



# **Weekly Disease Report For The Week Ending December 29<sup>th</sup>, 2018 (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.

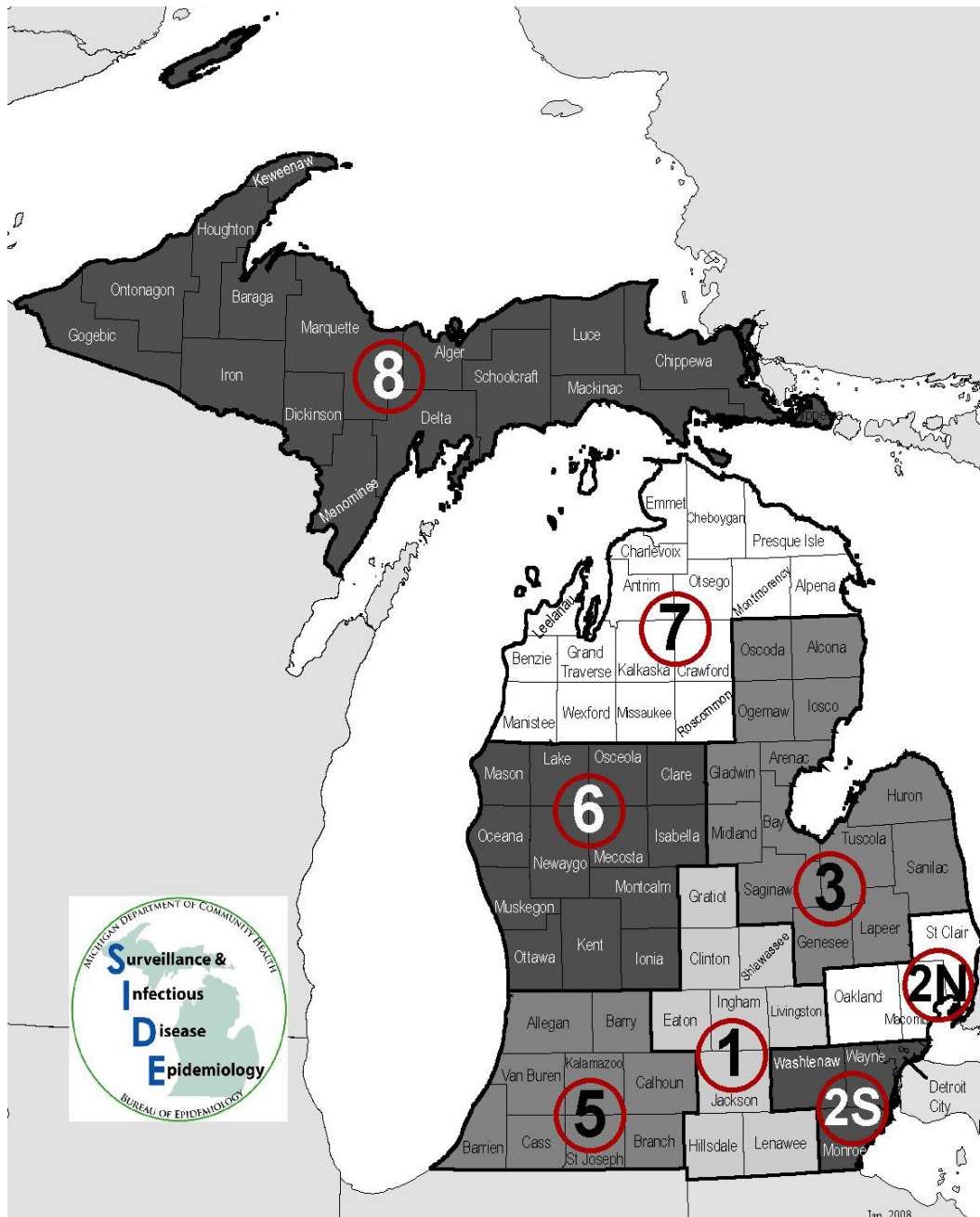
The data in the Weekly Disease Report are provisional, based on current reports to MDHHS by local health departments. The MDSS is a dynamic, continually active system: counts of disease are constantly changing as cases are investigated, confirmed as cases, or ruled out as not meeting the case definition. 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 38<sup>th</sup> 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*** |                |                |                |                |
|-----------------|---|--------------------------------------|---------------|--------------|--------------|---|----------------|----------------|----------------|----------------|
|                 |   | 49-2018                              | 50-2018       | 51-2018      | 52-2018      | 2014  | 2015           | 2016           | 2017           | 2018           |
| Foodborne       | Amebiasis                                 | 0                                    | 0             | 0            | 0            | 23  | 33             | 15             | 6              | 2              |
|                 | Botulism - Foodborne                      | 0                                    | 0             | 0            | 0            | 0   | 0              | 0              | 0              | 0              |
|                 | Campylobacter                             | 34                                   | 19            | 16           | 23           | 1,194   | 1,348          | 1,644          | 1,738          | 1,697          |
|                 | Cryptosporidiosis                         | 6                                    | 4             | 4            | 8            | 249   | 240            | 437            | 425            | 380            |
|                 | Giardiasis                                | 5                                    | 5             | 3            | 8            | 514   | 454            | 587            | 568            | 458            |
|                 | Listeriosis                               | 0                                    | 1             | 0            | 0            | 0   | 0              | 0              | 0              | 19             |
|                 | Listeriosis (2014-2017)*                  | 0                                    | 0             | 0            | 0            | 19  | 20             | 18             | 30             | 4              |
|                 | Norovirus                                 | 0                                    | 34            | 21           | 27           | 341   | 768            | 1,433          | 1,075          | 1,010          |
|                 | Paratyphoid Fever                         | 0                                    | 0             | 0            | 0            | 0   | 0              | 0              | 0              | 1              |
|                 | Salmonellosis                             | 21                                   | 17            | 9            | 11           | 1,050   | 970            | 1,069          | 1,093          | 1,162          |
|                 | Shiga toxin-producing Escherichia coli -- | 6                                    | 4             | 4            | 4            | 150   | 147            | 201            | 201            | 327            |
|                 | Shiga toxin-producing Escherichia coli -- | 0                                    | 0             | 0            | 0            | 0   | 0              | 0              | 0              | 0              |
|                 | Shigellosis                               | 2                                    | 1             | 1            | 4            | 308   | 515            | 706            | 460            | 208            |
|                 | Typhoid Fever                             | 0                                    | 0             | 0            | 0            | 8   | 9              | 7              | 14             | 6              |
|                 | Yersinia enterocolitica                   | 1                                    | 2             | 4            | 1            | 24  | 21             | 41             | 66             | 82             |
| <b>Subtotal</b> |   | <b>75</b>                            | <b>87</b>     | <b>62</b>    | <b>86</b>    | <b>3,880</b>  | <b>4,525</b>   | <b>6,158</b>   | <b>5,676</b>   | <b>5,356</b>   |
| Influenza       | Flu Like Disease*                         | 10,965                               | 12,433        | 9,580        | 1,833        | 280,888   | 298,594        | 321,126        | 394,852        | 378,897        |
|                 | Influenza                                 | 143                                  | 250           | 416          | 740          | 7,918   | 7,372          | 14,458         | 26,018         | 47,001         |
|                 | Influenza, Novel                          | 0                                    | 0             | 0            | 0            | 1   | 0              | 22             | 2              | 3              |
|                 | <b>Subtotal</b>                           | <b>11,108</b>                        | <b>12,683</b> | <b>9,996</b> | <b>2,573</b> | <b>288,807</b>                                      | <b>305,966</b> | <b>335,606</b> | <b>420,872</b> | <b>425,901</b> |
|                 |   |                                      |               |              |              |   |                |                |                |                |
| Meningitis      | Meningitis - Aseptic                      | 11                                   | 10            | 7            | 9            | 679   | 809            | 665            | 659            | 823            |
|                 | Meningitis - Bacterial Other              | 1                                    | 2             | 5            | 4            | 140   | 142            | 168            | 126            | 149            |
|                 | Meningococcal Disease                     | 0                                    | 0             | 0            | 0            | 14  | 8              | 7              | 6              | 4              |
|                 | Streptococcus pneumoniae, Inv             | 23                                   | 19            | 11           | 32           | 520   | 694            | 813            | 841            | 787            |
|                 | <b>Subtotal</b>                           | <b>35</b>                            | <b>31</b>     | <b>23</b>    | <b>45</b>    | <b>1,353</b>  | <b>1,653</b>   | <b>1,653</b>   | <b>1,632</b>   | <b>1,763</b>   |
| Other           | Acute Flaccid Myelitis (AFM)              | 0                                    | 0             | 0            | 0            | 0   | 0              | 0              | 0              | 6              |
|                 | Anthrax                                   | 0                                    | 0             | 0            | 0            | 0   | 0              | 0              | 0              | 0              |
|                 |   |                                      |               |              |              |   |                |                |                |                |

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

## 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*** |        |         |         |         |
|---------------|---------------------------------------|--------------------------------------|---------|---------|---------|---|--------|---------|---------|---------|
|               |                                       | 49-2018                              | 50-2018 | 51-2018 | 52-2018 | 2014  | 2015   | 2016    | 2017    | 2018    |
|               | Blastomycosis                         | 0                                    | 0       | 1       | 1       | 19  | 13     | 15      | 22      | 17      |
|               | Botulism - Infant                     | 0                                    | 0       | 0       | 0       | 1   | 1      | 1       | 0       | 1       |
|               | Botulism - Other                      | 0                                    | 0       | 0       | 0       | 0   | 0      | 0       | 0       | 2       |
|               | Brucellosis                           | 1                                    | 0       | 0       | 0       | 2   | 2      | 2       | 2       | 4       |
|               | CP-CRE                                | 5                                    | 0       | 8       | 8       | 131   | 195    | 132     | 145     | 394     |
|               | Candida auris                         | 0                                    | 0       | 0       | 0       | 0   | 0      | 0       | 0       | 0       |
|               | Cholera                               | 0                                    | 0       | 0       | 0       | 0   | 0      | 0       | 0       | 0       |
|               | Cholera (Pre-2019)*                   | 0                                    | 0       | 0       | 0       | 0   | 0      | 1       | 1       | 1       |
|               | Coccidioidomycosis                    | 1                                    | 0       | 0       | 1       | 35  | 27     | 37      | 43      | 40      |
|               | Creutzfeldt-Jakob Disease             | 0                                    | 0       | 0       | 0       | 7   | 18     | 14      | 13      | 11      |
|               | Cryptococcosis                        | 1                                    | 0       | 2       | 1       | 27  | 34     | 12      | 15      | 15      |
|               | Cyclosporiasis                        | 0                                    | 0       | 0       | 0       | 6   | 8      | 3       | 41      | 30      |
|               | Encephalitis, Post Chickenpox         | 0                                    | 0       | 0       | 0       | 1   | 0      | 0       | 0       | 1       |
|               | Encephalitis, Post Mumps              | 0                                    | 0       | 0       | 0       | 0   | 0      | 0       | 0       | 0       |
|               | Encephalitis, Post Other              | 0                                    | 0       | 0       | 0       | 23  | 21     | 16      | 21      | 10      |
|               | Encephalitis, Primary                 | 2                                    | 2       | 1       | 0       | 23  | 12     | 10      | 15      | 18      |
|               | Gastrointestinal Illness              | 4,817                                | 6,886   | 5,416   | 1,292   | 64,828  | 96,828 | 108,517 | 158,893 | 154,923 |
|               | Guillain-Barre Syndrome               | 1                                    | 3       | 0       | 1       | 54  | 52     | 46      | 53      | 47      |
|               | Hantavirus                            | 0                                    | 0       | 0       | 0       | 0   | 0      | 1       | 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                                    | 0       | 0       | 0       | 0   | 0      | 0       | 0       | 0       |
|               | Hemolytic Uremic Syndrome (Pre-2019)* | 0                                    | 0       | 0       | 0       | 6   | 12     | 9       | 6       | 11      |
|               | Hemorrhagic Fever                     | 0                                    | 0       | 0       | 0       | 0   | 0      | 0       | 0       | 0       |
|               | Histoplasmosis                        | 1                                    | 9       | 3       | 6       | 135   | 191    | 162     | 177     | 158     |
|               | Kawasaki                              | 1                                    | 0       | 2       | 1       | 56  | 56     | 50      | 46      | 35      |
|               | Legionellosis                         | 6                                    | 7       | 6       | 7       | 236   | 263    | 309     | 349     | 641     |
|               | Leprosy                               | 0                                    | 0       | 0       | 0       | 0   | 1      | 0       | 0       | 1       |
|               | Leptospirosis                         | 0                                    | 0       | 0       | 0       | 1   | 0      | 5       | 4       | 1       |
|               | Melioidosis+                          | 0                                    | 0       | 0       | 0       | 0   | 1      | 0       | 1       | 0       |
|               | Novel Coronavirus~~                   | 0                                    | 0       | 0       | 0       | 0   | 0      | 0       | 0       | 1       |

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

## 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*** |               |                |                |                |
|---------------|---|--------------------------------------|--------------|--------------|--------------|---|---------------|----------------|----------------|----------------|
|               |   | 49-2018                              | 50-2018      | 51-2018      | 52-2018      | 2014  | 2015          | 2016           | 2017           | 2018           |
|               | Plague                                      | 0                                    | 0            | 0            | 0            | 0   | 1             | 0              | 0              | 0              |
|               | Psittacosis                                 | 0                                    | 0            | 0            | 0            | 0   | 0             | 2              | 1              | 4              |
|               | Q Fever Acute                               | 0                                    | 0            | 0            | 0            | 1   | 2             | 1              | 3              | 4              |
|               | Q Fever Chronic                             | 0                                    | 0            | 0            | 0            | 1   | 2             | 1              | 2              | 1              |
|               | Q Fever*                                    | 0                                    | 0            | 0            | 0            | 0   | 2             | 4              | 0              | 3              |
|               | 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   | 2             | 4              | 0              | 0              |
|               | Rubella - Congenital                        | 0                                    | 0            | 0            | 0            | 0   | 0             | 0              | 0              | 0              |
|               | Streptococcal Dis, Inv, Grp A               | 4                                    | 8            | 7            | 8            | 300   | 329           | 397            | 458            | 423            |
|               | Streptococcal Toxic Shock                   | 0                                    | 0            | 1            | 1            | 4   | 11            | 2              | 2              | 5              |
|               | Streptococcus pneumoniae, Drug Resistant    | 2                                    | 3            | 2            | 2            | 84  | 98            | 113            | 110            | 95             |
|               | Toxic Shock                                 | 0                                    | 0            | 0            | 0            | 4   | 7             | 7              | 2              | 4              |
|               | Trachoma                                    | 0                                    | 0            | 0            | 0            | 4   | 2             | 0              | 0              | 0              |
|               | Trichinosis                                 | 0                                    | 0            | 0            | 0            | 0   | 0             | 1              | 0              | 0              |
|               | Tularemia                                   | 0                                    | 0            | 0            | 0            | 2   | 0             | 1              | 0              | 2              |
|               | VISA  | 0                                    | 1            | 0            | 0            | 3   | 4             | 4              | 7              | 8              |
|               | VRSA  | 0                                    | 0            | 0            | 0            | 0   | 1             | 0              | 0              | 0              |
|               | Vibriosis - Non Cholera                     | 0                                    | 0            | 0            | 0            | 0   | 0             | 0              | 0              | 0              |
|               | Vibriosis - Non Cholera (Pre-2019)*         | 1                                    | 1            | 0            | 1            | 8   | 10            | 9              | 19             | 45             |
|               | <b>Subtotal</b>                             | <b>4,843</b>                         | <b>6,920</b> | <b>5,449</b> | <b>1,330</b> | <b>66,004</b>                                       | <b>98,206</b> | <b>109,888</b> | <b>160,451</b> | <b>156,962</b> |
| Rabies        |   |                                      |              |              |              |   |               |                |                |                |
|               | Rabies Animal                               | 1                                    | 2            | 0            | 0            | 41  | 36            | 45             | 44             | 76             |
|               | Rabies: Potential Exposure & PEP            | 5                                    | 9            | 12           | 8            | 0   | 0             | 3              | 0              | 48             |
|               | Rabies: Potential Exposure & PEP(Pre-2019)* | 86                                   | 84           | 81           | 84           | 3,468   | 3,818         | 4,911          | 5,511          | 6,441          |
|               | <b>Subtotal</b>                             | <b>92</b>                            | <b>95</b>    | <b>93</b>    | <b>92</b>    | <b>3,509</b>  | <b>3,854</b>  | <b>4,959</b>   | <b>5,555</b>   | <b>6,565</b>   |
| STD           |   |                                      |              |              |              |   |               |                |                |                |
|               | Chancroid                                   | 0                                    | 0            | 0            | 0            | 0   | 0             | 0              | 1              | 0              |
|               | Chlamydia (Genital)                         | 1,122                                | 1,058        | 1,087        | 737          | 45,265  | 48,108        | 49,417         | 51,737         | 51,194         |
|               | Gonorrhea                                   | 390                                  | 350          | 364          | 297          | 9,730   | 10,694        | 13,103         | 15,383         | 16,885         |
|               | Granuloma Inguinale                         | 0                                    | 0            | 0            | 0            | 0   | 0             | 0              | 0              | 0              |

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

## 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*** |        |        |        |        |
|-----------------|--|--------------------------------------|---------|---------|---------|---|--------|--------|--------|--------|
|                 |  | 49-2018                              | 50-2018 | 51-2018 | 52-2018 | 2014  | 2015   | 2016   | 2017   | 2018   |
|                 | Lymphogranuloma venereum               | 1                                    | 0       | 0       | 0       | 0   | 24     | 20     | 9      | 16     |
|                 | Syphilis - Congenital                  | 0                                    | 1       | 0       | 0       | 16  | 11     | 13     | 10     | 14     |
|                 | Syphilis - Early Latent                | 8                                    | 7       | 13      | 10      | 249   | 288    | 302    | 343    | 411    |
|                 | Syphilis - Late Latent*                | 0                                    | 0       | 0       | 0       | 412   | 381    | 429    | 416    | 0      |
|                 | Syphilis - Late with Manifestations*   | 0                                    | 0       | 0       | 0       | 22  | 25     | 15     | 20     | 0      |
|                 | Syphilis - Latent of Unknown Duration* | 0                                    | 0       | 0       | 0       | 79  | 7      | 39     | 28     | 0      |
|                 | Syphilis - Primary                     | 3                                    | 4       | 8       | 4       | 160   | 128    | 139    | 164    | 227    |
|                 | Syphilis - Secondary                   | 10                                   | 3       | 9       | 4       | 277   | 276    | 241    | 315    | 427    |
|                 | Syphilis - To Be Determined            | 0                                    | 0       | 0       | 0       | 0   | 0      | 0      | 0      | 1      |
|                 | Syphilis - Unknown Duration or Late    | 8                                    | 9       | 11      | 4       | 0   | 0      | 0      | 9      | 624    |
|                 | <b>Subtotal</b>                        |                                      | 1,542   | 1,432   | 1,492   | 1,056   | 56,210 | 59,942 | 63,718 | 68,435 |
| Tuberculosis    |  |                                      |         |         |         |   |        |        |        |        |
|                 | Latent Tuberculosis Infection          | 30                                   | 22      | 18      | 16      | 0   | 0      | 6      | 120    | 1,118  |
|                 | Nontuberculous Mycobacterium           | 22                                   | 13      | 17      | 17      | 35  | 79     | 116    | 263    | 841    |
|                 | Tuberculosis                           | 4                                    | 3       | 1       | 1       | 112   | 141    | 136    | 140    | 111    |
|                 | <b>Subtotal</b>                        |                                      | 56      | 38      | 36      | 34  | 147    | 220    | 258    | 523    |
| VPD             |  |                                      |         |         |         |   |        |        |        |        |
|                 | Chickenpox (Varicella)                 | 12                                   | 6       | 7       | 5       | 713   | 563    | 556    | 543    | 433    |
|                 | Diphtheria                             | 0                                    | 0       | 0       | 0       | 0   | 0      | 0      | 0      | 0      |
|                 | H. influenzae Disease - Inv.           | 5                                    | 3       | 2       | 7       | 101   | 137    | 187    | 199    | 174    |
|                 | Measles                                | 0                                    | 0       | 0       | 0       | 5   | 1      | 1      | 2      | 19     |
|                 | Mumps                                  | 1                                    | 0       | 0       | 1       | 39  | 20     | 37     | 47     | 81     |
|                 | Pertussis                              | 9                                    | 16      | 4       | 14      | 1,363   | 469    | 417    | 761    | 652    |
|                 | Polio                                  | 0                                    | 0       | 0       | 0       | 0   | 0      | 0      | 0      | 0      |
|                 | Rubella                                | 0                                    | 0       | 0       | 0       | 0   | 0      | 0      | 0      | 0      |
|                 | Shingles                               | 27                                   | 32      | 23      | 24      | 492   | 708    | 866    | 976    | 1,251  |
|                 | Tetanus                                | 0                                    | 0       | 0       | 0       | 0   | 0      | 1      | 2      | 2      |
|                 | VZ Infection, Unspecified              | 6                                    | 1       | 2       | 3       | 143   | 187    | 172    | 270    | 210    |
| <b>Subtotal</b> |  | 60                                   | 58      | 38      | 54      | 2,856   | 2,085  | 2,237  | 2,800  | 2,822  |
| Vectorborne     |  |                                      |         |         |         |   |        |        |        |        |
|                 | Babesiosis++                           | 0                                    | 0       | 0       | 0       | 2   | 2      | 5      | 3      | 6      |

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

## 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*** |            |            |            |            |
|-----------------|---|--------------------------------------|----------|----------|----------|---|------------|------------|------------|------------|
|                 |   | 49-2018                              | 50-2018  | 51-2018  | 52-2018  | 2014  | 2015       | 2016       | 2017       | 2018       |
|                 | Chikungunya~                            | 0                                    | 0        | 0        | 0        | 1   | 6          | 4          | 4          | 2          |
|                 | Dengue Fever                            | 0                                    | 0        | 0        | 0        | 6   | 23         | 16         | 11         | 11         |
|                 | Ehrlichiosis*                           | 0                                    | 0        | 0        | 0        | 0   | 0          | 0          | 0          | 0          |
|                 | Ehrlichiosis, Anaplasma phagocytophilum | 0                                    | 0        | 0        | 0        | 4   | 7          | 8          | 15         | 17         |
|                 | Ehrlichiosis, Ehrlichia chaffeensis     | 0                                    | 1        | 0        | 0        | 3   | 6          | 8          | 3          | 8          |
|                 | Ehrlichiosis, Ehrlichia ewingii         | 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          | 0          | 3          | 1          |
|                 | Ehrlichosis human, other, unsp*         | 0                                    | 0        | 0        | 0        | 0   | 0          | 0          | 0          | 0          |
|                 | Encephalitis, California                | 0                                    | 0        | 0        | 0        | 0   | 1          | 0          | 0          | 2          |
|                 | Encephalitis, Eastern Equine            | 0                                    | 0        | 0        | 0        | 1   | 0          | 2          | 0          | 1          |
|                 | Encephalitis, Powassan                  | 0                                    | 0        | 0        | 0        | 0   | 0          | 0          | 0          | 0          |
|                 | Encephalitis, St. Louis                 | 0                                    | 0        | 0        | 0        | 0   | 0          | 0          | 0          | 0          |
|                 | Encephalitis, Western Equine            | 0                                    | 0        | 0        | 0        | 0   | 0          | 0          | 0          | 0          |
|                 | Lyme Disease                            | 1                                    | 4        | 1        | 0        | 124   | 150        | 232        | 346        | 306        |
|                 | Malaria                                 | 0                                    | 2        | 0        | 0        | 18  | 21         | 43         | 45         | 29         |
|                 | Rickettsial Disease - Spotted Fever     | 0                                    | 0        | 0        | 0        | 1   | 2          | 14         | 13         | 23         |
|                 | Rickettsial Disease - Typhus            | 0                                    | 0        | 0        | 0        | 0   | 0          | 1          | 0          | 0          |
|                 | West Nile Virus                         | 0                                    | 0        | 0        | 0        | 1   | 19         | 45         | 43         | 105        |
|                 | Yellow Fever                            | 0                                    | 0        | 0        | 0        | 0   | 0          | 0          | 0          | 0          |
|                 | Zika~~                                  | 0                                    | 0        | 0        | 0        | 0   | 0          | 75         | 10         | 1          |
|                 | <b>Subtotal</b>                         | <b>1</b>                             | <b>7</b> | <b>1</b> | <b>0</b> | <b>161</b>  | <b>237</b> | <b>453</b> | <b>496</b> | <b>512</b> |
| Viral Hepatitis |   |                                      |          |          |          |   |            |            |            |            |
|                 | Hepatitis A                             | 4                                    | 7        | 0        | 1        | 54  | 72         | 132        | 705        | 332        |
|                 | Hepatitis B, Acute                      | 2                                    | 1        | 2        | 0        | 50  | 60         | 51         | 63         | 79         |
|                 | Hepatitis B, Chronic                    | 19                                   | 26       | 19       | 13       | 1,119   | 1,084      | 1,270      | 1,214      | 1,080      |
|                 | Hepatitis B, Perinatal                  | 0                                    | 0        | 0        | 0        | 2   | 0          | 0          | 1          | 1          |
|                 | Hepatitis C, Acute                      | 3                                    | 4        | 2        | 3        | 82  | 91         | 159        | 233        | 174        |
|                 | Hepatitis C, Chronic                    | 218                                  | 168      | 186      | 122      | 8,177   | 7,846      | 11,816     | 11,968     | 10,329     |
|                 | Hepatitis C, Perinatal                  | 1                                    | 2        | 0        | 0        | 1   | 1          | 3          | 3          | 11         |

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

## 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*** |       |        |        |        |
|---------------|----------------------|--------------------------------------|---------|---------|---------|---|-------|--------|--------|--------|
|               |                      | 49-2018                              | 50-2018 | 51-2018 | 52-2018 | 2014  | 2015  | 2016   | 2017   | 2018   |
|               | Hepatitis E          | 0                                    | 0       | 0       | 0       | 2   | 7     | 4      | 5      | 9      |
|               | <b>Subtotal</b>      | 247                                  | 208     | 209     | 139     | 9,487   | 9,161 | 13,435 | 14,192 | 12,015 |

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

**Complete HIV/AIDS statistics can be found at:** [http://www.michigan.gov/mdch/0,1607,7-132-2944\\_5320\\_5331---,00.html](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 52-2018                                 |         |     |         |     |         |       |         |     |         |     |         |     |         |     |         |        |         |       |         |     |         |        |         |       |
| 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   |
| Rubella - Congenital                                      | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Salmonellosis   | -       | 2   | -       | -   | -       | 15    | -       | 2   | -       | 1   | -       | 4   | -       | 3   | -       | 10     | -       | 14    | -       | 1   | 1       | 22     | -       | 12    |
| Shiga toxin-producing Escherichia coli --(STEC)           | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Shiga toxin-producing Escherichia coli --(STEC Pre-2019)* | -       | -   | -       | 1   | -       | 5     | -       | 1   | -       | -   | -       | 1   | -       | 1   | -       | 5      | -       | 1     | -       | -   | -       | 7      | -       | -     |
| Shigellosis   | -       | -   | -       | -   | -       | 4     | -       | -   | -       | -   | -       | 1   | -       | -   | -       | -      | 1       | -     | -       | -   | -       | 2      | -       | -     |
| Shingles  | -       | -   | -       | -   | -       | 5     | -       | -   | -       | -   | -       | -   | -       | -   | 2       | -      | 15      | -     | -       | -   | -       | 1      | -       | -     |
| Streptococcal Dis, Inv, Grp A                             | -       | -   | -       | -   | -       | 3     | -       | 1   | -       | -   | -       | -   | -       | -   | 1       | 6      | -       | 8     | -       | -   | -       | 16     | -       | 1     |
| Streptococcal Toxic Shock                                 | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | 1       | -      | -       | -     | -       | -   | -       | 1      | -       | -     |
| Streptococcus pneumoniae, Drug Resistant                  | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | 1       | -      | -       | -     | -       | -   | -       | 7      | -       | -     |
| Streptococcus pneumoniae, Inv                             | -       | 2   | -       | 2   | -       | 10    | -       | 1   | -       | 1   | -       | 2   | -       | -   | 10      | -      | 9       | -     | 1       | 3   | 10      | -      | -       |       |
| Syphilis - Congenital                                     | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Syphilis - Early Latent                                   | -       | -   | -       | -   | -       | 1     | -       | -   | -       | -   | -       | -   | -       | -   | 3       | -      | 4       | -     | -       | -   | -       | 7      | -       | 1     |
| Syphilis - Late Latent*                                   | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Syphilis - Latent of Unknown Duration*                    | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Syphilis - Late with Manifestations*                      | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Syphilis - Primary  | -       | -   | -       | -   | -       | -     | -       | 1   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | 1      | -       | -     |
| Syphilis - Secondary                                      | -       | -   | -       | -   | -       | 1     | -       | 1   | -       | -   | -       | -   | -       | -   | -       | -      | 6       | -     | -       | -   | -       | 7      | -       | 1     |
| Syphilis - To Be Determined                               | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Syphilis - Unknown Duration or Late                       | -       | -   | -       | -   | -       | 4     | -       | -   | -       | 1   | -       | -   | -       | -   | 3       | -      | 4       | -     | -       | -   | -       | 10     | -       | -     |
| Tetanus   | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Toxic Shock   | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Trachoma  | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Trichinosis   | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Tuberculosis  | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Tularemia   | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Typhoid Fever   | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Vibriosis - Non Cholera                                   | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Vibriosis - Non Cholera (Pre-2019)*                       | -       | -   | -       | -   | -       | 1     | -       | -   | -       | 1   | -       | -   | -       | -   | -       | -      | -       | -     | -       | 1   | 1       | 2      | -       | 1     |
| VISA  | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| VRSA  | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| VZ Infection, Unspecified                                 | -       | 1   | -       | -   | -       | -     | -       | -   | -       | 2   | -       | 1   | -       | -   | 2       | -      | -       | -     | 4       | -   | -       | -      | -       | -     |
| West Nile Virus   | -       | -   | -       | -   | -       | 3     | -       | -   | -       | -   | -       | -   | -       | -   | 1       | -      | -       | -     | -       | -   | -       | 3      | -       | -     |
| Yellow Fever  | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| Yersinia enteritis  | -       | -   | -       | -   | -       | 1     | -       | -   | -       | -   | -       | -   | -       | -   | 1       | -      | -       | -     | -       | -   | -       | 11     | -       | -     |
| Zika  | -       | -   | -       | -   | -       | -     | -       | -   | -       | -   | -       | -   | -       | -   | -       | -      | -       | -     | -       | -   | -       | -      | -       | -     |
| <b>Total</b>  | 0       | 325 | 0       | 45  | 79      | 9,619 | 2       | 413 | 2       | 410 | 1       | 248 | 1       | 206 | 16      | 10,614 | 26      | 7,985 | 0       | 412 | 53      | 16,962 | 16      | 7,339 |

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 52-2018                                 |         |        |         |       |            |     |           |     |          |       |         |       |         |       |          |     |         |       |              |        |           |     |         |        |
| 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    |
| Rubella - Congenital                                      | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       | -      |
| Salmonellosis   | -       | 13     | 1       | 7     | -          | 1   | -         | 2   | -        | 30    | -       | 7     | -       | 8     | -        | 2   | -       | 6     | 1            | 56     | -         | 3   | -       | 18     |
| Shiga toxin-producing Escherichia coli --(STEC)           | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       | -      |
| Shiga toxin-producing Escherichia coli --(STEC Pre-2019)* | -       | 17     | -       | 3     | -          | -   | -         | -   | 4        | -     | 3       | -     | 2       | -     | -        | -   | 1       | -     | 4            | -      | 1         | -   | 2       |        |
| Shigellosis   | -       | 3      | -       | 1     | -          | 1   | -         | -   | -        | -     | -       | -     | 1       | -     | -        | -   | -       | -     | 30           | -      | -         | -   | -       |        |
| Shingles  | -       | 1      | -       | 3     | -          | 6   | -         | 3   | -        | -     | -       | -     | 9       | -     | -        | -   | 1       | -     | 51           | -      | -         | -   | 3       |        |
| Streptococcal Dis, Inv, Grp A                             | -       | 8      | -       | 1     | -          | 1   | -         | 2   | 1        | 3     | -       | 2     | -       | 4     | -        | -   | -       | -     | 51           | -      | 1         | -   | 2       |        |
| Streptococcal Toxic Shock                                 | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Streptococcus pneumoniae, Drug Resistant                  | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | 22           | -      | -         | -   | 1       |        |
| Streptococcus pneumoniae, Inv                             | -       | 22     | -       | 9     | -          | 3   | 1         | 2   | -        | 5     | -       | 7     | 1       | 7     | -        | 1   | -       | 2     | 4            | 81     | -         | 2   | 14      |        |
| Syphilis - Congenital                                     | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | 4            | -      | -         | -   | -       |        |
| Syphilis - Early Latent                                   | -       | -      | -       | -     | -          | -   | -         | -   | 4        | -     | 1       | -     | 1       | -     | -        | -   | -       | 3     | 124          | -      | 1         | -   | 1       |        |
| Syphilis - Late Latent*                                   | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Syphilis - Latent of Unknown Duration*                    | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Syphilis - Late with Manifestations*                      | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Syphilis - Primary  | -       | -      | -       | -     | -          | -   | -         | -   | 1        | -     | -       | -     | -       | -     | 1        | -   | -       | 2     | 63           | -      | -         | -   | 2       |        |
| Syphilis - Secondary                                      | -       | 1      | -       | -     | -          | -   | 1         | -   | 1        | -     | 1       | -     | -       | -     | -        | -   | 2       | 150   | -            | -      | -         | 1   | 1       |        |
| Syphilis - To Be Determined                               | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Syphilis - Unknown Duration or Late                       | -       | 6      | -       | 1     | -          | -   | -         | -   | 3        | -     | -       | -     | 2       | -     | -        | -   | -       | -     | 218          | -      | -         | -   | 4       |        |
| Tetanus   | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | 1            | -      | -         | -   | -       |        |
| Toxic Shock   | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Trachoma  | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Trichinosis   | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Tuberculosis  | -       | 1      | -       | -     | -          | -   | -         | -   | 1        | -     | -       | -     | 1       | -     | -        | -   | -       | -     | 23           | -      | -         | -   | -       |        |
| Tularemia   | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | 1         | -   | -       |        |
| Typhoid Fever   | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Vibriosis - Non Cholera                                   | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Vibriosis - Non Cholera (Pre-2019)*                       | -       | 4      | -       | 1     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | 1            | -      | -         | -   | 1       |        |
| VISA  | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| VRSA  | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| VZ Infection, Unspecified                                 | -       | 1      | -       | -     | 1          | 2   | -         | 3   | -        | 1     | -       | 4     | -       | 1     | -        | -   | 5       | -     | -            | -      | 1         | -   | 13      |        |
| West Nile Virus   | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | 9            | -      | -         | -   | 1       |        |
| Yellow Fever  | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| Yersinia enterocolitica                                   | -       | 9      | -       | 1     | -          | -   | -         | 1   | -        | -     | -       | -     | 1       | -     | -        | -   | -       | -     | -            | -      | -         | -   | 2       |        |
| Zika  | -       | -      | -       | -     | -          | -   | -         | -   | -        | -     | -       | -     | -       | -     | -        | -   | -       | -     | -            | -      | -         | -   | -       |        |
| <b>Total</b>  | 91      | 20,479 | 8       | 1,843 | 2          | 777 | 1         | 144 | 2        | 1,010 | 3       | 2,802 | 1,730   | 5,697 | 2        | 674 | 25      | 1,201 | 443          | 24,770 | 1         | 945 | 24      | 19,537 |

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 52-2018                                 |          |              |            |               |          |            |          |            |                |              |          |              |           |              |          |              |          |              |           |               |          |              |          |            |
| Disease   | Emmet    |              | Genesee    |               | Gladwin  |            | Gogebic  |            | Grand Traverse |              | Gratiot  |              | 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        |
| Rubella - Congenital                                      | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Salmonellosis   | -        | 6            | 1          | 40            | -        | 3          | -        | 1          | -              | 7            | -        | 4            | -         | 10           | -        | 2            | -        | 4            | 1         | 18            | -        | 9            | -        | 2          |
| Shiga toxin-producing Escherichia coli --(STEC)           | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Shiga toxin-producing Escherichia coli --(STEC Pre-2019)* | -        | -            | -          | 7             | -        | 3          | -        | 1          | -              | 1            | -        | -            | -         | 1            | -        | 4            | -        | -            | -         | 5             | -        | 3            | -        | -          |
| Shigellosis   | -        | -            | 1          | 8             | -        | -          | -        | -          | -              | 1            | -        | -            | -         | -            | -        | 1            | -        | -            | -         | 2             | -        | -            | -        | -          |
| Shingles  | 1        | 3            | -          | 9             | -        | -          | -        | -          | -              | 16           | -        | 2            | -         | -            | -        | -            | -        | -            | -         | 32            | -        | 6            | -        | -          |
| Streptococcal Dis, Inv, Grp A                             | -        | 2            | 1          | 21            | -        | 1          | -        | -          | -              | 2            | -        | 1            | -         | 3            | -        | 1            | -        | 1            | -         | 11            | -        | 4            | -        | 2          |
| Streptococcal Toxic Shock                                 | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Streptococcus pneumoniae, Drug Resistant                  | -        | -            | -          | 15            | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | 4             | -        | -            | -        | -          |
| Streptococcus pneumoniae, Inv                             | -        | 6            | 2          | 22            | -        | 6          | 1        | 1          | -              | 5            | -        | 4            | 2         | 13           | -        | 2            | 1        | 2            | 3         | 21            | 1        | 13           | 1        | 5          |
| Syphilis - Congenital                                     | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Syphilis - Early Latent                                   | -        | 1            | -          | 8             | -        | -          | -        | -          | -              | -            | -        | -            | -         | 1            | -        | -            | -        | -            | -         | 32            | -        | -            | -        | -          |
| Syphilis - Late Latent*                                   | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Syphilis - Latent of Unknown Duration*                    | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Syphilis - Late with Manifestations*                      | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Syphilis - Primary  | -        | -            | 1          | 2             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | 15            | -        | 1            | -        | -          |
| Syphilis - Secondary                                      | -        | -            | -          | 7             | -        | 1          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | 1         | 13            | -        | -            | -        | -          |
| Syphilis - To Be Determined                               | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Syphilis - Unknown Duration or Late                       | -        | 1            | -          | 17            | -        | -          | -        | -          | -              | 2            | -        | -            | -         | 1            | -        | -            | -        | -            | -         | 27            | -        | 2            | -        | -          |
| Tetanus   | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | 1            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Toxic Shock   | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | 1            | -        | -          |
| Trachoma  | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Trichinosis   | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Tuberculosis  | -        | -            | -          | 2             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | 1            | -        | -            | -         | 6             | -        | -            | -        | -          |
| Tularemia   | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Typhoid Fever   | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Vibriosis - Non Cholera                                   | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Vibriosis - Non Cholera (Pre-2019)*                       | -        | -            | -          | -             | -        | -          | -        | -          | -              | 1            | -        | -            | -         | -            | -        | 3            | -        | -            | -         | -             | -        | -            | -        | -          |
| VISA  | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | 1             | -        | -            | -        | -          |
| VRSA  | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| VZ Infection, Unspecified                                 | -        | 8            | -          | 3             | -        | 3          | -        | -          | -              | -            | -        | -            | -         | 1            | -        | -            | -        | -            | -         | -             | -        | 5            | -        | 1          |
| West Nile Virus   | -        | -            | -          | 3             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | 5             | -        | -            | -        | -          |
| Yellow Fever  | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| Yersinia enteritis  | -        | -            | -          | 2             | -        | -          | -        | -          | -              | 1            | -        | -            | -         | 1            | -        | -            | -        | -            | -         | 2             | -        | -            | -        | -          |
| Zika  | -        | -            | -          | -             | -        | -          | -        | -          | -              | -            | -        | -            | -         | -            | -        | -            | -        | -            | -         | -             | -        | -            | -        | -          |
| <b>Total</b>  | <b>5</b> | <b>3,139</b> | <b>111</b> | <b>18,742</b> | <b>2</b> | <b>442</b> | <b>1</b> | <b>953</b> | <b>11</b>      | <b>4,292</b> | <b>6</b> | <b>5,838</b> | <b>30</b> | <b>4,144</b> | <b>7</b> | <b>1,225</b> | <b>3</b> | <b>2,074</b> | <b>87</b> | <b>20,693</b> | <b>6</b> | <b>4,871</b> | <b>5</b> | <b>430</b> |

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 52-2018                                 |          |            |           |              |           |               |            |               |          |              |            |               |          |           |          |            |           |              |          |            |           |              |            |               |
| 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           |
| Rubella - Congenital                                      | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Salmonellosis   | -        | 4          | -         | 8            | -         | 28            | -          | 50            | -        | 2            | -          | 65            | -        | -         | -        | 2          | -         | 12           | -        | 1          | 1         | 25           | -          | 21            |
| Shiga toxin-producing Escherichia coli --(STEC)           | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Shiga toxin-producing Escherichia coli --(STEC Pre-2019)* | -        | 2          | -         | 2            | -         | 1             | -          | 17            | -        | -            | -          | 25            | -        | -         | -        | -          | -         | -            | -        | -          | -         | 5            | -          | 6             |
| Shigellosis   | -        | -          | -         | -            | -         | 2             | -          | 5             | -        | -            | -          | 20            | -        | -         | -        | -          | 3         | -            | -        | 1          | 3         | -            | 1          |               |
| Shingles  | -        | -          | -         | 1            | -         | 17            | -          | 9             | -        | -            | 1          | 65            | -        | -         | -        | -          | -         | -            | -        | -          | -         | 10           | 2          | 42            |
| Streptococcal Dis, Inv, Grp A                             | -        | 1          | 1         | 1            | -         | 5             | -          | 8             | -        | 1            | 1          | 19            | -        | -         | -        | 1          | -         | 3            | -        | -          | -         | 5            | -          | 10            |
| Streptococcal Toxic Shock                                 | -        | -          | -         | -            | -         | -             | 1          | 2             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Streptococcus pneumoniae, Drug Resistant                  | -        | -          | -         | -            | -         | 6             | -          | 1             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | 3            | -          | -             |
| Streptococcus pneumoniae, Inv                             | -        | -          | -         | 3            | 1         | 8             | 1          | 28            | -        | 1            | -          | 51            | -        | -         | -        | 4          | -         | 5            | -        | 2          | -         | 7            | 1          | 11            |
| Syphilis - Congenital                                     | -        | -          | -         | -            | -         | 1             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Syphilis - Early Latent                                   | -        | -          | -         | -            | -         | 5             | 1          | 9             | -        | -            | 1          | 27            | -        | -         | -        | -          | -         | -            | -        | -          | -         | 4            | -          | 1             |
| Syphilis - Late Latent*                                   | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Syphilis - Latent of Unknown Duration*                    | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Syphilis - Late with Manifestations*                      | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Syphilis - Primary  | -        | -          | -         | 1            | -         | 5             | -          | 2             | -        | -            | -          | 13            | -        | -         | -        | -          | -         | -            | -        | -          | -         | 4            | -          | -             |
| Syphilis - Secondary                                      | -        | -          | -         | 6            | -         | 4             | -          | 10            | -        | 1            | -          | 17            | -        | -         | -        | -          | 2         | -            | 2        | -          | 1         | -            | 2          |               |
| Syphilis - To Be Determined                               | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Syphilis - Unknown Duration or Late                       | -        | -          | -         | -            | -         | 12            | -          | 13            | -        | 1            | 1          | 42            | -        | -         | -        | -          | 3         | -            | -        | -          | 6         | -            | 1          |               |
| Tetanus   | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Toxic Shock   | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Trachoma  | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Trichinosis   | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Tuberculosis  | -        | -          | -         | 1            | -         | 1             | -          | 1             | -        | -            | 1          | 12            | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Tularemia   | -        | 1          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Typhoid Fever   | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Vibriosis - Non Cholera                                   | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Vibriosis - Non Cholera (Pre-2019)*                       | -        | -          | -         | -            | -         | -             | -          | 2             | -        | -            | -          | 5             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | 1          |               |
| VISA  | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| VRSA  | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| VZ Infection, Unspecified                                 | -        | 1          | -         | 5            | -         | 7             | -          | 1             | -        | 1            | -          | 1             | -        | -         | -        | 1          | -         | 1            | -        | 5          | -         | 3            | -          | 8             |
| West Nile Virus   | -        | -          | -         | -            | -         | -             | -          | 1             | -        | -            | -          | 19            | -        | -         | -        | -          | 1         | -            | -        | -          | -         | -            | -          | -             |
| Yellow Fever  | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | -             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| Yersinia enteritis  | -        | -          | -         | 1            | -         | 1             | -          | 13            | -        | -            | -          | 4             | -        | -         | -        | -          | -         | -            | -        | -          | -         | 2            | -          | 2             |
| Zika  | -        | -          | -         | -            | -         | -             | -          | -             | -        | -            | -          | 1             | -        | -         | -        | -          | -         | -            | -        | -          | -         | -            | -          | -             |
| <b>Total</b>  | <b>2</b> | <b>489</b> | <b>15</b> | <b>4,028</b> | <b>64</b> | <b>13,994</b> | <b>167</b> | <b>32,620</b> | <b>4</b> | <b>1,537</b> | <b>154</b> | <b>54,905</b> | <b>0</b> | <b>11</b> | <b>0</b> | <b>235</b> | <b>11</b> | <b>3,293</b> | <b>0</b> | <b>748</b> | <b>14</b> | <b>5,990</b> | <b>208</b> | <b>23,720</b> |

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 52-2018                                 |          |            |          |            |            |               |           |              |           |            |          |              |           |              |           |            |           |              |           |              |           |              |           |               |
| 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           |
| Rubella - Congenital                                      | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Salmonellosis   | -        | 1          | -        | 2          | -          | 83            | -         | 3            | -         | 6          | -        | 4            | -         | 2            | -         | 1          | -         | 9            | -         | 4            | -         | 24           | -         | 10            |
| Shiga toxin-producing Escherichia coli --(STEC)           | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Shiga toxin-producing Escherichia coli --(STEC Pre-2019)* | -        | -          | -        | 1          | -          | 26            | -         | -            | -         | 1          | -        | -            | -         | 2            | -         | 1          | -         | 2            | -         | 4            | -         | 7            | -         | 2             |
| Shigellosis   | -        | -          | -        | -          | -          | 10            | -         | 1            | -         | -          | -        | -            | -         | 1            | -         | -          | -         | 1            | -         | -            | -         | -            | -         | 1             |
| Shingles  | -        | -          | -        | -          | 5          | 195           | -         | 1            | -         | 1          | -        | -            | -         | -            | -         | 1          | -         | 6            | -         | -            | -         | 10           | -         | 2             |
| Streptococcal Dis, Inv, Grp A                             | -        | -          | -        | -          | 1          | 46            | -         | -            | -         | 3          | -        | -            | -         | 2            | -         | -          | -         | 3            | -         | 1            | -         | 6            | -         | 2             |
| Streptococcal Toxic Shock                                 | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Streptococcus pneumoniae, Drug Resistant                  | -        | -          | -        | -          | -          | 4             | -         | -            | -         | -          | -        | 1            | -         | -            | -         | -          | -         | 3            | -         | -            | -         | -            | -         | -             |
| Streptococcus pneumoniae, Inv                             | -        | 1          | -        | -          | 1          | 50            | -         | 1            | -         | 4          | -        | 3            | 1         | 8            | -         | 1          | -         | 2            | -         | 6            | -         | 8            | -         | 12            |
| Syphilis - Congenital                                     | -        | -          | -        | -          | -          | 3             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Syphilis - Early Latent                                   | -        | -          | -        | -          | 1          | 34            | -         | -            | -         | -          | -        | -            | -         | 1            | -         | -          | -         | 1            | -         | -            | -         | 2            | -         | -             |
| Syphilis - Late Latent*                                   | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Syphilis - Latent of Unknown Duration*                    | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Syphilis - Late with Manifestations*                      | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Syphilis - Primary  | -        | -          | -        | -          | 1          | 28            | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | 2             |
| Syphilis - Secondary                                      | -        | -          | -        | -          | -          | 45            | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | 6            | -         | 1             |
| Syphilis - To Be Determined                               | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Syphilis - Unknown Duration or Late                       | -        | -          | -        | -          | -          | 37            | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | 1            | -         | -            | -         | 3            | -         | -             |
| Tetanus   | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Toxic Shock   | -        | -          | -        | -          | -          | 1             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Trachoma  | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Trichinosis   | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Tuberculosis  | -        | -          | -        | -          | -          | 6             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | 2            | -         | -            | -         | 1            | -         | -             |
| Tularemia   | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Typhoid Fever   | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Vibriosis - Non Cholera                                   | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Vibriosis - Non Cholera (Pre-2019)*                       | -        | -          | -        | 1          | -          | 2             | -         | -            | -         | 2          | -        | -            | -         | -            | -         | 1          | -         | -            | -         | -            | -         | 1            | -         | 1             |
| VISA  | -        | 1          | -        | -          | -          | 2             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| VRSA  | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| VZ Infection, Unspecified                                 | -        | -          | -        | -          | -          | 1             | -         | 7            | -         | 1          | -        | 2            | -         | 3            | -         | 2          | -         | -            | -         | 1            | -         | 6            | -         | 4             |
| West Nile Virus   | -        | -          | -        | -          | -          | 11            | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | 4            | -         | -             |
| Yellow Fever  | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| Yersinia enteritis  | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | 1            | -         | -             |
| Zika  | -        | -          | -        | -          | -          | -             | -         | -            | -         | -          | -        | -            | -         | -            | -         | -          | -         | -            | -         | -            | -         | -            | -         | -             |
| <b>Total</b>  | <b>1</b> | <b>604</b> | <b>3</b> | <b>386</b> | <b>237</b> | <b>50,393</b> | <b>50</b> | <b>3,113</b> | <b>10</b> | <b>873</b> | <b>3</b> | <b>1,338</b> | <b>27</b> | <b>4,467</b> | <b>2</b>  | <b>217</b> | <b>12</b> | <b>6,181</b> | <b>1</b>  | <b>1,737</b> | <b>31</b> | <b>6,850</b> | <b>18</b> | <b>15,018</b> |

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 52-2018                                 |             |           |           |              |          |              |            |               |            |              |          |            |           |            |          |            |          |            |          |          |            |               |              |            |
| 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        |
| Rubella - Congenital                                      | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Salmonellosis   | -           | -         | -         | 12           | -        | 5            | 2          | 106           | -          | 7            | -        | 2          | -         | 2          | -        | 3          | -        | -          | -        | -        | 1          | 38            | -            | -          |
| Shiga toxin-producing Escherichia coli --(STEC)           | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Shiga toxin-producing Escherichia coli --(STEC Pre-2019)* | -           | -         | -         | 2            | -        | 5            | 1          | 23            | -          | 1            | -        | 1          | -         | -          | -        | -          | -        | -          | -        | 1        | 15         | -             | -            |            |
| Shigellosis   | -           | -         | -         | 1            | -        | 1            | -          | 27            | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | 8             | -            | -          |
| Shingles  | -           | -         | -         | 25           | -        | 2            | 8          | 400           | -          | 2            | -        | -          | -         | 2          | -        | -          | -        | -          | -        | -        | -          | 26            | -            | -          |
| Streptococcal Dis, Inv, Grp A                             | -           | -         | -         | 14           | -        | 4            | -          | 33            | -          | 1            | -        | -          | -         | -          | -        | 2          | -        | -          | -        | -        | -          | 8             | 1            | 1          |
| Streptococcal Toxic Shock                                 | -           | -         | -         | -            | -        | -            | -          | 1             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Streptococcus pneumoniae, Drug Resistant                  | -           | -         | -         | -            | -        | -            | -          | 5             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | 4             | -            | -          |
| Streptococcus pneumoniae, Inv                             | -           | 1         | 1         | 10           | -        | 2            | 2          | 74            | -          | 5            | -        | 1          | -         | 1          | -        | -          | -        | 1          | -        | -        | -          | 10            | -            | 2          |
| Syphilis - Congenital                                     | -           | -         | -         | -            | -        | -            | -          | 3             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Syphilis - Early Latent                                   | -           | -         | -         | 9            | -        | 1            | 2          | 52            | -          | 1            | -        | -          | -         | -          | -        | -          | -        | 1          | -        | -        | -          | 1             | -            | -          |
| Syphilis - Late Latent*                                   | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Syphilis - Latent of Unknown Duration*                    | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Syphilis - Late with Manifestations*                      | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Syphilis - Primary  | -           | -         | -         | -            | -        | 1            | -          | 31            | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | 2             | -            | -          |
| Syphilis - Secondary                                      | -           | -         | -         | -            | -        | -            | -          | 56            | -          | 1            | -        | -          | -         | -          | -        | 1          | -        | -          | -        | -        | -          | 3             | -            | -          |
| Syphilis - To Be Determined                               | -           | -         | -         | -            | -        | -            | -          | 1             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Syphilis - Unknown Duration or Late                       | -           | -         | -         | 9            | -        | 1            | 2          | 73            | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | 6             | -            | -          |
| Tetanus   | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Toxic Shock   | -           | -         | -         | -            | -        | -            | -          | 1             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Trachoma  | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Trichinosis   | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Tuberculosis  | -           | -         | -         | 1            | -        | -            | -          | 20            | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | 7             | -            | -          |
| Tularemia   | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Typhoid Fever   | -           | -         | -         | -            | -        | -            | -          | 4             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Vibriosis - Non Cholera                                   | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Vibriosis - Non Cholera (Pre-2019)*                       | -           | -         | -         | -            | -        | -            | -          | 4             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| VISA  | -           | -         | -         | -            | -        | -            | -          | 1             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | 2             | -            | 1          |
| VRSA  | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| VZ Infection, Unspecified                                 | -           | 1         | -         | -            | -        | -            | -          | -             | -          | -            | -        | 1          | -         | -          | -        | 1          | -        | -          | -        | -        | -          | -             | -            | 3          |
| West Nile Virus   | -           | -         | -         | -            | -        | -            | -          | 12            | -          | -            | -        | -          | -         | -          | -        | -          | -        | 1          | -        | -        | -          | 2             | -            | -          |
| Yellow Fever  | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| Yersinia enteritis  | -           | -         | -         | 4            | -        | -            | -          | 2             | -          | 1            | 1        | 1          | -         | -          | -        | -          | -        | -          | -        | -        | -          | 2             | -            | -          |
| Zika  | -           | -         | -         | -            | -        | -            | -          | -             | -          | -            | -        | -          | -         | -          | -        | -          | -        | -          | -        | -        | -          | -             | -            | -          |
| <b>Total</b>  | <b>0</b>    | <b>43</b> | <b>58</b> | <b>9,150</b> | <b>3</b> | <b>3,719</b> | <b>322</b> | <b>37,898</b> | <b>150</b> | <b>3,414</b> | <b>5</b> | <b>305</b> | <b>0</b>  | <b>242</b> | <b>1</b> | <b>781</b> | <b>2</b> | <b>158</b> | <b>2</b> | <b>0</b> | <b>349</b> | <b>59,566</b> | <b>1</b>     | <b>400</b> |

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 52-2018                                 |           |            |           |               |          |            |             |            |            |              |           |              |            |              |          |              |           |              |            |               |            |               |          |              |
| 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          |
| Rubella - Congenital                                      | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Salmonellosis   | -         | 4          | 1         | 18            | -        | 7          | -           | -          | -          | 14           | -         | 16           | -          | 7            | -        | 15           | -         | 9            | -          | 35            | 1          | 146           | -        | 3            |
| Shiga toxin-producing Escherichia coli --(STEC)           | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Shiga toxin-producing Escherichia coli --(STEC Pre-2019)* | -         | -          | -         | 6             | -        | 1          | -           | 2          | -          | 2            | -         | 5            | -          | 3            | 1        | 2            | -         | 14           | -          | 24            | 1          | 32            | -        | -            |
| Shigellosis   | -         | -          | -         | 3             | -        | -          | -           | -          | -          | 2            | -         | 10           | -          | -            | -        | -            | -         | 2            | -          | 9             | 2          | 38            | -        | 1            |
| Shingles  | -         | -          | -         | 3             | -        | -          | -           | -          | -          | -            | 4         | 19           | -          | -            | -        | 1            | -         | 2            | 1          | 113           | 2          | 126           | -        | -            |
| Streptococcal Dis. Inv, Grp A                             | -         | 1          | -         | 9             | -        | 1          | -           | 1          | -          | 1            | -         | 7            | -          | 2            | -        | 4            | -         | 2            | 1          | 11            | -          | 46            | -        | 1            |
| Streptococcal Toxic Shock                                 | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Streptococcus pneumoniae, Drug Resistant                  | -         | -          | -         | -             | -        | 2          | -           | -          | -          | -            | -         | 2            | -          | -            | -        | -            | -         | -            | 1          | 7             | 1          | 7             | -        | -            |
| Streptococcus pneumoniae, Inv                             | -         | 1          | 2         | 26            | -        | 5          | -           | -          | -          | 7            | 1         | 6            | -          | 5            | -        | 4            | -         | 15           | -          | 14            | 1          | 77            | -        | 5            |
| Syphilis - Congenital                                     | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | 3             | -        | -            |
| Syphilis - Early Latent                                   | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | 1          | -            | -        | -            | -         | -            | 14         | 2             | 57         | -             | -        |              |
| Syphilis - Late Latent*                                   | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Syphilis - Latent of Unknown Duration*                    | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Syphilis - Late with Manifestations*                      | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Syphilis - Primary  | -         | 1          | -         | -             | -        | -          | -           | -          | -          | -            | 3         | -            | -          | -            | -        | -            | 1         | -            | 9          | -             | 36         | -             | -        |              |
| Syphilis - Secondary                                      | -         | -          | -         | 2             | -        | -          | -           | -          | -          | 2            | -         | 2            | -          | -            | -        | -            | -         | -            | 16         | -             | 54         | -             | -        |              |
| Syphilis - To Be Determined                               | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Syphilis - Unknown Duration or Late                       | -         | 2          | 1         | 7             | -        | -          | -           | -          | -          | -            | 4         | -            | 1          | -            | 1        | -            | 3         | -            | 14         | -             | 76         | -             | 2        |              |
| Tetanus   | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Toxic Shock   | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | 1             | -        | -            |
| Trachoma  | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Trichinosis   | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Tuberculosis  | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | 1         | -            | 8          | -             | 15         | -             | -        |              |
| Tularemia   | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Typhoid Fever   | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | 3             | -        | -            |
| Vibriosis - Non Cholera                                   | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Vibriosis - Non Cholera (Pre-2019)*                       | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | 1         | -            | 4          | -             | 3          | -             | -        |              |
| VISA  | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| VRSA  | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| VZ Infection, Unspecified                                 | -         | -          | -         | 12            | -        | 2          | -           | -          | -          | 2            | -         | 4            | 1          | 5            | -        | 2            | -         | -            | -          | 2             | 1          | 50            | -        | 1            |
| West Nile Virus   | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | 3          | -            | 1        | -            | 1         | -            | 1          | -             | 23         | -             | -        |              |
| Yellow Fever  | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| Yersinia enteritis  | -         | -          | -         | 1             | -        | 1          | -           | -          | -          | -            | -         | 1            | -          | 1            | -        | -            | -         | 4            | -          | 2             | -          | 4             | -        | -            |
| Zika  | -         | -          | -         | -             | -        | -          | -           | -          | -          | -            | -         | -            | -          | -            | -        | -            | -         | -            | -          | -             | -          | -             | -        | -            |
| <b>Total</b>  | <b>1</b>  | <b>801</b> | <b>49</b> | <b>15,045</b> | <b>3</b> | <b>326</b> | <b>0</b>    | <b>222</b> | <b>19</b>  | <b>3,205</b> | <b>39</b> | <b>8,427</b> | <b>173</b> | <b>7,551</b> | <b>9</b> | <b>3,735</b> | <b>8</b>  | <b>6,646</b> | <b>101</b> | <b>30,985</b> | <b>277</b> | <b>49,138</b> | <b>1</b> | <b>4,321</b> |

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: 12/29/2016 - 12/29/2018

Time Breakdown: by Week

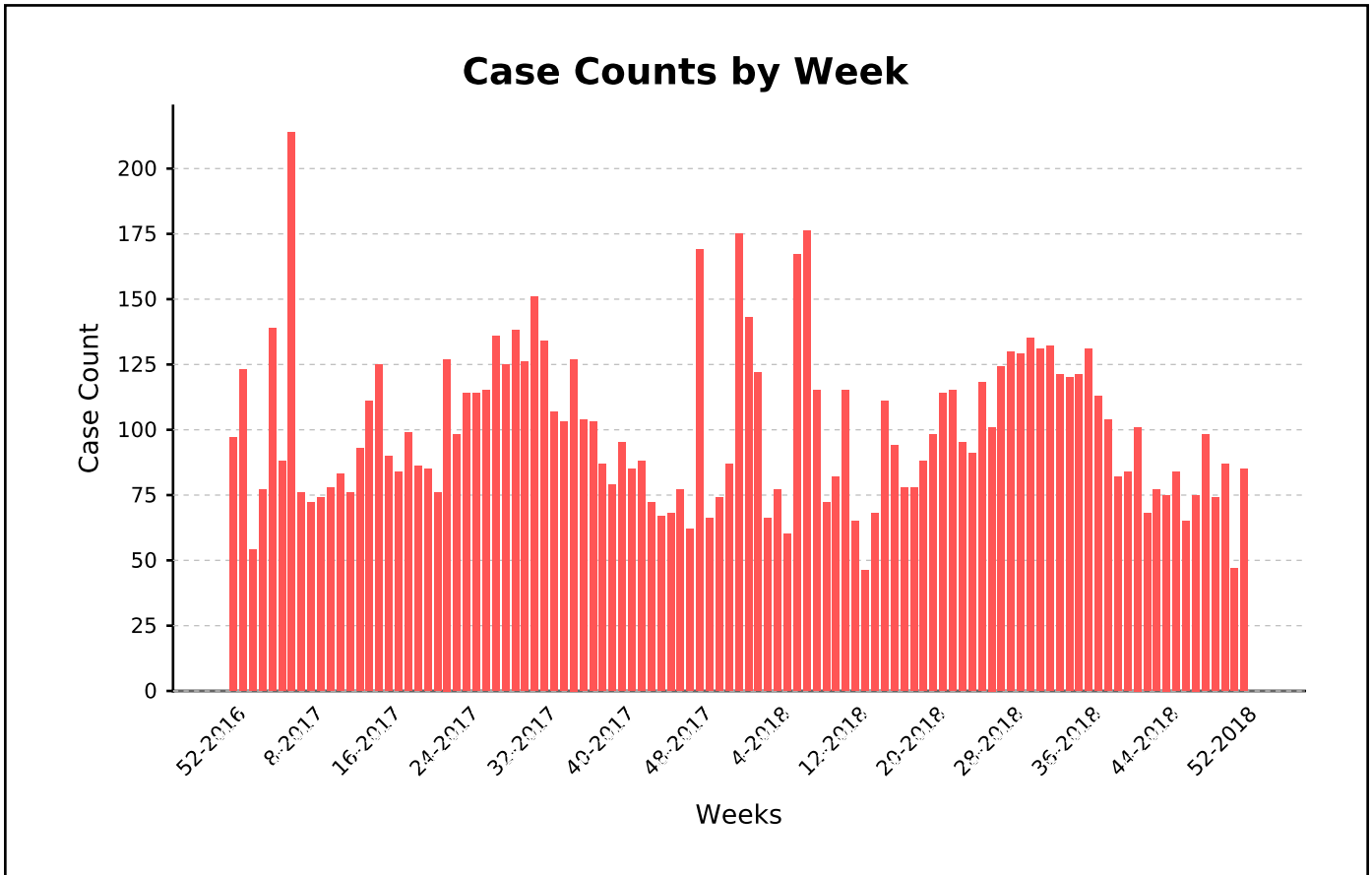
Geographic Area: The State of Michigan

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 |
|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|
| 52-2016 | 97    | 15-2017 | 125   | 30-2017 | 126   | 45-2017 | 68    | 8-2018  | 115   |
| 1-2017  | 123   | 16-2017 | 90    | 31-2017 | 151   | 46-2017 | 77    | 9-2018  | 72    |
| 2-2017  | 54    | 17-2017 | 84    | 32-2017 | 134   | 47-2017 | 62    | 10-2018 | 82    |
| 3-2017  | 77    | 18-2017 | 99    | 33-2017 | 107   | 48-2017 | 169   | 11-2018 | 115   |
| 4-2017  | 139   | 19-2017 | 86    | 34-2017 | 103   | 49-2017 | 66    | 12-2018 | 65    |
| 5-2017  | 88    | 20-2017 | 85    | 35-2017 | 127   | 50-2017 | 74    | 13-2018 | 46    |
| 6-2017  | 214   | 21-2017 | 76    | 36-2017 | 104   | 51-2017 | 87    | 14-2018 | 68    |
| 7-2017  | 76    | 22-2017 | 127   | 37-2017 | 103   | 52-2017 | 175   | 15-2018 | 111   |
| 8-2017  | 72    | 23-2017 | 98    | 38-2017 | 87    | 1-2018  | 143   | 16-2018 | 94    |
| 9-2017  | 74    | 24-2017 | 114   | 39-2017 | 79    | 2-2018  | 122   | 17-2018 | 78    |
| 10-2017 | 78    | 25-2017 | 114   | 40-2017 | 95    | 3-2018  | 66    | 18-2018 | 78    |
| 11-2017 | 83    | 26-2017 | 115   | 41-2017 | 85    | 4-2018  | 77    | 19-2018 | 88    |
| 12-2017 | 76    | 27-2017 | 136   | 42-2017 | 88    | 5-2018  | 60    | 20-2018 | 98    |
| 13-2017 | 93    | 28-2017 | 125   | 43-2017 | 72    | 6-2018  | 167   | 21-2018 | 114   |
| 14-2017 | 111   | 29-2017 | 138   | 44-2017 | 67    | 7-2018  | 176   | 22-2018 | 115   |

| <b>Week</b> | <b>Total</b> |
|-------------|--------------|
| 23-2018     | 95           |
| 24-2018     | 91           |
| 25-2018     | 118          |
| 26-2018     | 101          |
| 27-2018     | 124          |
| 28-2018     | 130          |
| 29-2018     | 129          |
| 30-2018     | 135          |
| 31-2018     | 131          |
| 32-2018     | 132          |
| 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     | 68           |
| 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           |

# Report 8: Epi-Curve Graph

Time Period: 12/29/2016 - 12/29/2018

Time Breakdown: by Week

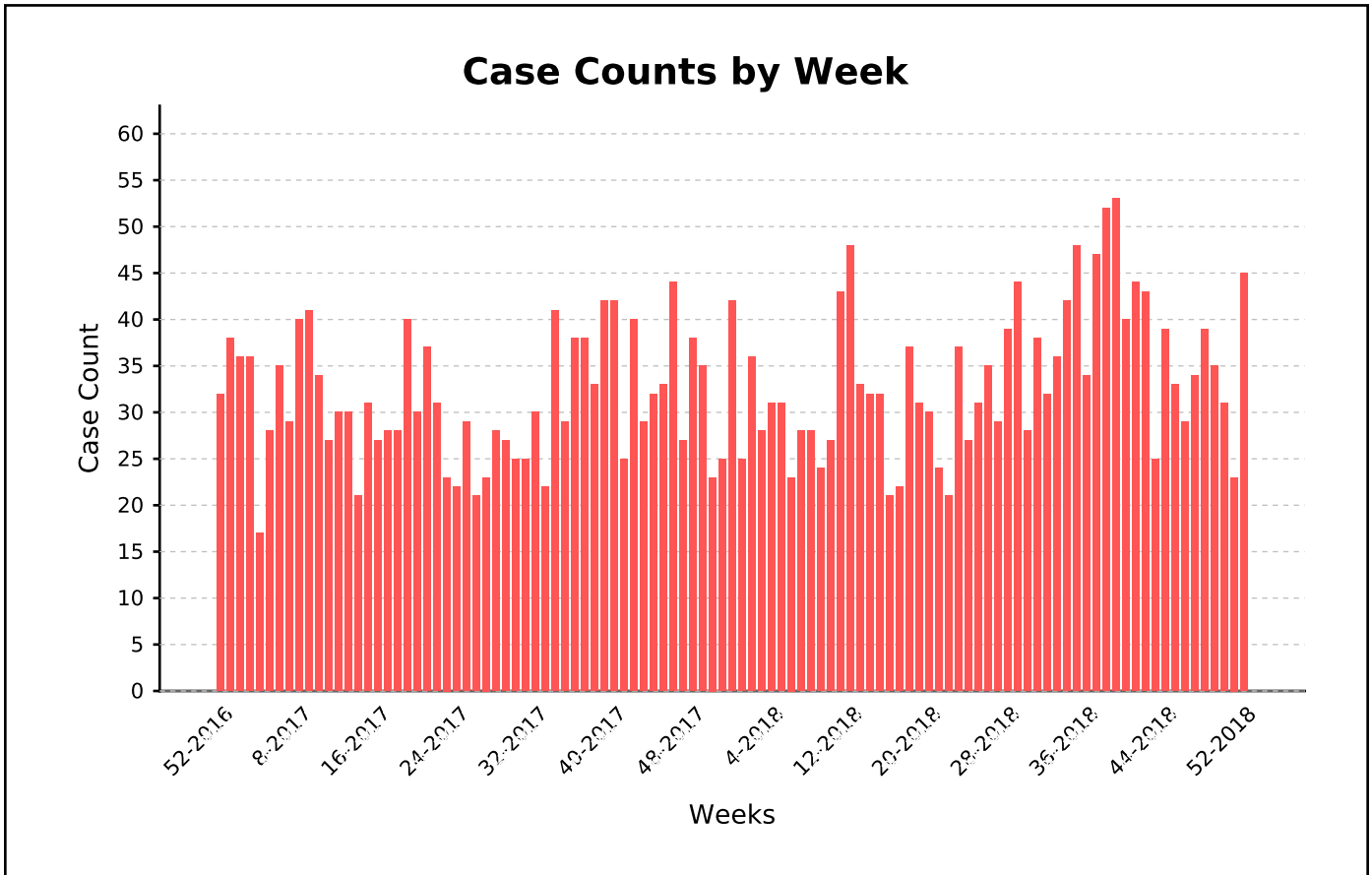
Geographic Area: The State of Michigan

Disease Group: Meningitis

Case Status: Confirmed, Probable, Suspect

Case Types: Individual and Aggregate

Investigation Status: Completed, Completed - Follow Up



| Week    | Total |
|---------|-------|
| 52-2016 | 32    |
| 1-2017  | 38    |
| 2-2017  | 36    |
| 3-2017  | 36    |
| 4-2017  | 17    |
| 5-2017  | 28    |
| 6-2017  | 35    |
| 7-2017  | 29    |
| 8-2017  | 40    |
| 9-2017  | 41    |
| 10-2017 | 34    |
| 11-2017 | 27    |
| 12-2017 | 30    |
| 13-2017 | 30    |
| 14-2017 | 21    |

| Week    | Total |
|---------|-------|
| 15-2017 | 31    |
| 16-2017 | 27    |
| 17-2017 | 28    |
| 18-2017 | 28    |
| 19-2017 | 40    |
| 20-2017 | 30    |
| 21-2017 | 37    |
| 22-2017 | 31    |
| 23-2017 | 23    |
| 24-2017 | 22    |
| 25-2017 | 29    |
| 26-2017 | 21    |
| 27-2017 | 23    |
| 28-2017 | 28    |
| 29-2017 | 27    |

| Week    | Total |
|---------|-------|
| 30-2017 | 25    |
| 31-2017 | 25    |
| 32-2017 | 30    |
| 33-2017 | 22    |
| 34-2017 | 41    |
| 35-2017 | 29    |
| 36-2017 | 38    |
| 37-2017 | 38    |
| 38-2017 | 33    |
| 39-2017 | 42    |
| 40-2017 | 42    |
| 41-2017 | 25    |
| 42-2017 | 40    |
| 43-2017 | 29    |
| 44-2017 | 32    |

| Week    | Total |
|---------|-------|
| 45-2017 | 33    |
| 46-2017 | 44    |
| 47-2017 | 27    |
| 48-2017 | 38    |
| 49-2017 | 35    |
| 50-2017 | 23    |
| 51-2017 | 25    |
| 52-2017 | 42    |
| 1-2018  | 25    |
| 2-2018  | 36    |
| 3-2018  | 28    |
| 4-2018  | 31    |
| 5-2018  | 31    |
| 6-2018  | 23    |
| 7-2018  | 28    |

| Week    | Total |
|---------|-------|
| 8-2018  | 28    |
| 9-2018  | 24    |
| 10-2018 | 27    |
| 11-2018 | 43    |
| 12-2018 | 48    |
| 13-2018 | 33    |
| 14-2018 | 32    |
| 15-2018 | 32    |
| 16-2018 | 21    |
| 17-2018 | 22    |
| 18-2018 | 37    |
| 19-2018 | 31    |
| 20-2018 | 30    |
| 21-2018 | 24    |
| 22-2018 | 21    |



| <b>Week</b> | <b>Total</b> |
|-------------|--------------|
| 23-2018     | 37           |
| 24-2018     | 27           |
| 25-2018     | 31           |
| 26-2018     | 35           |
| 27-2018     | 29           |
| 28-2018     | 39           |
| 29-2018     | 44           |
| 30-2018     | 28           |
| 31-2018     | 38           |
| 32-2018     | 32           |
| 33-2018     | 36           |
| 34-2018     | 42           |
| 35-2018     | 48           |
| 36-2018     | 34           |
| 37-2018     | 47           |
| 38-2018     | 52           |
| 39-2018     | 53           |
| 40-2018     | 40           |
| 41-2018     | 44           |
| 42-2018     | 43           |
| 43-2018     | 25           |
| 44-2018     | 39           |
| 45-2018     | 33           |
| 46-2018     | 29           |
| 47-2018     | 34           |
| 48-2018     | 39           |
| 49-2018     | 35           |
| 50-2018     | 31           |
| 51-2018     | 23           |
| 52-2018     | 45           |