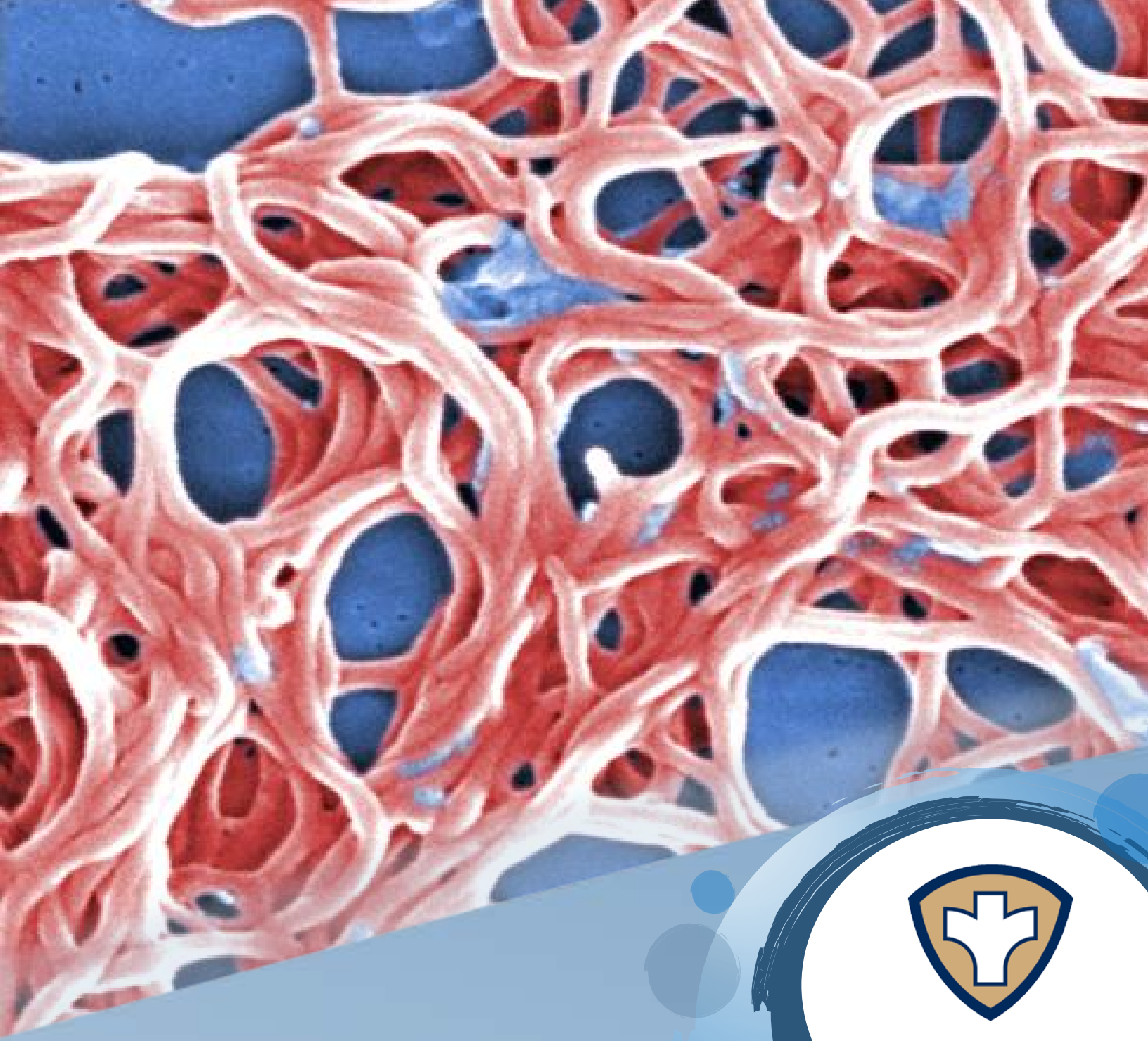

Public Health
Prevent. Promote. Protect.

ANNUAL SUMMARY OF COMMUNICABLE DISEASES: 2021

Tuscarawas County Health Department
Tuscarawas County, Ohio

ANNUAL SUMMARY OF COMMUNICABLE DISEASE: 2021

Tuscarawas County, Ohio

Tuscarawas County Health Department
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Dover, OH 44622
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Cover Image: This digitally colorized scanning electron microscopic (SEM) image depicts a grouping of numerous, Gram-negative, anaerobic, Borrelia burgdorferi bacteria, which had been derived from a pure culture. This pathogenic organism is responsible for causing the illness, Lyme disease, a zoonotic, vector-borne, ailment, transmitted to humans by way of a tick bite. Centers for Disease Control and Prevention; Image obtained from phil.cdc.gov. Content Providers: CDC/Claudia Molins, 2011. Photo Credit: Janice Haney Carr.

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DEPARTMENT DESCRIPTION

Tuscarawas County is represented by both a city health department and general health district. The New Philadelphia City Health Department (NPCHD) is responsible for communicable disease investigation and control for those cases residing within the city limits of New Philadelphia. The Tuscarawas County General Health District, dba Tuscarawas County Health Department (TCHD) is responsible for disease investigation and control for all cases outside the City of New Philadelphia but inside the County lines of Tuscarawas. This also includes the municipalities of Dover and Uhrichsville.

PERSONNEL

Staff at both agencies work on routine surveillance and outbreak investigations. The key personnel at both agencies responsible for the routine communicable disease surveillance, and prevention and control include:

- Chelsea Martin, BSN, RN, Communicable Disease Nurse, Tuscarawas County Health Department
- Valerie Wallace, BSN, RN, Nurse, Tuscarawas County Health Department
- Amy Kaser, RN, Director of Nursing, Tuscarawas County Health Department
- Caroline Terakedis, REHIS, Director of Environmental Health, Tuscarawas County Health Department
- Katie Seward, MPH, CHES, CRHCP, Health Commissioner, Tuscarawas County Health Department
- Nichole Bache, RN, Director of Nursing, New Philadelphia City Health Department
- Vickie Ionno, RN, Health Commissioner, New Philadelphia City Health Department
- Natasha Yonley, MPH, CPH, CHES, Epidemiologist

With the impact of the COVID-19 pandemic, each local health department brought in additional staff to assist with communicable disease surveillance as related to COVID-19. This included:

- Michelle Genetin, EHSIT, Tuscarawas County Health Department
- Jared Redmond, REHIS, Tuscarawas County Health Department
- Michael Kopko, REHIS, Tuscarawas County Health Department
- Efia Taylor, EHSIT, Tuscarawas County Health Department
- Andrew Kaser, EHSIT, Tuscarawas County Health Department
- Crystal Bobzien, RN, Tuscarawas County Health Department
- Lori Laizure, RN, Tuscarawas County Health Department
- Brittany Engstrom, MA, Tuscarawas County Health Department
- Jordan McCartney, RN, Tuscarawas County Health Department
- Autumn Poland, Tuscarawas County Health Department
- Abigale Raber, Tuscarawas County Health Department
- Kelly Snyder, Tuscarawas County Health Department
- Paige Hay, EHSIT, Tuscarawas County Health Department
- Micayla Lautzenheiser, EHSIT, Tuscarawas County Health Department
- Lee Finley, REHIS, New Philadelphia City Health Department
- James Smiraldo, EHSIT, New Philadelphia City Health Department
- Dana Fischio, MBA, EHSIT, New Philadelphia City Health Department
- Sue Geist, New Philadelphia City Health Department
- Ann Proctor, RN, New Philadelphia City Health Department
- Maegan Cummings, RN, New Philadelphia City Health Department

INTRODUCTION

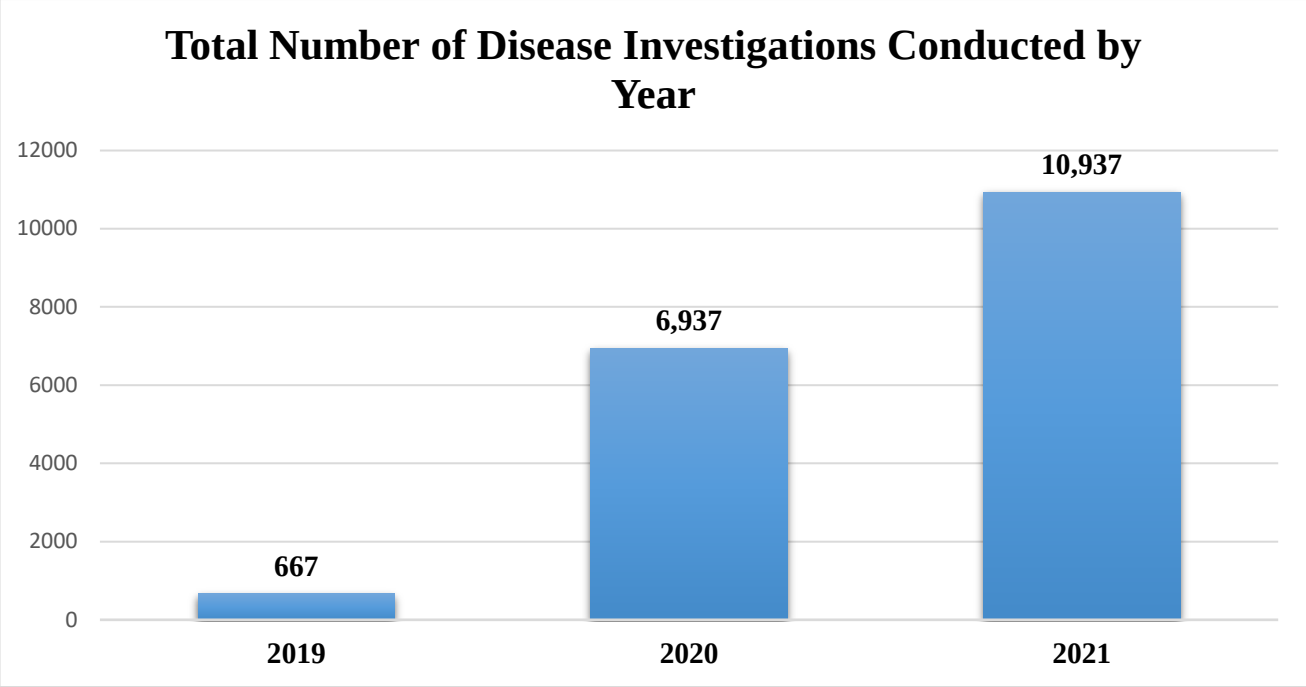
This report summarizes communicable diseases reported to the Tuscarawas County Health Department (TCHD) and the New Philadelphia City Health Department (NPCHD), collectively throughout this report as Tuscarawas County, in 2021. Communicable diseases (also called "infectious diseases") are illnesses caused by bacteria, viruses, and parasites (also called "microorganisms"), and are transmitted from an infected person or animal to another. The route of transmission varies by disease; however, it may include contact with contaminated objects, direct contact with contaminated body fluids (e.g., blood) or respiratory secretions, the bite of an animal or vector (e.g., insect) carrying the microorganism, inhalation of contaminated airborne particles, or ingestion of contaminated food or water. The Annual Summary of Communicable Diseases 2021 includes cases of reportable diseases that were diagnosed among residents of Tuscarawas County, reported to public health, and found to meet the public health surveillance definition of a confirmed, probable, or suspected case. These data do not represent all cases of reportable infectious disease that occurred in the community, as individuals may not seek medical care for mild or asymptomatic infections, or laboratory confirmation tested is not always conducted. Data in this summary are considered provisional.

Ohio Administrative Code 3701-3-02 reads, "cases and suspected cases of selected infectious diseases are required to be reported to Ohio and local public health agencies". TCHD and NPCHD have been reporting, tracking, and investigating infectious disease cases through the Ohio Disease Reporting System (ODRS). Many of these diseases must also be reported by the Ohio Department of Health (ODH) to the Centers for Disease Control and Prevention (CDC) as part of national public health surveillance of infectious diseases. Please note that data in tables 2a-2f are grouped by *type* of disease. There are two columns for each year; one column states, "Confirmed & Probable" and the second column states "All Statuses." The "All Statuses" column includes cases that were suspected, probable, or confirmed.

This document is intended to be a resource for individuals and public health partners concerned about infectious diseases in Tuscarawas County. Further information on communicable diseases may be obtained by contacting the Tuscarawas County Health Department.

KEY FINDINGS

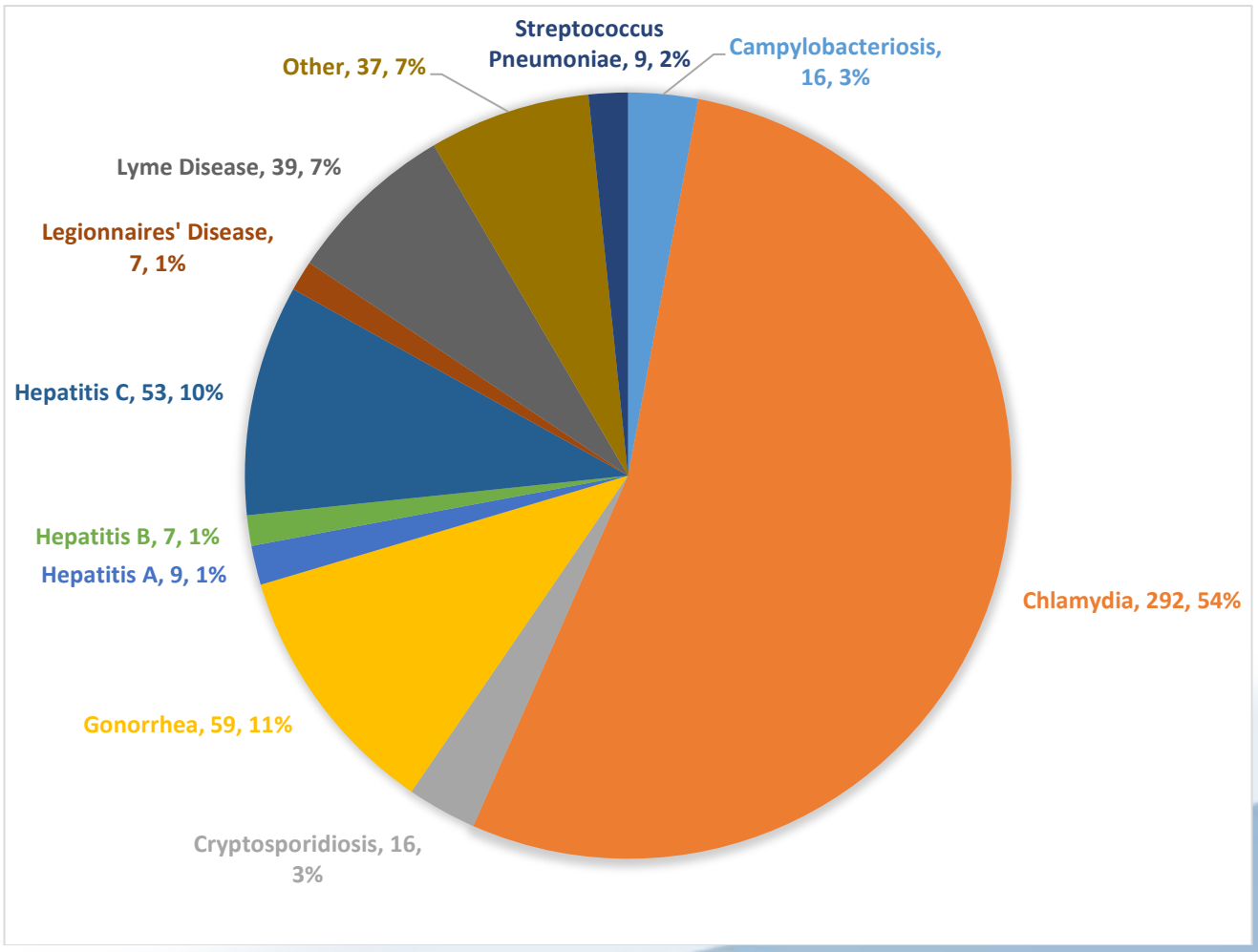
In 2021, there were 10,937 disease investigations completed between the New Philadelphia City Health Department (NPCHD) and the Tuscarawas County Health Department (TCHD). This is a 63% increase from 2020 to 2021.



The numbers of diseases in this summary include all investigations that were classified as confirmed, probable or suspected. Numbers are subject to change due to delayed laboratory reporting or jurisdictional changes after diagnosis.

Top 10 Most Reported Diseases (excluding COVID-19)
All Ages
Tuscarawas County 2021

Reportable Disease	Number of Cases	Case Rate per 100,000 population
Chlamydia	292	313.1
Gonorrhea	59	63.3
Hepatitis C	53	56.8
Lyme Disease	39	41.8
Campylobacteriosis	16	17.2
Cryptosporidiosis	16	17.2
Streptococcus Pneumoniae	9	9.7
Hepatitis A	9	9.7
Legionnaires' disease	7	7.5
Hepatitis B	7	7.5
Other	37	-



COVID-19

COVID-19 continued to be the most reported disease from 2020 to 2021. A total of 10,253 confirmed and probable cases were reported in 2021. That represents 95% of all reported diseases in Tuscarawas County residents. The 2021 case rate per 100,000 population for COVID-19 was 10,993.6. The State of Ohio case rate for 2021 was 16,195.6.

Since the start of the pandemic in 2020 the Tuscarawas County zip codes with the highest COVID-19 case rates are as follows (as of February 14, 2022):

Zip Code	Area	Case Rate per 100,000 population
44671	Sandyville	27,931.0
44622	Dover	25,828.4
44682	Tuscarawas	23,786.4
44621	Dennison	23,503.1
44663	New Philadelphia	23,211.8
44629	Gnadenhutten	20,819.2
44683	Uhrichsville	20,568.3
44697	Zoar	20,098.0
43837	Port Washington	19,722.6
44612	Bolivar	19,409.2
44680	Strasburg	19,304.2
44656	Mineral City	18,229.9
43832	Newcomerstown	17,281.3
44653	Midvale	16,196.1
43840	Stonecreek	15,961.7
44678	Somerdale	14,534.9
44681	Sugarcreek	9,916.1
44643	Magnolia	5,718.3
43804	Baltic	5,573.2
44699	Tippecanoe	5,302.1
44624	Dundee	4,540.3
44675	Sherrodsville	4,109.6
44608	Beach City	2,091.0
43749	Kimbolton	715.5
43824	Fresno	485.9
44626	East Sparta	331.7

DEMOGRAPHIC PROFILE OF TUSCARAWAS COUNTY

Tuscarawas County Population, 2020[1]

- The demographic profile of Tuscarawas County is described in the following tables.
- Tuscarawas County is served by two local health departments:
  - New Philadelphia City Health Department serves a population of 17,288*.
  - Tuscarawas County Health Department serves a population of 75,448*.

**According to data taken from Ohio's Health Department Profile and Performance database*

Table 1a: Tuscarawas County Population by Gender, 2019[2]

Gender	2020	
	Population	Percent (%)
Male	46,112	50.1
Female	45,875	49.9
Total	91,987	100

Table 1b: Tuscarawas County Population by Race and Ethnicity, 2020[1]

Race	2020	
	Population	Percent (%)
White	85,679	91.9
Black or African American	724	0.8
American Indian and Alaska Native	967	1.0
Asian Alone	306	0.3
Native Hawaiian and Other Pacific Islander	29	<0.1
Other race	1,737	1.9
Two or More Races	3,831	4.1
Total	93,273	100

Table 1c: Tuscarawas County Population by Age Group, 2019[2]

Age (Years)	2020	
	Population	Percent (%)
Persons 4 and under	5,743	6.2
Persons 5 to 24	22,212	24.2
Persons between 25 and 64	45,376	49.3
Persons 65 and over	18,656	20.3
Total	91,987	100

COUNTS AND RATE OF COMMUNICABLE DISEASE

Table 2a: Counts and Rate of Enteric Reportable Diseases among Tuscarawas County Residents, by Jurisdiction, 2020-2021

† = Rate per 100,000 population

	Jurisdiction	Year	Population			Class B	Class B	Class B	Class B	Class B	Class B	Class B	Class B	Class B
					Disease Name	Campylobacteriosis	Cryptosporidiosis	Cyclosporiasis	*E. coli*,	Giardiasis	Hepatitis A	Salmonellosis	Shigellosis	Yersiniosis
ENTERIC DISEASES	Tuscarawas County (Entire)	2020	*91,987*	Confirmed & Probable	# of Cases	14	1	0	2	1	38	10	1	0
					Case Rate†	15.2	1.1	0.0	2.2	1.1	41.3	10.9	1.1	0.0
				All Statuses	# of Cases	14	1	0	2	3	61	10	1	0
					Case Rate†	15.2	1.1	0.0	2.0	3.3	66.3	10.9	1.1	0.0
		2021	*93,263*	**Confirmed & Probable**	**# of Cases**	**16**	**16**	**1**	**5**	**0**	**1**	**5**	**1**	**3**
					Case Rate†	**17.2**	**17.2**	**1.1**	**5.4**	**0.0**	**1.1**	**5.4**	**1.1**	**3.2**
				All Statuses	# of Cases	16	16	1	5	2	9	5	1	3
					Case Rate†	17.2	17.2	1.1	5.4	2.1	9.7	5.4	1.1	3.2
	Tuscarawas County Health Department	2020	*74,541*	Confirmed & Probable	# of Cases	10	0	0	2	1	38	10	1	0
					Case Rate†	13.4	0.0	0.0	2.7	1.3	51.0	13.4	1.3	0.0
				All Statuses	# of Cases	10	1	0	2	3	50	10	1	0
					Case Rate†	13.4	1.3	0.0	2.7	4.0	67.1	13.4	1.3	0.0
		2021	*75,586*	Confirmed & Probable	# of Cases	13	1	1	3	0	1	5	0	3
					Case Rate†	17.2	1.3	1.3	4.0	0.0	1.3	6.6	0.0	4.0
				All Statuses	# of Cases	13	1	1	3	1	8	5	0	3
					Case Rate†	17.2	1.3	1.3	4.0	1.3	10.6	6.6	0.0	4.0
	New Philadelphia City Health Department	2020	*17,446*	Confirmed & Probable	# of Cases	4	0	0	0	0	0	0	0	0
					Case Rate†	22.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				All Statuses	# of Cases	4	0	0	0	0	11	0	0	0
					Case Rate†	22.9	0.0	0.0	0.0	0.0	63.1	0.0	0.0	0.0
		2021	*17,677*	Confirmed & Probable	# of Cases	3	1	0	2	0	0	0	1	0
					Case Rate†	17.0	5.7	0.0	11.3	0.0	0.0	0.0	5.7	0.0
				All Statuses	# of Cases	3	1	0	2	1	1	0	1	0
					Case Rate†	17.0	5.7	0.0	11.3	5.7	5.7	0.0	5.7	0.0

Table 2b: Counts and Rate of Reportable Hepatitis among Tuscarawas County Residents, by Jurisdiction, 2020-2021

† = Rate per 100,000 population

	Jurisdiction	Year:	Population:			Class B	Class B	Class B
					Disease Name	Hepatitis B perinatal	Hepatitis B, non-perinatal (acute and chronic)	Hepatitis C acute and chronic
Hepatitis	Tuscarawas County (Entire)	2020	*91,987*	Confirmed & Probable	# of Cases	0	7	60
					Case Rate†	0.0	7.6	65.2
				All Statuses	# of Cases	1	15	64
					Case Rate†	1.1	16.3	69.6
		2021	*93,263*	**Confirmed & Probable**	**# of Cases**	**0**	**7**	**53**
					Case Rate†	**0.0**	**7.5**	**56.8**
				All Statuses	# of Cases	0	18	57
					Case Rate†	0.0	19.3	61.1
	Tuscarawas County Health Department	2020	*74,541*	Confirmed & Probable	# of Cases	0	6	44
					Case Rate†	0.0	8.0	59.0
				All Statuses	# of Cases	1	13	47
					Case Rate†	1.3	17.4	63.1
		2021	*75,586*	Confirmed & Probable	# of Cases	0	5	40
					Case Rate†	0.0	6.6	52.9
				All Statuses	# of Cases	0	15	44
					Case Rate†	0.0	19.8	58.2
	New Philadelphia City Health Department	2020	*17,446*	Confirmed & Probable	# of Cases	0	1	16
					Case Rate†	0.0	5.7	91.7
				All Statuses	# of Cases	0	2	17
					Case Rate†	0.0	11.5	97.4
		2021	*17,677*	Confirmed & Probable	# of Cases	0	2	13
					Case Rate†	0.0	11.3	73.5
				All Statuses	# of Cases	0	3	13
					Case Rate†	0.0	17.0	73.5

Table 2c: Counts and Rate of Reportable Sexually Transmitted Diseases among Tuscarawas County Residents, by Jurisdiction, 2020-2021

† = Rate per 100,000 population

Sexually Transmitted Disease	Jurisdiction	Year:	Population:			Class B	Class B
					Disease Name	*Chlamydia trachomatis* infections	Gonorrhea (*Neisseria gonorrhoeae)*
	Tuscarawas County (Entire)	2020	*91,987*	Confirmed & Probable	# of Cases	248	42
					Case Rate†	269.6	45.7
				All Statuses	# of Cases	248	42
					Case Rate†	269.6	45.7
		2021	*93,263*	**Confirmed & Probable**	**# of Cases**	**292**	**59**
					Case Rate†	**313.1**	**63.3**
				All Statuses	# of Cases	292	59
					Case Rate†	313.1	63.3
	Tuscarawas County Health Department	2020	*74,541*	Confirmed & Probable	# of Cases	177	34
					Case Rate†	237.5	45.6
				All Statuses	# of Cases	177	34
					Case Rate†	237.5	45.6
		2021	*75,586*	Confirmed & Probable	# of Cases	201	38
					Case Rate†	265.9	50.3
				All Statuses	# of Cases	201	38
					Case Rate†	265.9	50.3
	New Philadelphia City Health Department	2020	*17,446*	Confirmed & Probable	# of Cases	71	8
					Case Rate†	407.0	45.9
				All Statuses	# of Cases	71	8
					Case Rate†	407.0	45.9
		2021	*17,677*	Confirmed & Probable	# of Cases	91	21
					Case Rate†	514.8	118.8
				All Statuses	# of Cases	91	21
					Case Rate†	514.8	118.8

Table 2d: Counts and Rate of Reportable Vaccine-Preventable Diseases among Tuscarawas County Residents, by Jurisdiction, 2020-2021

† = Rate per 100,000 population

	Jurisdiction	Year:	Population:			Class B	Class B	Class A	Class A	Class B	Class B
					Disease Name	*Haemophilus influenza*, invasive	Influenza-associated hospitalization	Measles	Mumps	Pertussis	Varicella
Vaccine-Preventable Diseases	Tuscarawas County (Entire)	2020	*91,987*	Confirmed & Probable	# of Cases	0	67	0	0	10	3
					Case Rate†	0.0	72.8	0.0	0.0	10.9	3.3
				All Statuses	# of Cases	0	68	0	1	10	3
					Case Rate†	0.0	73.9	0.0	1.1	10.9	3.3
		2021	*93,263*	**Confirmed & Probable**	**# of Cases**	**1**	**1**	**0**	**0**	**1**	**2**
					Case Rate†	**1.1**	**1.1**	**0.0**	**0.0**	**1.1**	**2.1**
				All Statuses	# of Cases	1	1	0	0	2	3
					Case Rate†	1.1	1.1	0.0	0.0	2.1	3.2
	Tuscarawas County Health Department	2020	*74,541*	Confirmed & Probable	# of Cases	0	55	0	0	10	2
					Case Rate†	0.0	73.8	0.0	0.0	13.4	2.7
				All Statuses	# of Cases	0	55	0	1	10	2
					Case Rate†	0.0	73.8	0.0	1.3	13.4	2.7
		2021	*75,586*	Confirmed & Probable	# of Cases	0	1	0	0	1	2
					Case Rate†	0.0	1.3	0.0	0.0	1.3	2.6
				All Statuses	# of Cases	0	1	0	0	2	3
					Case Rate†	0.0	1.3	0.0	0.0	2.6	4.0
	New Philadelphia City Health Department	2020	*17,446*	Confirmed & Probable	# of Cases	0	12	1	0	0	1
					Case Rate†	0.0	68.8	5.7	0.0	0.0	5.7
				All Statuses	# of Cases	0	13	1	0	0	1
					Case Rate†	0.0	74.5	5.7	0.0	0.0	5.7
		2021	*17,677*	Confirmed & Probable	# of Cases	1	0	0	0	0	0
					Case Rate†	5.7	0.0	0.0	0.0	0.0	0.0
				All Statuses	# of Cases	1	0	0	0	0	0
					Case Rate†	5.7	0.0	0.0	0.0	0.0	0.0

Table 2e: Counts and Rate of Reportable Vector-borne and Zoonotic Diseases among Tuscarawas County Residents, by Jurisdiction, 2020-2021

† = Rate per 100,000 population, * = not in previous report

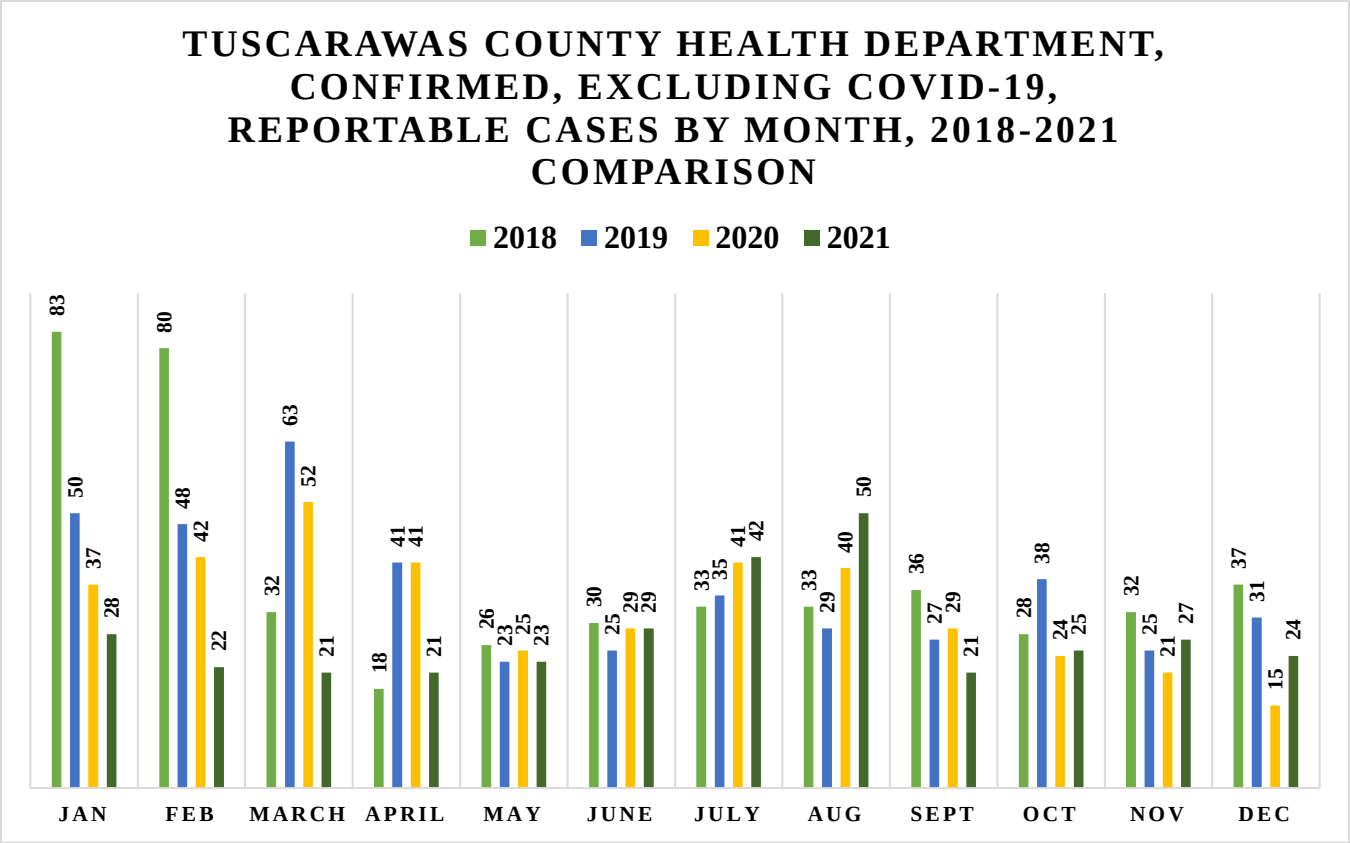
Vector borne and Zoonotic Diseases	**Jurisdiction**	**Year:**	**Population:**		**Class**	B	B	B	B	B	B	B	B	B
					Disease Name	Babesiosis	Brucellosis	Dengue	La Cross virus	Lyme disease	Q Fever	Rabies, animal	Spotted fever rickettsiosis (including RMSF)	West Nile Virus
	Tuscarawas County (Entire)	2020	*91,987*	Confirmed & Probable	# of Cases	0	0	0	0	28	0	0	0	0
					Case Rate†	0.0	0.0	0.0	0.0	30.4	0.0	0.0	0.0	0.0
				All Statuses	# of Cases	0	1	0	0	68	1	0	0	1
					Case Rate†	0.0	1.1	0.0	0.0	79.9	1.1	0.0	0.0	1.1
		2021	*93,263*	**Confirmed & Probable**	**# of Cases**	**0**	**0**	**1**	**1**	**39**	**0**	**0**	**0**	**0**
					Case Rate†	**0.0**	**0.0**	**1.1**	**1.1**	**41.8**	**0.0**	**0.0**	**0.0**	**0.0**
				All Statuses	# of Cases	2	0	1	1	140	0	0	0	1
					Case Rate†	2.1	0.0	1.1	1.1	150.1	0.0	0.0	0.0	1.1
	Tuscarawas County Health Department	2020	*74,541*	Confirmed & Probable	# of Cases	0	0	0	0	28	0	0	0	0
					Case Rate†	0.0	0.0	0.0	0.0	37.6	0.0	0.0	0.0	0.0
				All Statuses	# of Cases	0	1	0	0	64	1	0	0	1
					Case Rate†	0.0	1.3	0.0	0.0	85.9	1.3	0.0	0.0	1.3
		2021	*75,586*	Confirmed & Probable	# of Cases	0	0	1	1	39	0	0	0	0
					Case Rate†	0.0	0.0	1.3	1.3	51.6	0.0	0.0	0.0	0.0
				All Statuses	# of Cases	0	0	1	1	125	0	0	0	1
					Case Rate†	0.0	0.0	1.3	1.3	165.4	0.0	0.0	0.0	1.3
	New Philadelphia City Health Department	2020	*17,446*	Confirmed & Probable	# of Cases	0	0	0	0	0	0	0	0	0
					Case Rate†	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				All Statuses	# of Cases	0	0	0	0	4	0	0	0	0
					Case Rate†	0.0	0.0	0.0	0.0	22.9	0.0	0.0	0.0	0.0
		2021	*17,677*	Confirmed & Probable	# of Cases	0	0	0	0	0	0	0	0	0
					Case Rate†	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				All Statuses	# of Cases	2	0	0	0	15	0	0	0	0
					Case Rate†	11.3	0.0	0.0	0.0	84.9	0.0	0.0	0.0	0.0

Table 2f: Counts and Rate of Other Reportable Diseases among Tuscarawas County Residents, by Jurisdiction, 2020-2021

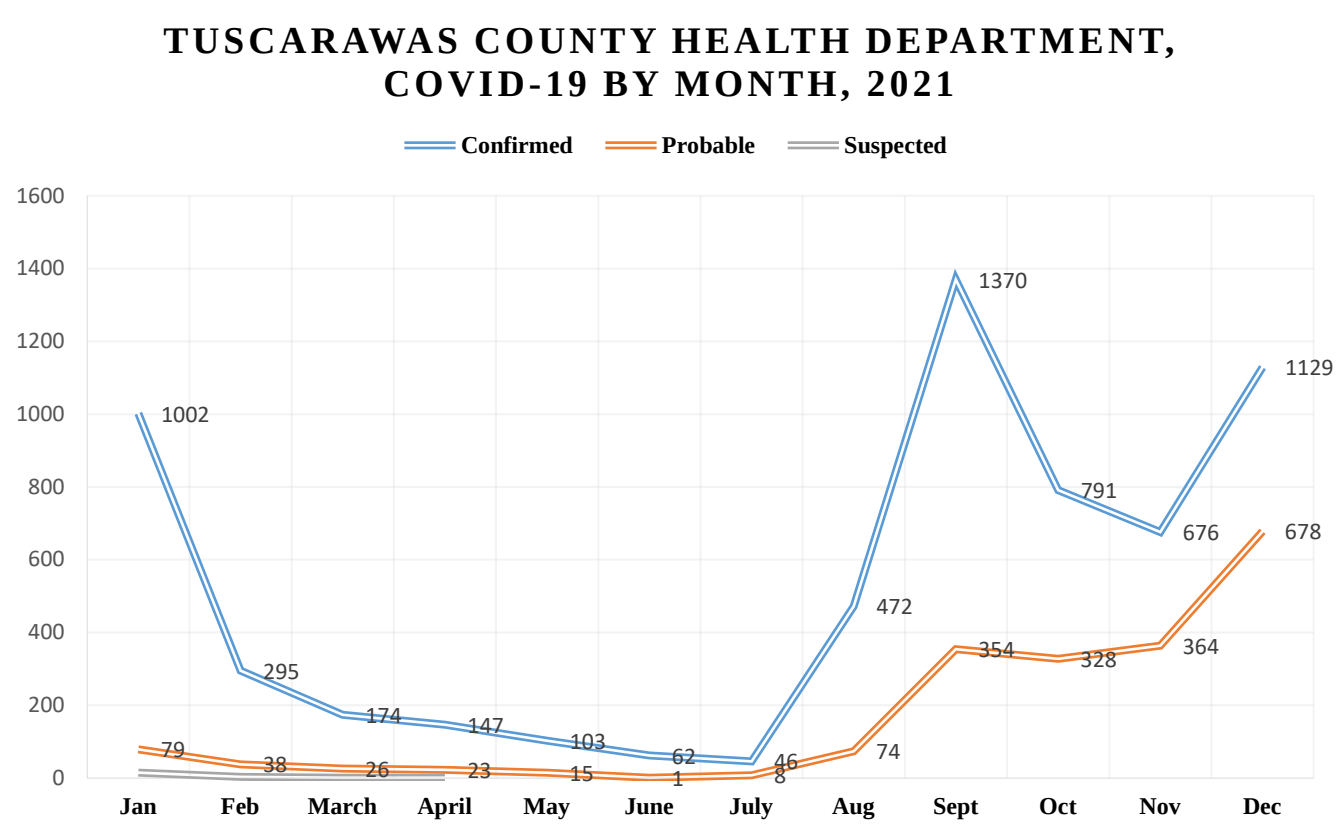
† = Rate per 100,000 population, * = not in previous report

	Jurisdiction	Year:	Population:		Class	A	B	B	B	B	A	B	B	B	B
					Disease Name	COVID-19	CP-CRE	Legionnaires' disease	Meningitis, aseptic (viral)	Meningitis, bacterial	Multisystem Inflammatory Syndrome in Children (MIS-C)	Streptococcal disease, group A, invasive (IGAS)	Streptococcal disease, group B, in newborn	*Streptococcus pneumoniae*, invasive disease (ISP)	Tuberculosis (TB), including multi-drug resistant TB (MDR-TB)
Other Reportable Diseases	Tuscarawas County (Entire)	2020	*91,987*	Confirmed & Probable	# of Cases	6244	2	2	3	1	*	2	0	2	3
					Case Rate†	6787.9	2.2	2.2	3.3	1.1	*	2.2	0.0	2.2	3.3
				All Statuses	# of Cases	6305	3	3	3	1	*	2	0	2	3
					Case Rate†	6854.2	3.3	3.3	3.3	1.1	*	2.2	0.0	2.2	3.3
		2021	*93,263*	**Confirmed & Probable**	**# of Cases**	**10253**	**1**	**7**	**3**	**2**	**3**	**2**	**0**	**9**	**2**
					Case Rate†	**10993.6**	**1.1**	**7.5**	**3.2**	**2.1**	**3.2**	**2.1**	**0.0**	**9.7**	**2.1**
				All Statuses	# of Cases	10281	7	7	3	2	3	2	0	9	2
					Case Rate†	11023.7	7.5	7.5	3.2	2.1	3.2	2.1	0.0	9.7	2.1
	Tuscarawas County Health Department	2020	*74,541*	Confirmed & Probable	# of Cases	4976	2	2	3	1	*	1	0	1	3
					Case Rate†	6675.5	2.7	2.7	4.0	1.3	*	1.3	0.0	1.3	4.0
				All Statuses	# of Cases	5019	3	2	3	1	*	1	0	1	3
					Case Rate†	6733.2	4.0	2.7	4.0	1.3	*	1.3	0.0	1.3	4.0
		2021	*75,586*	Confirmed & Probable	# of Cases	8255	1	7	3	1	3	0	0	4	2
					Case Rate†	10921.3	1.3	9.3	4.0	1.3	4.0	0.0	0.0	5.3	2.6
				All Statuses	# of Cases	8275	7	7	3	1	3	0	0	4	2
					Case Rate†	10947.8	9.3	9.3	4.0	1.3	4.0	0.0	0.0	5.3	2.6
	New Philadelphia City Health Department	2020	*17,446*	Confirmed & Probable	# of Cases	1268	0	0	0	0	*	1	0	1	0
					Case Rate†	7268.1	0.0	0.0	0.0	0.0	*	5.7	0.0	5.7	0.0
				All Statuses	# of Cases	1286	0	1	0	0	*	1	0	1	0
					Case Rate†	7371.3	0.0	5.7	0.0	0.0	*	5.7	0.0	5.7	0.0
		2021	*17,677*	Confirmed & Probable	# of Cases	1998	0	0	0	1	0	2	0	5	0
					Case Rate†	11302.8	0.0	0.0	0.0	5.7	0.0	11.3	0.0	28.3	0.0
				All Statuses	# of Cases	2006	0	0	0	1	0	2	0	5	0
					Case Rate†	11348.1	0.0	0.0	0.0	5.7	0.0	11.3	0.0	28.3	0.0

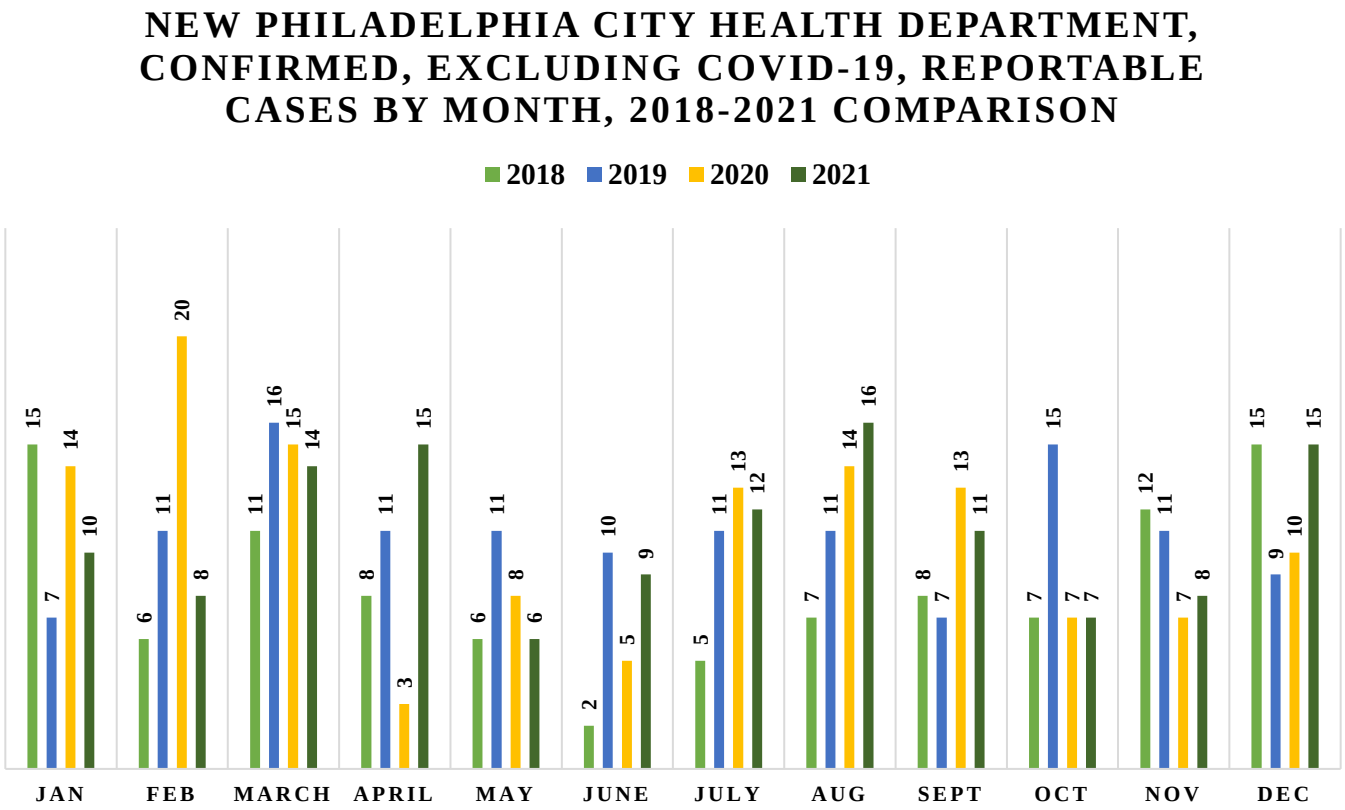
Graph 1: Reportable Communicable Disease by Month, Tuscarawas County, Ohio, 2018-2021



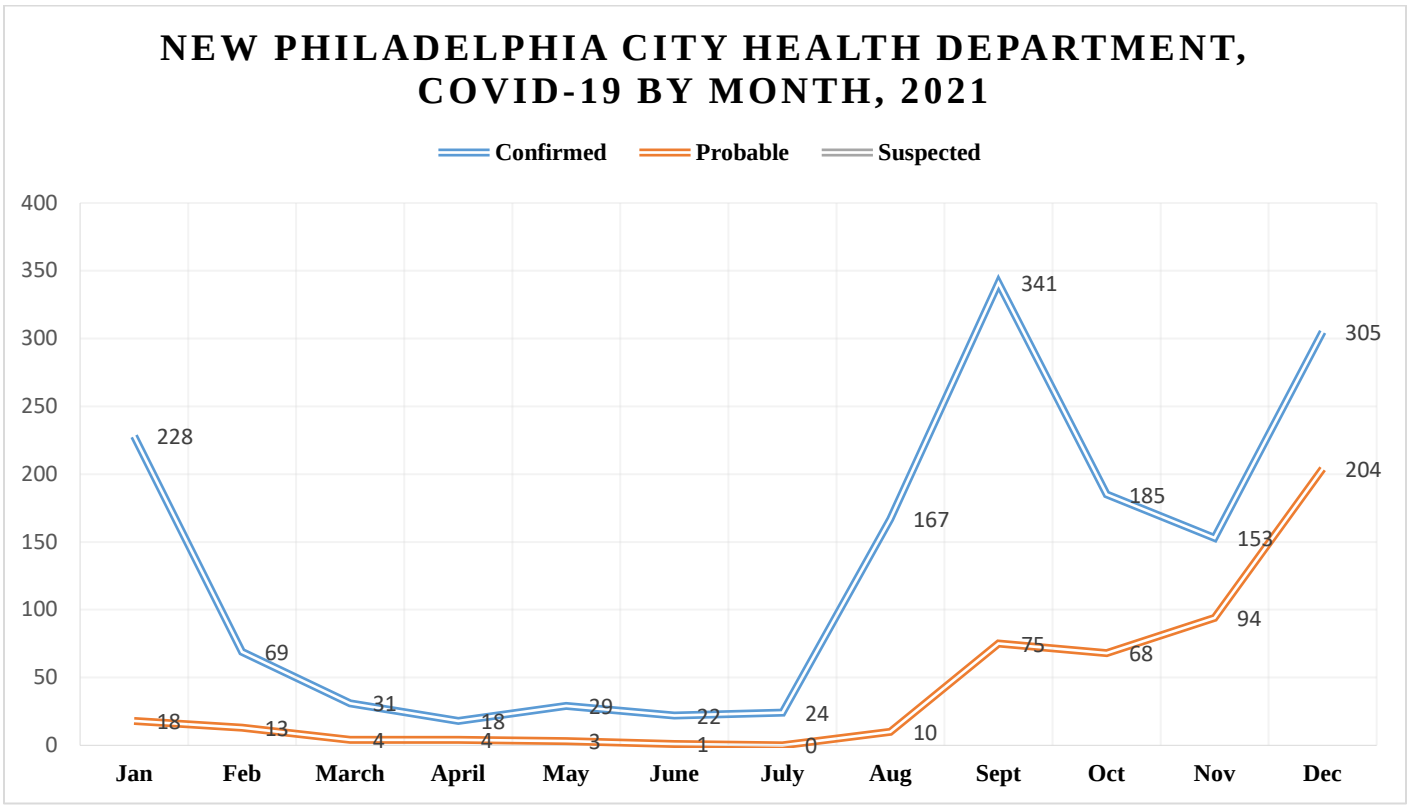
Graph 2: COVID-19 Disease by Month, Tuscarawas County, Ohio, 2021



Graph 3: Reportable Communicable Disease by Month, New Philadelphia, Ohio, 2018-2021



Graph 4: COVID-19 Disease by Month, New Philadelphia City, Ohio, 2021



DEATHS ASSOCIATED WITH COVID-19

In 2021, 252 deaths were related to COVID-19 compared to 176 in 2020. This brings the COVID-19 pandemic death total to 428 community lives lost in 2020 and 2021. Tuscarawas County had a consistently higher death rate than Ohio and the United States for COVID-19 associated deaths in 2021. In 2021, Tuscarawas County had a death rate of 2.4%, compared to Ohio's 1.3%.

Death data were obtained from the Ohio Disease Reporting System (ODRS) and are subject to limitations. Deaths that are identified during case or outbreak investigation are entered into ODRS, but cases are not followed to determine if death occurred after the investigation ended.

INFECTIOUS DISEASE OUTBREAKS IN TUSCARAWAS COUNTY

Year:	2018			2019			2020			2021		
	Confirmed	Probable	Suspected	Confirmed	Probable	Suspected	Confirmed	Probable	Suspected	**Confirmed**	**Probable**	**Suspected**
Cluster							7		2	**2**		**1**
Community							13	1	1	**9**		
Foodborne				1								
Healthcare-Associated			1				7		1	**4**	**7**	**3**
Institutional		1				2	11		2	**19**	**2**	**11**
Unspecified (Class A)												
Unusual Incidence												
Waterborne				1								
Zoonotic												
Other							4					
Year Total	**2**			**4**			**49***			**58***		

Table 3: Number of Confirmed, Probable, and Suspect Outbreaks* Reported by Year, Tuscarawas County, 2018-2021

*This does include COVID-19 outbreaks as they were opened, COVID-19 outbreaks were underreported.

OUTBREAK DEFINITIONS[3]

Community: Two or more cases of similar illness with a common exposure in the community and not considered a foodborne, waterborne, zoonotic, healthcare-associated, or institutional disease outbreak.

Foodborne: The occurrence of 2 or more cases of a similar illness resulting from the ingestion of a common food.

Healthcare-Associated: The occurrence of cases of an illness above the expected or baseline level, usually over a given period of time, as a result of being in a healthcare facility or receiving healthcare-associated products or procedures. The number of cases indicating the presence of an outbreak will vary per the disease agent, size and type of population exposed, previous exposure to the agent, and the time and place of occurrence.

Institutional: Two or more cases of similar illness with a common exposure at an institution (e.g., correctional facility, day care center, group home, school, assisted-living facility) and not considered a foodborne or waterborne disease outbreak.

Unspecified (Class A reporting): Any unexpected pattern of cases, suspected cases, deaths, or increased incidence of any other disease of major public health concern which, because of the severity of disease or potential for epidemic spread, may indicate a newly recognized infectious agent, outbreak, epidemic, related public health hazard, or act of bioterrorism.

Unusual Incidence: Two or more cases of infectious disease that can be connected by person, place, and time, and do not meet the criteria for another type of outbreak.

Waterborne: Waterborne disease outbreaks are divided into two categories, depending on the type of water implicated in the outbreak. Outbreaks associated with water (excluding recreational water) must meet two criteria: first, two or more persons must be epidemiologically linked by location of exposure to water, by time, and characteristics of illness; Second, the epidemiologic evidence must implicate water as the probable source of illness. Outbreaks associated with recreational water must also meet two criteria: First, two or more persons must be epidemiologically linked by the location of the exposure to recreational water, time, and illness. Recreational water settings include swimming pools, wading pools, spas, waterslides, interactive fountains, wet decks, and fresh and marine bodies of water. Second, the epidemiologic evidence must implicate water or volatilization of water-associated compounds into the air surrounding an aquatic facility as the probable source of the illness.

Zoonotic: Occurs when two or more cases of similar illness after exposure to the same animal or the same or similar species of animals and epidemiologic evidence implicating animals as the probable source of illness.

DISEASE SPOTLIGHT: Lyme Disease

Cases in Tuscarawas County

	2020	2021
Number of Cases	**68**	**140**
Rate (per 100,000 pop.)	**79.9**	**150.1**

Cases and rates include all statuses (confirmed, probable, and suspected)

EPIDEMIOLOGY:[4,5,6]

Infectious agents: *Borrelia burgdorferi*

Case Definition: A systemic, tick-borne disease with protean manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The most common clinical marker for the disease is erythema migrans (EM), the initial skin lesion that occurs in 60%-80% of patients.

Mode of Transmission: transmitted through the bite of a tick

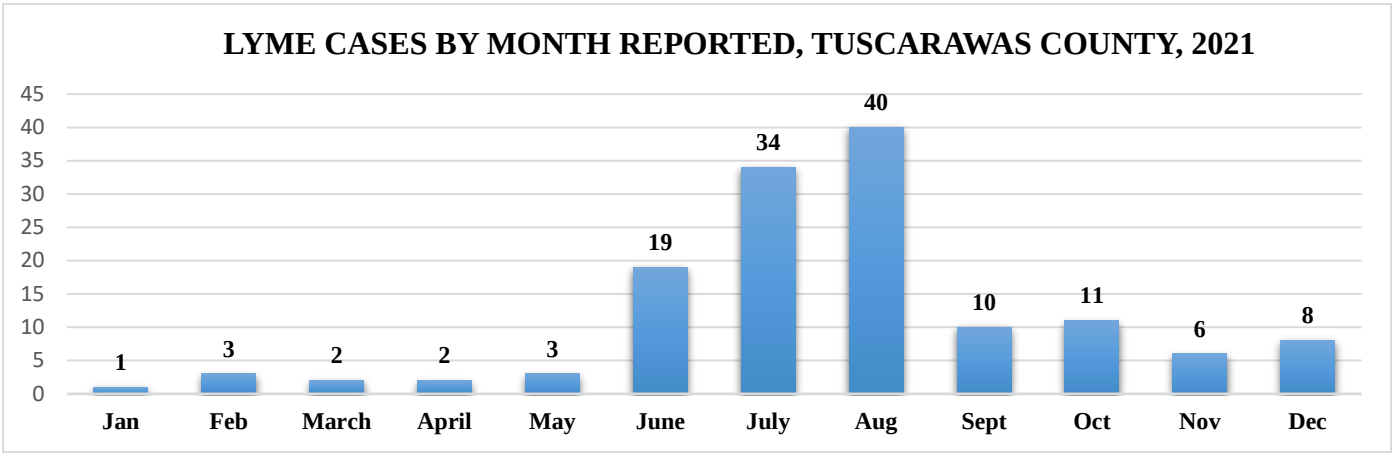
Incubation Period: For erythema migrans, 3 to 32 days after tick bite (mean 7 to 10 days); early stages of the illness may be unapparent, and the patient may present with later manifestations.

Images from:
https://phil.cdc.gov/Details.aspx?pid=13175 [7]
https://phil.cdc.gov/Details.aspx?pid=14471 [8]

Symptoms: Often starts as a roughly circular reddish rash around or near the site of the tick bite. The rash expands over several days to several weeks, becoming several inches across. Other, general flu-like symptoms also occur fever, headache, fatigue, stiff neck, joint and muscle pain.

Treatment: The disease is usually treated with antibiotics in the tetracycline group, administered either orally or by injection.

Prevention: Wear light-colored, long pants, tuck pant cuffs into sock tops and spray pant legs and socks with insect repellent. When possible, avoid walking in tall grass and weeds. Conduct visual "tick checks" on yourself and children every hour or two. Check pets for ticks before allowing them into the home. Carefully remove attached ticks as soon as possible. Keep yard and play areas well mowed to discourage ticks.



DISEASE SPOTLIGHT: Multisystem Inflammatory Syndrome in Children (MIS-C)

Cases in Tuscarawas County

	2020	2021
Number of Cases	**0**	**3**
Rate (per 100,000 pop.)	**0**	**3.2**

***Cases and rates include all statuses** (confirmed, probable, and suspected)*

EPIDEMIOLOGY:[9,10]

Infectious agents: We do not currently know what causes MIS-C. However, many children with MIS-C were recently infected with SARS-CoV-2 or had been around someone with COVID-19.

Case Definition: An individual aged <21 years presenting with fever, laboratory evidence of inflammation, and evidence of clinically severe illness requiring hospitalization, with multisystem (>2) organ involvement (cardiac, renal, respiratory, hematologic, gastrointestinal, dermatologic or neurological); AND No alternative plausible diagnoses; AND Positive for current or recent SARS-CoV-2 infection by RT-PCR, serology, or antigen test; or exposure to a suspected or confirmed COVID-19 case within the 4 weeks prior to the onset of symptoms.

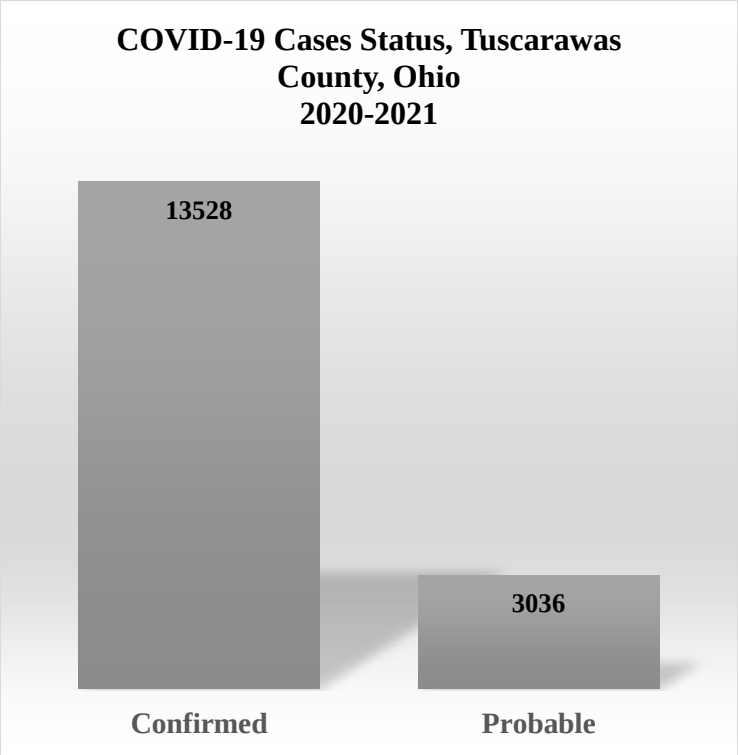
Symptoms: MIS-C is a condition where different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs. Children with MIS-C may present with persistent fever, abdominal pain, vomiting, diarrhea, skin rash, mucocutaneous lesions, and in severe cases, hypotension and shock. Patients usually have elevated markers of inflammation, and some patients may develop myocarditis, cardiac dysfunction, and acute kidney injury

Treatment: Treatments have consisted primarily of supportive care and directed care against the underlying inflammatory process.

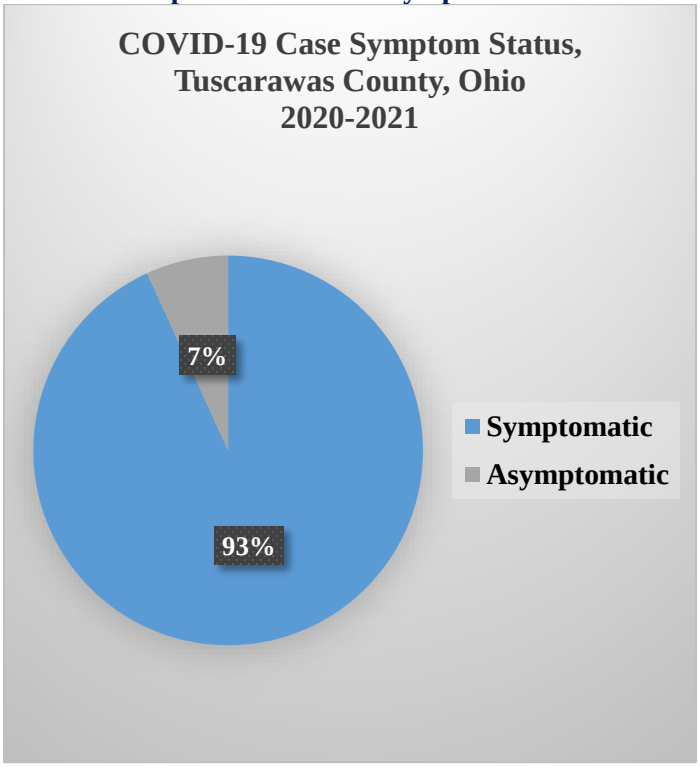
COVID-19 PANDEMIC DATA

The data provided in the graphs below show all cases from January 2020 through December 2021.

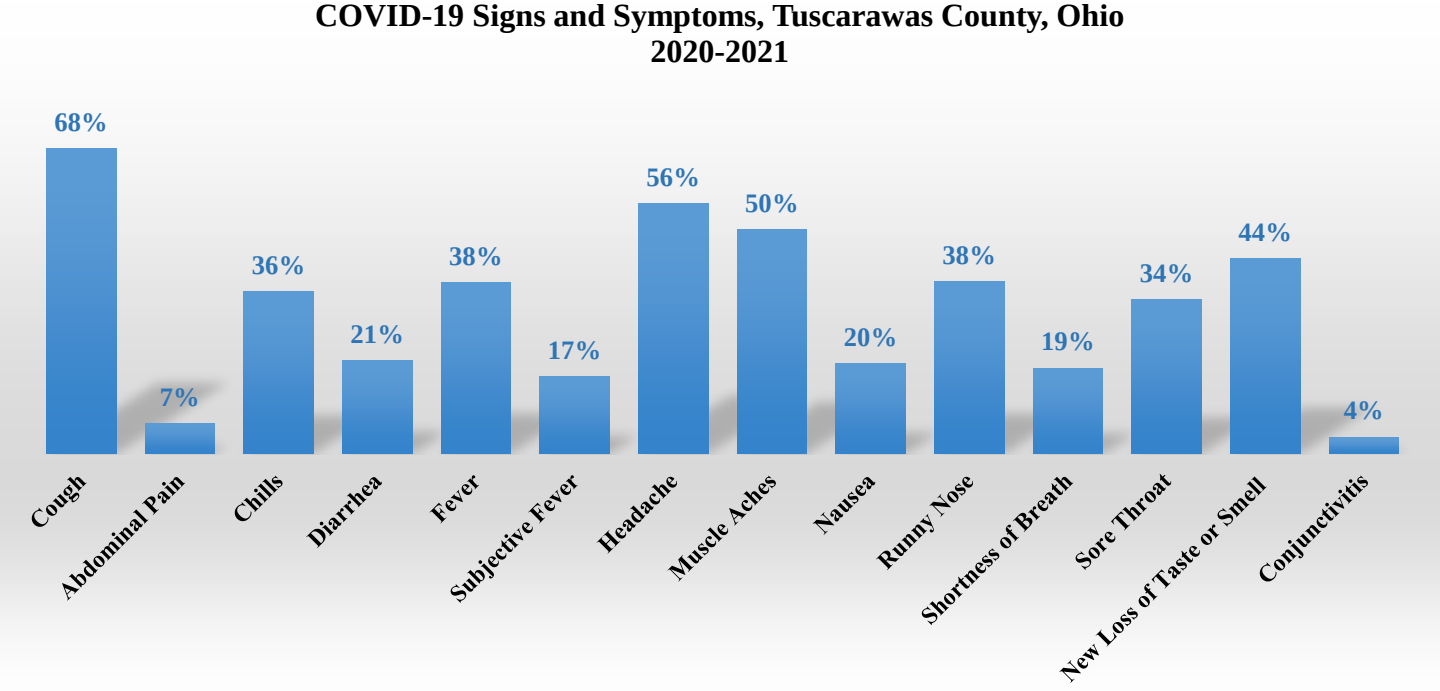
Graph 5: Total COVID-19 Case Status



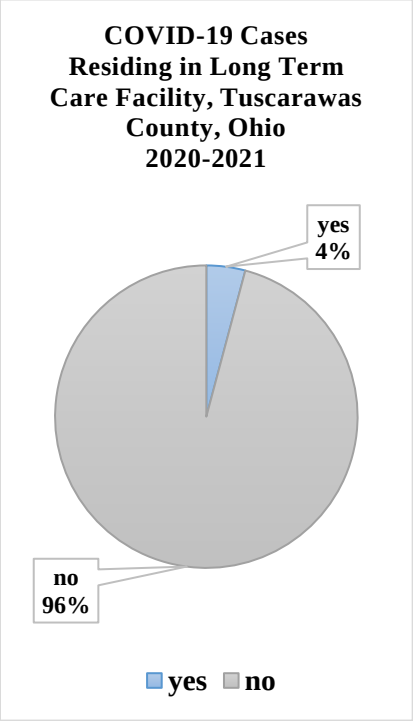
Graph 6: COVID-19 Symptom Status



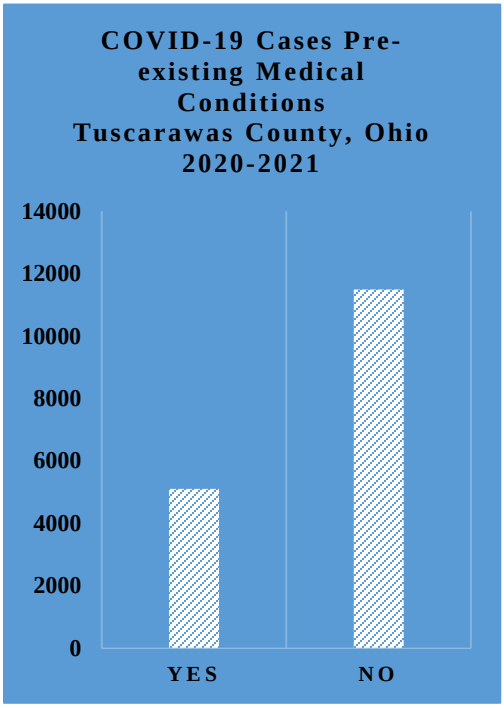
Graph 7: COVID-19 Signs and Symptoms



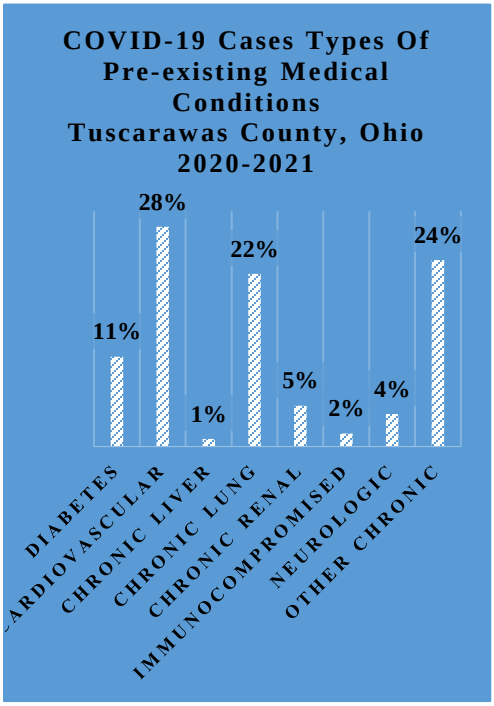
Graph 8: LTC Cases



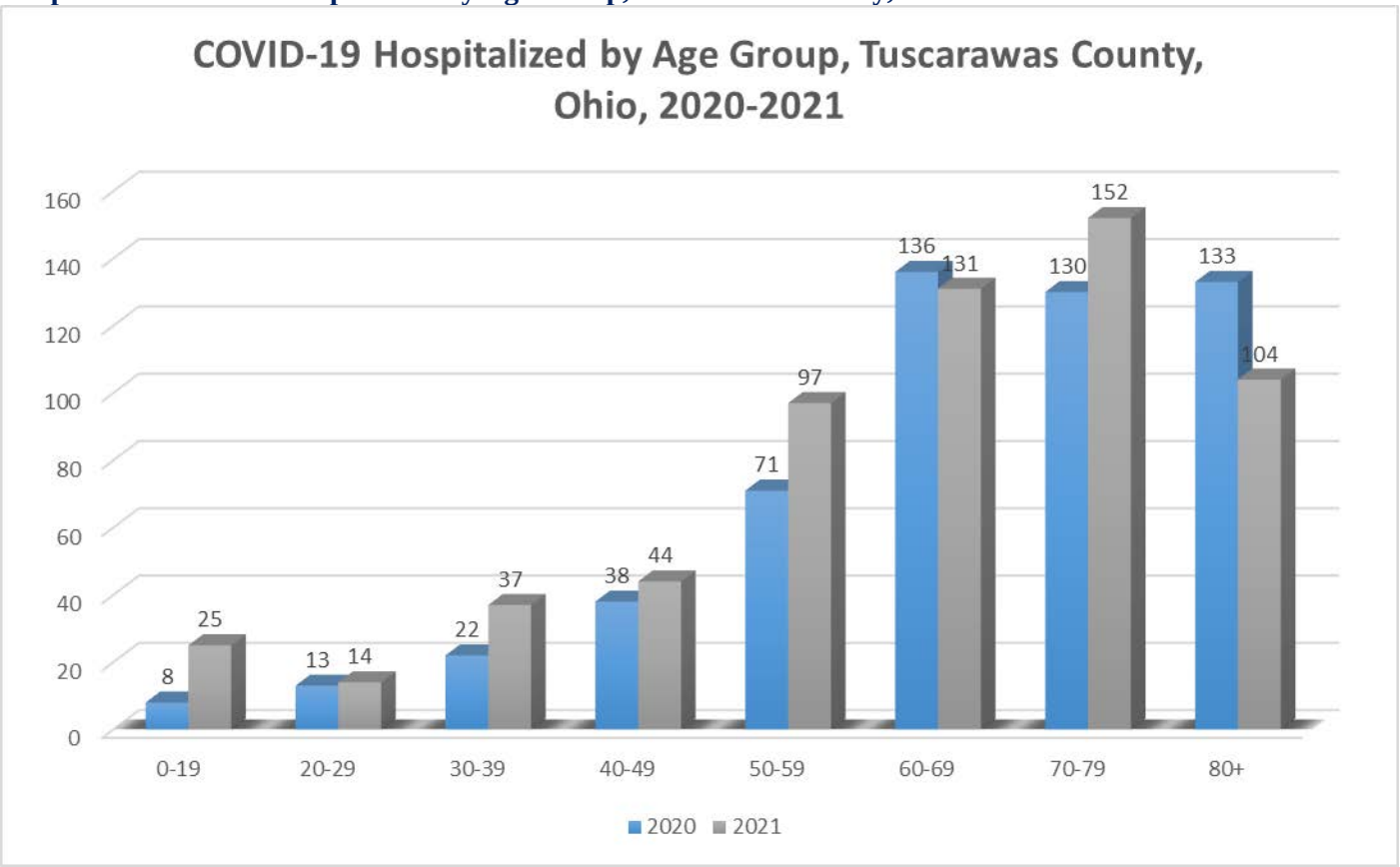
Graph 9: Pre-existing Medical Conditions



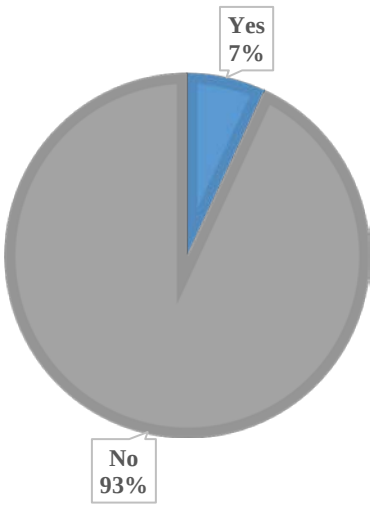
Graph 10: Types of Conditions



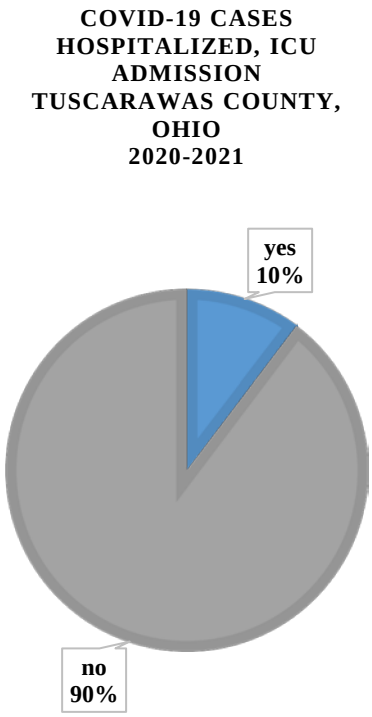
Graph 11: COVID-19 Hospitalized by Age Group, Tuscarawas County, 2020-2021



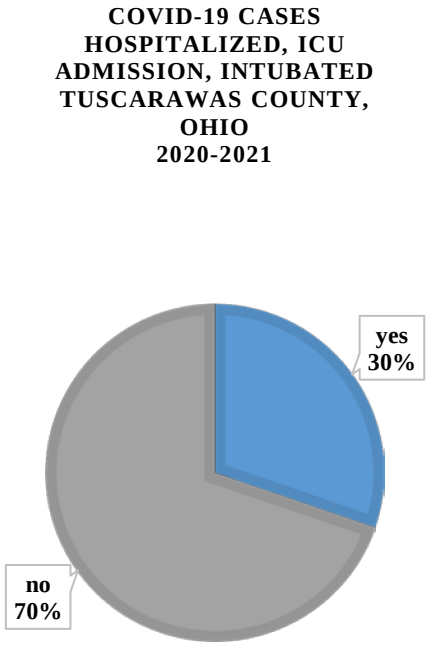
Graph 12:
COVID-19 Hospitalized Cases



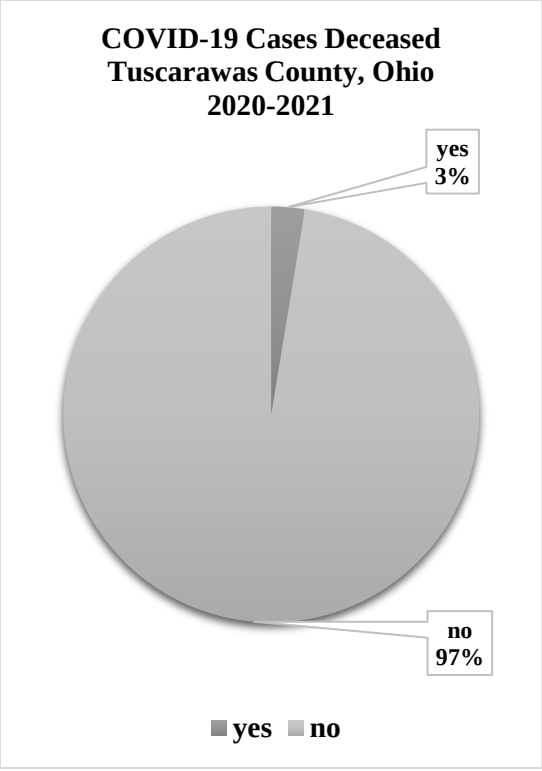
Graph 13:
COVID-19 cases hospitalized from graph 11 that required ICU admission.



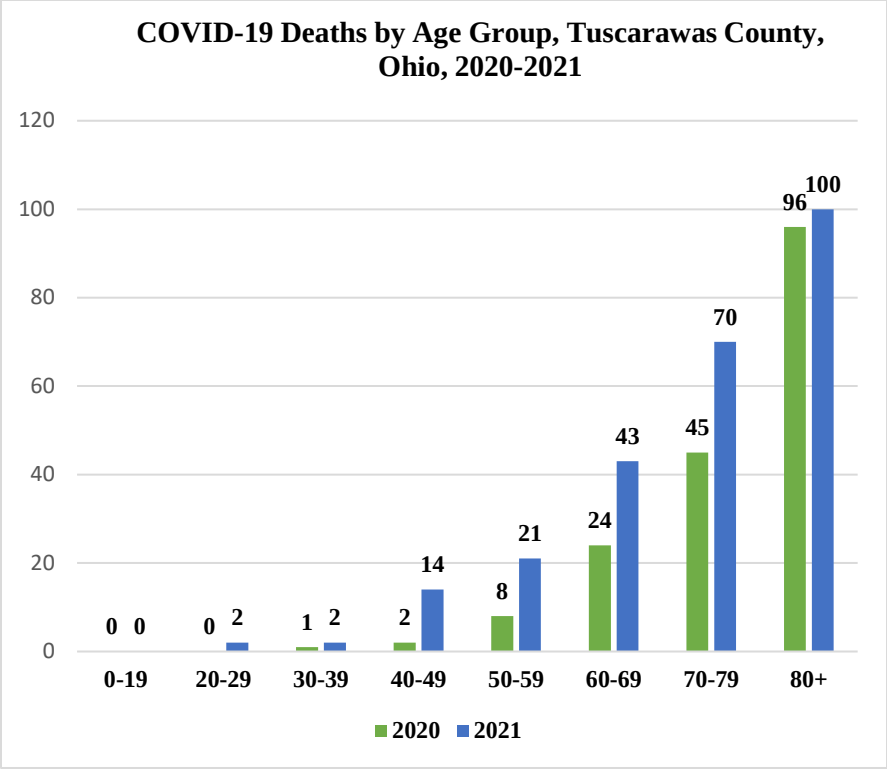
Graph 14:
COVID-19 cases hospitalized from graph 12 that required intubation.



Graph 15: COVID-19 Deaths



Graph 16: COVID-19 Deaths by Age Group



TIMELINESS OF DISEASE REPORTING

A key part of good public health practice is timeliness of disease reporting.[11] Requirements for each reportable disease vary based on the communicability and severity of the disease as to when they should be reported.

Using Ohio Disease Reporting Systems (ODRS) it is possible to query the date when a healthcare provider diagnosed an illness, onset date, and the date when the local health department received notification. Table 4 lists selected diseases and the corresponding median and mean numbers of days between healthcare provider diagnosis and reporting to the local health department. The reporting lag time is the difference between the date a case was reported to the local health department (LHD) and the case's diagnosis date. If the diagnosis date is blank, ODRS is defaulted to the date fields in the following order: lab specimen collection date, lab result date, onset date, date reported to ODH, or created date. For class A diseases (immediately reported), mean and median lag time values should be less than one (1). For class B diseases, the lag time values should be less than two (2).

Table 4: Reporting Lag Time for Selected Reportable Diseases, Tuscarawas County, 2021

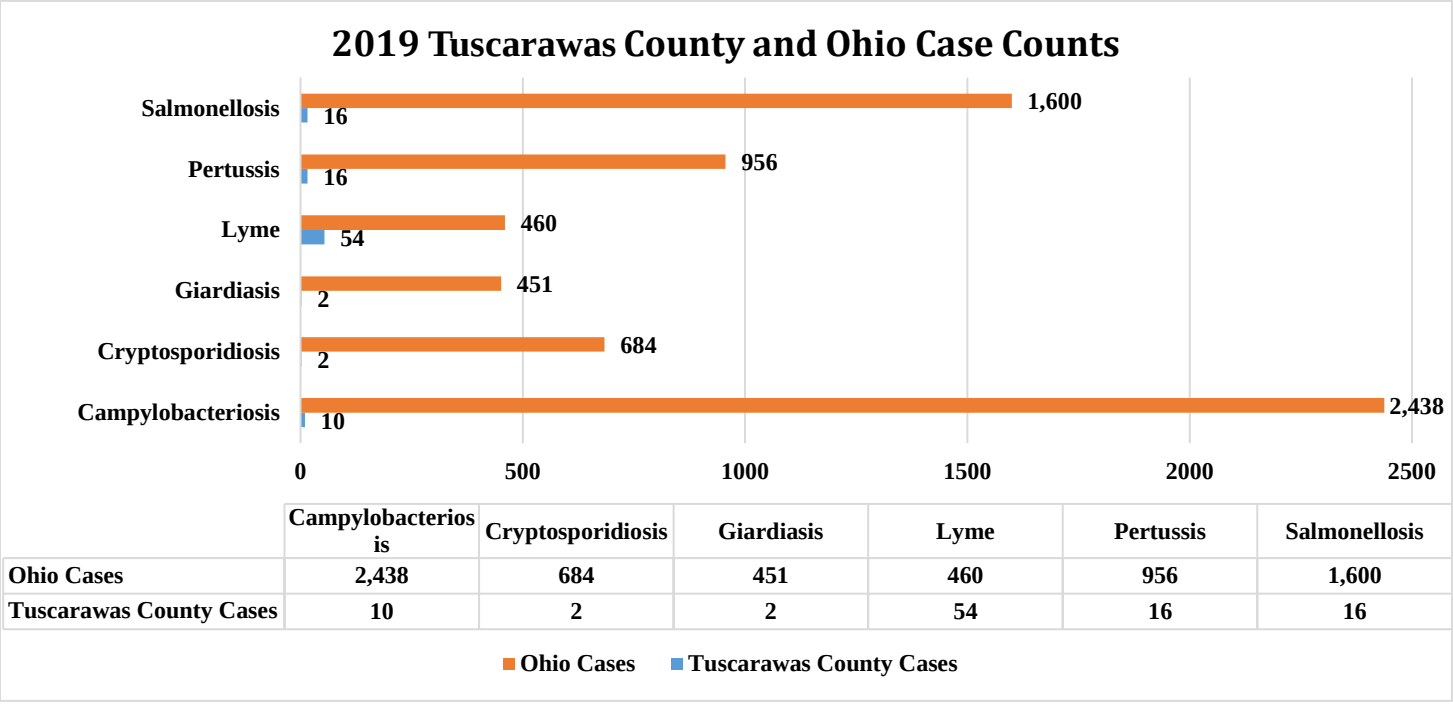
		2021			
Reportable Condition	**Reporting Requirement**	# of Cases	Mean (Days)	Median (Days)	% of Cases Missing Diagnosis Date
E. coli	By end of next business day	5	2.2	1	80
Hepatitis A	By end of next business day	9	5.8	4	100
Listeriosis	By end of next business day	0	N/A	N/A	N/A
Measles	Immediately	0	N/A	N/A	N/A
Meningococcal disease - Neisseria meningitidis	Immediately	0	N/A	N/A	N/A
Mumps	By end of next business day	0	N/A	N/A	N/A
Pertussis	By end of next business day	2	4	4	50
Rubella	By end of next business day	0	N/A	N/A	N/A
Salmonellosis	By end of next business day	5	3.6	2	100
Vibrio	By end of next business day	0	N/A	N/A	N/A

In 2021, there were zero (0) suspect, probable, or confirmed class A disease, of the diseases listed above, which must be reported immediately to the local health department. The class B diseases listed above; all reported did not meet the goal for reporting lag time. Delays in lag time can be attributed to the cases being mailed or faxed and arriving over the weekend or holidays. Also, some cases are sent to other counties, and they then send them to the correct Tuscarawas County jurisdiction.

COMPARISON WITH THE STATE OF OHIO

Below is a chart with select reportable diseases in Tuscarawas County compared with the state of Ohio. The Ohio Department of Health puts together an annual report of communicable diseases, the most recent annual report is from 2019. Graph 3 is the total number of cases for Tuscarawas County and the State of Ohio. Tuscarawas County has a very small portion of the total state numbers; therefore, it is better to look at the case rate of the diseases for every 100,000 population; since the two populations are quite different adjusting to rates allows for the data to be compared easier. Table 5 lists a comparison of Tuscarawas County to Ohio case rates per 100,000 population. For example, when looking at table 5, one would expect that for every 100,000 people in Tuscarawas County there would be approximately 58.6 cases of Lyme, this is compared to the state of Ohio that would expect 3.9 cases per 100,000. If one just looks at the case counts one would think that fifty-four (54) cases is small compared to the four hundred sixty (460) cases in Ohio; however, looking at the case rate it shows that Lyme disease is much higher in Tuscarawas County compared to the state.

Graph 17: Select Reportable Communicable Disease Tuscarawas County vs. Ohio, 2019



	Campylobacteriosis	Cryptosporidiosis	Giardiasis	Lyme	Pertussis	Salmonellosis
Ohio Cases	2,438	684	451	460	956	1,600
Tuscarawas County Cases	10	2	2	54	16	16

Table 5: Tuscarawas County and Ohio Case Rate per 100,000

	Tuscarawas County Rate	Ohio Rate	Status
Campylobacteriosis	10.8	20.9	Lower
Cryptosporidiosis	2.2	5.9	Lower
Giardiasis	2.2	3.9	Lower
Lyme	58.6	3.9	Higher
Pertussis	17.4	8.2	Higher
Salmonellosis	17.4	13.7	Higher

PREVENTION

There are several ways to protect yourself and others from infectious diseases. Learn, practice and teach healthy habits.

1. Handle & Prepare Food Safely
    a. Food can carry germs. Wash hands, utensils, and surfaces often when preparing any food, especially raw meat. Always wash fruits and vegetables. Cook and keep foods at proper temperatures. Don't leave food out – refrigerate promptly.
2. Wash Hands Often
    a. One of the most important healthy habits to prevent the spread of germs is to clean your hands. Our hands can carry germs, so it is important to wash them often, even if they don't look dirty.
3. Clean & Disinfect Commonly Used Surfaces
    a. Germs can live on surfaces. Cleaning with soap and water is usually enough. However, you should disinfect your bathroom and kitchen regularly. Disinfect other areas if someone in the house is ill. You can use an EPA certified disinfectant (look for the EPA registration number on the label) or a bleach solution.
4. Cough and Sneeze into a Tissue or Your Sleeve
    a. If you are sick, the air that comes out of your mouth when you cough, or sneeze may contain germs. Someone close by can breathe in your air, or touch a surface contaminated with your germs, and become ill. Cough or sneeze into a tissue or your shirt sleeve-not into your hands. Remember to throw away the tissue and wash your hands. You can wear a face mask when you are sick with a cough or sneezing illness
5. Don't Share Personal Items
    a. Avoid sharing personal items that can't be disinfected, like toothbrushes and razors, or sharing towels between washes. Needles should never be shared, should only be used once, and then thrown away properly.
6. Practice Safer Sex
    a. The only guaranteed method to prevent STIs is to abstain from all sexual contact.
    b. However, there are effective steps you can take to reduce your risk of sexually transmitted infections (STI). Effective STI prevention begins before any sexual activity. Here are some steps you can take to reduce your STI risk:
        i. Talk honestly with potential partners about both of your sexual histories.
        ii. Get tested, along with your partner, before having sex.
        iii. Avoid sexual contact when under the influence of alcohol or drugs.
        iv. Consider pre-exposure prophylaxis (PrEP), a medication that someone who is HIV negative can take to reduce their risk of contracting HIV.
        v. Use barrier methods every time you engage in sexual activity.
7. Get Vaccinated
    a. Vaccines can prevent many infectious diseases. You should get some vaccinations in childhood, some as an adult, and some for special situations like pregnancy and travel. Make sure you and your family are up to date on your vaccinations.
8. Avoid Touching Wild Animals
    a. You and your pets should avoid touching wild animals which can carry germs that cause infectious diseases. If you are bitten, talk to your doctor. Make sure that your pet's vaccinations are up to date.
9. Stay Home When Sick
    a. When you are sick, stay home and rest. You will get well sooner and will not spread germs.

Vaccines

Vaccinations are an important tool to prevent infection and spread of some diseases. It is important that you are your family are up to date on your immunizations. To view the CDC recommendations for vaccines for those Birth – Age 18 visit: https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html. A schedule for those over the age of 18 can be viewed at: https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html

Below is a table of vaccines administered by the TCHD by type and year for 2019-2021:

Vaccine	Protects Against	Number of Recommended Doses	2019	2020	2021
DTap	Diphtheria, tetanus and whooping cough (pertussis)	5 doses	48	26	24
DTaP-Hep B-IPV	Diphtheria, tetanus and whooping cough (pertussis), hepatitis B, polio	3 doses	110	87	64
DTap-IPV	Diphtheria, tetanus and whooping cough (pertussis), polio	Booster only	69	45	52
HPV9	Cervical, vaginal, anal cancers or genital warts caused by certain types of HPV		167	98	129
Hep A; adult	Hepatitis A	2 or 3 doses	178	55	2
Hep A; ped/adol, 2 dose	Hepatitis A	2 doses	217	120	82
Hep A-Hep B	Hepatitis A and B	3 doses	40	23	8
Hep B; ped/adol	Hepatitis B	4 doses	137	51	80
Hep B; adult	Hepatitis B	2 or 3 doses	116	65	38
Hib	Haemophilus influenzae Type B	3 doses	145	99	93
IPV	Polio	4 doses	100	41	40
Influenza	Influenza of seasonal flu	Annually	505	465	255
MMR	Measles, mumps, rubella	2 doses	209	68	80
MMRV	Measles, mumps, rubella, varicella	2 doses	98	56	60
Meningococcal B	Meningitis	2 doses	36	10	31
Meningococcal MCV4O	Meningitis	2 doses	386	208	207
Pneumococcal PCV 13	Pneumonia	4 doses	182	97	90
Td, adult	Tetanus, diphtheria	2 doses	68	38	8
Tdap	Tetanus, diphtheria pertussis	5 doses	636	294	230
Meningococcal MCV4P	Meningitis	2 doses	177	142	176
Pneumococcal Polysaccharide PPV23	Pneumonia	2 doses	18	11	7
Rotavirus	Rotavirus	2 or 3 doses	52	42	24
Varicella	Varicella (chicken pox)	2 doses	157	86	97
Rabies	Rabies		9	3	3
COVID-19 mRNA	COVID-19	2 doses + booster	-	127	15,454
COVID-19 Janssen	COVID-19	1 dose + booster	-	-	590
Total			**3,860**	**2,357**	**17,765**

BASIC INFORMATION ON REPORTABLE COMMUNICABLE DISEASES

The following gives information on commonly reported communicable diseases in Tuscarawas County. Each of the diseases follows the following format:

Disease Name:
Infectious Agent: what causes the illness
Reservoir: where the disease lives, grows, and multiplies
Mode of Transmission: how the disease is spread
Incubation Period: how long it can be in your body after exposure, prior to seeing signs and symptoms
Prevention Measures: how to eliminate the spread of disease

Campylobacteriosis:

- **Infectious Agent:** *Campylobacter jejuni*, *Campylobacter Coli*.
- **Reservoir:** Poultry, cattle, farm animals. Most raw poultry meat is contaminated.
- **Mode of Transmission:** Ingestion of undercooked poultry, contaminated water or milk from an infected cow, improper hand sanitization after handling farm animals.
- **Incubation Period:** 2-5 day, range 1-10 days.
- **Prevention Measures:** Pasteurize all milk, boil/chlorinate all water. Thoroughly cook meat and sanitize utensils/cutting boards. Implement stringent hand washing practices.

Chlamydia Infection:

- **Infectious Agent:** *Chlamydia trachomatis* (subtypes D-K).
- **Reservoir:** Humans.
- **Mode of Transmission:** Sexual Intercourse.
- **Incubation Period:** 7-14 days or longer.
- **Prevention Measures:** Sex education, condom use, screening of at risk populations (>25 years old).

Cryptosporidiosis:

- **Infectious Agent:** *Cryptosporidium parvum* – a coccidian protozoan parasite.
- **Reservoir:** Humans, cattle, domesticated animals.
- **Mode of Transmission:** Fecal-oral – including person-to-person, animal-to-person, waterborne and foodborne.
- **Incubation Period:** 7 days, range 1-12 days.
- **Prevention Measures:** Personal hygiene education, sanitary handling of feces, stringent hand washing practices and boiling and filtering water.

Giardiasis:

- **Infectious Agent:** *Giardia lamblia*, *Giardia intestinalis*, *Giardia duodenalis*, a flagellate protozoan parasite.
- **Reservoir:** Humans, possibly Beaver and other domesticated animals.
- **Mode of Transmission:** Fecal-oral , hand-to-mouth transfer. Most common at day care centers. Also, anal intercourse, contamination of foodstuffs and unfiltered stream and lake waters (given human or animal fecal contamination).
- **Incubation Period:** 3 to >25 days, median 7-10 days.
- **Prevention Measures:** Protect public water supplies against contamination, implement emergency boiling procedures, and promote stringent hand washing procedures.

Gonococcal Infection:

- **Infectious Agent:** *Neisseria gonorrhoeae*
- **Reservoir:** Humans.
- **Mode of Transmission:** Sexual Contact
- **Incubation Period:** 2-7 days.
- **Prevention Measures:** Safe sex practices, monogamy or abstinence.

Hepatitis C:

- **Infectious Agent:** Hepatitis C Virus (HCV).
  Reservoir: Humans.
- **Mode of Transmission:** Usually by skin puncture (needlestick, cut, abrasion, etc). No evidence for oral route.
- **Incubation Period:** 6-9 weeks. Chronic infections may persist up to 20 years before onset of cirrhosis or hepatoma.
- **Prevention Measures:** Immunization of all children, screening of donated blood products. Safe sex practices and eliminate recreational drug use.

Influenza:

- **Infectious Agent:** Multiple (ex: H1N1, H3N2)
- **Reservoir:** Humans, Birds, Swine.
- **Mode of Transmission:** Airborne spread of droplets or direct contact with mucous membranes of infected individual.
- **Incubation Period:** 1-3 days.
- **Prevention Measures:** Education on sanitization, annual vaccination, universal precautions.

Lyme Disease:

- **Infectious Agent:** *Borrelia burgdorferi, Borrelia garinii, Barrelia afzelii*
- **Reservoir:** Deer Ticks
- **Mode of Transmission:** Tick bite
- **Incubation Period:** 7-10 days.
- **Prevention Measures:** Education on tick habitat, prevention and removal. Avoidance of tick infested areas, application of tick repellant and use of long shirts and pants.

Pertussis:

- **Infectious Agent:** *Bordetella Pertussis*.
- **Reservoir:** Humans.
- **Mode of Transmission:** Airborne, droplets.
- **Incubation Period:** 9-10 days.
- **Prevention Measures:** Pertussis vaccination as part of standard DPT.

Shigellosis:

- **Infectious Agent:** *Shigella dysenteriae, S. flexneri, S. boydii, S. Sonnei.*
- **Reservoir:** Humans, primates.
- **Mode of Transmission:** Direct or indirect fecal-oral contact by infected individual. Most commonly, poor hand washing followed by food preparation. Also flies may land on an infected latrine and subsequently on an exposed food.
- **Incubation Period:** 1-3 days.

- **Prevention Measures:** Educate on proper hand-washing techniques, implement fly-proof latrines, pasteurize, refrigerate and thoroughly cook all foods. Enforce quality control measures in food preparation (restaurants and industry).

Varicella (Chickenpox):

- **Infectious Agent:** Human α-Herpesvirus 3 (Varicella-Zoster Virus, VZV).
- **Reservoir:** Humans.
- **Mode of Transmission:** Direct contact, airborne, droplets from spread of vesicle fluid or secretions of the respiratory tract. Indirect contact, surfaces or fabrics contaminated with discharges from vesicles or membranes of the infected.
- **Incubation Period:** 2-3 weeks.
- **Prevention Measures:** Vaccination of children, isolate infected children.

Yersinosis:

- **Infectious Agent:** *Yersinia pseudotuberculosis, Y. enterocolitica*.
- **Reservoir:** Swine, rodents.
- **Mode of Transmission:** Fecal-oral transmission through contaminated food or water. Consumption of raw pork.
- **Incubation Period:** 3-7 days.
- **Prevention Measures:** Prepare foods in a sanitary manner, protect and sanitize the water supply, control the rodent population, wash hands thoroughly after caring for or slaughtering animals.

Ohio Reportable Diseases[3]

Know Your ABCs: A Quick Guide to Reportable Infectious Diseases in Ohio

From the Ohio Administrative Code Chapter 3701-3; Effective August 1, 2019

Class A:

Diseases of major public health concern because of the severity of disease or potential for epidemic spread – report immediately via telephone upon recognition that a case, a suspected case, or a positive laboratory result exists.

- Anthrax
- Botulism, foodborne
- Cholera
- Diphtheria
- Influenza A – novel virus infection
- Measles
- Meningococcal disease
- Middle East Respiratory Syndrome (MERS)
- Plague
- Rabies, human
- Rubella (not congenital)
- Severe acute respiratory syndrome (SARS)
- Smallpox
- Tularemia
- Viral hemorrhagic fever (VHF), including Ebola virus disease, Lassa fever, Marburg hemorrhagic fever, and Crimean-Congo hemorrhagic fever

Any unexpected pattern of cases, suspected cases, deaths or increased incidence of any other disease of major public health concern, because of the severity of disease or potential for epidemic spread, which may indicate a newly recognized infectious agent, outbreak, epidemic, related public health hazard or act of bioterrorism.

Class B:

Disease of public health concern needing timely response because of potential for epidemic spread – report by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known.

- Amebiasis
- Arboviral neuroinvasive and non-neuroinvasive disease:
  - Chikungunya virus infection
  - Eastern equine encephalitis virus disease
  - LaCrosse virus disease (other California serogroup virus disease)
  - Powassan virus disease
  - St. Louis encephalitis virus disease
  - West Nile virus infection
  - Western equine encephalitis virus disease
  - Yellow fever
  - Zika virus infection
  - Other arthropod-borne diseases
- Babesiosis
- Botulism
  - infant
  - wound
- Brucellosis
- Campylobacteriosis
- *Candida auris*
- Carbapenemase-producing carbapenem-resistant Enterobacteriaceae (CP-CRE)
  - CP-CRE *Enterobacter* spp.
  - CP-CRE *Escherichia coli*
  - CP-CRE *Klebsiella* spp.
  - CP-CRE other
- Chancroid
- *Chlamydia trachomatis* infections
- Coccidioidomycosis
- Creutzfeldt-Jakob disease (CJD)
- Cryptosporidiosis
- Cyclosporiasis
- Dengue
- *E. coli* O157:H7 and Shiga toxin-producing *E. coli* (STEC)
- Ehrlichiosis/anaplasmosis
- Giardiasis
- Gonorrhea *(Neisseria gonorrhoeae)*
- *Haemophilus influenzae* (invasive disease)
- Hantavirus
- Hemolytic uremic syndrome (HUS)
- Hepatitis A
- Hepatitis B (non-perinatal)
- Hepatitis B (perinatal)
- Hepatitis C (non-perinatal)
- Hepatitis C (perinatal)
- Hepatitis D (delta hepatitis)
- Hepatitis E
- Influenza-associated hospitalization
- Influenza-associated pediatric mortality
- Legionnaires' disease
- Leprosy (Hansen disease)
- Leptospirosis
- Listeriosis
- Lyme disease
- Malaria
- Meningitis:
  - Aseptic (viral)
  - Bacterial
- Mumps
- Pertussis
- Poliomyelitis (including vaccine-associated cases)
- Psittacosis
- Q fever
- Rubella (congenital)
- *Salmonella* Paratyphi infection
- *Salmonella* Typhi infection (typhoid fever)
- Salmonellosis
- Shigellosis
- Spotted Fever Rickettsiosis, including Rocky Mountain spotted fever (RMSF)
- *Staphylococcus aureus*, with resistance or intermediate resistance to vancomycin (VRSA, VISA)
- Streptococcal disease, group A, invasive (IGAS)
- Streptococcal disease, group B, in newborn
- Streptococcal toxic shock syndrome (STSS)
- *Streptococcus pneumoniae*, invasive disease (ISP)
- Syphilis
- Tetanus
- Toxic shock syndrome (TSS)
- Trichinellosis
- Tuberculosis (TB), including multi-drug resistant tuberculosis (MDR-TB)
- Varicella
- Vibriosis
- Yersiniosis

Class C:

Report an outbreak, unusual incident or epidemic of other diseases (e.g. histoplasmosis, pediculosis, scabies, staphylococcal infections) by the end of the next business day.

Outbreaks:

- Community
- Foodborne
- Healthcare-associated
- Institutional
- Waterborne
- Zoonotic

NOTE:

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

Ohio Department of Health

NOTES

Ohio Administrative Code 3701-3-02, 3701-3-05, and 3701-3-12 require that communicable diseases be reported to local health departments.

Case and Outbreak Classifications

Case and outbreak definitions can be found in the Infectious Disease Control Manual, for reporting purposes in the state of Ohio.

Reportable Disease Class Definitions[3]

Reportable diseases in Ohio are grouped into three classes: Class A, Class B, and Class C.

Class A: Diseases are to be reported immediately upon recognition that a case, suspected case or a positive laboratory result exists. These are of major public health concern because of their ease of transmission and ability for epidemic spread.

Class B: Diseases are to be reported by the end of the next business day after the existence of a case, suspected case, or a positive laboratory result is known. These diseases also have public health concern needing timely response because of their potential for epidemic spread.

Class C: Diseases are to be reported by the end of the next business day.

Reportable Disease Changes in Ohio in 2021

Additions: None

Case Definition Changes in 2021 for Nationally Notifiable Diseases[12]

Changes in 2021**:** None

Notes about Reporting Systems[13]

The Ohio Disease Reporting System (ODRS) was developed to make disease reporting timelier and more efficient for disease reporters (i.e. laboratories, physicians, hospitals), and to improve communication about infectious diseases between disease reporters, local departments of health (LHD), and the Ohio Department of Health (ODH). Currently, ODH, LHD, and infection preventionists can enter and update case and laboratory reports in ODRS. The system uses patient address to determine correct jurisdiction in which to send the report for follow-up and investigation.

HIV/AIDS Data

HIV/AIDS data is sent to Stark County for residents of Tuscarawas County. Looking at the Ohio Department of Health HIV Infections Annual Surveillance statistics Tuscarawas County does not meet the reporting threshold set by the Ohio Department of Health.[14]

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