Age	46.4 years
Max. Age	103 years

### 2021



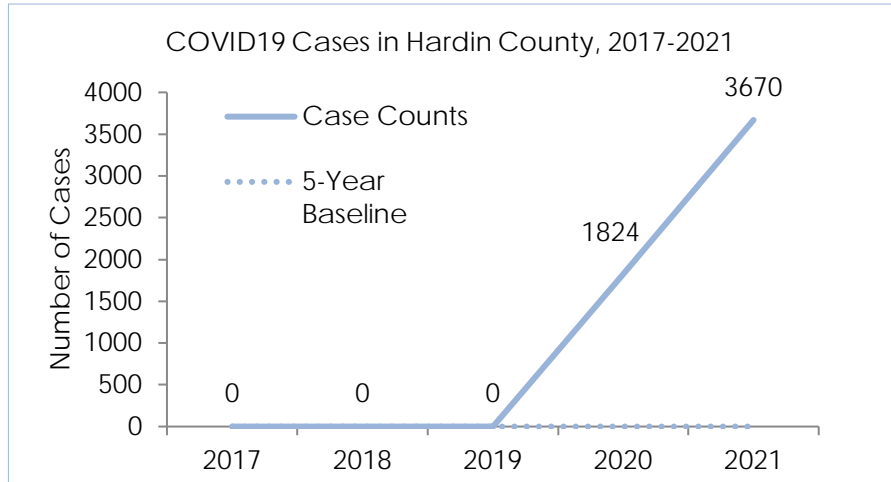
Min. Age	<1 year
Avg. Age	39.8 years
Max. Age	99 years

<sup>1</sup>Mild illness includes those who were able to recover at home  
<sup>2</sup>Moderate illness includes cases who sought outpatient treatment or required hospitalization  
<sup>3</sup>Severe illness includes cases who were hospitalized in intensive care, were intubated, or died as a result of their illness

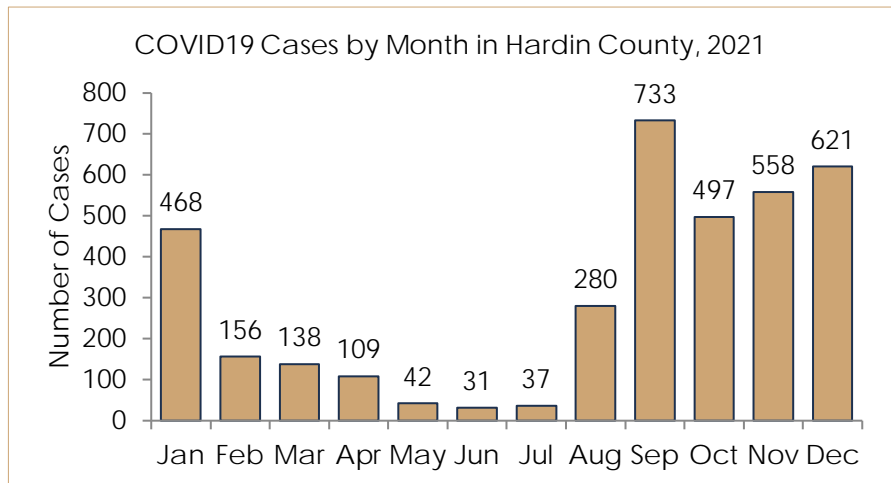
# COVID-19

This illness is caused by the novel 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 getting vaccinated, avoiding those ill with COVID-19, social distancing, wearing a cloth facemask that covers the mouth and nose, handwashing, and disinfecting frequently touched surfaces.

**3,670**  
Reported cases  
of COVID-19



**101%**  
Increase from  
previous year



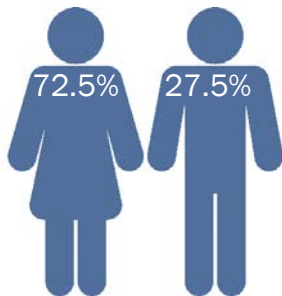
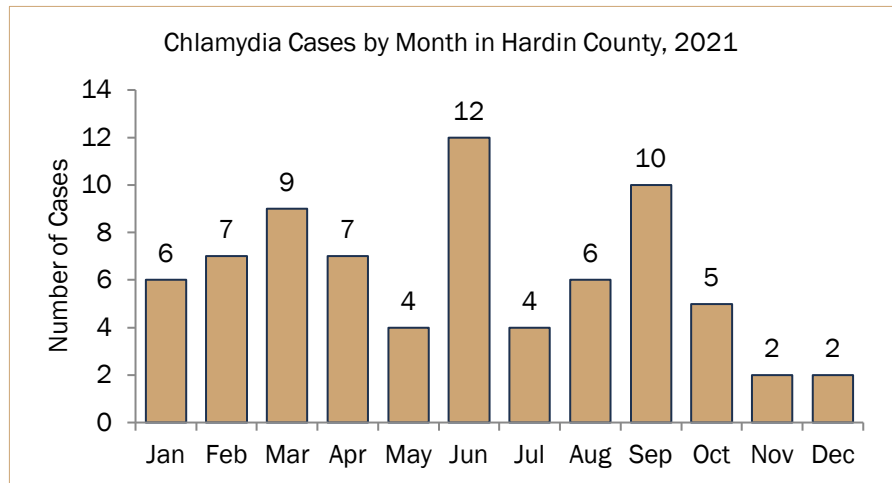
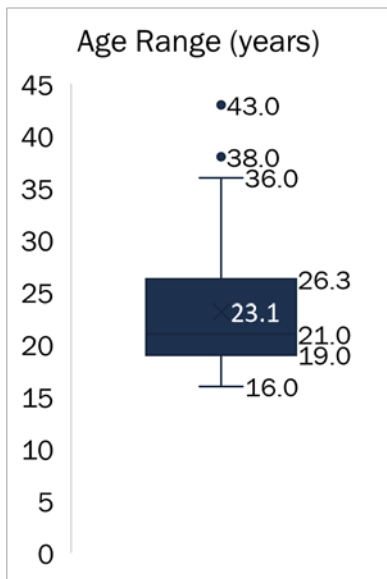
**Did you know?**  
Everyone 5 years of age & older is eligible for the COVID vaccine

Make an appointment by calling the Hardin County Health Department's Nursing Division at (419) 673-6230

# 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.

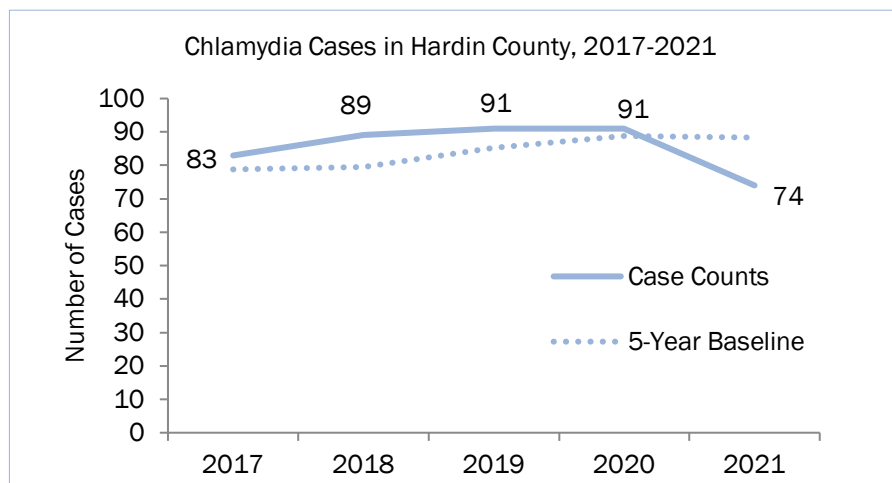
## Case Demographics



**18%**  
Decrease from previous year

**74**  
Reported cases of chlamydia

**Did you know?**  
Women are often reported at much higher rates due to yearly exams.

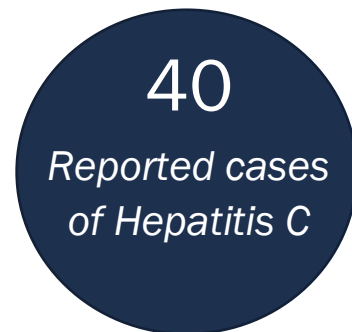
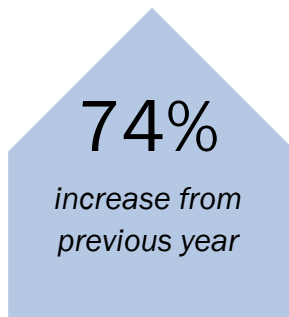
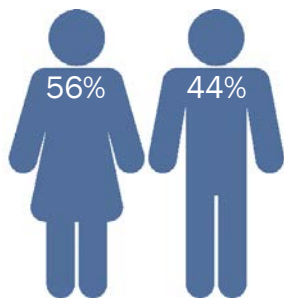
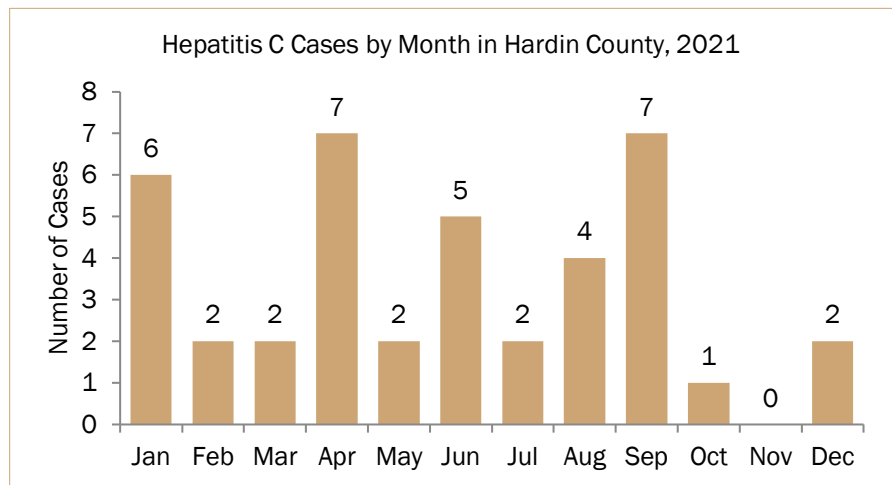
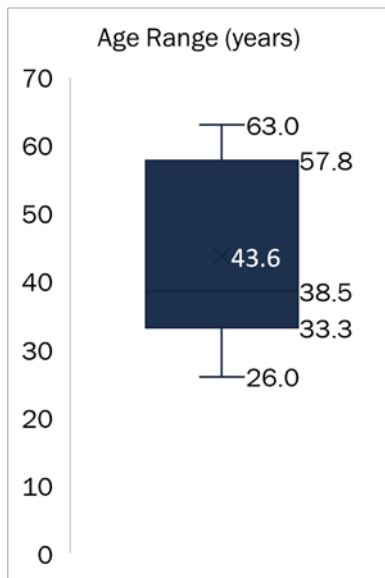




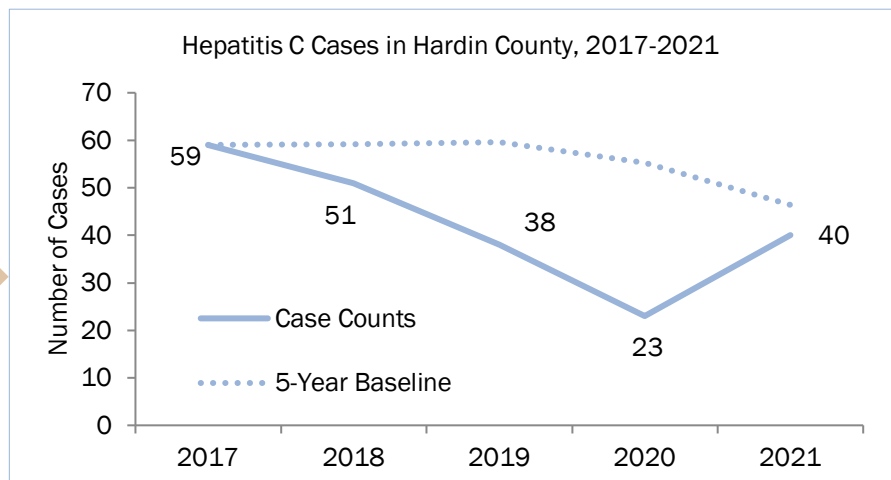
# Hepatitis C

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



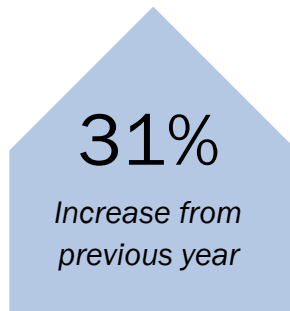
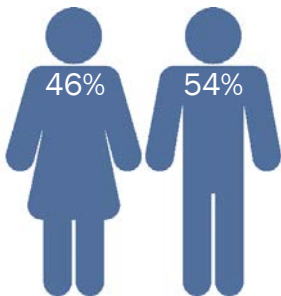
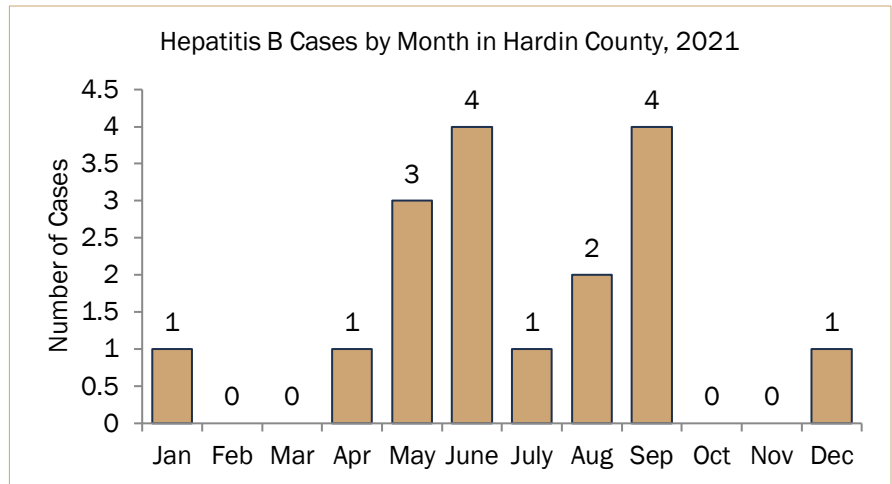
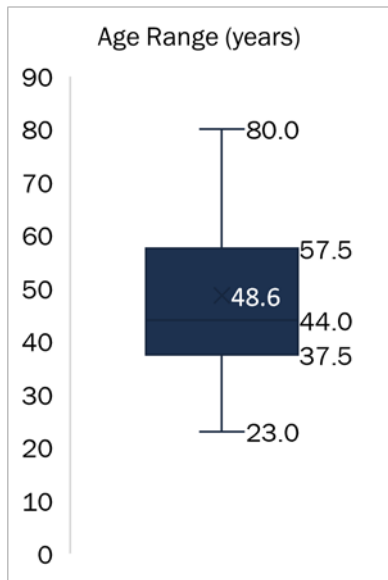
**Did you know?**  
The CDC recommends anyone 18 years & older should be tested for Hep C at least once in their lifetime



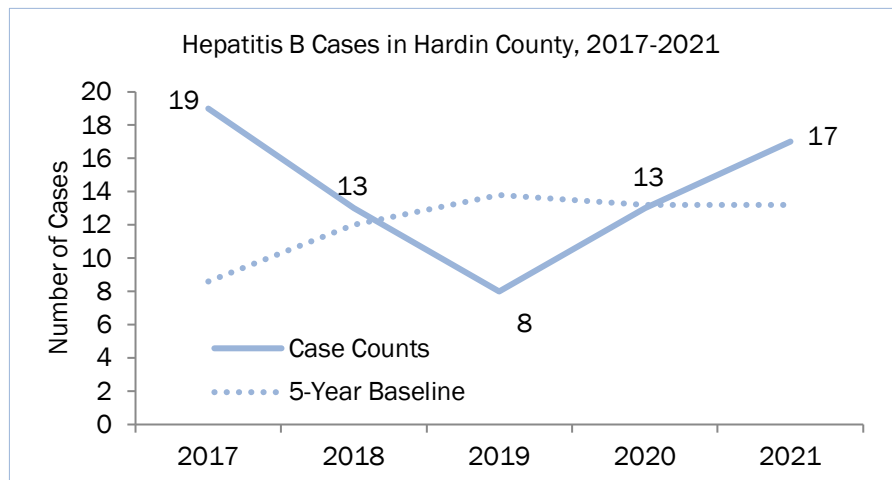
# Hepatitis B

The Hepatitis B virus is primarily transmitted via blood but can also be transmitted by other bodily fluids such as semen, vaginal secretions, and wound exudates. It causes illness approximately 60 days after exposure to the virus. While the virus is very infectious, there is a vaccine to prevent infection which is recommended along with proper contact precautions.

## Case Demographics



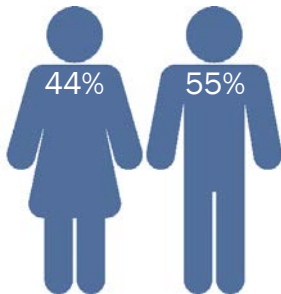
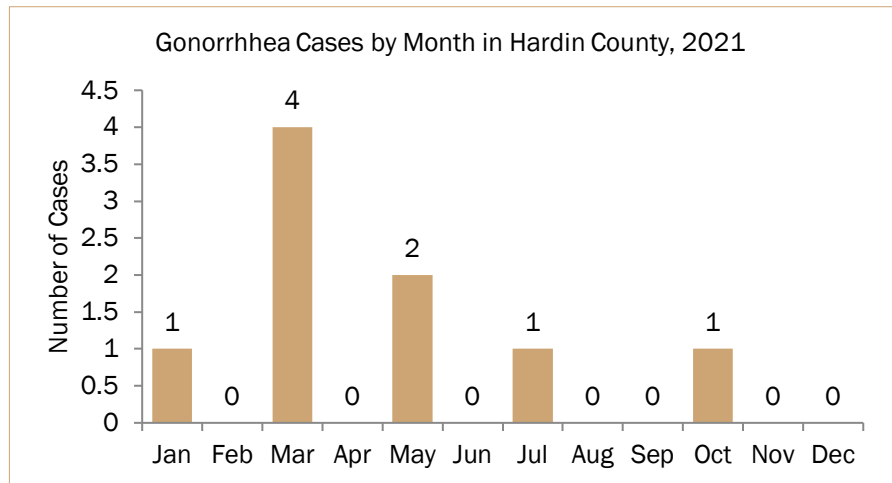
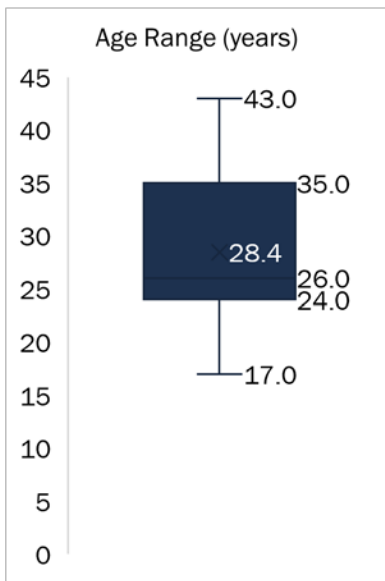
**Did you know?**  
The Hepatitis B virus can survive outside the body for at least 7 days



# 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.

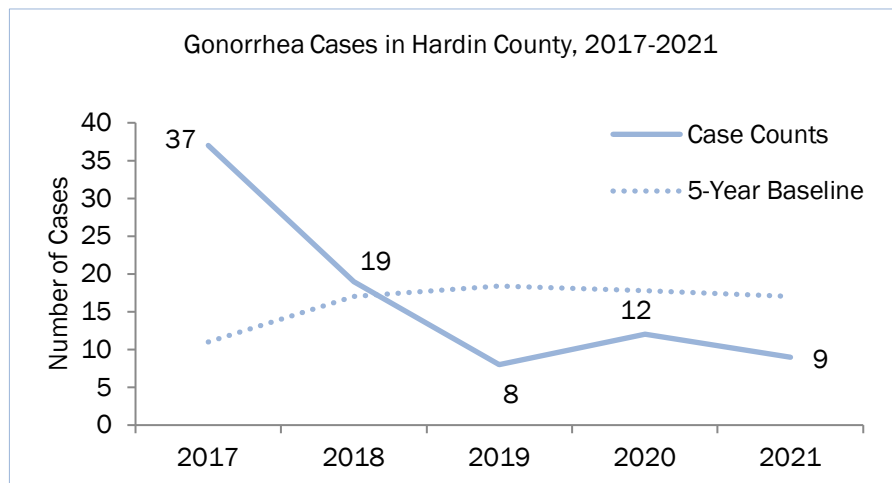
## Case Demographics



**25%**  
Decrease from previous year

**9**  
Reported cases of gonorrhea

**Did you know?**  
Male Gonorrhea cases are often asymptomatic & under reported



# Contact Information

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Prepared by the Hardin County Health Department's epidemiologists.

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

Data Extract on March 30, 2022

