



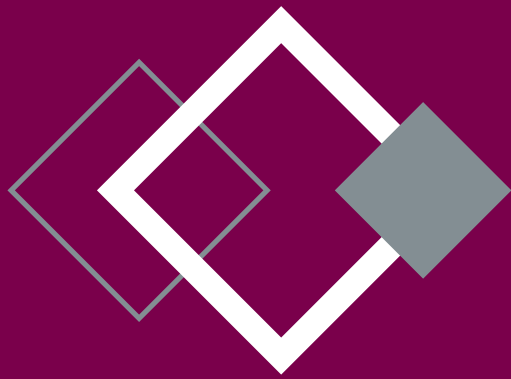
Public Health
Prevent. Promote. Protect.
Zanesville-Muskingum County



2025 ANNUAL EPIDEMIOLOGY REPORT

Zanesville-Muskingum
County Health Department

Kaili Shaffer
Epidemiologist II
Family and Community Health
and Wellness



REPORT OVERVIEW

This report will encompass many aspects of epidemiology in Muskingum County in 2025. Topics of discussion include communicable and infectious disease cases, outbreak investigations, public health preparedness activities, animal bites, birth & death analysis, and leading causes of death. This report may share information on the burden of disease in Muskingum County and give insight to prevention and intervention strategies.

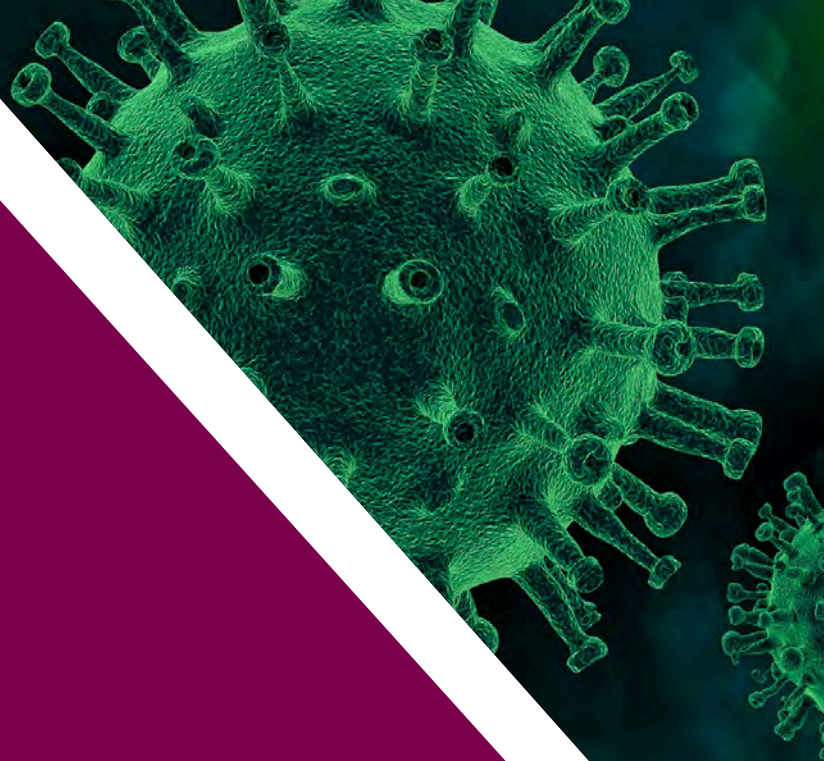


TABLE OF CONTENTS

Table of Contents	Page 1
Background	Page 2
Summary of Events	Page 3
Frequency & Incidence	Page 4-6
Age- Reportable Conditions	Page 7-8
Race- Reportable Conditions	Page 9
Sex- Reportable Conditions	Page 10
Reportable Conditions by Syndrome	Page 11-12
Reportable Disease Trends	Page 13
COVID-19 Statistics	Page 14-15
Lyme Disease Statistics	Page 16-17
STI Statistics	Page 18-19
Hospitalized Influenza Statistics	Page 20
Communicable Disease Outbreaks	Page 21-22
Births & Deaths.....	Page 23
Conclusion	Page 24-25
Sources	Page 26

BACKGROUND

Muskingum County

Muskingum County was created by the Ohio government on January 7, 1804. Located in the Southeastern Region of Ohio, Muskingum County is predominately rural and had a population of 87,122 people in 2025, according to the US Census Bureau. Muskingum County has a land area of 673 square miles and is known for cultural, historical, and geographical features such as the Muskingum River.



Disease Reporting and Investigation

Infectious diseases are required to be reported to local health departments in Ohio. These reports play a significant role in population health by detecting, controlling, and preventing the spread of communicable diseases. Disease reporting and investigation falls under three of the 10 Essential Public Health Services including:

- 1) Assess and monitor population health
- 2) Investigate, diagnose, and address health hazards and root causes
- 3) Communicate effectively to inform and educate.



NOTABLE ACTIVITIES

Emergency Response Plans

In 2025, all three epidemiology related ZMCHD Public Health Emergency Preparedness (PHEP) annexes were reviewed and updated. These sections include:

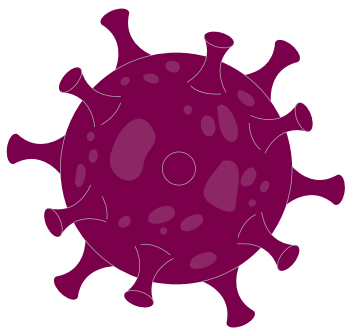
- C: Non-pharmaceutical Interventions
- C1: Epi Team Notebook
- C2: Ebola and Other Special Pathogens.

These sections are reviewed and updated annually.



Epidemiological Response Team

There were 1,346 probable/confirmed Class A and Class B Reportable Conditions investigated by public health staff in 2025, as well as 27 outbreaks.



Trainings and Exercises

ZMCHD participated in various emergency preparedness and epidemiological trainings in 2025. A Tabletop Exercise for Chemical Surge was conducted in January. An Epi Intensive Course by APIC was attended over three days in June at The Ohio Department of Health. Two trainings were held in Jefferson County in August for All Hazards Preparedness for Animals in Disasters, as well as All Hazards Planning for Animal, Agricultural, and Food Related Disasters. In October, an Outbreak Investigation training was hosted by ODH in Coshocton County and the Ohio Regional Tick Symposium was held at The Ohio State University in collaboration with Ohio State Agriculture and Veterinary Schools. The PHN Conference was held at Kent State in November over two days.

Community Activities and Education

At the start of the 2025 school year, newsletters were created and sent monthly to school nurses in the county. Topics included various infectious diseases, outbreak reporting, seasonal infectious disease awareness, and current local events. There were also multiple flyers created throughout the year that shared education on topics such as infectious disease statistics and infection prevention and control.

FREQUENCY & INCIDENCE

REPORTABLE CONDITIONS

In 2025, there were **1,346 confirmed and probable Class A and Class B infectious diseases** reported to the Zanesville-Muskingum County Health Department. There were 27 Class C outbreaks reported. These diseases are listed on the Ohio Department of Health's reportable communicable diseases list. Muskingum County reported 33 different reportable conditions in 2025.

Count of Reportable Conditions Muskingum County 2025			
Reportable Condition	Cases in 2025	2025 Rate*	5-year Average Rate*
C. auris	1	1.15	0.23
Campylobacteriosis	15	17.22	26.37
Chlamydia infection	229	262.85	494.32
COVID-19 hospitalization	6	6.89	NA
COVID-19	639	733.45	8445.73
CPO	3	3.44	2.77
Cryptosporidiosis	11	12.63	22.44
Dengue	1	1.15	0.23
E. coli (STEC)	1	1.15	3.71
Giardiasis	14	16.07	11.56
Gonococcal infection	25	28.70	143.10
Haemophilus influenzae	3	3.44	5.09
Hepatitis A	1	1.15	12.29
Hepatitis B	8	9.18	25.01
Hepatitis C	37	42.47	103.48
Hepatitis C - Perinatal Infection	1	1.15	0.93
Influenza - ODH Lab Results	1	1.15	6.25
Influenza-associated hospitalization	156	179.06	159.95
LaCrosse virus disease	1	1.15	1.39
Legionellosis	4	4.59	6.01
Lyme Disease	129	148.07	92.42
Measles	3	3.44	0.69
Meningitis - aseptic/viral	4	4.59	6.48
Meningitis - bacterial (Not N. meningitidis)	1	1.15	1.39
Pertussis	7	8.03	12.27
Salmonellosis	15	17.22	19.89
Shigellosis	3	3.44	2.08
Streptococcal - Group A -invasive	6	6.89	10.19
Streptococcal - Group B - in newborn	1	1.15	1.16
Streptococcus pneumonia	14	16.07	28.23
Syphilis	3	3.44	25.94
Varicella	1	1.15	3.24
Vibriosis (not cholera)	2	2.3	0.46

Rates are per 100,000 population

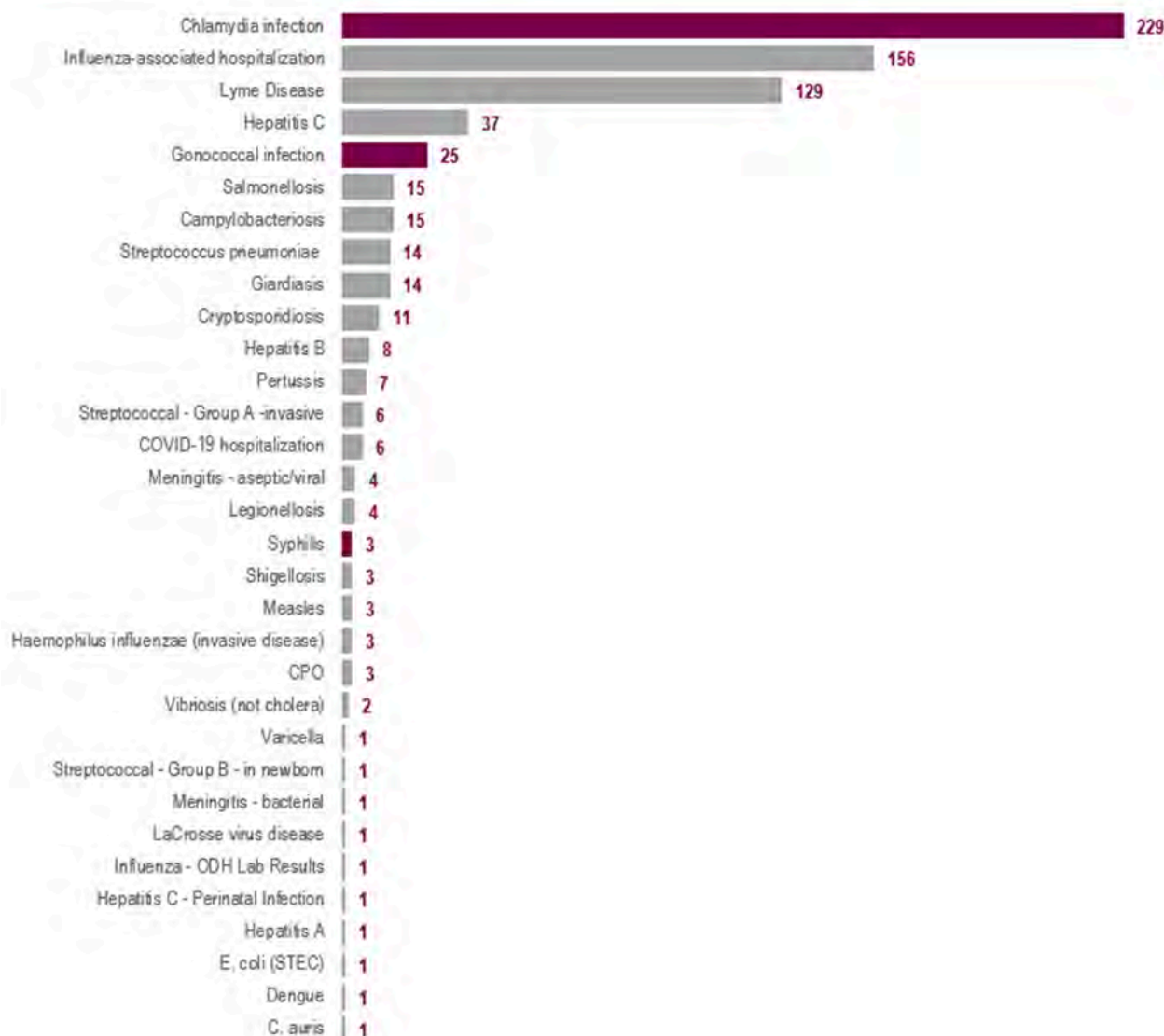
FREQUENCY & INCIDENCE

REPORTABLE CONDITIONS

The five leading reportable diseases in Muskingum County in 2025 were COVID-19, chlamydia, influenza-associated hospitalizations, Lyme disease, and hepatitis C. These are the same 5 leading reportable diseases that were seen in 2024. Sexually transmitted infections including chlamydia, gonorrhea, and syphilis accounted for 19.1% of total reportable conditions, while COVID-19 infections, including hospitalizations, accounted for 47.9% of all reportable conditions, a decrease from 73.4% in 2024. Vaccine-preventable diseases (VPDs) accounted for 62.41% of all reportable conditions in 2025, including COVID-19, dengue, Haemophilus influenzae, hepatitis A, hepatitis B, influenza, measles, meningitis, pertussis, streptococcus pneumoniae, and varicella.

STIs account for **19%** of all reportable conditions in Muskingum County in 2025, with Chlamydia being the most common.

**This chart does not include the 130 COVID-19 cases.



FREQUENCY & INCIDENCE

REPORTABLE CONDITIONS

Reportable conditions are received through the Ohio Disease Reporting System (ODRS) from hospitals, medical practices, and laboratories via electronic reporting, telephone, fax, or mail. Any duplicates, cases outside of Muskingum County jurisdiction, or suspected cases have been removed from total yearly counts. While Human Immunodeficiency Virus (HIV) and Tuberculosis (TB) are reportable conditions, they are not reported

through ODRS surveillance systems. Instead, they are reported from the Ohio Department of Health in their yearly reports. Some numbers in those reports for HIV and TB may be suppressed due to low case counts.

The greatest amount of cases in one month was seen in February, which can be attributed to hospitalized influenza and COVID-19.



2025 Muskingum County Communicable Disease Reporting: Ohio Disease Reporting System												
Reportable Condition	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
C. auris	0	0	0	1	0	0	0	0	0	0	0	0
Campylobacteriosis	3	0	0	1	3	0	0	2	5	1	0	0
Chlamydia infection	18	12	13	15	22	7	29	16	22	27	25	23
COVID-19 hospitalization	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	6
COVID-19	150	130	131	72	30	14	15	28	67	NA	NA	NA
CPO	0	0	1	1	0	0	1	0	0	0	0	0
Cryptosporidiosis	0	1	0	0	1	0	1	4	1	0	0	0
Dengue	0	0	1	0	0	0	0	0	0	0	0	0
E. coli (STEC)	0	0	0	0	0	0	1	0	0	0	0	0
Giardiasis	0	2	0	1	1	2	0	4	1	0	1	2
Gonococcal infection	0	0	1	0	1	2	3	1	6	7	1	3
Haemophilus influenzae	0	0	0	0	0	2	1	0	0	0	0	0
Hepatitis A	0	0	0	0	0	0	1	0	0	0	0	0
Hepatitis B	1	1	1	2	2	0	0	1	0	0	0	0
Hepatitis C	5	0	4	2	4	4	4	2	2	4	4	2
Hepatitis C - Perinatal Infection	0	0	0	1	0	0	0	0	0	0	0	0
Influenza - ODH Lab Results	1	0	0	0	0	0	0	0	0	0	0	0
Influenza-associated hospitalization	32	87	28	3	1	0	2	1	0	0	0	2
LaCrosse virus disease	0	0	0	0	0	0	0	1	0	0	0	0
Legionellosis	0	0	0	0	0	0	3	0	1	0	0	0
Lyme Disease	2	2	3	4	13	34	38	11	9	7	4	2
Measles	0	0	0	0	0	0	0	3	0	0	0	0
Meningitis - aseptic/viral	2	0	0	0	0	1	0	1	0	0	0	0
Meningitis - bacterial (Not N. meningitidis)	0	0	0	0	0	0	0	0	0	1	0	0
Pertussis	2	0	0	0	2	0	0	1	0	0	0	1
Salmonellosis	2	0	2	2	2	0	0	2	1	3	0	1
Shigellosis	1	0	0	0	0	1	0	0	0	0	1	0
Streptococcal - Group A -invasive	1	0	0	0	1	1	0	0	1	0	0	2
Streptococcal - Group B - in newborn	1	0	0	0	0	0	0	0	0	0	0	0
Streptococcus pneumonia	2	2	1	1	1	1	1	0	2	1	0	2
Syphilis	0	0	1	0	0	0	0	0	2	0	0	0
Varicella	0	0	0	0	1	0	0	0	0	0	0	0
Vibriosis (not cholera)	0	0	0	1	1	0	0	0	0	0	0	0

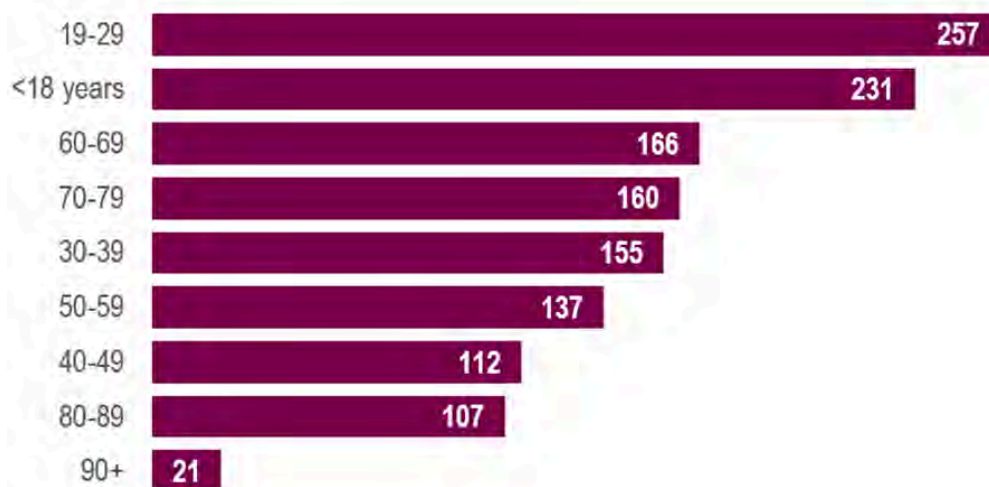
AGE

REPORTABLE CONDITIONS

In 2025, the age range for reportable diseases was 1 week to 99 years. Ages 19-29 years had the most reportable conditions with 257 cases, accounting for about 19% of total cases. Children 18 years and under accounted for about 17% of total cases with 231 reportable conditions. Conditions that most affected children include COVID-19, chlamydia, and Lyme disease.

The elderly population, ages 65 years and older, accounted for about 27% of total cases with 361 reportable conditions. Respiratory diseases, including COVID-19, Haemophilus Influenzae, influenza, legionellosis, pertussis, and streptococcus pneumoniae, account for 84% of cases in the 65 years and older age group.

19% of reportable conditions took place in individuals aged 19-29 years.



AGE RANGE 1 WEEK - 99 YEARS

19%

OF REPORTABLE CONDITIONS
OCCURED IN INDIVIDUALS
AGES 19-29 YEARS

17%

OF REPORTABLE CONDITIONS
OCCURED IN CHILDREN 18
YEARS & UNDER

AGE

REPORTABLE CONDITIONS

The table below shows the age range for each reportable condition in 2025. The age range for all conditions was 1 week to 99 years, with an **average age of 44.23 years and a median age of 43 years.**

2025 Communicable Disease Reporting- ODRS			
Demographics by Age Range			
Reportable Condition	Cases in 2025	Youngest	Oldest
C. auris	1	47 years	47 years
Campylobacteriosis	15	1 year	80 years
Chlamydia infection	229	13 years	53 years
COVID-19 hospitalization	6	34 years	89 years
COVID-19	639	1 week	99 years
CPO	3	51 years	80 years
Cryptosporidiosis	11	24 years	89 years
Dengue	1	35 years	35 years
E. coli (STEC)	1	59 years	59 years
Giardiasis	14	11 months	83 years
Gonococcal infection	25	17 years	42 years
Haemophilus influenzae	3	21 years	72 years
Hepatitis A	1	78 years	78 years
Hepatitis B	8	20 years	80 years
Hepatitis C	37	5 years	70 years
Hepatitis C - Perinatal Infection	1	1 year	1 year
Influenza - ODH Lab Results	1	11 months	11 months
Influenza-associated hospitalization	156	1 year	98 years
LaCrosse virus disease	1	11 years	11 years
Legionellosis	4	40 years	79 years
Lyme Disease	129	2 years	88 years
Measles	3	4 years	8 years
Meningitis - aseptic/viral	4	50 years	80 years
Meningitis - bacterial (Not N. meningitidis)	1	28 years	28 years
Pertussis	7	2 months	66 years
Salmonellosis	15	13 years	82 years
Shigellosis	3	6 years	36 years
Streptococcal - Group A -invasive	6	36 years	86 years
Streptococcal - Group B - in newborn	1	1 month	1 month
Streptococcus pneumonia	14	3 years	78 years
Syphilis	3	33 years	62 years
Varicella	1	11 months	11 months
Vibriosis (not cholera)	2	33 years	78 years

RACE

REPORTABLE CONDITIONS

Analysis of how reportable conditions affect different races in Muskingum County can help identify disparities. In 2025, Whites accounted for 75.93% of all reportable conditions while accounting for 88.74% of the total population in Muskingum County. Blacks/African Americans accounted for 7.28% of reportable conditions despite accounting for only 3.48% of Muskingum County's total population.

2025 Communicable Disease Reporting- ODRS			
Demographics by Race			
Race	Cases in 2025	Percent of Total Illnesses	Percent in Population
American Indian/Alaska Native	1	0.07%	0.17%
Asian	4	0.30%	0.45%
Black/African American	98	7.28%	3.48%
Other	35	2.60%	0.65%
Unknown	186	13.82%	NA
White	1,022	75.93%	88.74%

Case counts for reportable conditions were converted to rates per 10,000 population. This analysis helped identify the disparity of disease in races, showing that **Blacks/African Americans suffered disease burden 2.5 - 4 times more** than other races with a rate of 323.22 per 10,000 population. This is elevated over other races such as Whites at 132.20 per 10,000 population, Asians at 102.3 per 10,000 population, and American Indian/Alaska Natives at 67.11 per 10,000 population.

Blacks/African Americans experienced reportable diseases 2.5-4 times as much as other races in Muskingum County in 2025.

Rates per 10,000 population



The category of “Other” races accounted for about 2.60% of all reportable conditions in 2025, in addition to those with “Unknown” race that accounted for 13.82% of conditions. Races may be labeled as “Unknown” when case investigations cannot be completed by a phone call or a letter.

SEX

REPORTABLE CONDITIONS

Females accounted for 59% of all reportable conditions in 2025 compared to 41% for males. Among males and females, COVID-19, Lyme disease, chlamydia, influenza-associated hospitalization, and hepatitis C were the five leading causes of disease. STIs including chlamydia, gonorrhea, and syphilis accounted for 13.33% of reportable diseases in males and 23.13% of reportable diseases in females. Overall, females reported experiencing STIs about 1.7 times more than males in 2025.

Females accounted for 59% of all reportable conditions in 2025

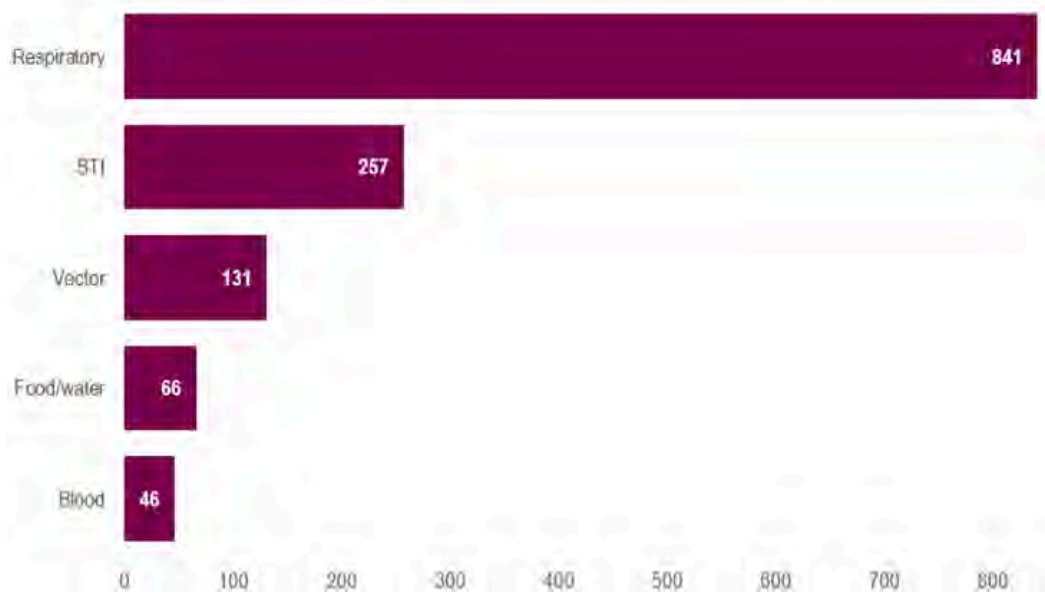


2025 Muskingum County Communicable Diseases					
Demographics-Sex					
Reportable Conditions	Case Count	Female		Male	
		Number	Percentage	Number	Percentage
C. auris	1	1	100	0	0
Campylobacteriosis	15	7	46.7	8	53.3
Chlamydia infection	229	161	70.3	68	29.7
COVID-19 hospitalization	6	5	83.3	1	16.7
COVID-19	639	393	61.5	246	38.5
CPO	3	3	100.0	0	0.0
Cryptosporidiosis	11	4	36.4	7	63.6
Dengue	1	1	100.0	0	0.0
STEC	1	1	100.0	0	0.0
Giardia	14	7	50.0	7	50.0
Gonorrhea	25	19	76.0	6	24.0
Haemophilus influenzae	3	2	66.7	1	33.3
Hepatitis A	1	0	0.0	1	100.0
Hepatitis B	8	3	37.5	5	62.5
Hepatitis C	37	17	45.9	20	54.1
Hepatitis C - Perinatal Infection	1	1	100.0	0	0.0
Influenza - ODHL Results	1	0	0.0	1	100.0
Influenza-associated hosp.	156	82	52.6	74	47.4
LaCrosse virus disease	1	0	0.0	1	100.0
Legionellosis	4	3	75.0	1	25.0
Lyme Disease	129	48	37.2	81	62.8
Measles	3	3	100.0	0	0.0
Meningitis - aseptic/viral	4	3	75.0	1	25.0
Meningitis - bacterial (Not N. meningitidis)	1	0	0.0	1	100.0
Pertussis	7	3	42.9	4	57.1
Salmonellosis	15	9	60.0	6	40.0
Shigellosis	3	1	33.3	2	66.7
Streptococcal - Group A -invasive	6	4	66.7	2	33.3
Streptococcal - Group B - in newborn	1	0	0.0	1	100.0
Streptococcus pneumoniae	14	6	42.9	8	57.1
Syphilis	3	3	100.0	0	0.0
Varicella	1	0	0.0	1	100.0
Vibriosis (not cholera)	2	1	50.0	1	50.0

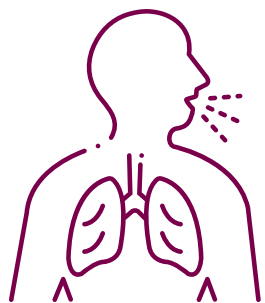
REPORTABLE CONDITIONS BY SYNDROME

Reportable diseases in 2025 can be broken down primarily into five leading syndromes, including respiratory, sexually transmitted infections (STIs), vector-borne, food & water illness, and blood-borne. Respiratory illnesses include COVID-19, Haemophilus influenzae, influenza, measles, meningitis, pertussis, group A streptococcal, streptococcus pneumonia, and varicella. Food & water illnesses include campylobacteriosis, cryptosporidiosis, *e. coli*, *Giardia*, hepatitis A, legionellosis, salmonellosis, shigellosis, and vibriosis. Sexually transmitted infections include chlamydia, gonorrhea, and syphilis. Blood-borne illnesses include hepatitis B, hepatitis C, and perinatal hepatitis C. Vector-borne illness included dengue, LaCrosse virus, and Lyme disease.

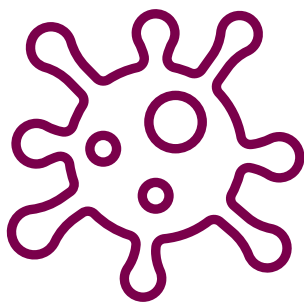
Respiratory illness transmission cases composed the majority of the five leading syndromes of disease in 2025.



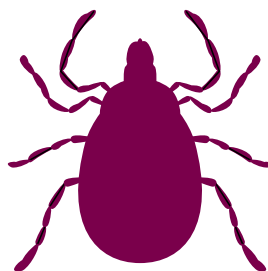
RESPIRATORY



STIs



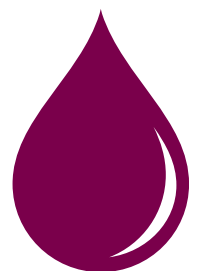
VECTOR-BORNE



FOOD/WATER



BLOOD



REPORTABLE CONDITIONS BY SYNDROME

Traditionally, syndromic surveillance patterns show seasonality for water & foodborne diseases, respiratory diseases, and vector-borne diseases. These three types of syndromic diseases can be seen year-round, but tend to have peaks at different times of the year. Water & foodborne diseases, along with vector-borne disease, are typically seen more in the summer months, while respiratory diseases are typically seen more during the fall and winter months. In 2025, water & foodborne cases were variable over the year but spiked in August. Vector-borne illnesses were seen peaking in the summer and respiratory illnesses peaked in the winter as expected. Sexually transmitted infections were variable throughout the year but saw a case increase of 79% in the second half of the year.

Respiratory illnesses were most common in the winter months in 2025.

*COVID-19 was removed as a reportable condition in October***



STI cases increased by 79% in the second half of 2025.



Vector-borne diseases spiked in the summer months in 2025.



Food and water illnesses spiked in August 2025.



REPORTABLE DISEASE TRENDS

The chart below shows case counts over a five-year period for each reportable condition in Muskingum County in 2025. **Eighteen of the 33 conditions reported in 2025 were above the five-year case average.** While most of these 18 conditions have a generally low incidence, conditions such as Lyme disease, measles, and influenza-associated hospitalizations were significantly higher in 2025 than previous years and deserve to be more closely monitored in 2026.

2025 Communicable Disease Reporting- ODRS						
2025 Comparison and 5-year average						
Reportable Condition	2021	2022	2023	2024	2025	5-year Average
C. auris	0	0	0	0	1	0.2
Campylobacteriosis	16	15	8	17	15	14.2
Chlamydia infection	326	379	240	184	229	271.6
COVID-19 hospitalization	NA	NA	NA	NA	6	NA
COVID-19	12,891	12,288	3,294	1,672	639	6156.8
CPO	1	3	2	1	3	2
Cryptosporidiosis	10	18	9	22	11	14
Dengue	0	0	0	0	1	0.2
E. coli (STEC)	1	4	4	1	1	2.2
Giardiasis	3	5	9	6	14	7.4
Gonococcal infection	138	97	46	33	25	67.8
Haemophilus influenzae	1	5	3	3	3	3
Hepatitis A	1	1	0	0	1	0.6
Hepatitis B	20	23	15	6	8	14.4
Hepatitis C	75	68	58	44	37	56.4
Hepatitis C - Perinatal Infection	0	0	1	1	1	0.6
Influenza - ODH Lab Results	2	15	3	5	1	5.2
Influenza-associated hospitalization	13	134	41	114	156	91.6
LaCrosse virus disease	0	3	0	0	1	0.8
Legionellosis	5	5	3	2	4	3.8
Lyme Disease	19	19	104	94	129	73
Measles	0	0	0	0	3	0.6
Meningitis - aseptic/viral	3	8	2	1	4	3.6
Meningitis - bacterial (Not N. meningitidis)	1	1	0	0	1	0.6
Pertussis	3	1	12	11	7	6.8
Salmonellosis	10	10	16	10	15	12.2
Shigellosis	1	0	0	1	3	1
Streptococcal - Group A -invasive	5	5	7	9	6	6.4
Streptococcal - Group B - in newborn	1	2	0	1	1	1
Streptococcus pneumonia	19	22	18	22	14	19
Syphilis	22	33	30	13	3	20.2
Varicella	4	3	1	1	1	2
Vibriosis (not cholera)	0	0	0	0	2	0.4

COVID-19 STATISTICS

The chart to the right shows COVID-19 cases in each month of 2025. Cases were highest in the first quarter of the month. Cases then declined throughout the summer before increases began closer to fall.

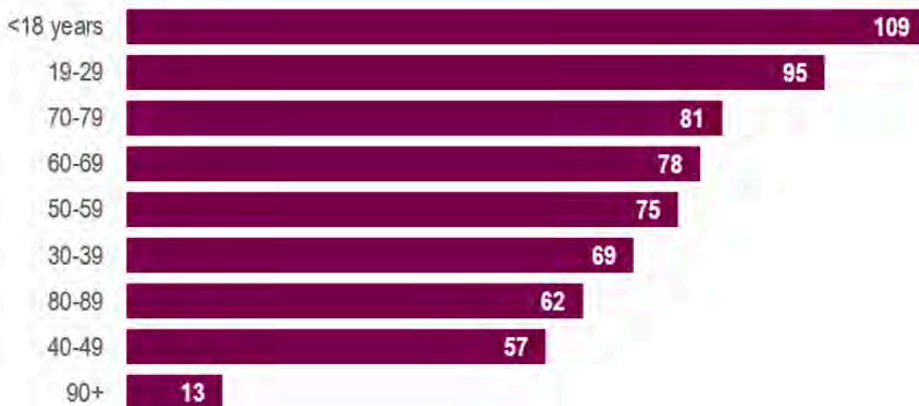
As of October 1st, 2025, COVID-19 cases were no longer a reportable condition in Ohio. Instead, COVID-19 hospitalizations became reportable as of October 1st. Muskingum County had 6 of these cases in December.

COVID-19 cases were highest in the first quarter of the year in 2025.

COVID-19 was removed as a reportable condition in October**



COVID-19 cases were seen most in children 18 years and younger



The graphic to the left shows the breakdown of COVID-19 cases by age group. Of all COVID-19 cases in 2025, 17.06% occurred in individuals 18 years and younger, which is a slight increase from 16.33% in 2024. Individuals ages 65 years and older accounted for 30.52% of Covid-19 cases in 2025, which is a slight increase from 26.97% in 2024.

COVID-19 STATISTICS

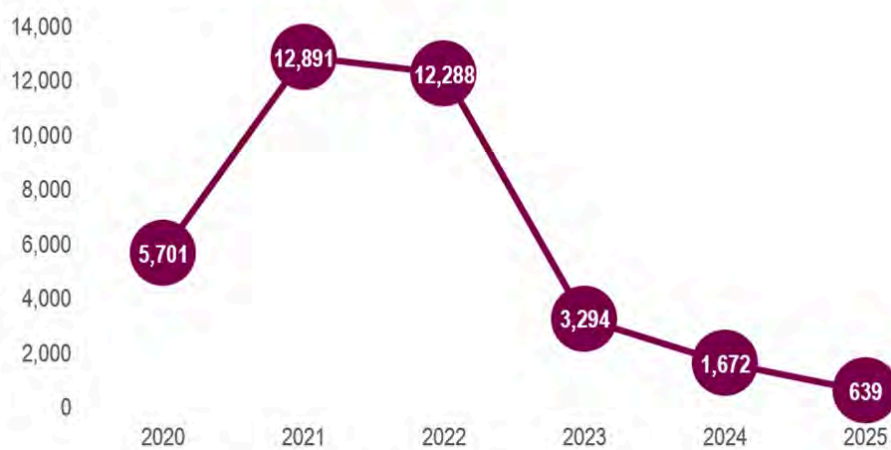
In 2025, females accounted for about 62% of COVID-19 cases that were reported to the LHD.

The graphic below shows the total number of confirmed and probable COVID-19 cases in Muskingum County from 2020 to 2025. The most cases by year were seen in 2021 while 2025 had the least number of cases reported since the start of the pandemic. While COVID-19 cases still remain high, there is a decreasing trend, with a 49% decline in cases between 2023 and 2024 and a 62% decline between 2024 and 2025.

Females accounted for 62% of COVID-19 cases in 2025



There was a **62% decrease** in COVID-19 cases between 2024 and 2025.



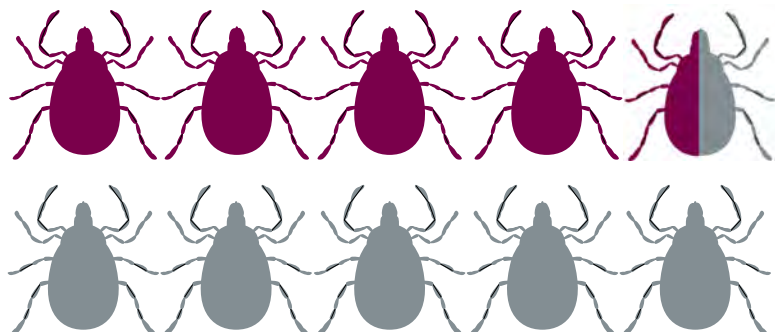
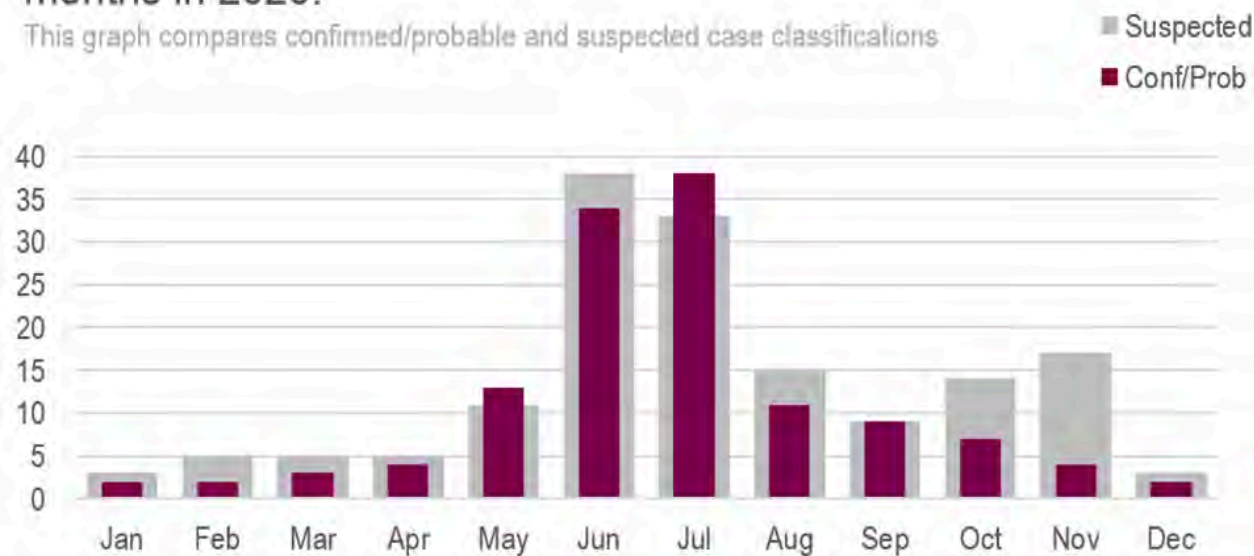
Decreases in COVID-19 may be due to multiple factors, such as vaccine uptake, mild infections due to mutations in the virus, and herd immunity. The CDC and Ohio Department of Health have moved away from reporting every COVID-19 case to only reporting hospitalized COVID-19 cases, similar to the way in which influenza cases are reported each year. This change was implemented in Ohio as of October 1st, 2025. While case counts will no longer be available, the burden of disease can still be seen by watching tools such as wastewater detections.

LYME DISEASE STATISTICS

Lyme disease cases have been increasing in Muskingum County over the last few years. This graph below shows Lyme cases reported each month in 2025. This graph is inclusive of confirmed/probable cases and suspected cases. For reporting purposes, only confirmed and probable cases are recorded for total counts, however, there has been an increase in suspected cases being further investigated to become confirmed or probable classification. It is important to note that while case counts may seem relatively low, there are many other cases being diagnosed and treated for Lyme disease that stay out of total case counts because of the case classification system in the Infectious Disease Control Manual. This graphic also shows that while most Lyme cases are seen in the summer months, it is possible to have cases year-round.

Lyme cases were more common in the summer months in 2025.

This graph compares confirmed/probable and suspected case classifications



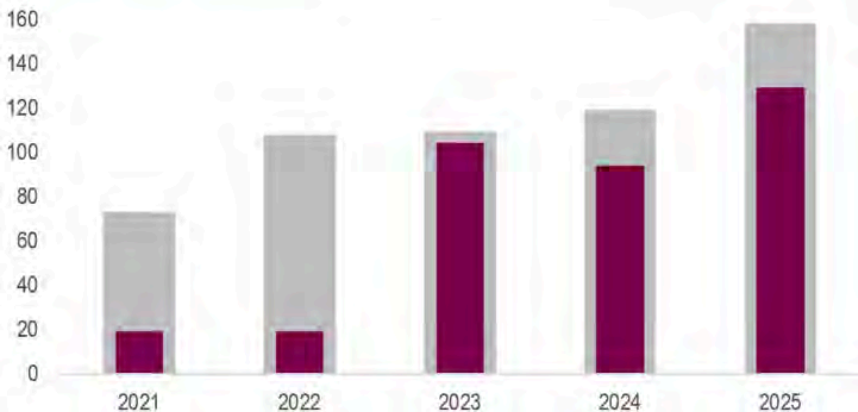
Suspected Lyme cases accounted for **55%** of all reported Lyme cases while **Confirmed/Probable** cases accounted for **45%** of all reported Lyme cases in Muskingum County in 2025.

LYME DISEASE STATISTICS

The graphic below breaks down case classifications over the last five years. In 2021 and 2022, the majority of Lyme cases were classified as suspected, meaning that the number reported was much less what was being investigated. From 2023 to 2025 however, there was a dramatic increase in the number of confirmed and probable cases. While there were still slightly more suspected cases over these years, this increase shows how much Lyme disease activity has moved into Muskingum County. Between 2024 and 2025, there was a 33% increase in suspected case classifications, a 37% increase in confirmed/probable classifications, and a 35% increase in total Lyme cases. Lyme disease was more reported in males in 2025 in Muskingum County.

Suspected Lyme cases remain more common than Confirmed/probable cases.

There was a 35% increase in total Lyme cases between 2024 and 2025.



Males accounted for 63% of Lyme cases in 2025

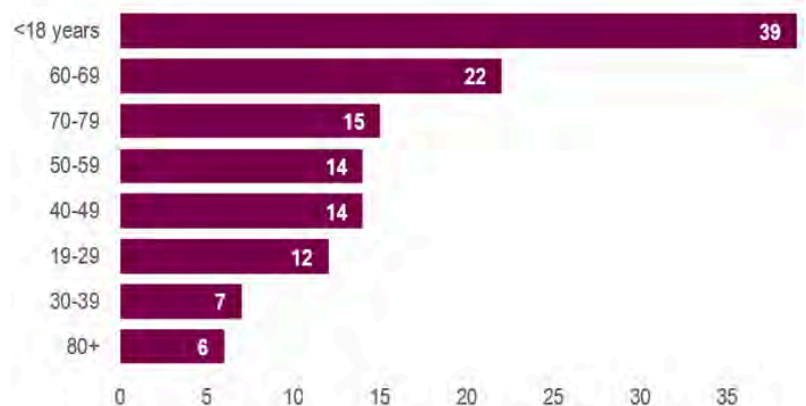
(Confirmed/probable cases only)



In 2025, children 18 and under saw the most cases of Lyme disease reported, accounting for 30% of all Lyme cases. This is a slight decrease from 33% in 2024. The age range of 60-69 years had the second most cases reported, accounting for 17% of all Lyme cases. The elderly population of 65 years and older account for 22% of Lyme cases in 2025, a slight decrease from 24% the previous year. These statistics are inclusive of reported confirmed and probable cases only. The age range of Lyme disease was 2-88 years.

30% of Lyme cases occurred in individuals 18 years and younger in 2025.

***These case counts are inclusive of confirmed and probable case classifications only**



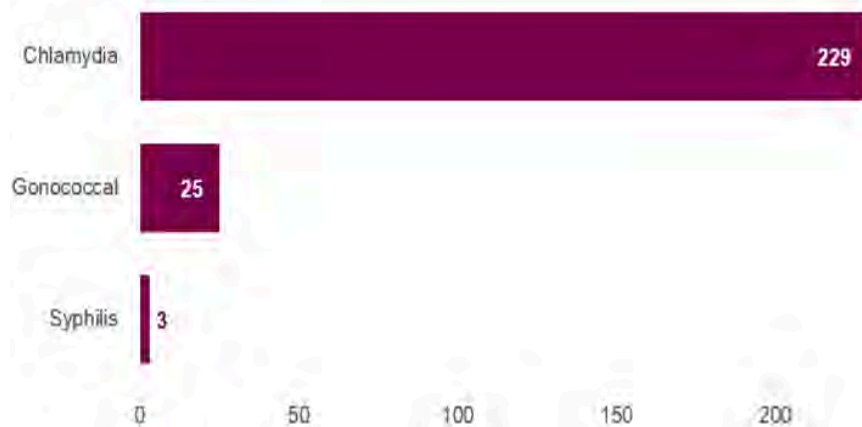
STI STATISTICS

STIs (sexually transmitted infections) accounted for 19% of all reportable conditions in Muskingum County in 2025. Chlamydia was the majority of STIs reported, accounting for 89% of all STIs in the county. Reported STIs include chlamydia, gonorrhea, and syphilis.

Females accounted for 70% of STI cases in 2025



Chlamydia accounted for 89% of STI cases in Muskingum County in 2025.



Females accounted for 70% of all reported STIs in 2025 in Muskingum County. Chlamydia and gonorrhea were seen more often in women than men. All cases of syphilis were in women.

Coinfections occurred in 3.89% of all STI cases and reinfections occurred in 31.52% of all STI cases. The number of coinfections between 2024 and 2025 were very similar with only a 0.5% decrease. However, 2025 saw a 45% increase of reinfections from 2024.

3.89%

of STI cases were **coinfections**

31.52%

of STI cases were **reinfections**

STI STATISTICS

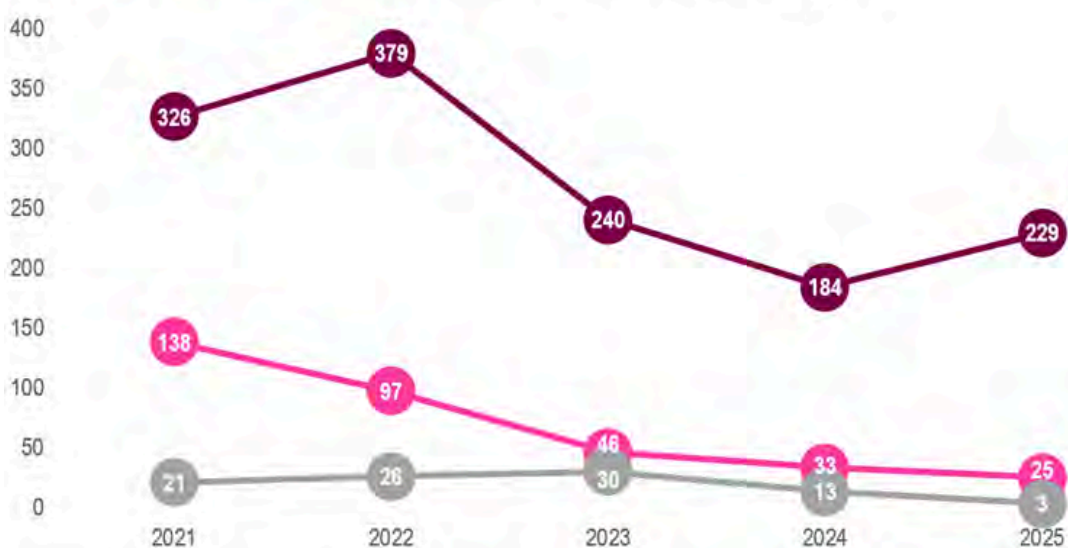
There were a total of 257 STIs reported in Muskingum County in 2025. This is a 12% increase in STIs between 2024 and 2025. The majority of STIs occurred in individuals ages 19-29 years, accounting for 54% of all STI cases, which is a decrease from 65% the previous year. Children 18 years and younger accounted for 20% of total STI cases, which is an increase from 10% the previous year. The age range for STIs in 2025 was 13-62 years.

74% of STIs occurred in individuals 29 years and younger.



The graphic below shows a case counts for chlamydia, gonorrhea, and syphilis over the last 5 years. While chlamydia had been seeing decreases since 2022, cases increased by 24% between 2024 and 2025. Gonorrhea has been steadily declining for the last 5 years, with an 82% decrease in cases between 2021 and 2025. Syphilis had seen a 275% increase in cases between 2019 and 2023, with 30 cases in 2023 being the highest recorded. Since 2023, syphilis cases have been declining, with a 90% decrease in cases between 2023 and 2025.

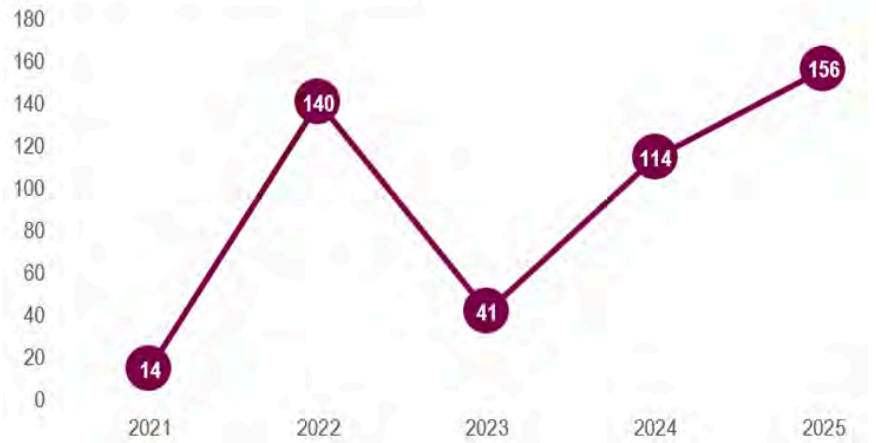
Gonorrhea and **syphilis** have been decreasing over the last three years, but **chlamydia** saw an increase over the last two years.



HOSPITALIZED INFLUENZA STATISTICS

Hospitalized influenza cases are typically seen more often during the fall and winter months, but can be seen year-round. Cases decreased greatly during the COVID-19 pandemic in 2020 and 2021, but 2022 saw a **900% increase** in cases back to pre-pandemic numbers. Cases have been increasing steadily since 2023. Between 2024 and 2025, there was a **37% increase** in cases.

There was a **37% increase** in hospitalized influenza cases between 2024 and 2025.



Hospitalized influenza cases typically affect those over 50 years of age more often than other age groups, but can impact individuals of all ages. In 2024, over 84% of cases took place in individuals over 50 years of age. The age range for hospitalized influenza cases was **2 weeks to 97 years old**. Cases were more common in females than males in 2024.

Over **87%** of hospitalized influenza cases took place in individuals **50 years and older** in 2025.



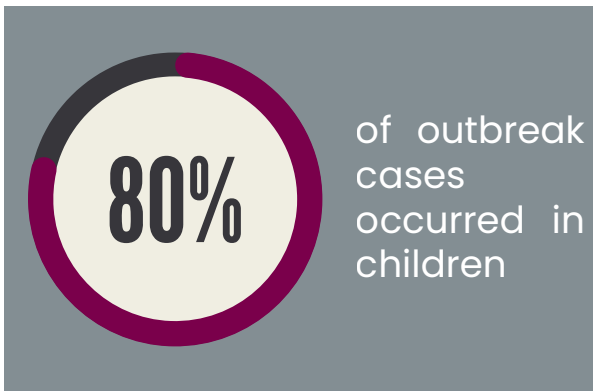
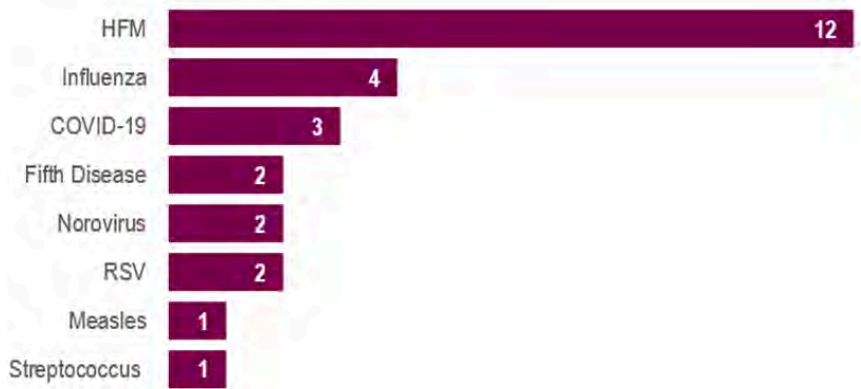
Females accounted for 53% of hospitalized influenza cases in 2025



COMMUNICABLE DISEASE OUTBREAKS

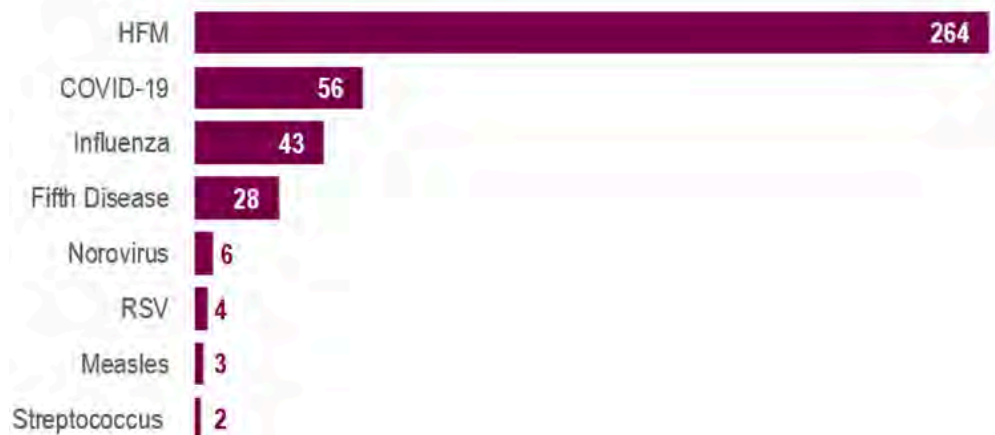
There were **27 communicable disease outbreaks among 8 different diseases** in 2025 in Muskingum County. Hand-foot-and-mouth outbreaks accounted for 44% of all outbreaks.

Muskingum County had 27 total outbreaks among 8 different diseases in 2025.



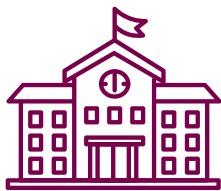
The graphic below shows the number of cases of each disease identified in outbreaks in Muskingum County in 2025. Hand-foot-and-mouth disease accounted for over 65% of all cases, all taking place in schools and daycares. All COVID-19 outbreaks occurred in long-term care facilities. Norovirus outbreaks occurred in restaurants. Streptococcus, fifth disease, and RSV outbreaks all occurred in daycares and schools. Influenza outbreaks occurred in daycares, schools, and LTCFs. There was 1 measles outbreaks that occurred in a family home.

Hand-foot-and-mouth disease accounted for 65% of cases in outbreaks.



COMMUNICABLE DISEASE OUTBREAKS

Outbreaks occurred in 12 schools, 8 daycares, 4 long-term care facilities, 2 restaurants, and 1 community location. Schools, daycares, and long-term care facilities were able to identify possible outbreak situations among their residents, staff, and students. These locations reached out to the health department for reporting purposes and infection prevention and control guidance. Outbreaks in restaurants were identified when environmental health received food complaints from restaurants. Once there was an epidemiologic link made between cases and restaurant locations, environmental health completed food inspections at those locations to ensure there were no violations. The measles outbreak in a home was identified with help from Genesis Hospital.



12



8



4



2



1

8
Hospitalizations

1-7 DAYS
Range of Hospital Admission

1
Death

2 MONTHS - 99 YEARS
Age Range of all Outbreak Cases

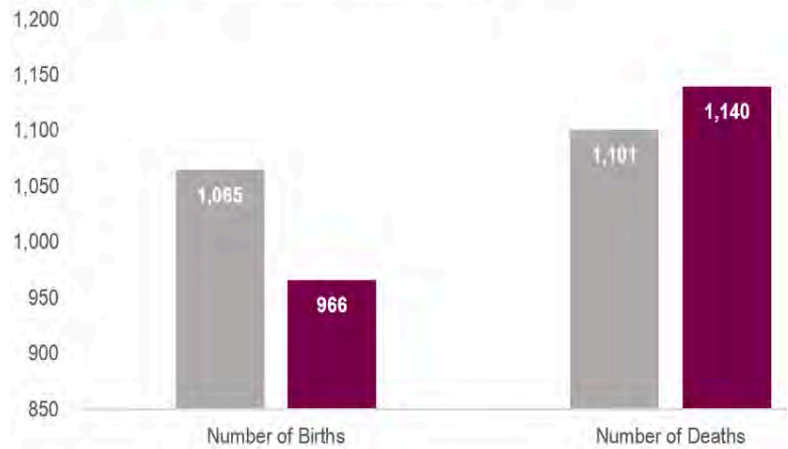
Females accounted for 51% of outbreak cases in 2025



BIRTHS & DEATHS

The graphic to the right shows births and deaths in Muskingum County between 2024 and 2025. Over the last two years, births in Muskingum County have decreased by 9.3%, while deaths have increased by 3.5%. There was a slight increase of total population of the county from about 86,496 individuals in 2024 to 87,122 individuals in 2025, which is about a 0.72% increase in total population.

Deaths in Muskingum County increased by 3.5% from 2024 to 2025, while births decreased 9.3%.



The table below lists the top ten causes of death in Muskingum County in 2025. Diseases of the heart was the top cause of death with 289 total deaths. This particular cause of death was also the leading cause of death in 2024. While heart disease or heart complications make up a great majority of deaths, malignant neoplasms, chronic lower respiratory diseases, cerebrovascular disease, diabetes, and Alzheimer’s continue to be in the top ten leading causes of death from year to year. These numbers may change over time as ODH reviews death certificates.

Leading Causes of Death Muskingum County 2025			
No.	Leading Cause of Death	Death Count	Mortality Rate*
1	23 Diseases of heart (I00-I09,I11,I13,I20-I51)	289	331.76
2	15 Malignant neoplasms (C00-C97)	240	275.48
3	30 Chronic lower respiratory diseases (J40-J47)	89	102.16
4	25 Cerebrovascular diseases (I60-I69)	51	58.54
5	45 Accidents (UNINTENTIONAL INJURIES) (V01-X59,Y85-Y86)	39	44.76
6	18 Diabetes mellitus (E10-E14)	38	43.62
7	22 Alzheimer's disease (G30)	34	39.03
8	28 Influenza and pneumonia (J09-J18)	28	32.14
9	36 Chronic liver disease and cirrhosis (K70,K73-K74)	25	28.70
10	46 Intentional self-harm (suicide) (*U03,X60-X84,Y87.0)	25	28.70

Rates are per 100,000 population

CONCLUSION

Muskingum County saw 1,346 reportable conditions in 2025. This is a **40.89% decrease in cases from 2024**, which saw 2,277 reportable conditions. This decrease is largely in part due to the decrease in COVID-19 cases and reporting requirements. The most significant increases were in Giardiasis (133.3%), Lyme disease (37.2%), influenza-associated hospitalizations (36.8%), and chlamydia (24.5%). The most significant decreases were in COVID-19 (61.8%), cryptosporidiosis (50.0%), and streptococcus pneumonia (36.4%). Through descriptive and analytical analysis, there were several significant observations:



COVID-19, chlamydia, and influenza-associated hospitalizations were identified as the three leading reportable conditions in Muskingum County in 2025



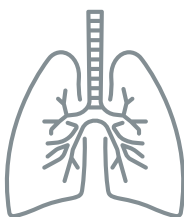
Vaccine-preventable diseases accounted for 62.48% of all reportable conditions



Females (59%) accounted for the larger portion of disease burden, primarily due to sexually transmitted infections and COVID-19



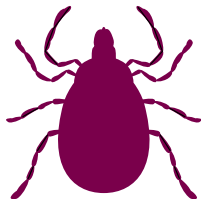
African Americans suffered the burden of disease 2.5-4 times the rate of other races in Muskingum County



Respiratory diseases accounted for 62.48% of all reportable conditions

CONCLUSION

Disease trends across the last five years identify the following conditions as major areas of concern:

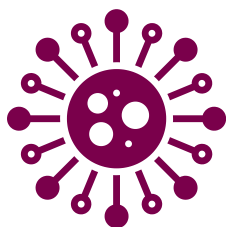


Lyme disease



Gastrointestinal diseases

i.e. cryptosporidiosis, salmonellosis, giardiasis, STEC



Sexually Transmitted Infections



Hospitalized influenza

To better understand and address infectious diseases in Muskingum County, several activities should be conducted to prevent further disease. These activities could include:

- **Continued disease surveillance**
- **Community and physician education**
- **Building partnerships with community members**

Further research may also be conducted to address:



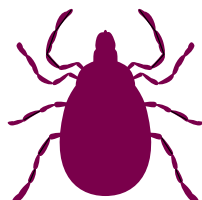
Risk factors for coinfections and reinfections in STI cases



Increase protection from vaccine-preventable infections and education



Health disparities that exist among sex and race in Muskingum County



Risk factors and educational information sharing for Lyme and other vector-borne disease prevention

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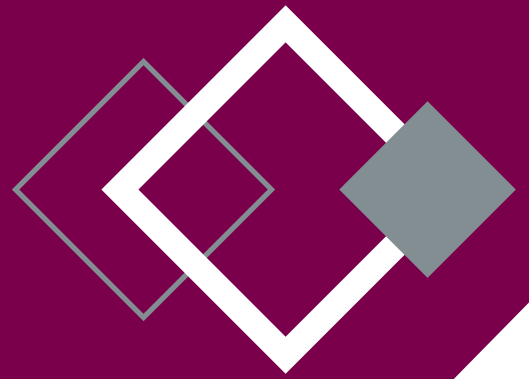
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THANK YOU



Questions?

Contact:

Kaili Shaffer, Epidemiologist II

Kailis@zmchd.org

740-454-9741 Ext. 247