

Kalamazoo County 2022 Communicable Disease Summary

This report shows five-year trends in Kalamazoo County for reportable conditions in Michigan. Additionally, for selected diseases, rates for both the county and state are shown over time. For detailed reports describing selected diseases visit the Health and Community Services Department webpage at www.kalcounty.com/hcs

Data are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS). The MDSS is a dynamic, continually active system; counts of disease are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting the case definition. The numbers reported are NOT final and should be used for general monitoring of trends over time.

Data was included using the following criteria: case referral date; case status=confirmed and probable; investigation status=active, completed, completed-follow up, new and review. Case rates were calculated using the U.S. census population denominator provided in MDSS.

Report Date: 2/2/23

Summary of Reportable Diseases by Year

				y Cases Re	norted**	,	Michigan Cases Reported					
Disease Group	Reportable Condition	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	
Foodborne	Botulism - Foodborne	-	-	-	-	-	-	-	-	1	-	
Toodborne	Campylobacter	90	64	47	36	31	1,716	1,719	1,229	1,495	1,370	
	Cryptosporidiosis	19	27	15	12	9	386	423	248	247	310	
	Giardiasis	28	41	27	17	20	468	420	389	435	359	
	Listeriosis *	-	-	-	-	-	24	29	29	36	36	
	Norovirus	19	148	43	101	- 127	985	1,458	567	555	1,318	
		-	-	-	-	-	1	4	4	1	2	
	Paratyphoid Fever Salmonellosis	- 51	44	18	23	- 29			908	869	848	
		17	16	11		12	1,137 302	1,078	206	259	404	
	Shiga toxin-producing Escherichia coli(STEC) *				12			298				
	Shigellosis	5	2	3	8	7	205	219	153	167	173	
	Typhoid Fever	-	-	-	-	1	8	10	1	3	14	
	Yersinia enteritis	14	11	5	3	5	80	80	78	87	178	
	Foodborne Subtotal	243	353	171	212	243	5,314	5,747	3,819	4,161	5,021	
Influenza	Flu Like Disease*	12,415	5,268	3,633	1,888	6,628	360,585	321,339	191,014	82,577	216,591	
	Influenza	2,427	1,063	1,613	9	967	45,273	30,069	30,309	2,892	45,219	
	Influenza, Novel	-	-	-	-	-	3	1	-	-	4	
	Influenza Subtotal	14,842	6,331	5,246	1,897	7,595	405,861	351,409	221,323	85,514	262,960	
COVID19/MIS	Multisystem Inflammatory Syndrome	-	-	-	4	1	-	-	71	157	100	
	Novel Coronavirus COVID-19	-	-	12,555	28,900	33,852	3	3	530,844	1,224,899	1,289,483	
	COVID19/MIS Subtotal	-	-	12,555	28,904	33,853	3	3	530,915	1,225,056	1,289,583	
Meningitis	Cronobacter (infant)	-	-	-	-	-	-	-	-	-	-	
	Meningitis - Aseptic	30	8	11	12	9	824	460	255	248	271	
	Meningitis - Bacterial Other	2	6	1	6	7	143	123	95	122	134	
	Meningococcal Disease	-	-	-	1	-	4	7	3	6	5	
	Streptococcus pneumoniae, Inv	29	23	18	16	25	796	929	531	462	708	
	Meningitis Subtotal	61	37	30	35	41	1,767	1,519	884	838	1,118	
Other	Acute Flaccid Myelitis (AFM)	-	-	-	-	-	6	2	5	-	3	
	Anthrax	-	-	-	-	-	-	-	-	-	-	
	Blastomycosis	-	-	-	-	1	16	26	26	26	36	
	Botulism - Infant	-	-	-	-	-	1	-	2	-	1	
	Brucellosis	-	-	-	-	-	4	1	3	-	8	
	CP-CRE *	-	-	-	1	4	176	159	214	205	287	
	Candida auris	-	-	-	-	-	-	-	-	2	132	
	Cholera *	-	-	-	-	-	1	2	1	-	1	
	Coccidioidomycosis	1	-	1	2	-	43	50	53	79	51	
	Creutzfeldt-Jakob Disease	-	-	-	-	-	10	10	11	7	13	
	Cyclosporiasis *	7	10	1	4	3	30	130	22	51	58	
	Encephalitis, Post Chickenpox	-	-	-	-	-	1	1	_	_	2	
	Encephalitis, Post Mumps	_	_	_	_	_	_	_	_	_	-	
	Encephalitis, Post Other	_	_	_	1	1	10	14	10	16	15	
	Encephalitis, Primary	_	2	3	-	2	17	15	15	12	7	
	Guillain-Barre Syndrome	_	1	4	3	2	46	61	54	54	67	
	Hantavirus	_	-	-	-	-	-	-	-	-	-	
	Hantavirus, Other	_	_	_	_	_	_	_	_	_	_	
	Hantavirus, Pulmonary	_	_	_	_	-	_	_	_	1	_	
	Hemolytic Uremic Syndrome *	_	_	_	_	-	11	8	5	3	17	
	Hemorrhagic Fever	_	-	-	_	-	-	-	-	-	-	
	Histoplasmosis	3	6	6	9	4	154	233	205	262	327	
	Kawasaki	-	J	-	1	-	36	233 56	60	43	55	
	Legionellosis		-									
	5	11	9	6	6	8	631	559 -	386	583	340	
	Leprosy	-	-	-	-	-	1			- 1	3	
	Leptospirosis	-	-	-	-	-	1	3	3	1	2	
	Melioidosis	-	-	-	-	-	-	-	-	-	-	
	Monkeypox	-	-	-	-	2	-	-	-	-	395	
	Novel Coronavirus SARS/MERS	-	-	-	-	-	-	-	-	-	-	
	Plague	-	-	-	-	-	-	-	-	-	-	
	Psittacosis	-	-	-	-	-	4	-	2	2	3	
	Q Fever Acute	1	-	-	-	-	4	4	5	4	1	
1	Q Fever Chronic	-	-	-	-	-	2	-	-	1	1	
1	Rheumatic Fever	-	-	-	-	-	-	-	-	-	2	
1	Rubella - Congenital	-	-	-	-	-	-	-	-	-	3	
	Streptococcus pneumoniae, Drug Resistant	1	3	4	5	-	101	77	38	37	59	

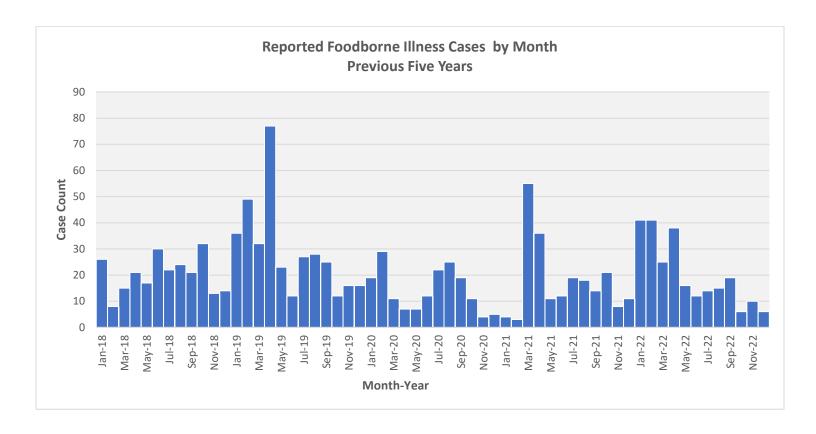
Gonorrhea 1,030 1,090 1,221 1,095 860 17,046 18,137 23,518 Granuloma Inguinale 19 6 8 Syphilis - Congenital 2 3 3 2 15 14 30 Syphilis - Congenital 2 3 3 2 15 14 30 Syphilis - Congenital 14 13 21 37 41 627 642 671 Syphilis - To Be Determined 2 3 3 2 15 14 30 Syphilis - To Be Determined 14 13 21 37 41 627 642 671 Syphilis - To Be Determined 2 2 3 2 2 5 271 319 Syphilis - Secondary 10 11 13 3 35 28 425 408 472 Syphilis - Secondary 10 11 13 3 35 28 425 408 472 STD Subtotal 3,428 3,455 3,233 3,133 2,652 70,441 70,190 70,757 Tuberculosis Infection 21 76 52 126 121 602 914 464 Subtotal Subtotal 42 95 77 149 140 1,555 1,898 1,255 L988 1,255 L9	257 381 2 2 4 3 1 - - 1 1 3 36 40 4 3 1 - 1,695 2,321 48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 42 38	257 2 4 1 - 1 36 4 1 1,695 48 4,3,646 3,694 2	346 4 3 2	447				2020	2019	2018	
Streptococcal Toxic Shock	2 2 4 3 1 1 3 36 40 4 3 1 - 1,695 2,321 48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	2 4 1 - 1 36 4 1 1,695 48 4 3,646 8 3,694	4 3 2		428	22					
Toxic Shock 5 7 7 3 Trichnosis 2 Trichnosis 2 Trichnosis	4 3 1 1 3 36 40 4 3 1 - 1,695 2,321 48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	4 1 - 1 36 4 1 1,695 48 4 3,646 8 3,694	3 2			23	12	3	11		Other Streptococcal Dis, Inv, Grp A
Trachoma Trichinosis Tularemia Vibriosis-non Cholera* Rabies Rabies Animal Rabies Rabies Animal Rabies Rabies Potential Exposure & PEP* 2 43 111 20 35 6471 5,960 3,454 Rabies Subtotal 3 45 112 20 37 6,547 6,018 3,508 STD Chamcroid Chiamydia (Genital) Concorriba Gonorrhea Chiamydia (Genital) Chiamydia (Genital) Concorriba Gonorrhea Cranuloma Inquinale Cranuloma Inquinale Cranuloma Inquinale Cranuloma Inquinale Cranuloma Inquinale Cranuloma Inquinale Cranuloma Unitario Chiamydia (Genital) Syphilis- Chiamydia (Genital) Syphi	1 1 3 3 36 40 4 3 1 - 1,695 2,321 48 51 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 3 3 42 38	1 - 1 36 4 1 1,695 48 4 3,646 8 3,694	2	5	5	-	-	-	-	2	Streptococcal Toxic Shock
Trichinosis Tularemia Vibriosis-non Cholera* VISA VISA VISA VISA VISA VISA Other Subtotal Rabies Ablies Animal Rabies Subtotal Chancroid Chancroid Chanydia (Gental) Gonorrhea Gonorrhea Gyphilis- Congenital Syphilis- Congenital Syphilis- Congenital Syphilis- Primary Syphilis- Firmary Syphilis- Firmary Syphilis- Firmary Syphilis- Formary Syphilis- Formary Syphilis- Condary Syphilis- Firmary Syphilis- Condary Syphilis- Condary Syphilis- Condary Syphilis- Condary Syphilis- Condary Syphilis- Condary Syphilis- Gonorrhea Syphilis- Congenital Syphilis- C	1 3 36 40 4 3 1 - 1,695 2,321 48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 3 3 3 42 38	1 36 4 1 1,695 48 4 3,646 3 3,694		7	5	-	-	-	-	-	Toxic Shock
Tularemia Wibriosis-non Cholera* VISA VRSA VRSA VRSA Other Subtotal Rabies Rabies Animal Rabies: Potential Exposure & PEP* 2 43 111 2 2 1 2 2 6 5 8 54 Rabies: Potential Exposure & PEP* 2 43 111 2 2 0 35 6,471 5,960 3,454 Rabies: Potential Exposure & PEP* 2 43 111 2 2 0 37 6,547 6,018 3,508 STD Charcroid Chamydia (Genital) Chamydia (Genital) Chamydia (Genital) Conorrhea 1,030 1,090 1,1221 1,095 860 17,046 18,137 23,518 Granuloma Inquinale Lymphogranuloma venereum Syphilis - Congenital Syphilis - Cong	1 3 36 40 4 3 1 - 1,695 2,321 48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	1 36 4 1 1,695 48 3,646 3,694	-	-	-	-	-	-	-	-	Trachoma
Vibriosis-non Cholera *	36 40 4 3 1 - 1,695 2,321 48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	36 4 1 1,695 48 3,646 3 3,694		-	-	-	-	-	-	-	Trichinosis
VISA	4 3 1 - 1,695 2,321 48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	4 1 1,695 48 3,646 3,694	-	1	2	-	-	-	-	-	Tularemia
NPSA	1 - 1,695 2,321 48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	1 1,695 48 3,646 3,694 2	26	41	44	2	-	3	2	2	Vibriosis-non Cholera *
Other Subtotal 36	1,695 2,321 48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	1,695 48 4 3,646 3 3,694 2	-	11	8	-	-	-	-	-	
Rabies Rabies Animal	48 51 3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	48 3,646 3 3,694 2	-	-	-	-	-	-	-	-	VRSA
Rabies Potential Exposure & PEP * 2 43 111 20 35 6,471 5,960 3,454 Rabies Subtotal	3,646 3,626 3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	3,646 3,694 2	1,501	1,923	1,798	52	44	31		36	Other Subtotal
Rabies Subtotal 3 45 112 20 37 6,547 6,018 3,508	3,694 3,677 2 - 16,481 37,362 12,265 15,789 - 3 3 42 38	3,694	54	58	76	2	-	1	2	1	Rabies Rabies Animal
STD Chancroid Chamydia (Genital) Chamydia (2 - 16,481 37,362 12,265 15,789 3 3 42 38	2	3,454	5,960	6,471	35	20	111	43	2	Rabies: Potential Exposure & PEP *
Chlamydia (Genital)	26,481 37,362 22,265 15,789 3 3 3 42 38		3,508	6,018	6,547	37	20	112	45	3	Rabies Subtotal
Gonorrhea 1,030 1,090 1,221 1,095 860 17,046 18,137 23,518 Granuloma Inguinale 19 6 8 Syphilis - Congenital 2 3 3 2 15 14 30 Syphilis - Congenital 2 3 3 2 15 14 30 Syphilis - Early Latent 8 14 11 30 0 22 405 560 559 Syphilis - To Be Determined 2 3 3 2 405 560 559 Syphilis - To Be Determined 2 2 3 2 2 405 560 559 Syphilis - To Be Determined 2 2 3 2 2 5 5 60 559 Syphilis - To Be Determined 2 2	12,265 15,789 3 3 42 38		-	-	-	-	-	-	-	-	STD Chancroid
Granuloma Inguinale	3 3 42 38	0 46,481	45,180	50,152	51,673	1,684	1,902	1,949	2,318	2,364	Chlamydia (Genital)
Lymphogranuloma venereum	42 38	8 22,265	23,518	18,137	17,046	860	1,095	1,221	1,090	1,030	Gonorrhea
Syphilis - Congenital	42 38	-	-	-	-	-	-	-	-	-	Granuloma Inguinale
Syphilis - Early Latent 8		3	8	6	19	-	-	-	-	-	Lymphogranuloma venereum
Syphilis - Unknown Duration or Late 14 13 21 37 41 627 642 671 Syphilis - To Be Determined 2 2 2 2	745 745	42	30	14	15	2	3	2	-	-	Syphilis - Congenital
Syphilis - To Be Determined -	745 745	745	559	560	405	22	30	11	14	8	Syphilis - Early Latent
Syphilis - To Be Determined	931 1,053	931	671	642	627	41	37	21	13	14	Syphilis - Unknown Duration or Late
Syphilis - Secondary 10	- 1	-	-	-	2	-	-	-	-	-	
Syphilis - Secondary 10	356 406	356	319	271		15	31	16	9	2	
STD Subtotal 3,428 3,455 3,233 3,133 2,652 70,441 70,190 70,757	623 555	623	472	408	425	28	35	13	11	10	
Tuberculosis Latent Tuberculosis Infection 21 76 52 126 121 602 914 464 Nontuberculous Mycobacterium 21 18 21 21 18 840 855 686 Tuberculosis 2			70.757	70.190	70.441	2.652		3.233	3.455	3.428	
Nontuberculous Mycobacterium 21	649 651			•				•			Tuberculosis Latent Tuberculosis Infection
Tuberculosis	769 829										
Tuberculosis Subtotal	137 121										•
VPD Chickenpox (Varicella) Diphtheria 12 10 3 5 3 433 424 186 Diphtheria -											
Diphtheria	179 229										
H. influenzae Disease - Inv. S 6 5 1 3 174 215 108 Measles 19 46 - Mumps 42 25 5 Pertussis 16 7 2 1 1 656 540 154 Polio 1 Rubella - 1 Shingles 9 10 22 37 28 1,248 1,225 819 Tetanus - 2 1 - VZ Infection, Unspecified 1 1 2 - 2 228 198 VPD Subtotal 43 34 34 44 35 2,786 2,704 1,471 Vectorborne Babesiosis 3 1 - Chikungunya * - 1 - 2 1 - Dengue Fever * - 1 - 10 21 3 Ehrlichiosis, Anaplasma phagocytophilum * - - 1 1 1 1 Ehrlichiosis, Anaplasmosis Undetermined - - 1 1 1 1 Ehrlichiosis, Ehrlichia edingii * - - - - - - Ehrlichiosis, Ehrlichia ewingii * - - - - - - Encephalitis, Eastern Equine * - 3 - - - 1 10 4 Encephalitis, Powassan * - - - - - - - - -											, , ,
Measles	152 197	152	108	215	174	3	1	5	6	5	•
Mumps	2 5					-		-			
Pertussis	4 13		5			_	_	_	_	_	
Polio	72 86					1	1	2	7	16	·
Rubella								-	-		
Shingles	5 7							_			
Tetanus	630 736										
VZ Infection, Unspecified 1 1 2 - - 212 228 198 VPD Subtotal 43 34 34 44 35 2,786 2,704 1,471 Vectorborne Babesiosis -	1 -									9	_
VPD Subtotal 43 34 34 44 35 2,786 2,704 1,471 Vectorborne Babesiosis - - - - - - 3 1 - Chikungunya * - 1 - - - 2 1 - Dengue Fever * - 1 - - - 10 21 3 Ehrlichiosis, Anaplasma phagocytophilum * - - - - - 14 13 18 Ehrlichiosis, Anaplasmosis Undetermined - - - - - 14 13 18 Ehrlichiosis, Ehrlichia chaffeensis * - 1 - <td>326 307</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td>	326 307									1	
Vectorborne Babesiosis -											· •
Chikungunya * - 1 - - 2 1 - Dengue Fever * - 1 - - - 10 21 3 Ehrlichiosis, Anaplasma phagocytophilum * - - - - - 14 13 18 Ehrlichiosis, Anaplasmosis Undetermined - - - - - 1 - - - Ehrlichiosis, Ehrlichia chaffeensis * - 1 - - - 7 6 1 Ehrlichiosis, Ehrlichia ewingii * -	4 16							34			
Dengue Fever * - 1 10 21 3 Ehrlichiosis, Anaplasma phagocytophilum * 14 13 18 Ehrlichiosis, Anaplasmosis Undetermined 1 1 Ehrlichiosis, Ehrlichia chaffeensis * - 1 7 6 1 Ehrlichiosis, Ehrlichia ewingii * Encephalitis, California Serogroup * - 1 2 - 2 3 4 Encephalitis, Eastern Equine * - 3 1 10 21 3 18 18 19 10 11 12 13 18 18 19 11 11 11 12 12 13 14 13 18 18 19 11 12 12 13 14 13 18 18 19 11 11 11 11 12 13 18 18 18 19 19 10 11 11 11 11 11 11 12 11 12 12 13 14 13 18 18 18 18 18 19 19 10 11 11 11 11 11 11 12 11 12 11 12 11 12 11 12 11 13 18 18 18 18 18 18 18 18 18 18 18 18 18	1 1							-			
Ehrlichiosis, Anaplasma phagocytophilum * - - - - 14 13 18 Ehrlichiosis, Anaplasmosis Undetermined - - - 1 -						-	-	-		_	- ·
Ehrlichiosis, Anaplasmosis Undetermined Ehrlichiosis, Ehrlichia chaffeensis * Ehrlichiosis, Ehrlichia ewingii * Encephalitis, California Serogroup * Encephalitis, Eastern Equine * Encephalitis, Powassan * Ehrlichiosis, Ehrlichia ewingii *	5 10 57 70					-	-	-	1	-	
Ehrlichiosis, Ehrlichia chaffeensis * - 1 - - - 7 6 1 Ehrlichiosis, Ehrlichia ewingii * -		5/	19	13	14	-	-	-	-	-	
Ehrlichiosis, Ehrlichia ewingii * -	- 1	-	-	-		1	-	-	-	-	
Encephalitis, California Serogroup * 1 2 - 2 3 4 Encephalitis, Eastern Equine * - 3 1 10 4 Encephalitis, Powassan *	3 10					-	-	-	1	_	
Encephalitis, Eastern Equine * - 3 1 10 4 Encephalitis, Powassan *						-	-	-	-	_	
Encephalitis, Powassan *	8 5					-	2	1	-	_	
	1 -	1	4			-	-	-	3	-	
	-	-	-	-	-	-	-	-	-	-	·
Encephalitis, St. Louis *	1 -		-	-	-	-	-	-	-	-	·
Encephalitis, Western Equine *								-	-	-	· · · · · · · · · · · · · · · · · · ·
Lyme Disease 40 58 69 149 117 272 412 472	860 732							69			•
Malaria - 1 - 1 4 30 23 16	13 33					4	1	-	1		
Rickettsial Disease - Spotted Fever * 1 17 10 5	5 10	5	5	10	17	-	-	-	-	1	·
Rickettsial Disease - Typhus	- 1	-	-			-	-	-	-	-	**
West Nile Virus * 1 17 8 -	- 1	-	-	8	17	-	-	-	-	1	
Yellow Fever *		-	-	-	-	-	-	-	-	-	
Zika * 1		-	-	-	1	-	-	-	-	-	Zika *
Vectorborne Subtotal 42 65 70 152 122 464 512 555	-	1,007	555	512	464	122	152	70	65	42	Vectorborne Subtotal
Viral Hepatitis Hepatitis 4 1 1 - 358 78 21		26	21	78	358	-	-	1	1	4	Viral Hepatitis Hepatitis A
Hepatitis B, Acute - 2 - 1 - 78 66 45	 1,007 902	36	45	66	78	-	1	-	2	-	Hepatitis B, Acute
Hepatitis B, Chronic 21 28 18 6 14 1,065 1,006 681	 1,007 902 26 23		681	1,006	1,065	14	6	18	28	21	Hepatitis B, Chronic
Hepatitis B, Perinatal 1	 1,007 902 26 23	624	-		1	-	-	-	-	-	

		Count	y Cases Re	ported**			Michigan Cases Reported					
Disease Group Reportable Condition	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022		
Viral Hepatitis Hepatitis C, Acute	7	2	1	4	4	178	129	142	129	128		
Hepatitis C, Chronic	234	115	90	59	94	9,843	5,696	4,109	3,863	3,685		
Hepatitis C, Perinatal	-	-	-	-	-	11	10	7	10	7		
Viral Hepatitis Subtotal	266	148	110	70	112	11,546	7,019	5,020	4,698	4,576		
Total	19,006	10,607	21,669	34,660	44,882	508,082	448,942	841,008	1,401,037	1,629,291		

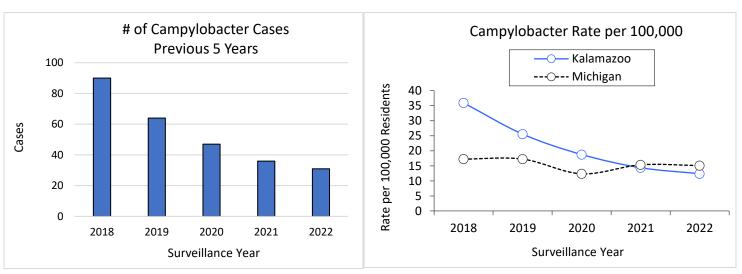
^{*} Indicates includes historic and current forms in MDSS

 $[\]ensuremath{^{**}}$ Data for cases reported is based on week case was referred to the health department

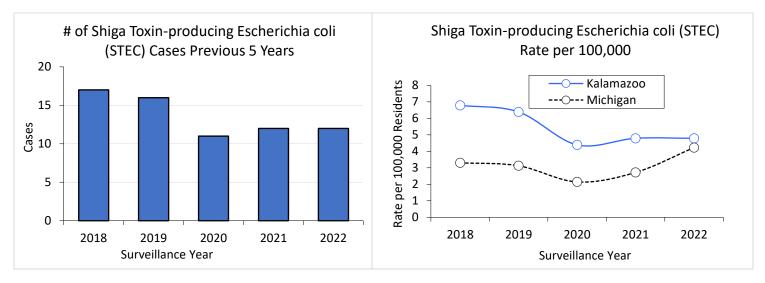
Selected Foodborne Illnesses



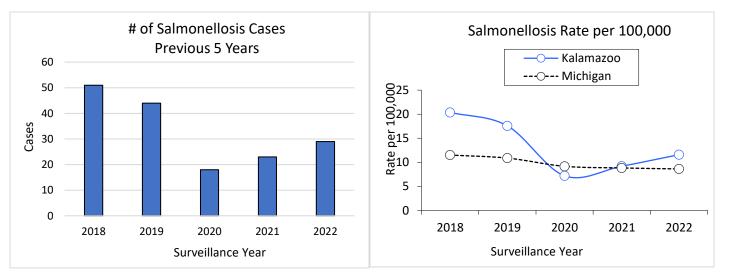
Campylobacter was the most commonly reported foodborne illness in the county (excluding norovirus) in 2022. However, the number of cases reported has steadily decreased in the county since 2018. The county 2022 case rate per 100,000 was slightly lower than the rate for MI.



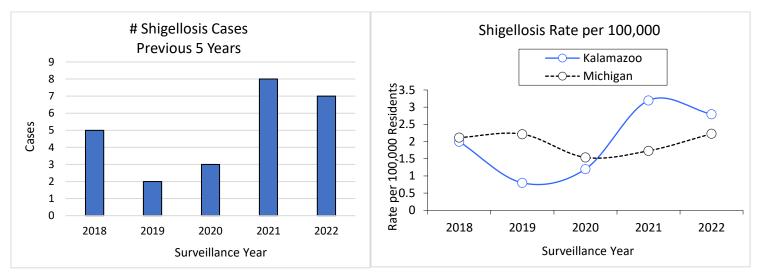
For the past three years the number of STEC cases reported in the county has been stable. Counts for 2022 were lower compared to 2018-19. Typically, the county had a higher case rate compared to MI, in 2022 rates were similar. In 2022, MI was part of two multi-state outbreaks of STEC.



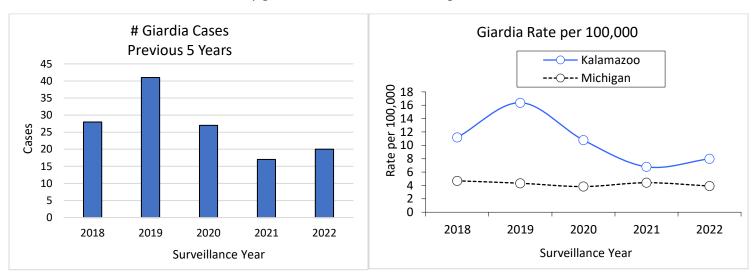
Salmonellosis was the second most commonly reported foodborne illness in the county in 2022 (excluding norovirus). There has been as steady increase in the number of cases reported after low case counts in 2020. However, case counts have not reached similar numbers to 2018/2019. The county 2022 rate was slightly higher than the case rate for MI.



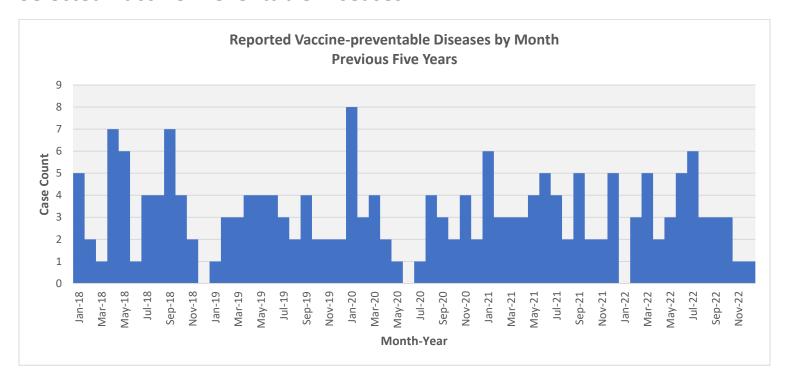
During 2021 and 2022, there were more cases of shigellosis reported compared to the previous three years. The county case rate was also higher compared to MI for both years.



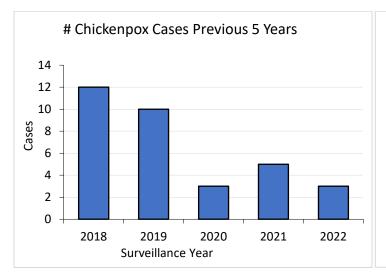
A slightly larger number of cases of giardia were reported in 2022 compared to 2021; however, case counts were still below those in 2018-2020. The county giardia case rate has been higher than the MI rate since 2018.

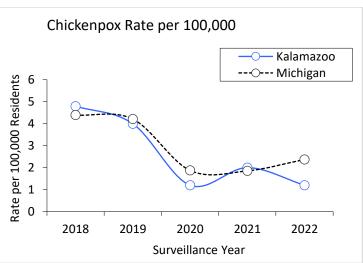


Selected Vaccine Preventable Diseases

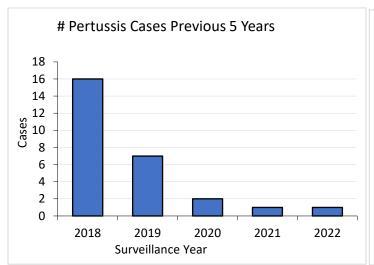


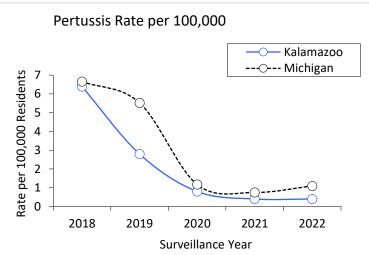
In 2022, the number of cases of chickenpox reported in the county was lower compared to 2021. Kalamazoo county has similar rates to MI since 2018; however, in 2022 the rate was slightly lower. The U.S. vaccination program for chickenpox/varicella began in 1995, during the first 25 years of the program it is estimated that the vaccine has prevented an estimated 91 million cases, 238,000 hospitalizations and 2,000 deaths nationwide (www.cdc.gov/chickenpox).



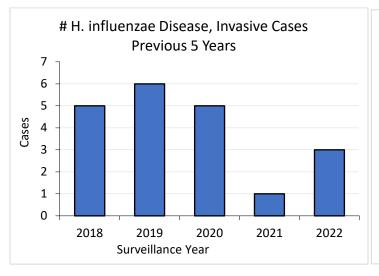


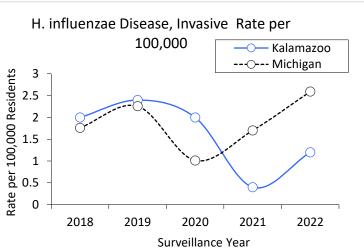
In the county there has been a steady decrease in the number of cases of pertussis ('Whooping Cough') reported since 2018. During this time the annual county case rate has been lower compared to the rate for the state of MI.



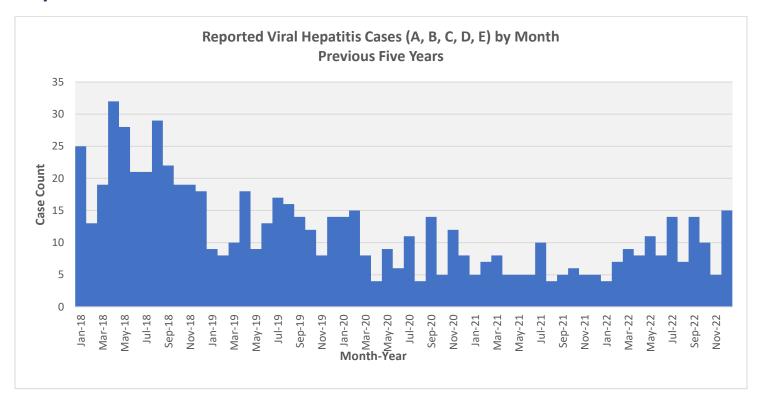


In 2022, the number of cases of H. influenzae disease increased compared to the previous year; however, the case rate was lower compared to MI. Case counts remain below 2018-2020 counts.

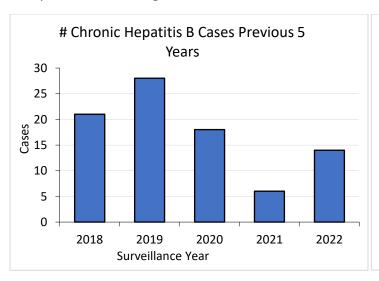


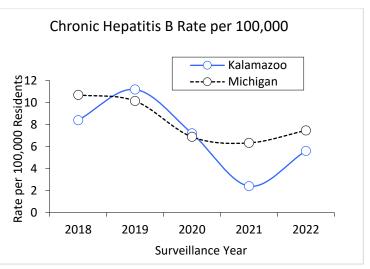


Hepatitis

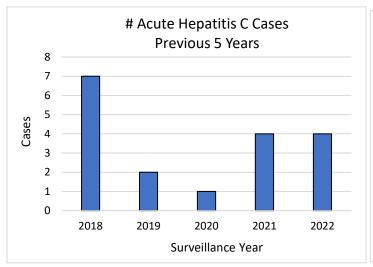


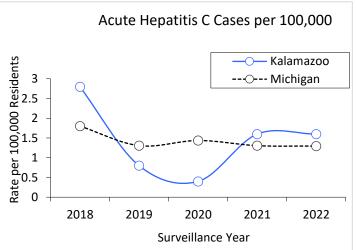
There was an increase in the number of chronic hepatitis B cases reported in 2022 compared to the previous year, counts remain below 2018-2020. The county had a lower rate compared to MI for the past two years, rates during 2019-2020 were similar.



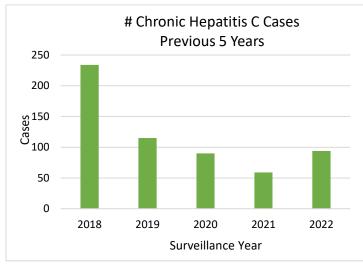


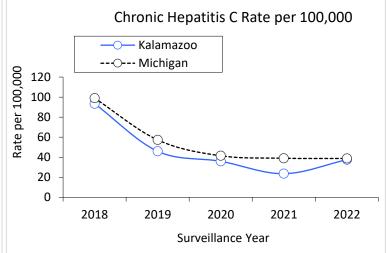
Case counts for acute hepatitis C were similar for 2021 and 2022. The case rate for MI was higher compared to the county for 2022.

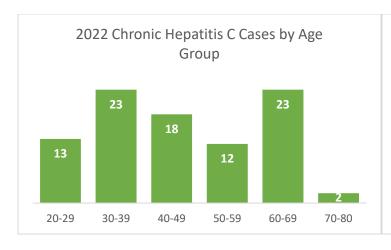


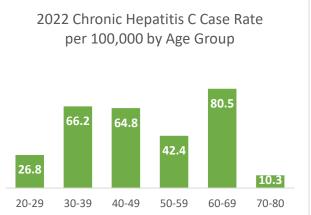


In 2022, Kalamazoo County had a larger number of cases reported compared to 2021, counts were similar to 2020. County rates were similar to the state since 2018. The charts below show the number of chronic hepatitis C cases reported by age group for 2022 and age-specific case rates. The highest case rate was in those age 60-69 years followed by the 30-49 year old age group.

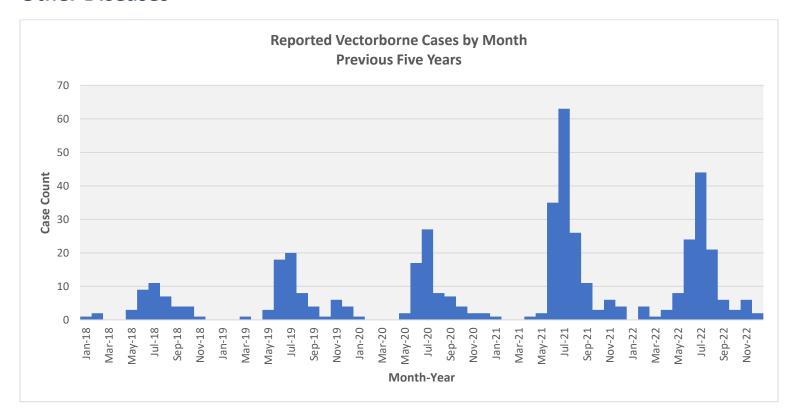




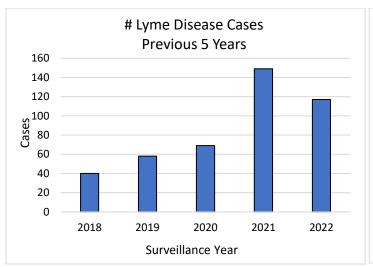


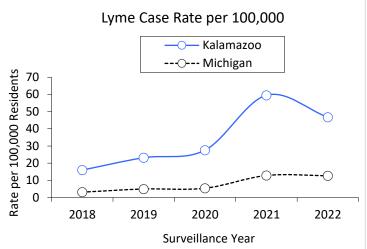


Other Diseases

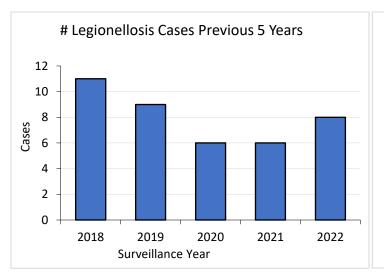


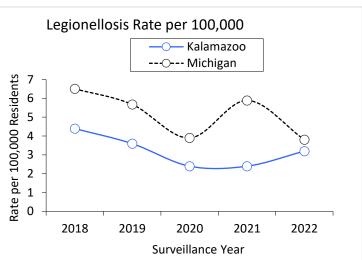
After a statewide increase in cases reported during 2021, the number of cases reported in county residents decreased in 2022. The county case rate has been higher compared to MI since 2018. Cases are reported by county of residence, not location of exposure to the tick vector (blacklegged tick). This tick vector is endemic in Michigan in portions of the Upper Peninsula and in the Western Lower Peninsula. However, the tick is now expanding into other areas in the state (www.michigan.gov/emergingdiseases)



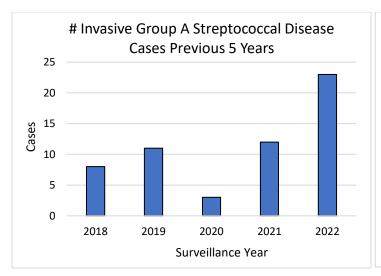


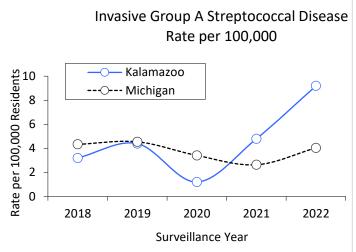
In 2022, the number of cases of legionellosis reported increased slightly compared to the previous year; however, the county case rate remined below the state rate.





The number of Invasive Group A Streptococcal (iGAS) cases was at the largest number reported since 2018. The county case rate was higher compared to MI for both 2021 and 2022. In 2022, the CDC began an investigation of an increase of iGAS among children in the U.S. In Kalamazoo, the cases reported were in adults age 18 and older. No specific clusters of illness were identified.





An outbreak of mpox occurred in the U.S. and other countries during 2022. In Kalamazoo county fewer than five cases were identified in county residents. The county case rate remained below the MI case rate for the year. A total of 271 residents received their first dose of the mpox vaccine, 202 received their second dose (data as of 1/30/23). The majority of those receiving the vaccine were male (90%, sex assigned at birth) and between the ages of 20-39 years (62%).

