



**HEALTH**  
Department

**2022**

Allegan County Health Department

# **YEARLY COMMUNICABLE DISEASE**

# **REPORT**



Disease Group	Reportable Condition	Allegan County Cases Reported					Michigan Cases Reported				
		2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Foodborne	Botulism - Foodborne	-	-	-	-	-	-	-	-	1	-
	Campylobacter	41	32	26	23	36	1,705	1,705	1,221	1,515	1,372
	Cryptosporidiosis	8	6	8	4	2	383	419	246	249	322
	Giardiasis	5	5	3	12	8	464	428	379	435	362
	Listeriosis*	-	-	-	-	-	23	30	29	35	36
	Norovirus	1	-	36	2	1	1,009	1,466	582	587	1,375
	Paratyphoid Fever	-	-	-	-	-	1	4	4	1	2
	Salmonellosis	15	23	9	12	12	1,137	1,075	906	872	852
	Shiga toxin-producing Escherichia coli --(STEC)	6	7	3	5	11	327	309	212	269	420
	Shigellosis	4	5	3	-	3	209	218	151	171	178
	Typhoid Fever	-	-	-	-	-	6	10	1	4	15
	Yersinia enteritis	1	2	2	-	-	82	76	81	85	187
	Foodborne Subtotal	81	80	92	59	74	5,348	5,749	3,819	4,230	5,131
	Influenza	Flu Like Disease*	3,470	3,128	2,859	1,388	2,969	376,206	332,154	196,395	85,960
Influenza		352	173	227	26	161	45,057	30,075	29,920	2,872	42,270
Influenza, Novel		-	-	-	-	-	3	1	-	-	4
Influenza Subtotal		3,822	3,301	3,086	1,414	3,130	421,266	362,230	226,315	88,875	272,357
COVID19/MIS	Multisystem Inflammatory Syndrome	-	-	-	-	1	-	-	80	175	75
	Novel Coronavirus COVID-19	-	1	6,634	16,576	13,347	15	58	586,826	1,360,739	1,261,618
	COVID19/MIS Subtotal	-	1	6,634	16,576	13,348	15	58	586,906	1,360,914	1,261,693
Meningitis	Cronobacter (infant)	-	-	-	-	-	-	-	-	-	
	Meningitis - Aseptic	10	11	7	3	4	826	457	248	253	291
	Meningitis - Bacterial Other	1	1	-	3	2	147	121	95	126	127
	Meningococcal Disease	-	-	-	-	-	4	8	3	5	5
	Streptococcus pneumoniae, Inv	10	22	8	5	14	791	936	489	485	696
	Meningitis Subtotal	21	34	15	11	20	1,768	1,522	835	869	1,119
Other	Acute Flaccid Myelitis (AFM)	-	-	-	-	-	6	3	4	1	2
	Anthrax	-	-	-	-	-	-	-	-	-	-
	Blastomycosis	-	1	-	-	1	20	26	24	24	36
	Botulism - Infant	-	-	-	-	1	1	-	2	-	1
	Bruceellosis	-	-	-	-	1	4	1	4	2	4
	CP-CRE *	2	1	-	-	-	401	244	-	-	-
	Candida auris	-	-	-	-	-	-	-	-	3	129
	Cholera *	-	-	-	-	-	1	-	-	-	-
	Coccidioidomycosis	1	-	-	-	-	39	52	54	75	52
	Creutzfeldt-Jakob Disease	-	-	-	-	1	12	15	10	15	13
	Cyclosporiasis *	2	5	-	-	-	30	129	-	-	-
	Encephalitis, Post Chickenpox	-	-	-	-	-	1	1	-	-	2
	Encephalitis, Post Mumps	-	-	-	-	-	-	-	-	-	-
	Encephalitis, Post Other	1	-	1	-	-	10	14	10	16	15
	Encephalitis, Primary	-	-	-	-	-	18	14	16	11	7
	Guillain-Barre Syndrome	-	1	-	-	2	48	63	50	60	66
	Hantavirus	-	-	-	-	-	-	-	-	-	-
	Hantavirus, Other	-	-	-	-	-	-	-	-	-	-
	Hantavirus, Pulmonary	-	-	-	-	-	-	-	-	1	-
	Hemolytic Uremic Syndrome *	-	-	-	-	-	11	-	-	-	-
	Hemorrhagic Fever	-	-	-	-	-	-	-	-	-	-
	Histoplasmosis	6	3	13	1	12	172	236	198	269	302
	Kawasaki	1	-	-	1	-	35	55	52	44	30
	Legionellosis	2	5	2	2	3	643	561	385	582	334
	Leprosy	-	-	-	-	-	1	-	-	1	2
	Leptospirosis	-	-	-	-	-	1	3	3	1	1
	Melioidosis	-	-	-	-	-	-	-	-	-	-
	Monkeypox	-	-	-	-	2	-	-	-	-	438
	Novel Coronavirus SARS/MERS	-	-	-	-	-	1	-	-	-	-
	Plague	-	-	-	-	-	-	-	-	-	-
	Psittacosis	-	-	-	-	-	4	-	2	2	3
	Q Fever Acute	-	-	-	-	-	4	5	4	4	2
	Q Fever Chronic	-	-	-	-	-	1	-	1	-	1
	Rheumatic Fever	-	-	-	-	-	-	-	-	-	-
	Rubella - Congenital	-	-	-	-	-	-	-	-	-	1
	Streptococcus pneumoniae, Drug Resistant	-	-	-	-	-	96	80	32	40	58

NOTE: The data in the yearly summary reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made available to local public health departments. The MDSS is a continually active system so counts of diseases are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting case definition. Each annual surveillance report reflects this constant activity as the numbers may slightly fluctuate each month. Therefore, it should be kept in mind that numbers in the annual disease reports are not final and should be used only to generally monitor trends over time. Confirmed, probable, and suspect and cases are included in this report. Report was compiled after all of Allegan Counties 2022 cases had been moved to completed. Suspect cases only appear in four disease categories in this report for 2022: COVID-19, Legionellosis, Lyme Disease, and Viral Hepatitis.

Disease Group	Reportable Condition	Allegheny County Cases Reported					Michigan Cases Reported				
		2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Other	Streptococcal Dis, Inv, Grp A	3	5	6	-	-	428	449	337	258	385
	Streptococcal Toxic Shock	-	-	-	-	-	5	5	4	2	1
	Toxic Shock	-	-	-	1	-	4	7	3	5	2
	Trachoma	-	-	-	-	-	-	-	2	1	-
	Trichinosis	-	-	-	-	-	-	-	-	-	-
	Tularemia	-	-	-	-	-	2	1	-	1	4
	Vibriosis-non Cholera *	1	-	1	-	-	45	39	27	35	41
	VISA	-	-	-	-	-	8	11	-	4	3
	VRSA	-	-	-	-	-	-	-	-	1	-
	Other Subtotal	19	21	23	5	23	2,052	2,014	1,224	1,458	1,935
Rabies	Rabies Animal	-	1	3	-	2	76	58	54	48	47
	Rabies: Potential Exposure & PEP *	4	9	8	7	24	6,509	5,891	3,351	3,676	3,592
	Rabies Subtotal	4	10	11	7	26	6,585	5,949	3,405	3,724	3,639
STD	Chancroid	-	-	-	-	-	-	-	-	2	-
	Chlamydia (Genital)	392	398	323	317	294	51,537	50,358	44,803	46,397	36,215
	Gonorrhea	76	108	108	104	94	17,031	18,266	23,388	22,216	15,295
	Granuloma Inguinale	-	-	-	-	-	-	-	-	-	-
	Lymphogranuloma venereum	-	-	-	-	-	16	1	8	3	1
	Syphilis - Congenital	-	-	-	-	-	14	16	29	42	37
	Syphilis - Early Latent	1	3	4	4	3	412	558	567	735	749
	Syphilis - Unknown Duration or Late	5	2	4	3	9	624	656	667	925	1,064
	Syphilis - To Be Determined	478	523	449	438	425	2	-	-	-	-
	Syphilis - Primary	-	1	1	3	1	228	273	312	356	412
	Syphilis - Secondary	1	1	2	3	7	426	411	471	622	561
	STD Subtotal	953	1,036	891	872	833	70,290	70,539	70,245	71,298	54,334
	Tuberculosis	Latent Tuberculosis Infection	12	12	7	7	16	1,126	2,052	960	1,209
Nontuberculous Mycobacterium		8	7	7	10	7	839	854	683	770	826
Tuberculosis		-	-	-	1	-	119	140	99	136	108
Tuberculosis Subtotal		20	19	14	17	23	2,084	3,046	1,742	2,115	2,032
VPD	Chickenpox (Varicella)	6	6	5	2	5	434	416	184	183	228
	Diphtheria	-	-	-	-	-	-	-	-	-	-
	H. influenzae Disease - Inv.	5	4	1	1	-	174	223	100	157	211
	Measles	-	-	-	-	-	19	46	-	1	2
	Mumps	2	1	-	-	-	81	29	7	10	27
	Pertussis	12	1	-	-	-	658	546	116	72	84
	Polio	-	-	-	-	-	-	-	-	-	-
	Rubella	-	-	-	-	-	-	-	1	6	6
	Shingles	5	6	6	4	4	1,252	1,222	817	629	749
	Tetanus	-	-	-	-	-	2	1	-	1	-
	VZ Infection, Unspecified	-	2	2	9	4	213	228	174	328	278
	VPD Subtotal	30	20	14	16	13	2,833	2,711	1,399	1,387	1,585
	Vectorborne	Babesiosis	-	-	-	-	-	5	2	1	8
Chikungunya *		-	-	-	-	-	2	1	-	-	-
Dengue Fever *		-	1	-	-	-	12	21	-	-	-
Ehrlichiosis, Anaplasma phagocytophilum *		1	-	-	-	-	17	15	-	-	-
Ehrlichiosis, Anaplasmosis Undetermined		-	-	-	-	-	-	-	-	-	1
Ehrlichiosis, Ehrlichia chaffeensis *		-	-	-	-	-	7	3	-	-	-
Ehrlichiosis, Ehrlichia ewingii *		-	-	-	-	-	-	-	-	-	-
Encephalitis, California Serogroup *		-	-	-	-	-	2	3	4	9	4
Encephalitis, Eastern Equine *		1	-	-	-	-	1	10	-	-	-
Encephalitis, Powassan *		-	-	-	-	-	-	-	-	-	-
Encephalitis, St. Louis *		-	-	-	-	-	-	-	-	-	-
Encephalitis, Western Equine *		-	-	-	-	-	-	-	-	-	-
Lyme Disease		5	17	12	34	33	309	490	536	1,266	1,108
Malaria		1	-	-	-	-	29	26	14	14	34
Rickettsial Disease - Spotted Fever *		2	-	-	-	-	23	10	-	-	-
Rickettsial Disease - Typhus		-	-	-	-	-	-	-	-	-	1
West Nile Virus *		3	-	-	-	-	105	12	-	-	-
Yellow Fever*	-	-	-	-	-	-	-	-	-	-	
Zika *	-	-	-	-	-	1	-	-	-	-	
Vectorborne Subtotal	13	19	12	35	33	514	601	630	1,450	1,309	
Viral Hepatitis	Hepatitis A	1	-	-	-	-	331	78	22	31	30
	Hepatitis B, Acute	-	-	-	-	1	80	65	45	35	36
	Hepatitis B, Chronic	2	1	-	5	1	1,057	1,002	677	623	722
	Hepatitis B, Perinatal	-	-	-	-	-	1	-	-	-	-
Viral Hepatitis	Hepatitis C, Acute	2	-	1	-	2	173	129	141	127	107
	Hepatitis C, Chronic	69	36	17	24	12	9,781	5,658	4,092	3,847	3,509
	Hepatitis C, Perinatal	-	-	-	-	-	11	10	8	9	7
	Viral Hepatitis Subtotal	87	56	30	64	49	11,447	6,975	5,000	4,682	4,426
<b>Total</b>	<b>5,046</b>	<b>4,586</b>	<b>4,177</b>	<b>2,493</b>	<b>4,198</b>	<b>517,602</b>	<b>455,387</b>	<b>311,209</b>	<b>176,364</b>	<b>344,228</b>	
* Indicates includes historic and current forms in MDSS											
** Data for cases reported is based on week case was referred to the health department											

NOTE: The data in the yearly summary reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made available to local public health departments. The MDSS is a continually active system so counts of diseases are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting case definition. Each annual surveillance report reflects this constant activity as the numbers may slightly fluctuate each month. Therefore, it should be kept in mind that numbers in the annual disease reports are not final and should be used only to generally monitor trends over time. Confirmed, probable, and suspect and cases are included in this report. Report was compiled after all of Allegheny Counties 2022 cases had been moved to completed. Suspect cases only appear in four disease categories in this report for 2022: COVID-19, Legionellosis, Lyme Disease, and Viral Hepatitis.

## Summary

After two years of increases in COVID-19 cases, the first sign of a decrease occurred in 2022 with a 20% reduction in cases. The influenza disease group may have taken the hit on the COVID-19 case decrease as flu-like disease cases increased by more than double (1,388 up to 2,969). Gastrointestinal Illness also had a strong increase from the prior year 3,955 in 2021 up to 7,660 in 2022. Including COVID-19 cases, Allegan County did increase in total disease cases from the prior year. The increases in Allegan County's three largest diseases (COVID-19, Flu-like disease, and Gastrointestinal Illness) overshadow the overall trend of all other diseases. In the annual report done for Allegan County, 147 diseases qualified for data analysis. Of these 147, 29 showed an increase from the current five-year trend (2018-2022). Showing that just 19.7% of all current diseases had growth over the five-year period with over 80% showing signs of plateauing or decrease in cases. Going by a year-by-year analysis from 2021 to 2022, very similar to the five-year trend, 28 diseases showed an increase, with the rest plateauing or decreasing from the previous year. Along with these metrics its important to note that there were 10 diseases in 2022 that did not occur in 2021 at all. Most of these diseases are more uncommon, thus the complete absence in 2021.

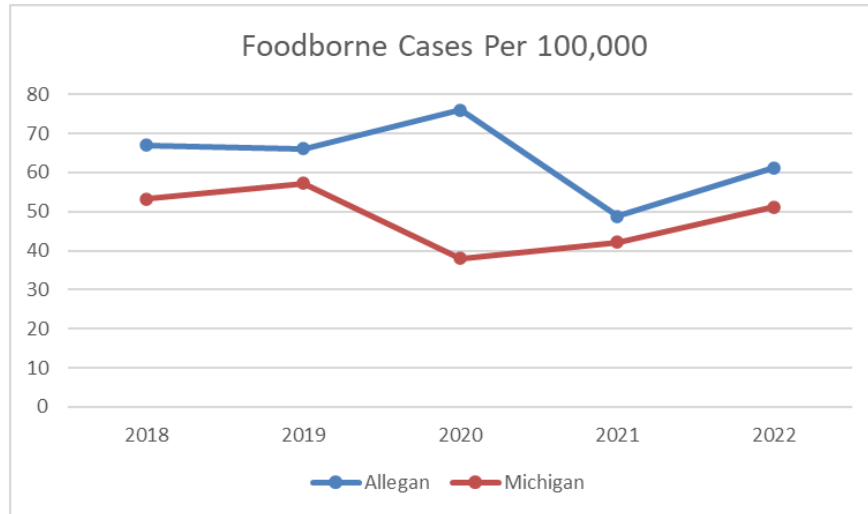
Certain illnesses of note include Shiga toxin-producing Escheria Coli (STEC), Latent Tuberculosis, Strep Throat and Rabies. STEC has had a rise over the past 3 years, 3 in 2020, 5 in 2021, and 11 in 2022. Rabies, with two animal cases (bats) in 2022 after zero the previous year, and a large jump in potential exposure and PEP cases from the past three years where Allegan County averaged 8 cases (2019-2021), and jumped to 24 cases in 2022. Strep throat doubled from the previous year, 310 in 2021, to 654 in 2022. Latent Tuberculosis also had a jump with seven cases in both 2020 and 2021, and 16 in 2022.

The charts above show all other diseases from the MDSS report and help to show trends for both Allegan County and the State of Michigan over the past five years. Represented below are disease categories and a comparison between Allegan County and the state of Michigan over the past five years. The charts below show disease counts per 100,000 population to help show a more accurate representation of how the two compare. Both population counts were taken from the U.S. Census, both from the July 2021 population estimates. Allegan County with a population of 120,950, and the state of Michigan with a population of 10,037,504.

NOTE: The data in the yearly summary reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made available to local public health departments. The MDSS is a continually active system so counts of diseases are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting case definition. Each annual surveillance report reflects this constant activity as the numbers may slightly fluctuate each month. Therefore, it should be kept in mind that numbers in the annual disease reports are not final and should be used only to generally monitor trends over time. Confirmed, probable, and suspect and cases are included in this report. Report was compiled after all of Allegan Counties 2022 cases had been moved to completed. Suspect cases only appear in four disease categories in this report for 2022: COVID-19, Legionellosis, Lyme Disease, and Viral Hepatitis.

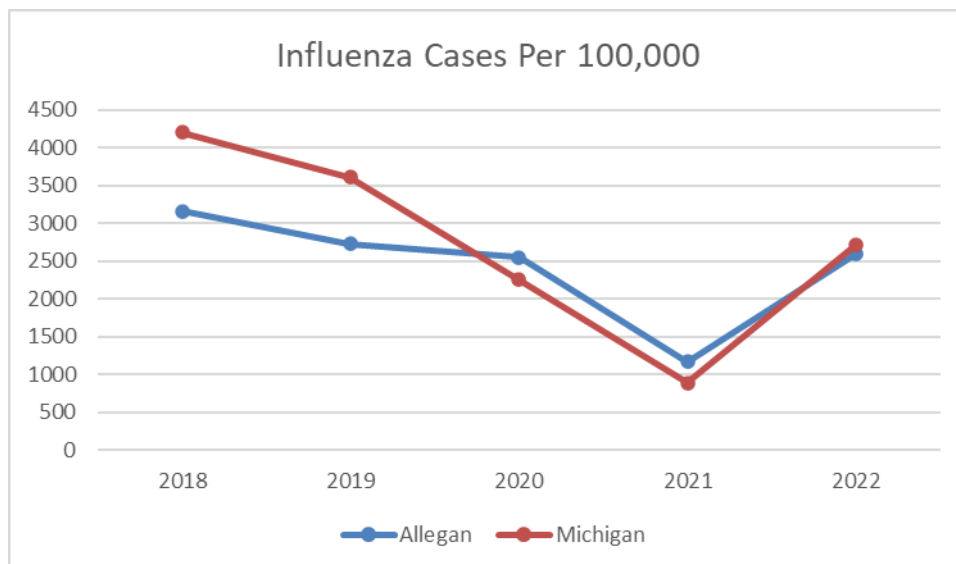
## Foodborne

Foodborne diseases are those that are caused by contamination of food and can occur at any stage of the food production, delivery, and consumption change<sup>1</sup>. Allegan County has been slightly above trend compared to the Michigan average the past two years, after rebounding from a spike in 2020. The leading foodborne diseases in Allegan County for 2022 include Campylobacter, Salmonellosis and Shiga-toxin-producing Escherichia Coli (STEC).



## Influenza

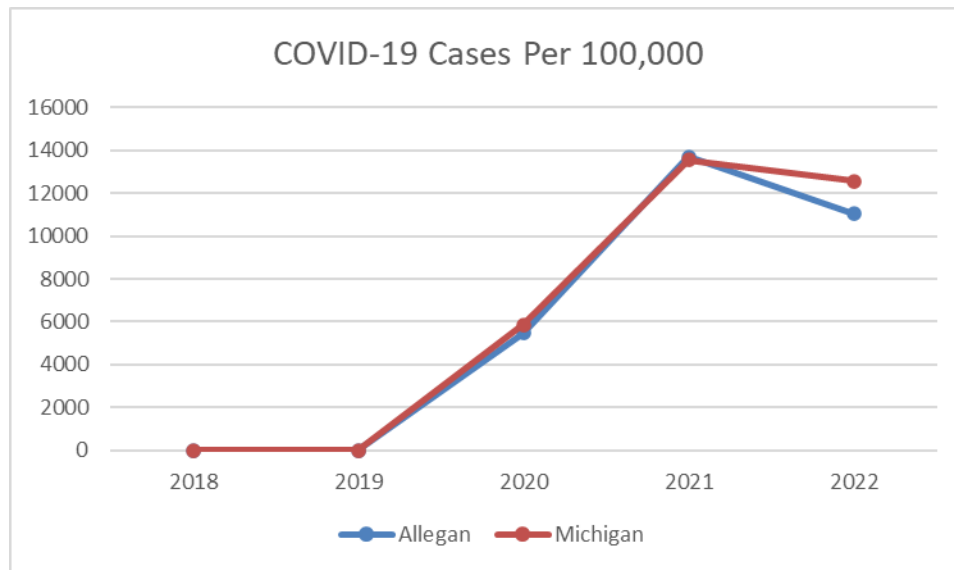
This category contains contagious respiratory illnesses caused by influenza viruses that can infect individuals through the nose, throat, and lungs<sup>2</sup>. Both Allegan County and the state of Michigan had shown decreases each year of the COVID-19 pandemic, until a rebound year in 2022. Allegan County more than doubled the number of flu-like diseases from 2021 to 2022, with the state of Michigan showing two and a half times more cases in 2022 compared to 2021. With COVID-19 showing a decline for the first time in 2022, flu-like disease may show an increase, as diagnosis of COVID-19 can be difficult due to similar symptoms and changes in definition criteria.



NOTE: The data in the yearly summary reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made available to local public health departments. The MDSS is a continually active system so counts of diseases are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting case definition. Each annual surveillance report reflects this constant activity as the numbers may slightly fluctuate each month. Therefore, it should be kept in mind that numbers in the annual disease reports are not final and should be used only to generally monitor trends over time. Confirmed, probable, and suspect and cases are included in this report. Report was compiled after all of Allegan Counties 2022 cases had been moved to completed. Suspect cases only appear in four disease categories in this report for 2022: COVID-19, Legionellosis, Lyme Disease, and Viral Hepatitis.

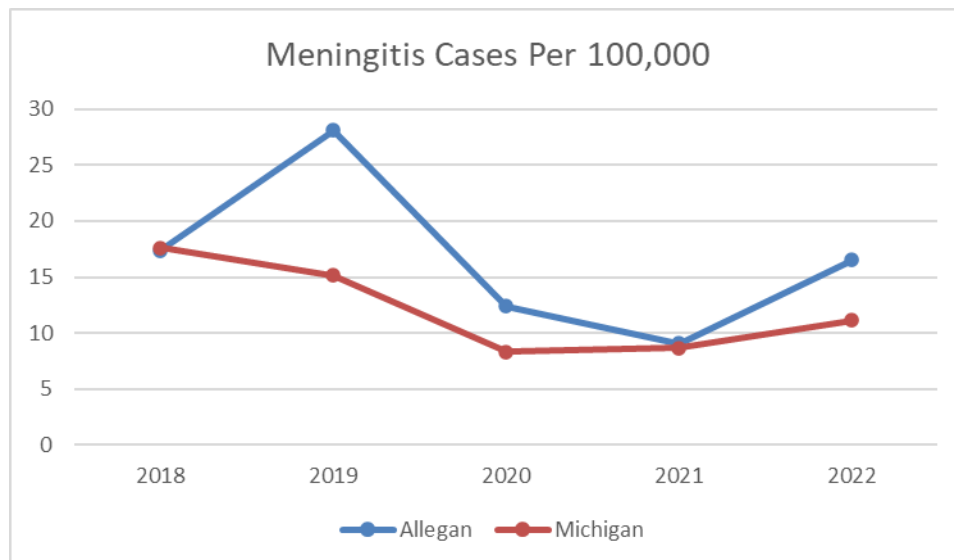
## COVID-19

Caused by the SARS-CoV-2 virus, the Coronavirus disease known as COVID-19 was declared an outbreak in January 2020. Through December 2022, the COVID-19 pandemic had over 730 million confirmed cases worldwide including over 6.6 million deaths<sup>3</sup>. As shown in the chart below, starting in 2019 there had been a sharp increase in cases over 2020 and 2021, with the state of Michigan plateauing over 2022, and Allegan County actually showing a decrease in total cases. For more information on COVID-19 please visit the Allegan County COVID [dashboard](#).



## Meningitis

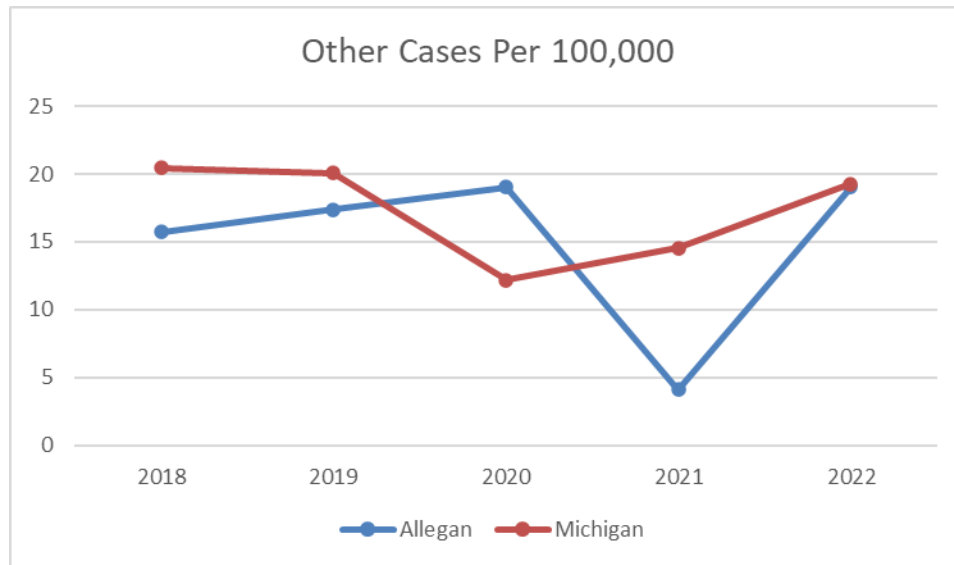
An inflammation (swelling) of the protective membranes covering the brain and spinal cord<sup>4</sup>. Can be caused by either a bacterial or viral infection. After a spike in 2019, Allegan County has been staying much more stable and just slightly above the state of Michigan's average the past three years.



NOTE: The data in the yearly summary reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made available to local public health departments. The MDSS is a continually active system so counts of diseases are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting case definition. Each annual surveillance report reflects this constant activity as the numbers may slightly fluctuate each month. Therefore, it should be kept in mind that numbers in the annual disease reports are not final and should be used only to generally monitor trends over time. Confirmed, probable, and suspect and cases are included in this report. Report was compiled after all of Allegan Counties 2022 cases had been moved to completed. Suspect cases only appear in four disease categories in this report for 2022: COVID-19, Legionellosis, Lyme Disease, and Viral Hepatitis.

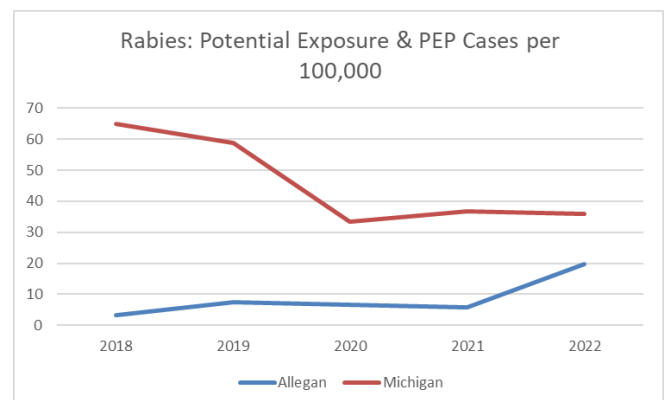
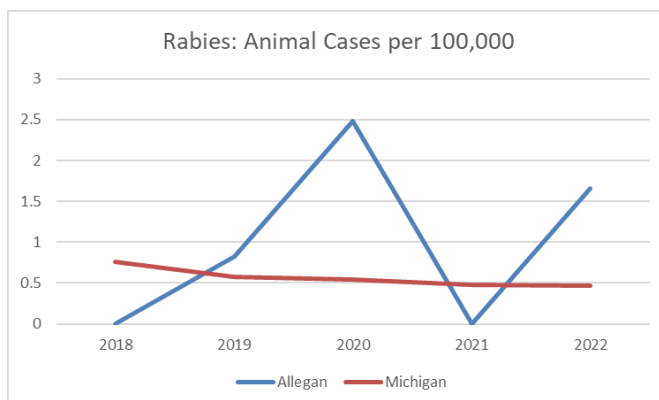
## Other

Including a total of 45 diseases the other category covers a broad range of diseases. Of these 45 diseases Allegan only had 8 of the diseases show at least one case in 2022, with the State of Michigan having 28 of these diseases show at least one case in 2022. Many of the diseases are quite rare, or uncommon, for a full list see the chart at the beginning of the document.



## Rabies

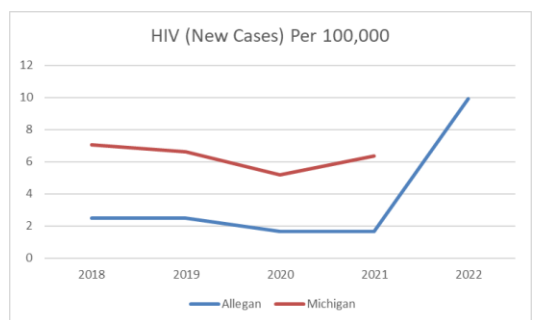
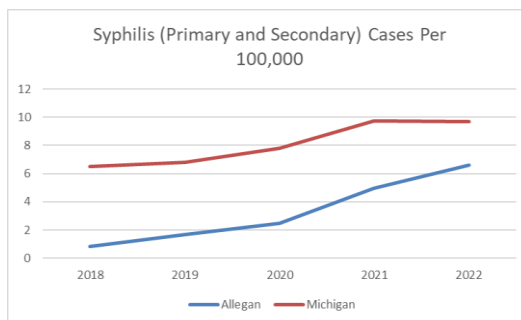
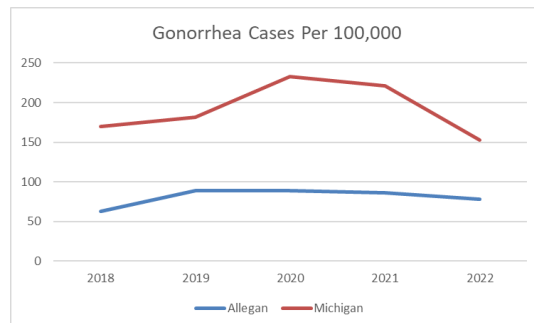
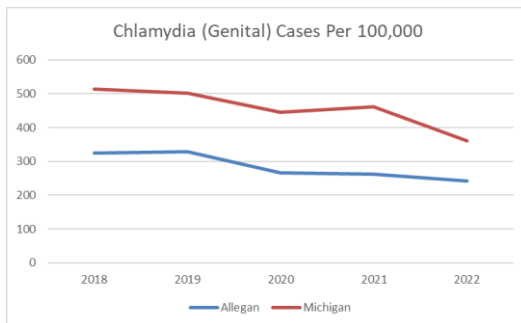
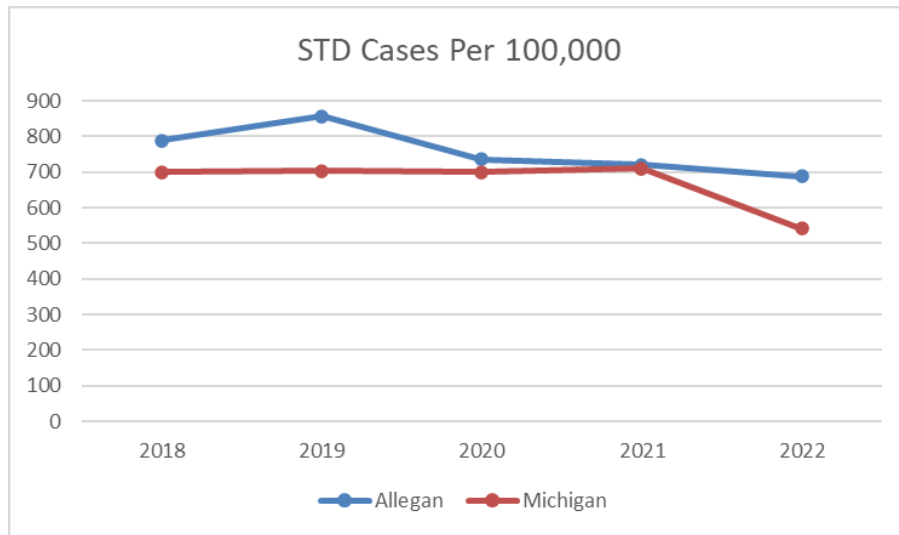
A preventable viral disease most commonly transmitted through the bite of a rabid animal. The rabies virus infects the central nervous system of mammals, ultimately causing disease in the brain and death<sup>5</sup>. Allegan County has consistently stayed below the state of Michigan average the past 5 years, even with the large spike from 2021 to 2022. Included in the graphs below are both Animal cases and Potential Exposure & PEP cases. Of Allegan's cases, 92.3% were from the potential exposure & PEP category, with the State of Michigan showing 98.7% of their rabies cases coming from the same category.



NOTE: The data in the yearly summary reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made available to local public health departments. The MDSS is a continually active system so counts of diseases are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting case definition. Each annual surveillance report reflects this constant activity as the numbers may slightly fluctuate each month. Therefore, it should be kept in mind that numbers in the annual disease reports are not final and should be used only to generally monitor trends over time. Confirmed, probable, and suspect and cases are included in this report. Report was compiled after all of Allegan Counties 2022 cases had been moved to completed. Suspect cases only appear in four disease categories in this report for 2022: COVID-19, Legionellosis, Lyme Disease, and Viral Hepatitis.

## Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) are infections transmitted from an infected person to an uninfected person through sexual contact, can be caused by bacteria, viruses, or parasites<sup>6</sup>. Both Allegan County and the state of Michigan showed declines in STDs in 2022. For more information please visit Allegan County's STD [homepage](#). The STD Cases per 100,000 chart below contains all STD's except for HIV (see separate chart below). HIV data provided from SHOARS for Allegan County and MDHHS for the State of Michigan<sup>10</sup>



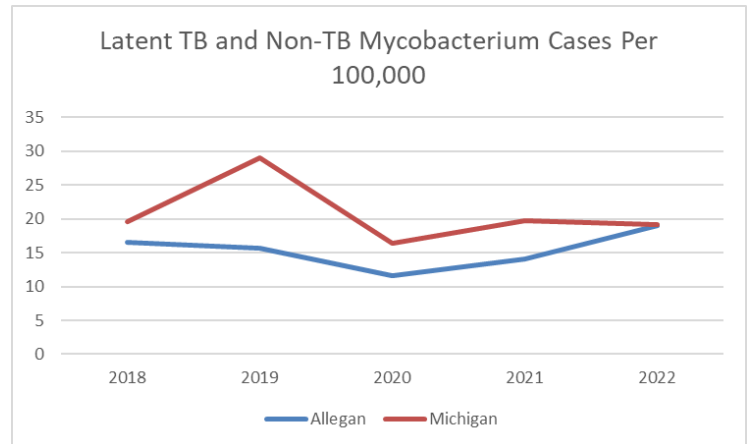
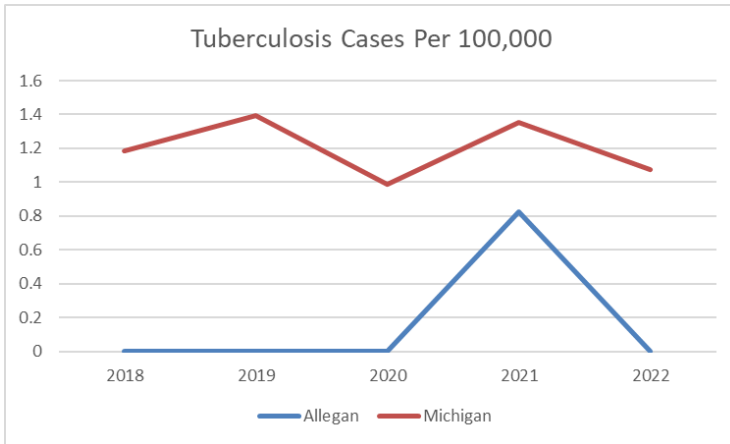
\*No data for new HIV cases for the State of Michigan in 2022 at time of data analysis

NOTE: The data in the yearly summary reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made available to local public health departments. The MDSS is a continually active system so counts of diseases are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting case definition. Each annual surveillance report reflects this constant activity as the numbers may slightly fluctuate each month. Therefore, it should be kept in mind that numbers in the annual disease reports are not final and should be used only to generally monitor trends over time. Confirmed, probable, and suspect and cases are included in this report. Report was compiled after all of Allegan Counties 2022 cases had been moved to completed. Suspect cases only appear in four disease categories in this report for 2022: COVID-19, Legionellosis, Lyme Disease, and Viral Hepatitis.



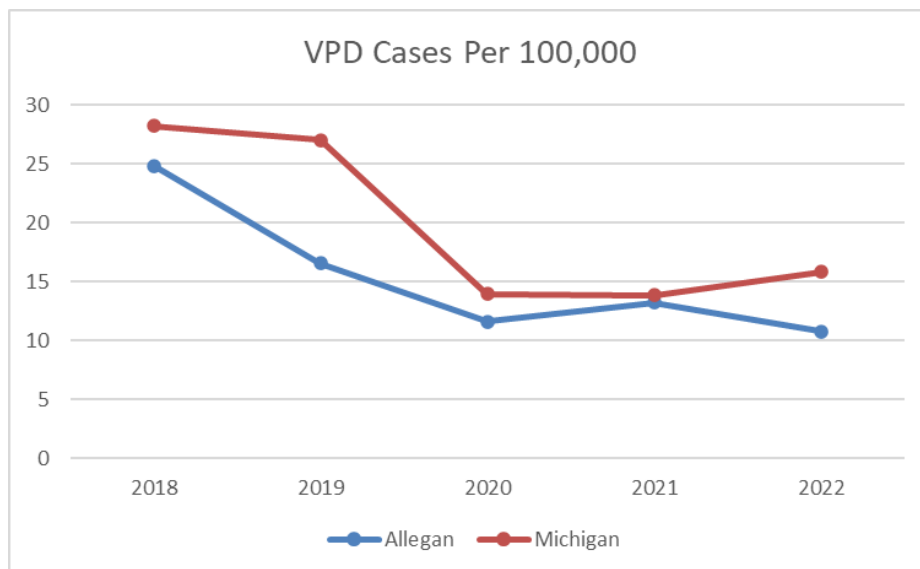
## Tuberculosis

Tuberculosis (TB) is a disease caused by a bacterium called *Mycobacterium tuberculosis*. Not everyone infected with TB will become sick, and due to this, two TB related conditions exist: Latent-TB and TB disease<sup>7</sup>. The first chart below shows TB cases with the second showing nontuberculosis mycobacterium along with Latent TB cases. Latent-TB makes up the majority of cases for both Allegan County and the state of Michigan. Allegan County has had only one TB case in the past 5 years, so the majority of cases are from the Latent TB category. The State of Michigan has had more TB cases, however the majority of their cases still come from the other two categories.



## Vaccine Preventable Diseases

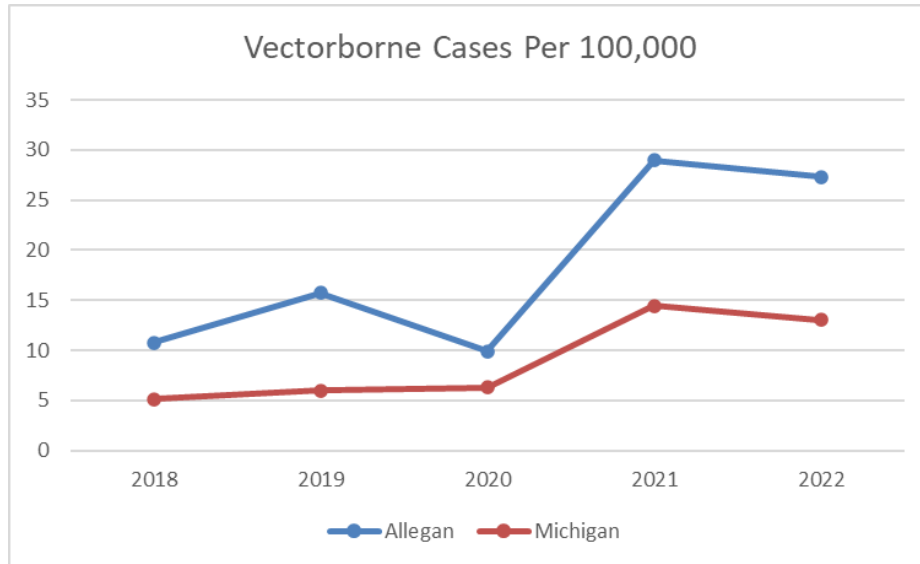
Vaccine preventable diseases (VPDs) are diseases caused by bacteria and viruses that can be prevented by vaccines. Examples including Chickenpox (Varicella), Measles, Mumps & Shingles. Over this five year period both Allegan County and the state of Michigan have had significant decreases in VPDs. For more information visit Allegan County's immunizations [homepage](#).



NOTE: The data in the yearly summary reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made available to local public health departments. The MDSS is a continually active system so counts of diseases are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting case definition. Each annual surveillance report reflects this constant activity as the numbers may slightly fluctuate each month. Therefore, it should be kept in mind that numbers in the annual disease reports are not final and should be used only to generally monitor trends over time. Confirmed, probable, and suspect and cases are included in this report. Report was compiled after all of Allegan Counties 2022 cases had been moved to completed. Suspect cases only appear in four disease categories in this report for 2022: COVID-19, Legionellosis, Lyme Disease, and Viral Hepatitis.

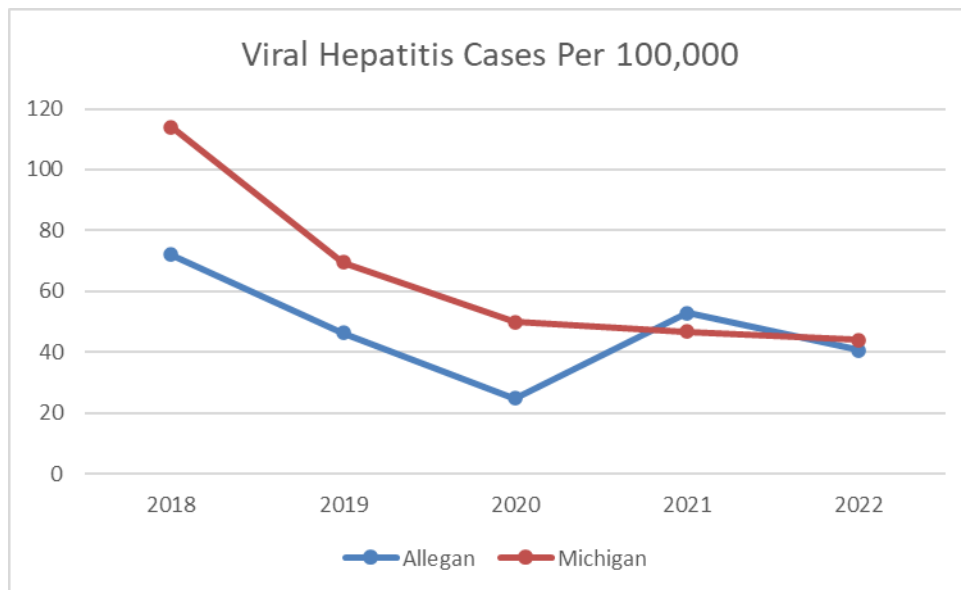
## Vector-borne

Vector-borne diseases are caused by parasites, viruses and bacteria that are transmitted by vectors (living organisms that can transmit infectious pathogens between humans, or from animals to humans, many are bloodsucking insects such as mosquitos)<sup>8</sup>. The vast majority of these cases for both Allegan County and the state of Michigan come from Lyme Disease. Both have had spikes the past two years.



## Viral Hepatitis

Often caused by a virus, Hepatitis is the inflammation (swelling) of the liver. Both Allegan County and the state of Michigan have both showed declines over the past five years. The chart below contains Hep A, B, and C, all acute, chronic, and perinatal cases. Allegan County has not shown a Hepatitis A cases since 2018, and has only shown a total of 10 cases of Hep B in the last 5 years. The Majority of cases for Allegan County belongs to Hep C cases.



NOTE: The data in the yearly summary reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made available to local public health departments. The MDSS is a continually active system so counts of diseases are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting case definition. Each annual surveillance report reflects this constant activity as the numbers may slightly fluctuate each month. Therefore, it should be kept in mind that numbers in the annual disease reports are not final and should be used only to generally monitor trends over time. Confirmed, probable, and suspect cases are included in this report. Report was compiled after all of Allegan Counties 2022 cases had been moved to completed. Suspect cases only appear in four disease categories in this report for 2022: COVID-19, Legionellosis, Lyme Disease, and Viral Hepatitis.

## Sources:

1. World Health Organization. (2023). *Foodborne diseases*. Retrieved from [https://www.who.int/health-topics/foodborne-diseases#tab=tab\\_1](https://www.who.int/health-topics/foodborne-diseases#tab=tab_1)
2. World Health Organization. (2023). *Influenza (Seasonal)*. Retrieved from [https://www.who.int/news-room/fact-sheets/detail/influenza-\(seasonal\)](https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal))
3. World Health Organization. (2023). WHO Coronavirus (COVID-19) Dashboard. World Health Organization. Retrieved from <https://covid19.who.int/>
4. Centers for Disease Control and Prevention. (2022). *Influenza (Flu)*. Retrieved from <https://www.cdc.gov/flu/about/keyfacts.htm>
5. Centers for Disease Control and Prevention. (2022). *Meningitis*. Retrieved from <https://www.cdc.gov/meningitis/index.html>
6. Centers for Disease Control and Prevention. (2020). *Rabies*. Retrieved from <https://www.cdc.gov/rabies/about.html>
7. National Institute of Allergy and Infectious Diseases. (2015). *Sexually Transmitted Diseases*. Retrieved from <https://www.niaid.nih.gov/diseases-conditions/sexually-transmitted-diseases>
8. Centers for Disease Control and Prevention. (2016). *Tuberculosis (TB)*. Retrieved from <https://www.cdc.gov/tb/topic/basics/default.htm>
9. World Health Organization. (2020). *Vector-borne diseases*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases>
10. MDHHS (2022). Annual HIV Prevalence Report, Persons living with HIV December 31, 2021. Retrieved from <https://www.michigan.gov/mdhhs/-/media/Project/Websites/mdhhs/Keeping-Michigan-Healthy/HIVSTI/Data-and-Statistics/2021/HIV-Prevalence-Report-Tables-2021.pdf?rev=5e5919bbf1ee4e73931d182d46427abc&hash=DB2D87D0A59ED5FF98F03EA18E5B9E25>