



Weekly Disease Report For The Week Ending December 14th, 2019 (MMWR Week 50)

The Michigan Disease Surveillance System (MDSS) has revolutionized communicable disease reporting in Michigan; and subsequently, has transformed the Weekly Disease Report. The advent of the MDSS allows immediate communication among disease reporting authorities, local health departments, and the Michigan Department of Health and Human Services (MDHHS) regarding investigations into possible cases of communicable disease. Information on these possible cases is available in MDSS regardless of whether they are suspected, probable, or confirmed cases of disease.

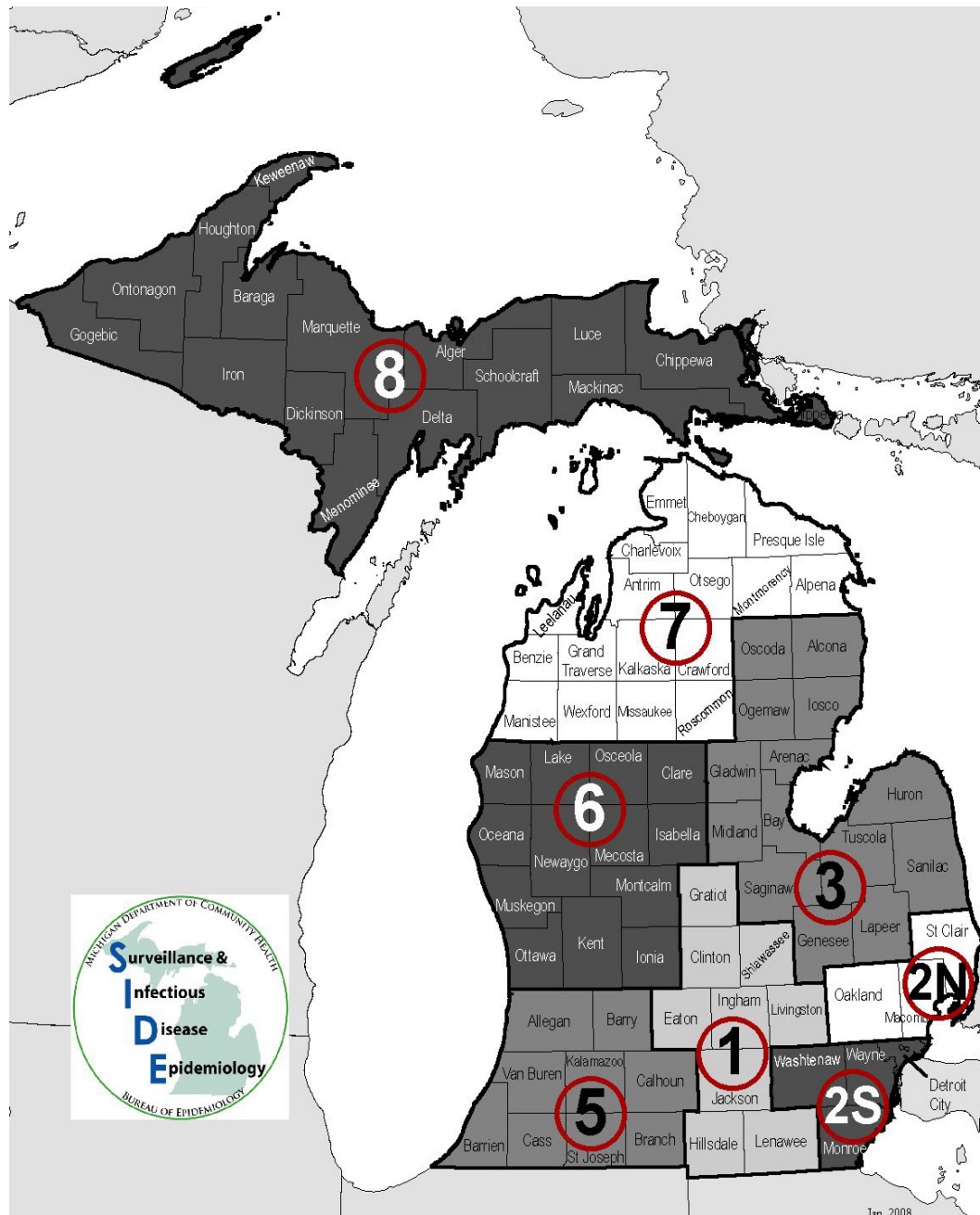
The data in the Weekly Disease Report are provisional, based on current reports to MDHHS by local health departments. The MDSS is a dynamic, continually active system: counts of disease are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting the case definition. The Weekly Disease Report reflects this constant activity as the numbers slightly fluctuate each week. Therefore, it should be kept in mind that numbers in the Weekly Disease Report are NOT final and should be used only to generally monitor trends over time. Please contact your local health department for definitive numbers to be used for research or reporting purposes. To find your local health department, please visit

<http://www.malph.org>

Clarification of terms used in the Weekly Disease Report:

MMWR Week: This week (established by the Centers for Disease Control and Prevention) runs from Sunday to Saturday and is assigned a sequentially increasing number from the first week containing a Wednesday in January. For example: 38-2010 is the 38th week in 2010 and corresponds to the week ending September 25, 2010.

Region: Michigan is divided into 8 Emergency Preparedness Regions. To determine which counties belong in which regions, please see below.



Questions regarding the content of the Weekly Disease Report should be referred to the Surveillance and Infectious Disease Epidemiology Section at 517-335-8165.

Reported Cases of All Reportable Conditions Michigan Disease Surveillance System

Disease Group	Reportable Condition	Cases Reported In The Last 4 Weeks**				Total Cases Reported In Each Of The Last 5 Years***				
		47-2019	48-2019	49-2019	50-2019	2015	2016	2017	2018	2019
Foodborne	Amebiasis	0	0	0	0	32	15	6	2	9
	Botulism - Foodborne	0	0	0	0	0	0	0	0	0
	Campylobacter	27	23	29	17	1,335	1,644	1,738	1,705	1,628
	Cryptosporidiosis	6	7	6	3	239	437	425	383	399
	Giardiasis	4	5	4	3	449	587	568	463	426
	Listeriosis	0	1	0	1	0	0	0	19	29
	Listeriosis (2014-2017)*	0	0	0	0	20	18	30	4	1
	Norovirus	29	0	3	81	767	1,433	1,087	1,012	1,117
	Paratyphoid Fever	0	0	0	0	0	0	0	1	4
	Salmonellosis	13	12	6	14	964	1,069	1,093	1,163	1,028
	Shiga toxin-producing Escherichia coli --	0	0	0	0	147	201	201	328	25
	Shiga toxin-producing Escherichia coli --	2	5	5	1	0	0	0	0	266
	Shigellosis	3	4	4	3	514	706	460	209	209
	Typhoid Fever	0	0	0	0	9	7	14	6	9
	Yersinia enterocolitica	0	1	1	1	20	41	66	82	74
Subtotal		84	58	58	124	4,496	6,158	5,688	5,377	5,224
Influenza	Flu Like Disease*	8,522	3,504	6,853	2,365	297,299	321,126	394,863	379,206	291,567
	Influenza	164	246	625	853	6,793	14,458	26,018	47,212	27,254
	Influenza, Novel	0	0	0	0	0	22	2	3	1
	Subtotal	8,686	3,750	7,478	3,218	304,092	335,606	420,883	426,421	318,822
Meningitis	Meningitis - Aseptic	9	4	10	3	807	665	659	827	430
	Meningitis - Bacterial Other	4	1	3	3	137	168	126	149	115
	Meningococcal Disease	0	0	0	0	8	7	6	4	7
	Streptococcus pneumoniae, Inv	7	15	26	13	678	813	841	791	853
	Subtotal	20	20	39	19	1,630	1,653	1,632	1,771	1,405
Other	Acute Flaccid Myelitis (AFM)	0	0	0	0	0	0	0	6	2
	Anthrax	0	0	0	0	0	0	0	0	0

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		47-2019	48-2019	49-2019	50-2019	2015	2016	2017	2018	2019
	Blastomycosis	0	0	0	3	13	15	22	18	23
	Botulism - Infant	0	0	0	0	1	1	0	1	0
	Botulism - Other	0	0	0	0	0	0	0	2	0
	Brucellosis	0	0	0	0	2	2	2	4	2
	CP-CRE	0	0	0	4	0	0	0	0	6
	CP-CRE (Pre-2020)*	14	10	15	13	195	132	145	396	373
	Candida auris	0	0	0	0	0	0	0	0	0
	Cholera	0	0	0	0	0	0	0	0	2
	Cholera (Pre-2019)*	0	0	0	0	0	1	1	1	0
	Coccidioidomycosis	1	2	1	2	26	37	43	40	55
	Creutzfeldt-Jakob Disease	0	0	0	0	18	14	13	12	14
	Cryptococcosis	0	0	1	1	33	12	15	15	18
	Cyclosporiasis	0	0	0	1	0	0	0	0	1
	Cyclosporiasis (Pre-2020)*	0	0	0	0	8	3	41	30	129
	Encephalitis, Post Chickenpox	0	0	0	0	0	0	0	1	1
	Encephalitis, Post Mumps	0	0	0	0	0	0	0	0	0
	Encephalitis, Post Other	0	0	0	0	21	16	21	10	14
	Encephalitis, Primary	0	0	0	0	12	10	15	18	11
	Gastrointestinal Illness	4,459	1,702	3,385	2,593	96,794	108,517	158,881	154,968	130,233
	Guillain-Barre Syndrome	0	0	1	0	52	46	53	47	58
	Hantavirus	0	0	0	1	0	1	0	0	1
	Hantavirus, Other	0	0	0	0	0	0	0	0	0
	Hantavirus, Pulmonary	0	0	0	0	0	0	0	0	0
	Hemolytic Uremic Syndrome	0	0	0	0	0	0	0	0	7
	Hemolytic Uremic Syndrome (Pre-2019)*	0	0	0	0	12	9	6	11	0
	Hemorrhagic Fever	0	0	0	0	0	0	0	0	0
	Histoplasmosis	3	6	9	7	189	162	177	162	211
	Kawasaki	0	1	1	1	56	50	46	35	54
	Legionellosis	12	3	6	5	260	309	349	643	550
	Leprosy	0	0	0	0	1	0	0	1	0
	Leptospirosis	0	0	0	0	0	5	4	1	3

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Reported Cases of All Reportable Conditions Michigan Disease Surveillance System

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		47-2019	48-2019	49-2019	50-2019	2015	2016	2017	2018	2019
	Melioidosis+	0	0	0	0	1	0	1	0	0
	Novel Coronavirus~~	0	0	0	1	0	0	0	1	1
	Plague	0	0	0	0	1	0	0	0	0
	Psittacosis	0	0	1	0	0	2	1	4	1
	Q Fever Acute	0	0	0	0	2	1	3	4	1
	Q Fever Chronic	0	0	0	0	2	1	2	1	0
	Q Fever*	0	0	0	3	2	4	0	3	9
	Rabies Human	0	0	0	0	0	0	0	0	0
	Reye Syndrome	0	0	0	0	0	0	0	0	0
	Rheumatic Fever	0	0	0	0	2	4	0	0	0
	Rubella - Congenital	0	0	0	0	0	0	0	0	0
	Streptococcal Dis, Inv, Grp A	10	11	2	6	321	397	458	428	423
	Streptococcal Toxic Shock	0	0	0	0	11	2	2	5	5
	Streptococcus pneumoniae, Drug Resistant	0	0	2	1	95	113	110	96	62
	Toxic Shock	1	1	0	0	7	7	2	4	9
	Trachoma	0	0	0	0	2	0	0	0	0
	Trichinosis	0	0	0	1	0	1	0	0	1
	Tularemia	0	0	0	0	0	1	0	2	1
	VISA	0	0	0	0	4	4	7	8	11
	VRSA	0	0	0	0	1	0	0	0	0
	Vibriosis - Non Cholera	0	0	0	0	0	0	1	0	33
	Vibriosis - Non Cholera (Pre-2019)*	0	0	0	0	9	9	19	45	5
	Subtotal	4,500	1,736	3,424	2,643	98,153	109,888	160,440	157,023	132,330
Rabies										
	Rabies Animal	1	0	0	0	36	45	44	76	56
	Rabies: Potential Exposure & PEP	82	65	76	73	0	3	0	50	5,277
	Rabies: Potential Exposure & PEP(Pre-2019)*	0	0	0	0	3,799	4,911	5,511	6,461	476
	Subtotal	83	65	76	73	3,835	4,959	5,555	6,587	5,809
STD										
	Chancroid	0	0	0	0	0	0	1	0	0
	Chlamydia (Genital)	1,004	789	958	958	47,895	49,412	51,739	51,262	48,419

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		47-2019	48-2019	49-2019	50-2019	2015	2016	2017	2018	2019
	Gonorrhea	359	314	395	360	10,645	13,102	15,384	16,928	17,385
	Granuloma Inguinale	0	0	0	0	0	0	0	0	0
	Lymphogranuloma venereum	0	0	0	0	24	20	9	16	1
	Syphilis - Congenital	2	1	1	2	11	13	10	14	20
	Syphilis - Early Latent	8	1	4	6	288	302	343	413	480
	Syphilis - Late Latent*	0	0	0	0	378	429	415	0	0
	Syphilis - Late with Manifestations*	0	0	0	0	25	15	20	0	0
	Syphilis - Latent of Unknown Duration*	1	1	1	0	7	39	27	0	16
	Syphilis - Primary	3	5	5	1	127	139	165	228	233
	Syphilis - Secondary	4	0	5	2	273	241	315	427	362
	Syphilis - To Be Determined	20	21	47	69	0	0	0	1	223
	Syphilis - Unknown Duration or Late	6	5	2	3	0	0	9	627	538
	Subtotal		1,407	1,137	1,418	1,401	59,673	63,712	68,437	69,916
Tuberculosis										
	Latent Tuberculosis Infection	41	34	34	26	0	7	120	1,125	1,969
	Nontuberculous Mycobacterium	14	16	19	14	86	124	272	841	819
	Tuberculosis	4	3	5	14	139	136	140	111	152
	Subtotal	59	53	58	54	225	267	532	2,077	2,940
VPD										
	Chickenpox (Varicella)	9	13	10	6	561	556	543	436	411
	Diphtheria	0	0	0	0	0	0	0	0	0
	H. influenzae Disease - Inv.	5	6	7	2	132	187	199	174	206
	Measles	0	0	0	1	1	1	2	19	48
	Mumps	0	0	1	0	20	37	47	81	28
	Pertussis	13	11	7	6	460	417	761	658	482
	Polio	0	0	0	0	0	0	0	0	0
	Rubella	0	0	0	0	0	0	0	0	0
	Shingles	26	11	21	20	705	866	976	1,252	1,132
	Tetanus	0	0	0	0	0	1	2	2	1
	VZ Infection, Unspecified	9	3	8	15	187	172	270	212	258
Subtotal	62	44	54	50	2,066	2,237	2,800	2,834	2,566	

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		47-2019	48-2019	49-2019	50-2019	2015	2016	2017	2018	2019
Vectorborne										
	Babesiosis++	0	0	0	0	2	5	3	6	6
	Chikungunya~	0	0	0	0	0	0	0	0	0
	Chikungunya (Pre-2020)*	0	0	1	0	6	4	4	2	3
	Dengue Fever	0	0	0	1	0	0	0	0	1
	Dengue Fever (Pre-2020)*	2	3	0	1	23	16	11	12	24
	Ehrlichiosis*	0	0	0	0	0	0	0	0	0
	Ehrlichiosis, Anaplasma phagocytophilum	0	0	0	0	0	0	0	0	0
	Ehrlichiosis, Anaplasma phagocytophilum	0	0	0	0	7	8	15	17	18
	Ehrlichiosis, Anaplasmosis Undetermined	0	0	0	0	0	0	0	0	0
	Ehrlichiosis, Ehrlichia chaffeensis	0	0	0	0	0	0	0	0	0
	Ehrlichiosis, Ehrlichia chaffeensis (2009-	0	0	2	1	6	8	3	8	15
	Ehrlichiosis, Ehrlichia ewingii	0	0	0	0	0	0	0	0	0
	Ehrlichiosis, Ehrlichia ewingii (2009-2019)*	0	0	0	0	0	0	0	0	0
	Ehrlichiosis, human granulocytic*	0	0	0	0	0	0	0	0	0
	Ehrlichiosis, human monocytic*	0	0	0	0	0	0	0	0	0
	Ehrlichiosis, human other/undetermined	0	0	0	0	0	0	3	1	0
	Ehrlichosis human, other, unsp*	0	0	0	0	0	0	0	0	0
	Encephalitis, California (Pre-2020)*	0	0	0	0	1	0	0	2	2
	Encephalitis, California Serogroup	0	0	0	0	0	0	0	0	0
	Encephalitis, Eastern Equine	0	0	0	0	0	0	0	0	0
	Encephalitis, Eastern Equine (Pre-2020)*	0	0	0	0	0	2	0	1	11
	Encephalitis, Powassan	0	0	0	0	0	0	0	0	0
	Encephalitis, Powassan (Pre-2020)*	0	0	0	0	0	0	0	0	0
	Encephalitis, St. Louis	0	0	0	0	0	0	0	0	0
	Encephalitis, St. Louis (Pre-2020)*	0	0	0	0	0	0	0	0	0
	Encephalitis, Western Equine	0	0	0	0	0	0	0	0	0
	Encephalitis, Western Equine (Pre-2020)*	0	0	0	0	0	0	0	0	0
	Lyme Disease	9	10	11	16	151	232	346	307	571
	Malaria	0	0	0	0	21	43	45	29	23
	Rickettsial Disease - Spotted Fever	0	0	0	1	0	0	0	0	1

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		47-2019	48-2019	49-2019	50-2019	2015	2016	2017	2018	2019
	Rickettsial Disease - Spotted Fever (Pre-	1	0	1	0	2	14	13	23	17
	Rickettsial Disease - Typhus	0	0	0	0	0	1	0	0	0
	West Nile Virus	0	0	0	0	0	0	0	0	1
	West Nile Virus (Pre-2020)*	0	0	1	0	19	45	43	105	15
	Yellow Fever	0	0	0	0	0	0	0	0	0
	Yellow Fever (Pre-2020)*	0	0	0	0	0	0	0	0	0
	Zika~~	0	0	0	0	0	0	0	0	0
	Zika (Pre-2020)*	0	0	0	0	0	75	10	2	0
	Subtotal		12	13	16	20	238	453	496	515
Viral Hepatitis										
	Hepatitis A	2	1	3	3	71	132	705	332	89
	Hepatitis B, Acute	12	4	13	45	60	51	63	80	176
	Hepatitis B, Chronic	19	22	33	43	1,079	1,270	1,213	1,079	1,092
	Hepatitis B, Perinatal	0	0	1	1	0	0	1	1	4
	Hepatitis C, Acute	42	36	68	69	89	159	233	175	487
	Hepatitis C, Chronic	168	72	92	121	7,806	11,812	11,967	10,341	6,111
	Hepatitis C, Perinatal	0	0	0	1	1	3	3	11	14
	Hepatitis E	0	0	0	0	7	4	5	9	5
Subtotal		243	135	210	283	9,113	13,431	14,190	12,028	7,978

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Complete HIV/AIDS statistics can be found at: http://www.michigan.gov/mdch/0,1607,7-132-2944_5320_5331---,00.html

* Indicates disease no longer reported into the MDSS on an individual cases basis.

** Data for cases reported in the last 4 weeks is based on the date the case was referred.

*** Data for cases reported in the last 5 years is for the entire year except for the current year which is year to date.

+ Indicates Disease added to MDSS in February 2012

++ Indicates Disease added to MDSS in December 2013

~ Indicates Disease added to MDSS in March 2015

~~ Indicates Disease added to MDSS in April 2016

Table of Diseases by Geographic Location																								
Time Period: Week 50-2019																								
Disease	Alcona		Alger		Allegan		Alpena		Antrim		Arenac		Baraga		Barry		Bay		Benzie		Berrien		Branch	
	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD
Zika (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1	140	1	49	27	9,231	4	306	3	360	3	126	2	337	391	9,226	136	6,566	13	446	364	21,099	214	6,131

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Table of Diseases by Geographic Location																								
Time Period: Week		50-2019																						
Disease	Calhoun		Cass		Charlevoix		Cheboygan		Chippewa		Clare		Clinton		Crawford		Delta		Detroit City		Dickinson		Eaton	
	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD
Zika (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	492	14,348	10	1,906	8	1,417	1	173	14	778	8	2,615	6	3,447	2	742	5	576	585	23,508	5	1,699	885	17,926

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Table of Diseases by Geographic Location																								
Time Period: Week 50-2019																								
Disease	Emmet		Genesee		Gladwin		Gogebic		Grand Traverse		Grafton		Hillsdale		Houghton		Huron		Ingham		Ionia		Iosco	
	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD
Acute Flaccid Myelitis (AFM)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Amebiasis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-
Anthrax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Babesiosis++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blastomycosis	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Botulism - Foodborne	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Botulism - Infant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Botulism - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brucellosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Campylobacter	-	7	-	31	-	7	-	3	-	8	-	4	-	14	-	4	-	5	1	35	-	11	-	2
Candida auris	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chancroid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickenpox (Varicella)	-	6	-	9	-	-	-	-	-	6	-	1	-	5	-	-	-	-	1	17	-	4	-	-
Chikungunya~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chikungunya (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlamydia (Genital)	2	63	61	2,810	2	58	-	29	4	255	2	123	5	92	1	62	-	48	29	1,797	-	164	1	42
Cholera	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Cholera (Pre-2019)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coccidioidomycosis	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-
CP-CRE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
CP-CRE (Pre-2020)*	-	-	-	13	-	-	-	-	-	-	-	-	3	-	-	-	1	-	5	-	-	-	-	1
Creutzfeldt-Jakob Disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cryptococcosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-
Cryptosporidiosis	-	1	-	14	-	3	-	2	-	7	-	2	-	3	-	2	-	2	-	-	-	2	-	-
Cyclosporiasis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclosporiasis (Pre-2020)*	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Dengue Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dengue Fever (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis, Anaplasma phagocytophilum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis, Anaplasma phagocytophilum (2009-2019)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Ehrlichiosis, Anaplasmosis Undetermined	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis, Ehrlichia chaffeensis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis, Ehrlichia chaffeensis (2009-2019)*	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis, Ehrlichia ewingii	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis, Ehrlichia ewingii (2009-2019)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis, human granulocytic*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis, human monocytic*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis, human other/undetermined (2009-2019)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrlichiosis human, other, unsp*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, California (Pre-2020)*	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, California Serogroup	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, Eastern Equine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, Eastern Equine (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, Post Chickenpox	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, Post Mumps	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, Post Other	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, Powassan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, Powassan (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, Primary	-	-	-	5	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-

Table of Diseases by Geographic Location																								
Time Period: Week 50-2019																								
Disease	Emmet		Genesee		Gladwin		Gogebic		Grand Traverse		Graftot		Hillsdale		Houghton		Huron		Ingham		Ionia		Iosco	
	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD
Zika (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Total	2	2,042	132	11,419	4	432	100	776	189	4,856	9	6,024	119	4,073	1	1,836	48	1,282	93	11,246	2	4,246	4	277

Disease counts reported here do NOT represent final numbers and are subject to change after cases are reviewed.

Table of Diseases by Geographic Location																									
Time Period: Week 50-2019																									
Disease	Iron		Isabella		Jackson		Kalamazoo		Kalkaska		Kent		Keweenaw		Lake		Lapeer		Leelanau		Lenawee		Livingston		
	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	
Zika (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1	731	18	3,980	78	10,571	676	19,897	1	1,552	165	42,393	0	11	3	135	18	3,139	2	432	8	4,674	602	18,567	

Disease counts reported here do NOT represent final numbers and are subject to change after cases are reviewed.

Table of Diseases by Geographic Location																									
Time Period: Week 50-2019																									
Disease	Luce		Mackinac		Macomb		Manistee		Marquette		Mason		Mecosta		Menominee		Midland		Missaukee		Monroe		Montcalm		
	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	
Zika (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	7	212	3	146	242	30,385	1	2,168	9	1,312	2	572	4	3,334	2	190	85	4,877	92	564	30	4,103	12	10,777	

Disease counts reported here do NOT represent final numbers and are subject to change after cases are reviewed.

Table of Diseases by Geographic Location																								
Time Period: Week 50-2019																								
Disease	Montmorency		Muskegon		Newaygo		Oakland		Oceana		Ogemaw		Ontonagon		Osceola		Oscoda		Otsego		Ottawa		Presque Isle	
	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD
Zika (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	0	34	59	12,643	5	2,978	351	46,941	62	2,652	1	221	1	260	4	1,318	1	56	0	0	87	49,938	1	141

Disease counts reported here do NOT represent final numbers and are subject to change after cases are reviewed.

Table of Diseases by Geographic Location																									
Time Period: Week		50-2019																							
Disease	Roscommon		Saginaw		Sanilac		Schoolcraft		Shiawassee		St Clair		St Joseph		Tuscola		Van Buren		Washtenaw		Wayne		Wexford		
	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	Current	YTD	
Zika (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3	218	250	11,799	4	246	1	243	14	2,748	272	8,349	125	4,872	15	2,604	20	4,932	147	22,146	437	29,240	60	1,957	

Disease counts reported here do NOT represent final numbers and are subject to change after cases are reviewed.

Report 8: Epi-Curve Graph

Time Period: 12/14/2017 - 12/14/2019

Time Breakdown: by Week

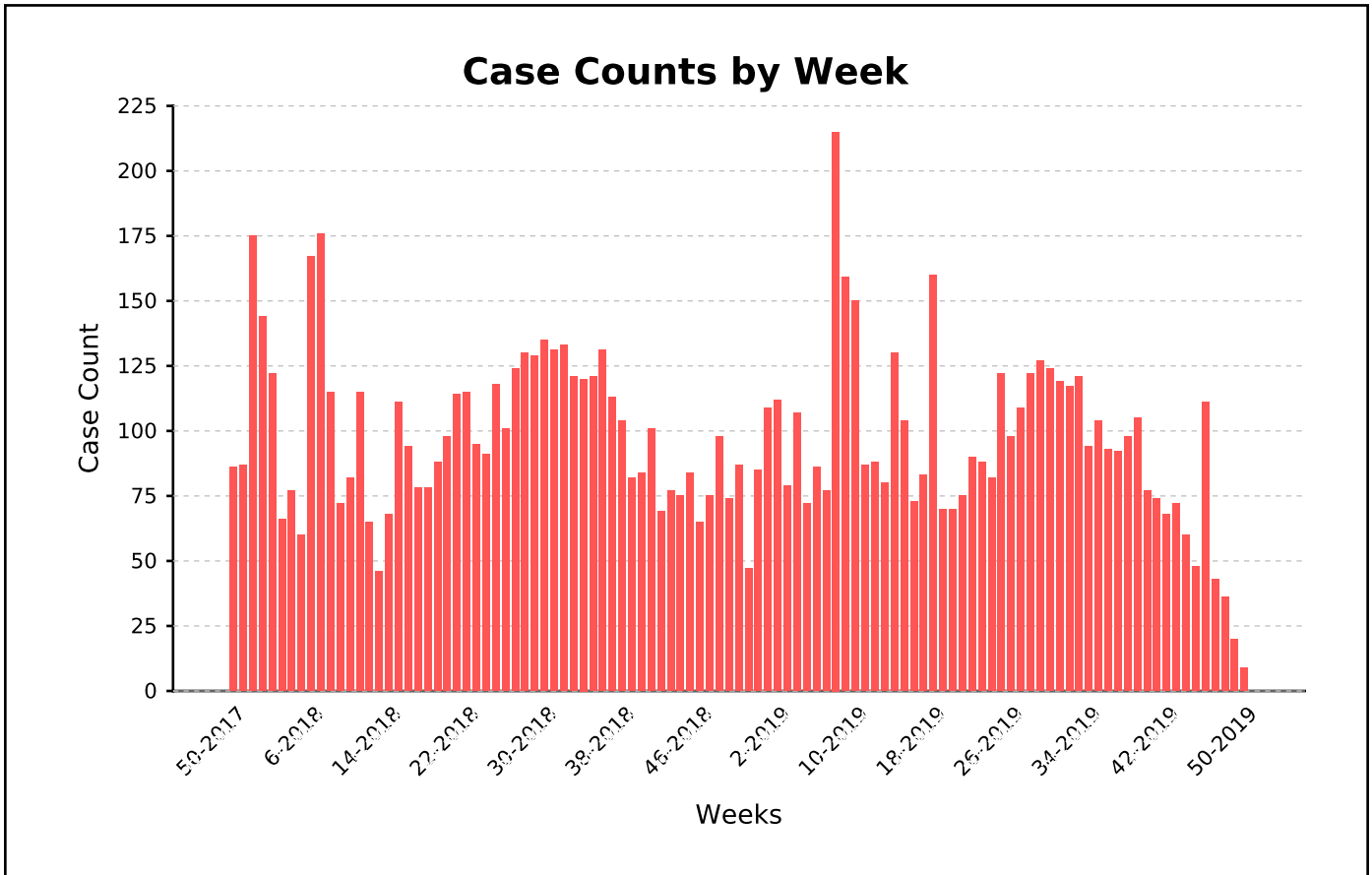
Geographic Area: The State of Michigan

Disease Group: Foodborne

Case Status: Confirmed, Probable, Suspect

Case Types: Individual and Aggregate

Investigation Status: Completed, Completed - Follow Up



Week	Total
50-2017	86
51-2017	87
52-2017	175
1-2018	144
2-2018	122
3-2018	66
4-2018	77
5-2018	60
6-2018	167
7-2018	176
8-2018	115
9-2018	72
10-2018	82
11-2018	115
12-2018	65

Week	Total
13-2018	46
14-2018	68
15-2018	111
16-2018	94
17-2018	78
18-2018	78
19-2018	88
20-2018	98
21-2018	114
22-2018	115
23-2018	95
24-2018	91
25-2018	118
26-2018	101
27-2018	124

Week	Total
28-2018	130
29-2018	129
30-2018	135
31-2018	131
32-2018	133
33-2018	121
34-2018	120
35-2018	121
36-2018	131
37-2018	113
38-2018	104
39-2018	82
40-2018	84
41-2018	101
42-2018	69

Week	Total
43-2018	77
44-2018	75
45-2018	84
46-2018	65
47-2018	75
48-2018	98
49-2018	74
50-2018	87
51-2018	47
52-2018	85
1-2019	109
2-2019	112
3-2019	79
4-2019	107
5-2019	72

Week	Total
6-2019	86
7-2019	77
8-2019	215
9-2019	159
10-2019	150
11-2019	87
12-2019	88
13-2019	80
14-2019	130
15-2019	104
16-2019	73
17-2019	83
18-2019	160
19-2019	70
20-2019	70

Week	Total
21-2019	75
22-2019	90
23-2019	88
24-2019	82
25-2019	122
26-2019	98
27-2019	109
28-2019	122
29-2019	127
30-2019	124
31-2019	119
32-2019	117
33-2019	121
34-2019	94
35-2019	104
36-2019	93
37-2019	92
38-2019	98
39-2019	105
40-2019	77
41-2019	74
42-2019	68
43-2019	72
44-2019	60
45-2019	48
46-2019	111
47-2019	43
48-2019	36
49-2019	20
50-2019	9

Report 8: Epi-Curve Graph

Time Period: 12/14/2017 - 12/14/2019

Time Breakdown: by Week

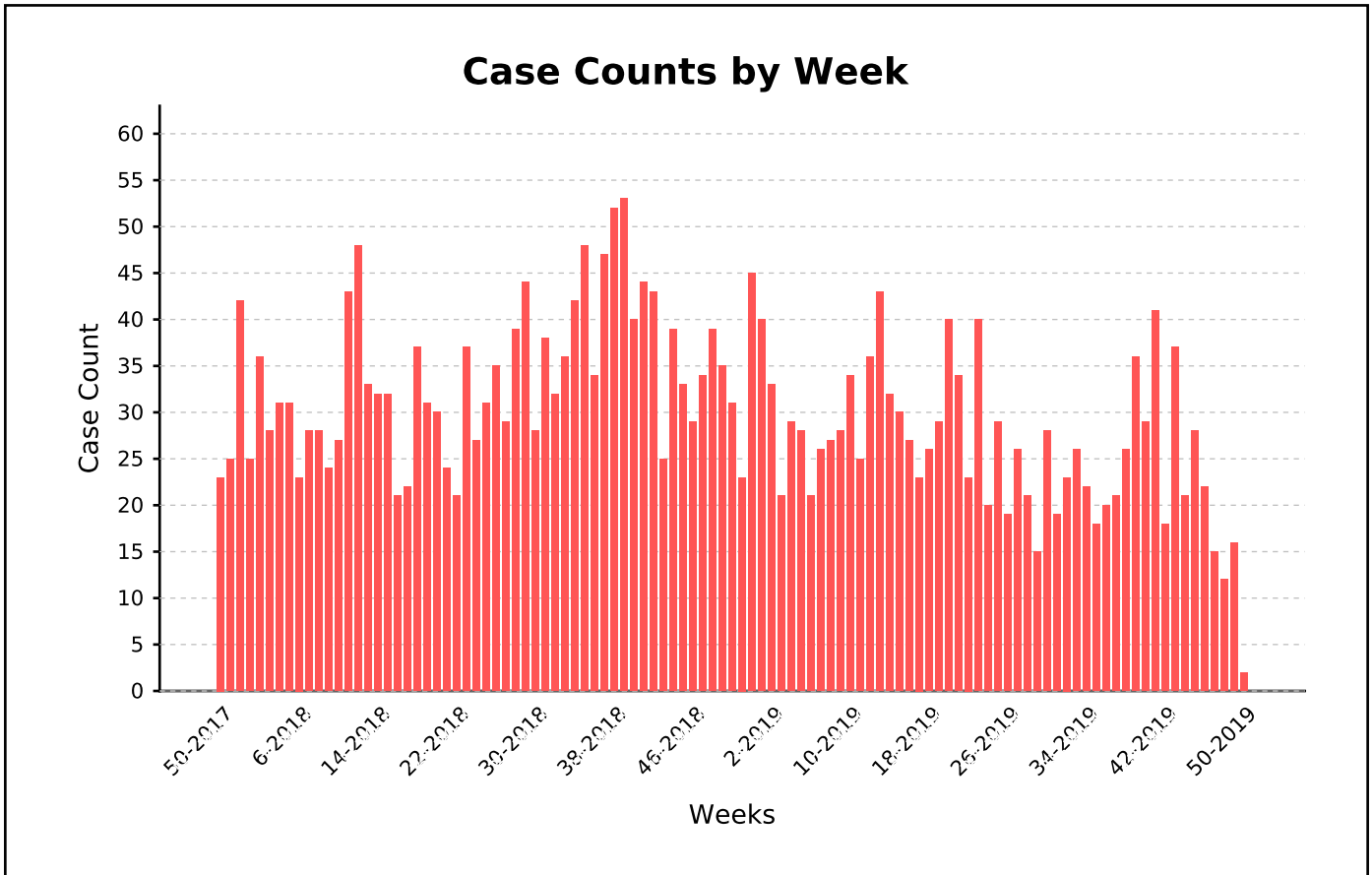
Geographic Area: The State of Michigan

Disease Group: Meningitis

Case Status: Confirmed, Probable, Suspect

Case Types: Individual and Aggregate

Investigation Status: Completed, Completed - Follow Up



Week	Total	Week	Total	Week	Total	Week	Total	Week	Total
50-2017	23	13-2018	33	28-2018	39	43-2018	25	6-2019	21
51-2017	25	14-2018	32	29-2018	44	44-2018	39	7-2019	26
52-2017	42	15-2018	32	30-2018	28	45-2018	33	8-2019	27
1-2018	25	16-2018	21	31-2018	38	46-2018	29	9-2019	28
2-2018	36	17-2018	22	32-2018	32	47-2018	34	10-2019	34
3-2018	28	18-2018	37	33-2018	36	48-2018	39	11-2019	25
4-2018	31	19-2018	31	34-2018	42	49-2018	35	12-2019	36
5-2018	31	20-2018	30	35-2018	48	50-2018	31	13-2019	43
6-2018	23	21-2018	24	36-2018	34	51-2018	23	14-2019	32
7-2018	28	22-2018	21	37-2018	47	52-2018	45	15-2019	30
8-2018	28	23-2018	37	38-2018	52	1-2019	40	16-2019	27
9-2018	24	24-2018	27	39-2018	53	2-2019	33	17-2019	23
10-2018	27	25-2018	31	40-2018	40	3-2019	21	18-2019	26
11-2018	43	26-2018	35	41-2018	44	4-2019	29	19-2019	29
12-2018	48	27-2018	29	42-2018	43	5-2019	28	20-2019	40

Week	Total
21-2019	34
22-2019	23
23-2019	40
24-2019	20
25-2019	29
26-2019	19
27-2019	26
28-2019	21
29-2019	15
30-2019	28
31-2019	19
32-2019	23
33-2019	26
34-2019	22
35-2019	18
36-2019	20
37-2019	21
38-2019	26
39-2019	36
40-2019	29
41-2019	41
42-2019	18
43-2019	37
44-2019	21
45-2019	28
46-2019	22
47-2019	15
48-2019	12
49-2019	16
50-2019	2