



Weekly Disease Report For The Week Ending December 28th, 2019 (MMWR Week 52)

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.

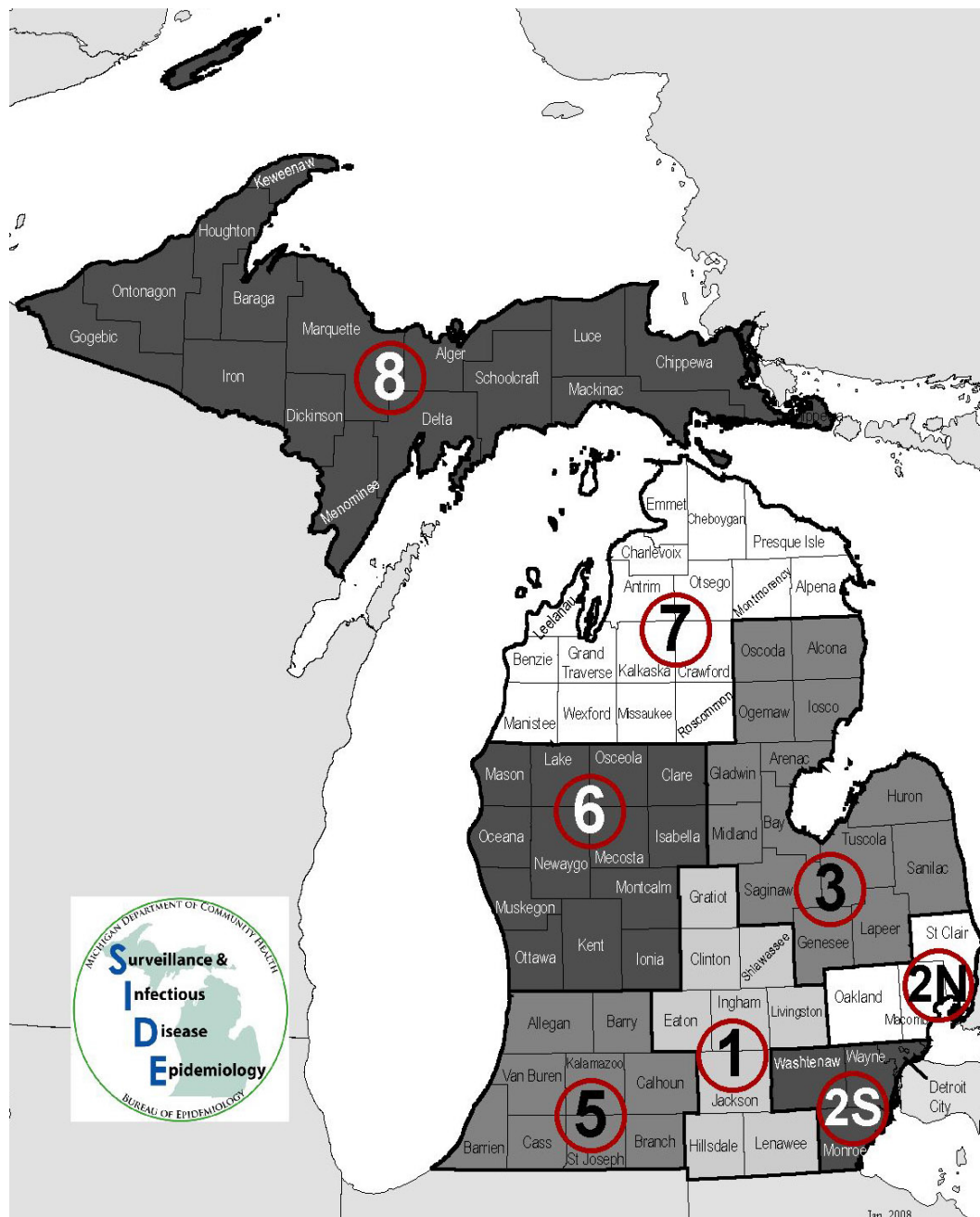
The data in the Weekly Disease Report are provisional, based on current reports to MDHHS by local health departments. The MDSS is a dynamic, continually active system: counts of disease are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting the case definition. 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***					
		49-2019	50-2019	51-2019	52-2019	2015	2016	2017	2018	2019	
Foodborne	Amebiasis	1	0	0	0	32	15	6	2	9	
	Botulism - Foodborne	0	0	0	0	0	0	0	0	0	
	Campylobacter	32	30	20	20	1,335	1,644	1,738	1,705	1,695	
	Cryptosporidiosis	10	4	6	2	239	437	425	383	415	
	Giardiasis	8	5	9	8	449	587	568	464	454	
	Listeriosis	0	0	0	0	0	0	0	19	28	
	Listeriosis (2014-2017)*	0	0	0	0	20	18	30	4	1	
	Norovirus	3	281	158	4	767	1,433	1,087	1,012	1,480	
	Paratyphoid Fever	0	0	0	0	0	0	0	1	4	
	Salmonellosis	13	12	17	13	964	1,069	1,093	1,163	1,073	
	Shiga toxin-producing Escherichia coli --	0	0	0	0	147	201	201	328	25	
	Shiga toxin-producing Escherichia coli --	4	3	5	5	0	0	0	0	279	
	Shigellosis	6	3	3	4	514	706	460	209	219	
	Typhoid Fever	0	0	1	0	9	7	14	6	10	
	Yersinia enterocolitica	2	0	1	1	20	41	66	82	77	
Subtotal		79	338	220	57	4,496	6,158	5,688	5,378	5,769	
Influenza	Flu Like Disease*	8,912	9,732	10,047	1,726	297,299	321,126	394,863	379,206	316,952	
	Influenza	632	875	1,513	2,488	6,793	14,458	26,018	47,212	31,051	
	Influenza, Novel	0	0	0	0	0	22	2	3	1	
	Subtotal		9,544	10,607	11,560	4,214	304,092	335,606	420,883	426,421	348,004
Meningitis	Meningitis - Aseptic	10	5	9	9	807	665	659	827	453	
	Meningitis - Bacterial Other	6	0	3	4	137	168	126	149	122	
	Meningococcal Disease	0	0	0	0	8	7	6	4	7	
	Streptococcus pneumoniae, Inv	26	15	28	40	678	813	841	791	922	
	Subtotal		42	20	40	53	1,630	1,653	1,632	1,771	1,504
Other	Acute Flaccid Myelitis (AFM)	0	0	0	0	0	0	0	6	1	
	Anthrax	0	0	0	0	0	0	0	0	0	

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		49-2019	50-2019	51-2019	52-2019	2015	2016	2017	2018	2019
	Blastomycosis	0	1	0	0	13	15	22	19	20
	Botulism - Infant	0	0	0	0	1	1	0	1	0
	Botulism - Other	0	0	0	0	0	0	0	2	0
	Brucellosis	1	0	0	0	2	2	2	4	2
	CP-CRE	1	3	2	4	0	0	0	0	11
	CP-CRE (Pre-2020)*	10	3	2	2	195	132	145	396	351
	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	0	1	0	1	26	37	43	40	48
	Creutzfeldt-Jakob Disease	0	0	0	0	18	14	13	12	14
	Cryptococcosis	1	1	0	0	33	12	15	15	18
	Cyclosporiasis	0	1	0	0	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	1	0	21	16	21	10	14
	Encephalitis, Primary	0	1	1	1	12	10	15	18	14
	Gastrointestinal Illness	3,699	5,234	3,910	271	96,794	108,517	158,881	154,968	138,170
	Guillain-Barre Syndrome	3	1	0	1	52	46	53	47	63
	Hantavirus	0	0	0	0	0	1	0	0	0
	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	1	0	0	0	0	0	0	8
	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	9	3	6	3	189	163	177	163	222
	Kawasaki	0	1	1	0	56	50	46	35	55
	Legionellosis	5	5	5	3	260	309	349	643	558
	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

Disease Group	Reportable Condition	Cases Reported In The Last 4 Weeks**				Total Cases Reported In Each Of The Last 5 Years***				
		49-2019	50-2019	51-2019	52-2019	2015	2016	2017	2018	2019
	Melioidosis+	0	0	0	0	1	0	1	0	0
	Novel Coronavirus~~	0	0	0	0	0	0	0	1	0
	Plague	0	0	0	0	1	0	0	0	0
	Psittacosis	0	0	0	0	0	2	1	4	0
	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	1	0	1	2	4	0	3	7
	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	4	7	12	14	321	397	458	428	446
	Streptococcal Toxic Shock	0	0	0	0	11	2	2	5	5
	Streptococcus pneumoniae, Drug Resistant	3	2	1	4	95	113	110	96	72
	Toxic Shock	0	0	0	0	7	7	2	4	8
	Trachoma	0	0	0	0	2	0	0	0	0
	Trichinosis	0	0	0	0	0	1	0	0	0
	Tularemia	0	0	0	0	0	1	0	2	1
	VISA	0	1	1	0	4	4	7	8	11
	VRSA	0	0	0	0	1	0	0	0	0
	Vibriosis - Non Cholera	0	0	0	1	0	0	1	0	34
	Vibriosis - Non Cholera (Pre-2019)*	0	0	0	0	9	9	19	45	5
	Subtotal	3,736	5,267	3,942	306	98,153	109,889	160,440	157,025	140,295
Rabies										
	Rabies Animal	0	0	4	1	36	45	44	76	59
	Rabies: Potential Exposure & PEP	72	68	59	72	0	3	0	50	5,415
	Rabies: Potential Exposure & PEP(Pre-2019)*	0	0	0	0	3,799	4,911	5,511	6,461	476
	Subtotal	72	68	63	73	3,835	4,959	5,555	6,587	5,950
STD										
	Chancroid	0	0	0	0	0	0	1	0	0
	Chlamydia (Genital)	948	997	959	697	47,892	49,410	51,737	51,262	49,811

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		49-2019	50-2019	51-2019	52-2019	2015	2016	2017	2018	2019
	Gonorrhea	382	383	370	293	10,644	13,102	15,384	16,928	17,976
	Granuloma Inguinale	0	0	0	0	0	0	0	0	0
	Lymphogranuloma venereum	0	0	0	0	24	20	9	16	1
	Syphilis - Congenital	0	0	0	0	11	13	10	14	15
	Syphilis - Early Latent	17	20	17	7	288	302	343	413	546
	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*	0	0	0	0	7	39	27	0	1
	Syphilis - Primary	13	8	5	1	127	139	165	228	263
	Syphilis - Secondary	7	14	10	3	273	241	315	427	402
	Syphilis - To Be Determined	1	9	10	6	0	0	0	1	45
	Syphilis - Unknown Duration or Late	11	14	15	4	0	0	9	627	621
	Subtotal		1,379	1,445	1,386	1,011	59,669	63,710	68,435	69,916
Tuberculosis										
	Latent Tuberculosis Infection	33	26	54	28	0	7	120	1,125	2,047
	Nontuberculous Mycobacterium	20	16	13	7	87	126	272	841	847
	Tuberculosis	2	0	2	1	139	136	141	111	129
	Subtotal		55	42	69	36	226	269	533	2,077
VPD										
	Chickenpox (Varicella)	5	11	3	6	561	556	543	436	421
	Diphtheria	0	0	0	0	0	0	0	0	0
	H. influenzae Disease - Inv.	6	5	5	9	132	187	199	174	222
	Measles	0	0	0	0	1	1	2	19	46
	Mumps	1	0	0	1	20	37	47	81	29
	Pertussis	17	13	14	8	460	417	761	658	538
	Polio	0	0	0	0	0	0	0	0	0
	Rubella	0	0	0	0	0	0	0	0	0
	Shingles	29	26	23	24	705	866	976	1,252	1,205
	Tetanus	0	0	0	0	0	1	2	2	1
	VZ Infection, Unspecified	4	8	3	3	187	172	270	212	238
Subtotal		62	63	48	51	2,066	2,237	2,800	2,834	2,700

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		49-2019	50-2019	51-2019	52-2019	2015	2016	2017	2018	2019
Vectorborne										
	Babesiosis++	0	0	0	0	2	5	3	6	5
	Chikungunya~	0	0	0	0	0	0	0	0	0
	Chikungunya (Pre-2020)*	0	0	0	0	6	4	4	2	3
	Dengue Fever	0	0	0	0	0	0	0	0	2
	Dengue Fever (Pre-2020)*	0	1	0	0	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	1	0	0	6	8	3	7	13
	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	3
	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	10
	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	4	3	5	3	151	232	346	308	539
	Malaria	0	0	1	2	21	43	45	29	25
	Rickettsial Disease - Spotted Fever	0	0	0	0	0	0	0	0	0

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		49-2019	50-2019	51-2019	52-2019	2015	2016	2017	2018	2019
	Rickettsial Disease - Spotted Fever (Pre-	1	0	0	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	0
	West Nile Virus (Pre-2020)*	0	0	0	0	19	45	43	105	14
	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		5	5	6	5	238	453	496	515
Viral Hepatitis										
	Hepatitis A	2	0	1	0	71	132	705	332	83
	Hepatitis B, Acute	9	7	22	19	60	51	63	80	133
	Hepatitis B, Chronic	21	18	18	7	1,079	1,270	1,213	1,078	1,027
	Hepatitis B, Perinatal	1	0	0	0	0	0	1	1	3
	Hepatitis C, Acute	37	10	31	36	89	159	233	175	281
	Hepatitis C, Chronic	89	112	107	80	7,806	11,809	11,962	10,341	6,177
	Hepatitis C, Perinatal	0	0	0	0	1	3	3	11	13
	Hepatitis E	0	0	0	0	7	4	5	9	5
Subtotal		159	147	179	142	9,113	13,428	14,185	12,027	7,722

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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 52-2019																								
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	0	140	0	48	63	9,911	6	318	2	409	3	133	0	377	11	9,626	78	7,028	1	458	44	22,969	16	6,268

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Table of Diseases by Geographic Location																									
Time Period: Week		52-2019																							
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	67	14,494	19	2,003	5	1,587	0	173	8	784	10	3,077	12	3,490	15	762	5	676	668	24,600	16	1,856	56	19,163	

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Table of Diseases by Geographic Location																								
Time Period: Week 52-2019																								
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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amebiasis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-
Anthrax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Babesiosis++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blastomycosis	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Botulism - Foodborne	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Botulism - Infant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Botulism - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brucellosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Campylobacter	-	7	1	33	-	7	-	3	-	8	-	4	-	14	-	4	-	5	1	38	-	11	-	2
Candida auris	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chancroid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickenpox (Varicella)	-	6	-	9	-	-	-	-	-	7	-	1	-	5	-	-	-	-	-	18	-	4	-	-
Chikungunya~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chikungunya (Pre-2020)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlamydia (Genital)	2	66	51	2,905	2	61	-	30	6	266	3	127	2	93	-	62	-	50	25	1,825	4	173	-	40
Cholera	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Cholera (Pre-2019)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coccidioidomycosis	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
CP-CRE	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CP-CRE (Pre-2020)*	-	-	-	13	-	-	-	-	-	-	-	-	-	2	-	-	-	1	-	5	-	-	-	1
Creutzfeldt-Jakob Disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cryptococcosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-
Cryptosporidiosis	-	1	-	15	-	3	-	2	1	8	-	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	-	-	-	6	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-

Table of Diseases by Geographic Location																									
Time Period: Week		52-2019																							
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	2,262	137	11,672	12	450	3	748	23	5,177	23	6,059	50	4,260	3	1,843	0	1,385	110	11,661	6	4,493	1	296	

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 52-2019																									
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	0	804	43	4,287	339	12,526	169	20,850	0	1,659	201	46,438	0	11	0	133	43	3,625	1	443	29	5,045	30	19,213	

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 52-2019																									
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	5	220	1	155	644	32,923	23	2,712	34	1,370	1	619	6	3,712	2	200	17	5,393	1	651	234	4,545	10	12,071	

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 52-2019																									
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	35	43	12,692	11	3,202	639	48,611	1	2,759	2	227	0	282	2	1,433	0	57	1	0	329	54,350	1	142	

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		52-2019																							
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	13	236	134	12,615	2	257	2	259	35	2,959	77	8,611	194	5,250	13	2,786	33	5,359	407	26,209	689	31,793	12	1,985	

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: 12/28/2017 - 12/28/2019

Time Breakdown: by Week

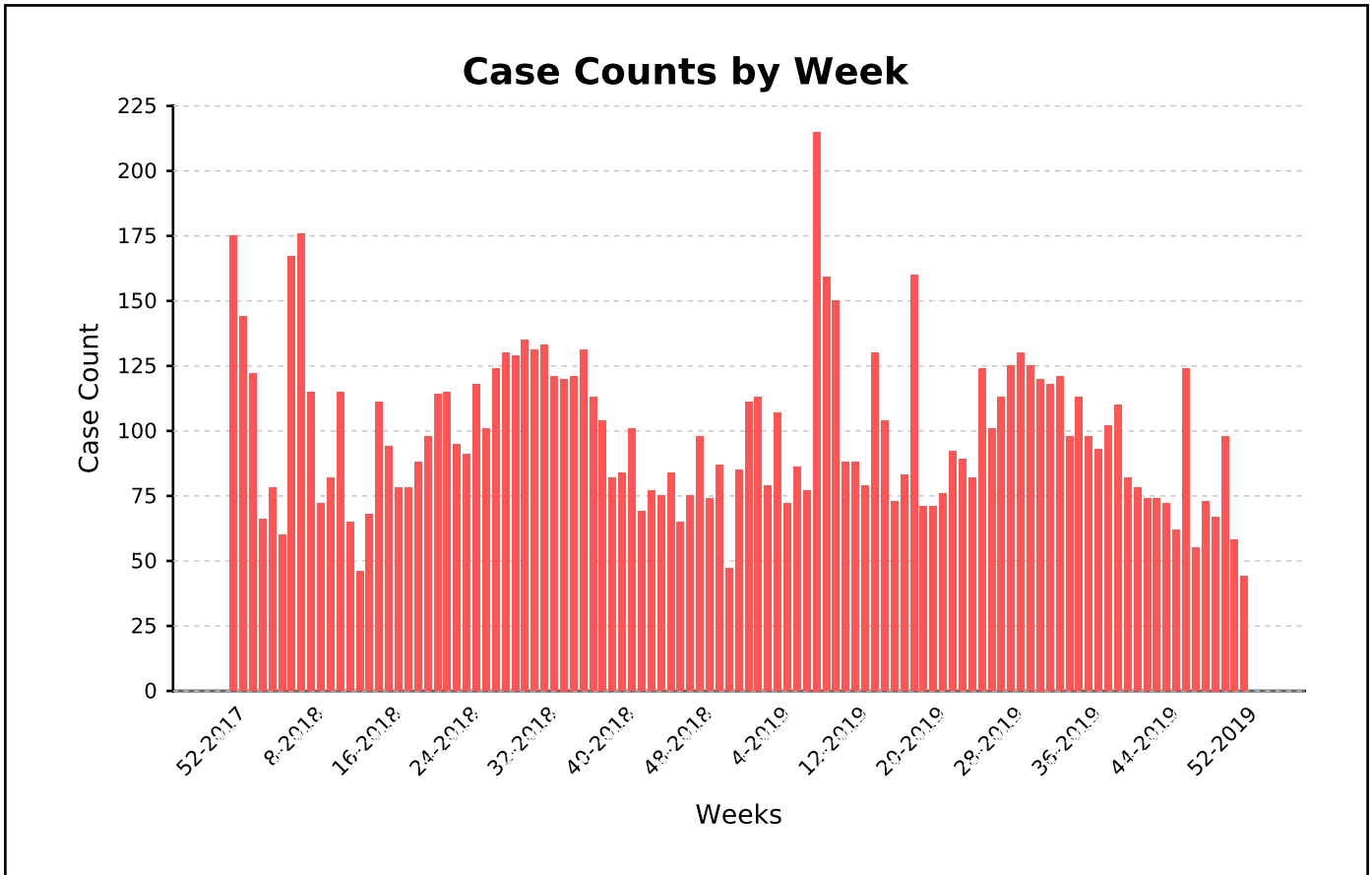
Geographic Area: The State of Michigan

Disease Group: Foodborne

Case Status: Confirmed, Probable, Suspect

Case Types: Individual and Aggregate

Investigation Status: Completed, Completed - Follow Up



Week	Total	Week	Total	Week	Total	Week	Total	Week	Total
52-2017	175	15-2018	111	30-2018	135	45-2018	84	8-2019	215
1-2018	144	16-2018	94	31-2018	131	46-2018	65	9-2019	159
2-2018	122	17-2018	78	32-2018	133	47-2018	75	10-2019	150
3-2018	66	18-2018	78	33-2018	121	48-2018	98	11-2019	88
4-2018	78	19-2018	88	34-2018	120	49-2018	74	12-2019	88
5-2018	60	20-2018	98	35-2018	121	50-2018	87	13-2019	79
6-2018	167	21-2018	114	36-2018	131	51-2018	47	14-2019	130
7-2018	176	22-2018	115	37-2018	113	52-2018	85	15-2019	104
8-2018	115	23-2018	95	38-2018	104	1-2019	111	16-2019	73
9-2018	72	24-2018	91	39-2018	82	2-2019	113	17-2019	83
10-2018	82	25-2018	118	40-2018	84	3-2019	79	18-2019	160
11-2018	115	26-2018	101	41-2018	101	4-2019	107	19-2019	71
12-2018	65	27-2018	124	42-2018	69	5-2019	72	20-2019	71
13-2018	46	28-2018	130	43-2018	77	6-2019	86	21-2019	76
14-2018	68	29-2018	129	44-2018	75	7-2019	77	22-2019	92

Week	Total
23-2019	89
24-2019	82
25-2019	124
26-2019	101
27-2019	113
28-2019	125
29-2019	130
30-2019	125
31-2019	120
32-2019	118
33-2019	121
34-2019	98
35-2019	113
36-2019	98
37-2019	93
38-2019	102
39-2019	110
40-2019	82
41-2019	78
42-2019	74
43-2019	74
44-2019	72
45-2019	62
46-2019	124
47-2019	55
48-2019	73
49-2019	67
50-2019	98
51-2019	58
52-2019	44

Report 8: Epi-Curve Graph

Time Period: 12/28/2017 - 12/28/2019

Time Breakdown: by Week

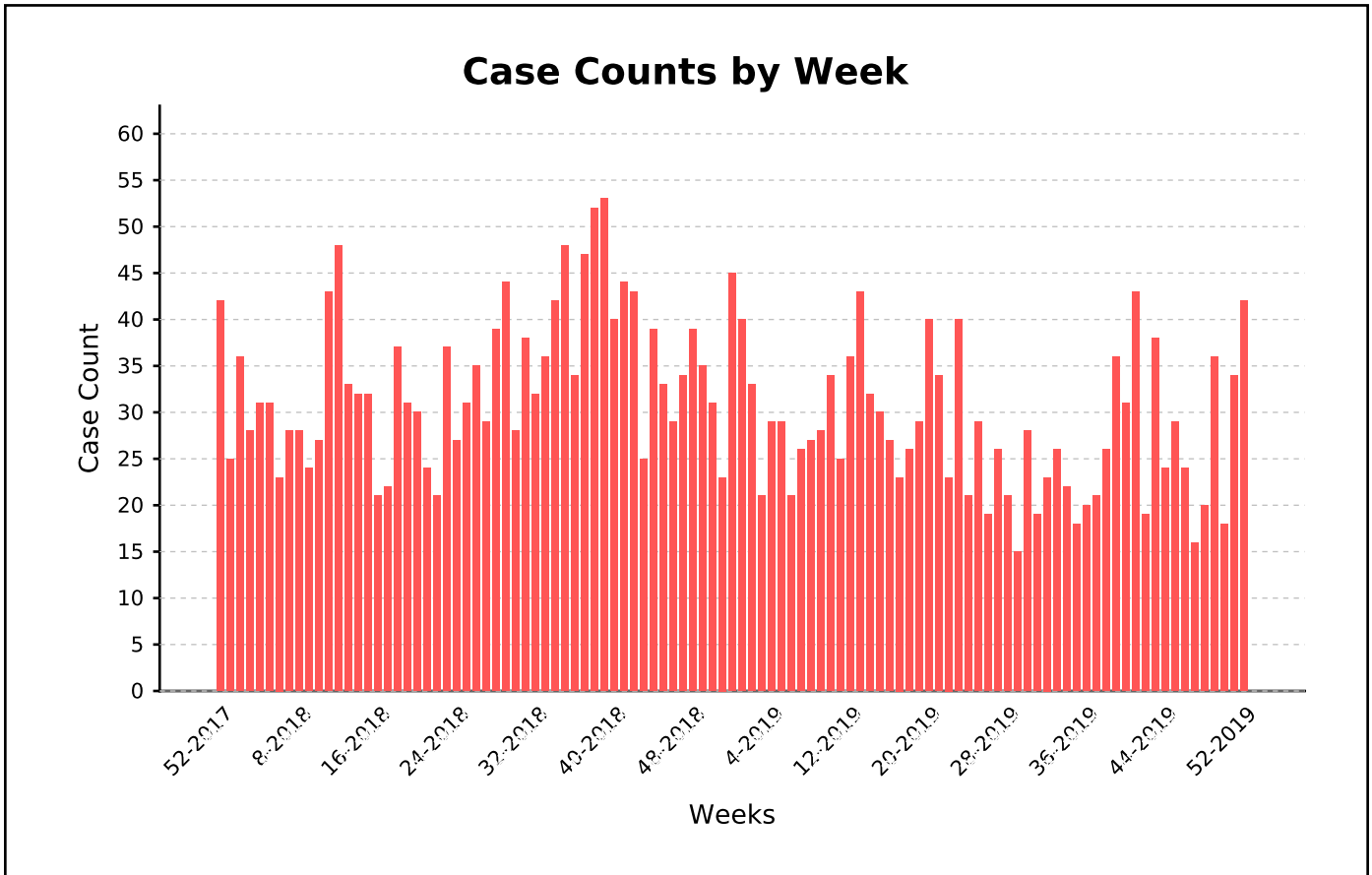
Geographic Area: The State of Michigan

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
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	29	20-2019	40
13-2018	33	28-2018	39	43-2018	25	6-2019	21	21-2019	34
14-2018	32	29-2018	44	44-2018	39	7-2019	26	22-2019	23

Week	Total
23-2019	40
24-2019	21
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	31
41-2019	43
42-2019	19
43-2019	38
44-2019	24
45-2019	29
46-2019	24
47-2019	16
48-2019	20
49-2019	36
50-2019	18
51-2019	34
52-2019	42