



*mi*Ottawa Department of  
**Public Health**

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# Quarterly Reportable Diseases Summary

## Ottawa County

# 2016

The data in the Quarterly Disease Reports are provisional, based on current reports in the Michigan Disease Surveillance System (MDSS) made 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. Each Quarterly Disease Report reflects this constant activity as the numbers may slightly fluctuate each quarter. Therefore, it should be kept in mind that numbers in the Quarterly Disease Reports are NOT final and should be used only to generally monitor trends over time. Unknown, suspected, probable and laboratory confirmed cases of the condition are included in the report.

Specific data requests and questions should be directed towards:

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## Reportable Diseases Summary 2016

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# January - March 2016

*Each Disease Group has an accompanying graph at the end of the Quarter's section.*

| Disease Group                            | Reportable Condition                            | Cases in Last 4 Quarters** |              |              |               | Q1 Cases by Year |              |               |               |
|--|---|----------------------------|--------------|--------------|---------------|------------------|--------------|---------------|---------------|
|  |   | Q2-15                      | Q3-15        | Q4-15        | Q1-16         | Q1-13            | Q1-14        | Q1-15         | Q1-16         |
| <b>Foodborne</b>                         | Amebiasis                                       | -                          | -            | -            | -             | -                | 1            | -             | -             |
|  | Botulism - Foodborne                            | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Campylobacter                                   | 19                         | 23           | 12           | 14            | 18               | 8            | 17            | 14            |
|  | Cryptosporidiosis                               | 3                          | 4            | 8            | -             | 2                | 3            | 3             | -             |
|  | Giardiasis                                      | 1                          | 5            | 1            | 5             | 2                | 2            | 2             | 5             |
|  | Listeriosis                                     | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Norovirus***                                    | 11                         | 1            | -            | 1             | 1                | 6            | 69            | 1             |
|  | Salmonellosis                                   | 5                          | 6            | 5            | 8             | 7                | 5            | 4             | 8             |
|  | Shiga toxin-producing Escherichia coli --(STEC) | 4                          | 3            | 2            | 3             | 3                | 1            | -             | 3             |
|  | Shigellosis                                     | 3                          | 4            | 11           | 4             | -                | -            | 1             | 4             |
|  | Typhoid Fever                                   | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Yersinia enteritis                              | -                          | -            | -            | -             | -                | -            | 1             | -             |
| <b>Foodborne Subtotal</b>                | <b>46</b>                                       | <b>46</b>                  | <b>39</b>    | <b>35</b>    | <b>33</b>     | <b>26</b>        | <b>97</b>    | <b>35</b>     |               |
| <b>Influenza</b>                         | Flu Like Disease* ***                           | 5,473                      | 1,601        | 9,618        | 15,193        | 15,192           | 8,908        | 13,650        | 15,193        |
|  | Influenza                                       | 1                          | -            | -            | 1             | 32               | 12           | 3             | 1             |
|  | Influenza, Novel                                | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | <b>Influenza Subtotal</b>                       | <b>5,474</b>               | <b>1,601</b> | <b>9,618</b> | <b>15,194</b> | <b>15,224</b>    | <b>8,920</b> | <b>13,653</b> | <b>15,194</b> |
| <b>Meningitis</b>                        | Meningitis - Aseptic                            | 1                          | 11           | 6            | 1             | 2                | 3            | 3             | 1             |
|  | Meningitis - Bacterial Other                    | 4                          | -            | 1            | 1             | 1                | -            | 1             | 1             |
|  | Meningococcal Disease                           | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Streptococcus pneumoniae, Inv                   | 2                          | 1            | 4            | 6             | 5                | 4            | 6             | 6             |
|  | <b>Meningitis Subtotal</b>                      | <b>7</b>                   | <b>12</b>    | <b>11</b>    | <b>8</b>      | <b>8</b>         | <b>7</b>     | <b>10</b>     | <b>8</b>      |
| <b>Other</b>                             | Anthrax   | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Blastomycosis                                   | -                          | -            | -            | 1             | -                | -            | -             | 1             |
|  | Botulism - Infant                               | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Botulism - Other                                | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Brucellosis                                     | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Cholera   | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Coccidioidomycosis                              | -                          | 1            | -            | -             | -                | 2            | -             | -             |
|  | Creutzfeldt-Jakob Disease                       | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Cryptococcosis                                  | -                          | -            | 1            | -             | -                | -            | -             | -             |
|  | Cyclosporiasis                                  | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Encephalitis, Post Chickenpox                   | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Encephalitis, Post Mumps                        | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Encephalitis, Post Other                        | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Encephalitis, Primary                           | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Guillain-Barre Syndrome                         | -                          | 1            | -            | -             | -                | -            | -             | -             |
|  | Hantavirus                                      | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Hantavirus, Other                               | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Hantavirus, Pulmonary                           | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Hemolytic Uremic Syndrome                       | -                          | -            | -            | -             | 1                | -            | -             | -             |
|  | Hemorrhagic Fever                               | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Hepatitis - Unspecified                         | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Histoplasmosis                                  | 3                          | 4            | 5            | 2             | 3                | 2            | 3             | 2             |
|  | Kawasaki  | -                          | 1            | 1            | -             | -                | 1            | -             | -             |
|  | Legionellosis                                   | -                          | 1            | -            | 1             | 1                | 1            | -             | 1             |
|  | Leprosy   | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Leptospirosis                                   | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Melioidosis                                     | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Plague  | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Psittacosis                                     | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Q Fever Acute                                   | -                          | -            | -            | 1             | -                | -            | -             | 1             |
|  | Q Fever Chronic                                 | -                          | -            | -            | -             | -                | -            | -             | -             |
|  | Rabies Animal                                   | 1                          | -            | 1            | -             | -                | -            | -             | -             |
| Rabies Human                             | -   | -                          | -            | -            | -             | -                | -            | -             |               |
| Reye Syndrome                            | -   | -                          | -            | -            | -             | -                | -            | -             |               |
| Rheumatic Fever                          | -   | -                          | -            | -            | -             | -                | -            | -             |               |
| Rubella - Congenital                     | -   | -                          | -            | -            | -             | -                | -            | -             |               |
| Streptococcus pneumoniae, Drug Resistant | -   | -                          | -            | -            | 1             | -                | -            | -             |               |
| Streptococcal Dis, Inv, Grp A            | 4   | 2                          | 3            | 6            | 4             | 2                | 4            | 6             |               |
| Streptococcal Toxic Shock                | -   | -                          | -            | -            | 1             | -                | -            | -             |               |

| Disease Group                   | Reportable Condition                | Cases in Last 4 Quarters** |               |               |               | Q1 Cases by Year |               |               |            |
|---------------------------------|-------------------------------------|----------------------------|---------------|---------------|---------------|------------------|---------------|---------------|------------|
|                                 |                                     | Q2-15                      | Q3-15         | Q4-15         | Q1-16         | Q1-13            | Q1-14         | Q1-15         | Q1-16      |
| <b>Other</b>                    | Toxic Shock                         | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Trachoma                            | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Trichinosis                         | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Tularemia                           | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Vibriosis - Non Cholera             | -                          | -             | -             | -             | -                | 1             | -             | -          |
|                                 | VISA                                | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | VRSA                                | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | <b>Other Subtotal</b>               | <b>8</b>                   | <b>10</b>     | <b>11</b>     | <b>11</b>     | <b>11</b>        | <b>9</b>      | <b>7</b>      | <b>11</b>  |
| <b>STD</b>                      | Chancroid                           | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Chlamydia (Genital)                 | 182                        | 216           | 264           | 214           | 187              | 152           | 195           | 214        |
|                                 | Gonorrhea                           | 23                         | 20            | 20            | 24            | 29               | 18            | 19            | 24         |
|                                 | Granuloma Inguinale                 | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Lymphogranuloma venereum            | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Primary & Secondary Syphilis        | 2                          | 2             | -             | -             | -                | -             | -             | -          |
|                                 | All Syphilis                        | 2                          | 2             | 5             | 1             | -                | -             | 1             | 1          |
|                                 | <b>STD Subtotal</b>                 | <b>207</b>                 | <b>238</b>    | <b>289</b>    | <b>239</b>    | <b>216</b>       | <b>170</b>    | <b>215</b>    | <b>239</b> |
| <b>Tuberculosis</b>             | Tuberculosis                        | -                          | -             | 1             | -             | 1                | -             | 1             | -          |
|                                 | Mycobacterium - Other               | 7                          | 6             | 5             | 10            | 4                | 2             | 5             | 10         |
|                                 | <b>Tuberculosis Subtotal</b>        | <b>7</b>                   | <b>6</b>      | <b>6</b>      | <b>10</b>     | <b>5</b>         | <b>2</b>      | <b>6</b>      | <b>10</b>  |
| <b>VPD</b>                      | Chickenpox (Varicella)              | 5                          | 2             | 6             | 5             | 3                | 5             | 4             | 5          |
|                                 | Diphtheria                          | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | H. influenzae Disease - Inv. †      | 3                          | 1             | 2             | 2             | -                | 1             | 1             | 2          |
|                                 | Measles                             | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Mumps                               | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Pertussis                           | 1                          | 10            | 1             | 4             | 3                | 10            | 7             | 4          |
|                                 | Polio                               | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Rubella                             | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Shingles                            | 7                          | 7             | 7             | 4             | 1                | 3             | 2             | 4          |
|                                 | Tetanus                             | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | VZ Infection, Unspecified           | 1                          | -             | -             | 2             | 1                | -             | 1             | 2          |
| <b>VPD Subtotal</b>             | <b>17</b>                           | <b>20</b>                  | <b>16</b>     | <b>17</b>     | <b>8</b>      | <b>19</b>        | <b>15</b>     | <b>17</b>     |            |
| <b>Vectorborne</b>              | Babesiosis                          | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Dengue Fever                        | -                          | 1             | -             | -             | -                | -             | -             | -          |
|                                 | Ehrlichiosis                        | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Encephalitis, California            | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Encephalitis, Eastern Equine        | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Encephalitis, Powassan              | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Encephalitis, St. Louis             | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Encephalitis, Western Equine        | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Lyme Disease                        | 3                          | 4             | -             | -             | -                | 1             | 1             | -          |
|                                 | Malaria                             | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Rickettsial Disease - Spotted Fever | 1                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Rickettsial Disease - Typhus        | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | West Nile Virus                     | -                          | 1             | -             | -             | -                | -             | -             | -          |
|                                 | Yellow Fever                        | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Zika                                | -                          | -             | -             | -             | -                | -             | -             | -          |
| <b>Vectorborne Subtotal</b>     | <b>4</b>                            | <b>6</b>                   | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>1</b>         | <b>1</b>      | <b>0</b>      |            |
| <b>Viral Hepatitis</b>          | Hepatitis A                         | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Hepatitis B, Acute                  | 1                          | -             | 1             | -             | -                | -             | -             | -          |
|                                 | Hepatitis B, Chronic                | 1                          | 2             | 6             | 5             | 5                | 3             | 2             | 5          |
|                                 | Hepatitis B, Perinatal              | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Hepatitis C, Acute ~                | 1                          | -             | -             | 1             | -                | -             | -             | 1          |
|                                 | Hepatitis C, Chronic ~              | 18                         | 17            | 17            | 34            | 12               | 11            | 24            | 34         |
|                                 | Hepatitis C, Unknown*               | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Hepatitis D                         | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Hepatitis E                         | -                          | -             | -             | -             | -                | -             | -             | -          |
|                                 | Hepatitis Non A Non B               | -                          | -             | -             | -             | -                | -             | -             | -          |
| <b>Viral Hepatitis Subtotal</b> | <b>21</b>                           | <b>19</b>                  | <b>24</b>     | <b>40</b>     | <b>17</b>     | <b>14</b>        | <b>26</b>     | <b>40</b>     |            |
| <b>Total</b>                    | <b>5,791</b>                        | <b>1,958</b>               | <b>10,014</b> | <b>15,554</b> | <b>15,522</b> | <b>9,168</b>     | <b>14,030</b> | <b>15,554</b> |            |

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

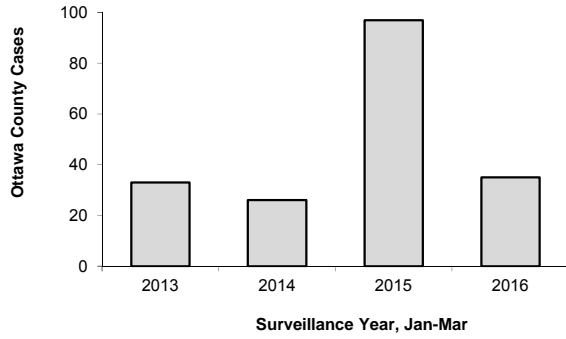
\*\* Data for cases reported is based on date of symptom onset, if available, or date of referral to the public health department.

\*\*\* The Ottawa County Department of Public Health began reporting outbreak aggregate counts of these diseases to the MDSS in 2015.

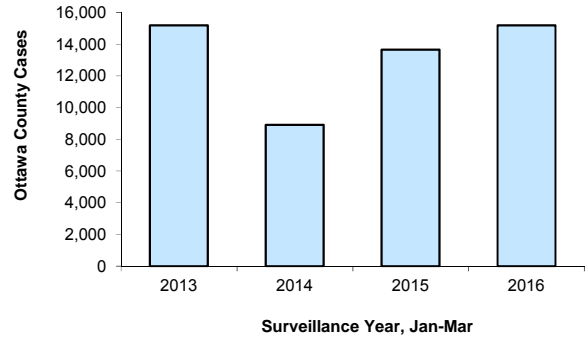
† All serotypes of invasive H. influenzae (Hi) disease are included in this report, though only H. influenzae serotype b disease (Hib) is vaccine-preventable.

~ Indicates a change in the case definition for 2016, which may increase the number of confirmed and probable cases.

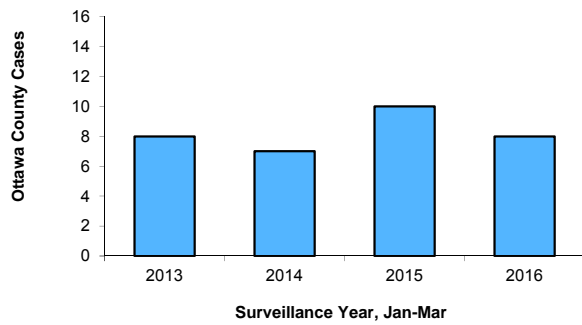
**All Types of Foodborne Illness Cases in Ottawa County, Quarter 1 - Previous 4 Years**



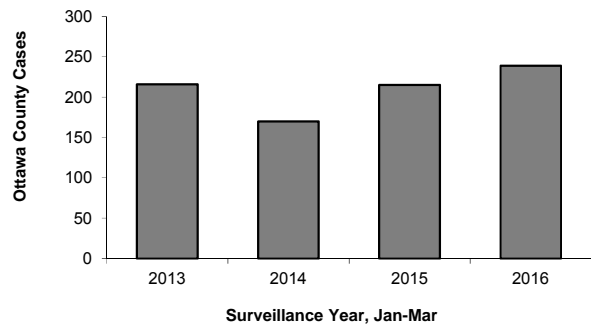
**Flu & Flu-Like Disease Cases in Ottawa County, Quarter 1 - Previous 4 Years**



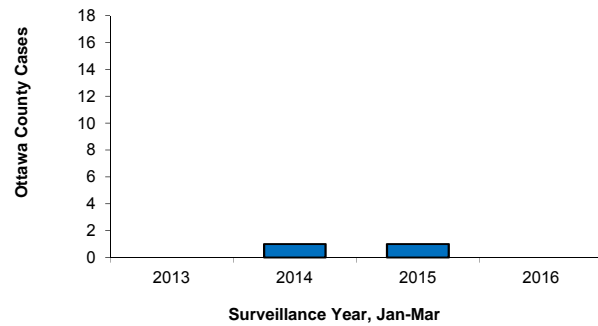
**All Types of Meningitis Cases in Ottawa County, Quarter 1 - Previous 4 Years**



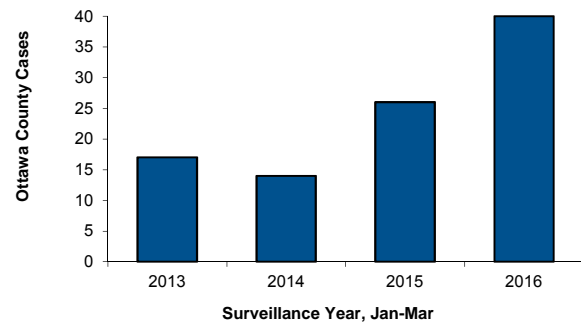
**All Types of Sexually Transmitted Disease Cases in Ottawa County, Quarter 1 - Previous 4 Years**



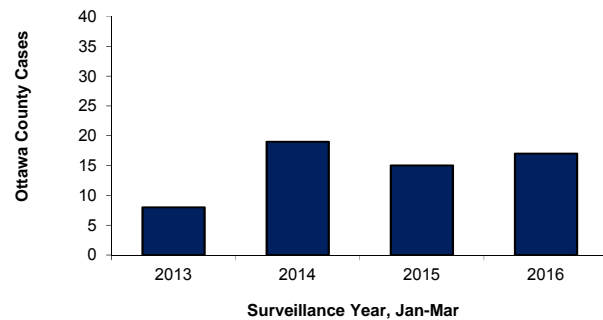
**All Types of Vectorborne Disease Cases in Ottawa County, Quarter 1 - Previous 4 Years**



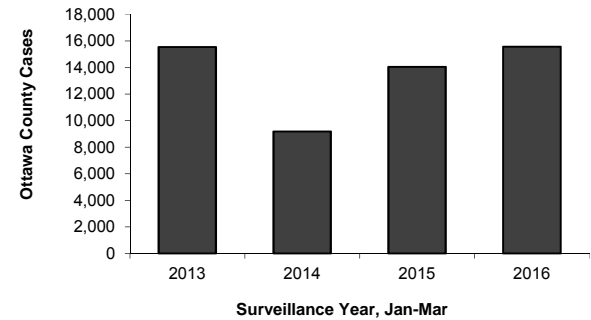
**All Types of Viral Hepatitis Cases in Ottawa County, Quarter 1 - Previous 4 Years**



**All Types of Vaccine Preventable Disease Cases in Ottawa County, Quarter 1 - Previous 4 Years**



**All Reportable Disease Cases in Ottawa County, Quarter 1 - Previous 4 Years**



## April - June 2016

*Each Disease Group has an accompanying graph at the end of the Quarter's section.*

| Disease Group                            | Reportable Condition                            | Cases in Last 4 Quarters** |       |        |       | Q2 Cases by Year |       |       |       |
|--|---|----------------------------|-------|--------|-------|------------------|-------|-------|-------|
|  |   | Q3-15                      | Q4-15 | Q1-16  | Q2-16 | Q2-13            | Q2-14 | Q2-15 | Q2-16 |
| <b>Foodborne</b>                         | Amebiasis                                       | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Botulism - Foodborne                            | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Campylobacter                                   | 23                         | 12    | 14     | 17    | 17               | 9     | 19    | 17    |
|  | Cryptosporidiosis                               | 4                          | 8     | -      | 4     | -                | 3     | 3     | 4     |
|  | Giardiasis                                      | 5                          | 1     | 5      | 11    | 5                | 6     | 1     | 11    |
|  | Listeriosis                                     | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Norovirus***                                    | 1                          | -     | 1      | -     | 1                | 5     | 11    | -     |
|  | Salmonellosis                                   | 6                          | 5     | 8      | 7     | 9                | 11    | 5     | 7     |
|  | Shiga toxin-producing Escherichia coli --(STEC) | 3                          | 2     | 3      | 1     | 3                | 2     | 4     | 1     |
|  | Shigellosis                                     | 4                          | 11    | 4      | -     | 5                | -     | 3     | -     |
|  | Typhoid Fever                                   | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Yersinia enterocolitica                         | -                          | -     | -      | -     | -                | -     | -     | -     |
| <b>Foodborne Subtotal</b>                |   | 46                         | 39    | 35     | 40    | 40               | 36    | 46    | 40    |
| <b>Influenza</b>                         | Flu Like Disease* ***                           | 1,601                      | 9,618 | 15,193 | 5,728 | 5,743            | 5,216 | 5,473 | 5,728 |
|  | Influenza                                       | -                          | -     | 1      | 1     | 1                | 1     | 1     | 1     |
|  | Influenza, Novel                                | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | <b>Influenza Subtotal</b>                       | 1,601                      | 9,618 | 15,194 | 5,729 | 5,744            | 5,217 | 5,474 | 5,729 |
| <b>Meningitis</b>                        | Meningitis - Aseptic                            | 11                         | 6     | 1      | 3     | 1                | 6     | 1     | 3     |
|  | Meningitis - Bacterial Other                    | -                          | 1     | 1      | 3     | 2                | 3     | 4     | 3     |
|  | Meningococcal Disease                           | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Streptococcus pneumoniae, Inv                   | 1                          | 4     | 6      | 1     | 4                | 5     | 2     | 1     |
|  | <b>Meningitis Subtotal</b>                      | 12                         | 11    | 8      | 7     | 7                | 14    | 7     | 7     |
| <b>Other</b>                             | Anthrax   | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Blastomycosis                                   | -                          | -     | 1      | -     | -                | 1     | -     | -     |
|  | Botulism - Infant                               | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Botulism - Other                                | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Brucellosis                                     | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Cholera   | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Coccidioidomycosis                              | 1                          | -     | -      | -     | -                | 1     | -     | -     |
|  | Creutzfeldt-Jakob Disease                       | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Cryptococcosis                                  | -                          | 1     | -      | -     | -                | -     | -     | -     |
|  | Cyclosporiasis                                  | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Encephalitis, Post Chickenpox                   | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Encephalitis, Post Mumps                        | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Encephalitis, Post Other                        | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Encephalitis, Primary                           | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Guillain-Barre Syndrome                         | 1                          | -     | -      | -     | -                | -     | -     | -     |
|  | Hantavirus                                      | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Hantavirus, Other                               | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Hantavirus, Pulmonary                           | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Hemolytic Uremic Syndrome                       | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Hemorrhagic Fever                               | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Hepatitis - Unspecified                         | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Histoplasmosis                                  | 4                          | 5     | 2      | 2     | 7                | 1     | 3     | 2     |
|  | Kawasaki  | 1                          | 1     | -      | -     | -                | -     | -     | -     |
|  | Legionellosis                                   | 1                          | -     | 1      | -     | -                | -     | -     | -     |
|  | Leprosy   | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Leptospirosis                                   | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Melioidosis                                     | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Plague  | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Psittacosis                                     | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Q Fever Acute                                   | -                          | -     | 1      | -     | -                | -     | -     | -     |
|  | Q Fever Chronic                                 | -                          | -     | -      | -     | -                | -     | -     | -     |
|  | Rabies Animal                                   | -                          | 1     | -      | -     | -                | -     | 1     | -     |
|  | Rabies Human                                    | -                          | -     | -      | -     | -                | -     | -     | -     |
| Reye Syndrome                            | -   | -                          | -     | -      | -     | -                | -     | -     |       |
| Rheumatic Fever                          | -   | -                          | -     | -      | -     | -                | -     | -     |       |
| Rubella - Congenital                     | -   | -                          | -     | -      | -     | -                | -     | -     |       |
| Streptococcus pneumoniae, Drug Resistant | -   | -                          | -     | -      | 2     | 1                | -     | -     |       |
| Streptococcal Dis, Inv, Grp A            | 2   | 3                          | 6     | 3      | 1     | 3                | 4     | 3     |       |
| Streptococcal Toxic Shock                | -   | -                          | -     | 1      | 1     | -                | -     | 1     |       |

| Disease Group            | Reportable Condition                | Cases in Last 4 Quarters** |        |        |       | Q2 Cases by Year |       |       |       |
|--------------------------|-------------------------------------|----------------------------|--------|--------|-------|------------------|-------|-------|-------|
|                          |                                     | Q3-15                      | Q4-15  | Q1-16  | Q2-16 | Q2-13            | Q2-14 | Q2-15 | Q2-16 |
| <b>Other</b>             | Toxic Shock                         | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Trachoma                            | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Trichinosis                         | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Tularemia                           | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Vibriosis - Non Cholera             | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | VISA                                | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | VRSA                                | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Other Subtotal                      | 10                         | 11     | 11     | 6     | 11               | 7     | 8     | 6     |
| <b>STD</b>               | Chancroid                           | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Chlamydia (Genital)                 | 216                        | 264    | 214    | 198   | 178              | 186   | 182   | 198   |
|                          | Gonorrhea                           | 20                         | 20     | 24     | 18    | 21               | 16    | 23    | 18    |
|                          | Granuloma Inguinale                 | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Lymphogranuloma venereum            | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Primary & Secondary Syphilis        | 2                          | -      | -      | 2     | -                | 1     | 2     | 2     |
|                          | All Syphilis                        | 2                          | 5      | 1      | 3     | -                | 2     | 2     | 3     |
|                          | STD Subtotal                        | 238                        | 289    | 239    | 219   | 199              | 204   | 207   | 219   |
| <b>Tuberculosis</b>      | Tuberculosis                        | -                          | 1      | -      | -     | -                | 1     | -     | -     |
|                          | Mycobacterium - Other               | 6                          | 5      | 10     | 4     | -                | 11    | 7     | 4     |
|                          | Tuberculosis Subtotal               | 6                          | 6      | 10     | 4     | 0                | 12    | 7     | 4     |
| <b>VPD</b>               | Chickenpox (Varicella)              | 2                          | 6      | 5      | 10    | 4                | 6     | 5     | 10    |
|                          | Diphtheria                          | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | H. influenzae Disease - Inv. †      | 1                          | 2      | 2      | -     | -                | 1     | 3     | -     |
|                          | Measles                             | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Mumps                               | -                          | -      | -      | 1     | -                | -     | -     | 1     |
|                          | Pertussis                           | 10                         | 1      | 4      | -     | 22               | 2     | 1     | -     |
|                          | Polio                               | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Rubella                             | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Shingles                            | 7                          | 7      | 4      | 2     | 1                | 1     | 7     | 2     |
|                          | Tetanus                             | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | VZ Infection, Unspecified           | -                          | -      | 2      | 1     | 1                | -     | 1     | 1     |
| VPD Subtotal             | 20                                  | 16                         | 17     | 14     | 28    | 10               | 17    | 14    |       |
| <b>Vectorborne</b>       | Babesiosis                          | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Dengue Fever                        | 1                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Ehrlichiosis                        | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Encephalitis, California            | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Encephalitis, Eastern Equine        | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Encephalitis, Powassan              | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Encephalitis, St. Louis             | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Encephalitis, Western Equine        | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Lyme Disease                        | 4                          | -      | -      | 2     | 2                | -     | 3     | 2     |
|                          | Malaria                             | -                          | -      | -      | 3     | -                | 1     | -     | 3     |
|                          | Rickettsial Disease - Spotted Fever | -                          | -      | -      | -     | -                | -     | 1     | -     |
|                          | Rickettsial Disease - Typhus        | -                          | -      | -      | 1     | -                | -     | -     | 1     |
|                          | West Nile Virus                     | 1                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Yellow Fever                        | -                          | -      | -      | -     | -                | -     | -     | -     |
| Zika                     | -                                   | -                          | -      | 1      | -     | -                | -     | 1     |       |
| Vectorborne Subtotal     | 6                                   | 0                          | 0      | 7      | 2     | 1                | 4     | 7     |       |
| <b>Viral Hepatitis</b>   | Hepatitis A                         | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Hepatitis B, Acute                  | -                          | 1      | -      | 2     | -                | -     | 1     | 2     |
|                          | Hepatitis B, Chronic                | 2                          | 6      | 5      | 5     | 2                | 4     | 1     | 5     |
|                          | Hepatitis B, Perinatal              | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Hepatitis C, Acute ~                | -                          | -      | 1      | 1     | -                | -     | 1     | 1     |
|                          | Hepatitis C, Chronic ~              | 17                         | 17     | 34     | 27    | 15               | 17    | 18    | 27    |
|                          | Hepatitis C, Unknown*               | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Hepatitis D                         | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Hepatitis E                         | -                          | -      | -      | -     | -                | -     | -     | -     |
|                          | Hepatitis Non A Non B               | -                          | -      | -      | -     | -                | -     | -     | -     |
| Viral Hepatitis Subtotal | 19                                  | 24                         | 40     | 35     | 17    | 21               | 21    | 35    |       |
| <b>Total</b>             |                                     | 1,958                      | 10,014 | 15,554 | 6,061 | 6,048            | 5,522 | 5,791 | 6,061 |

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

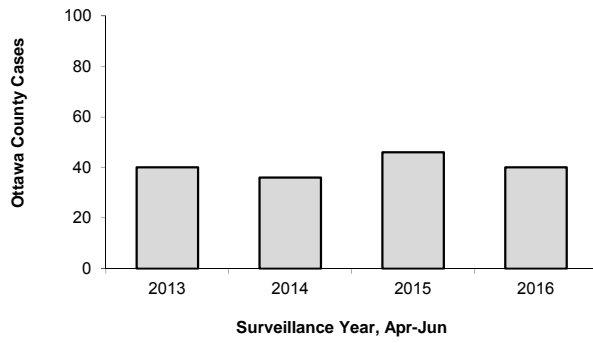
\*\* Data for cases reported is based on date of symptom onset, if available, or date of referral to the public health department.

\*\*\* The Ottawa County Department of Public Health began reporting outbreak aggregate counts of these diseases to the MDSS in 2015.

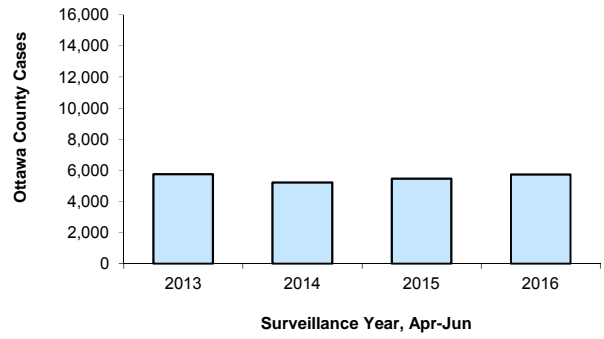
† All serotypes of invasive H. influenzae (Hi) disease are included in this report, though only H. influenzae serotype b disease (Hib) is vaccine-preventable.

~ Indicates a change in the case definition for 2016, which may increase the number of confirmed and probable cases.

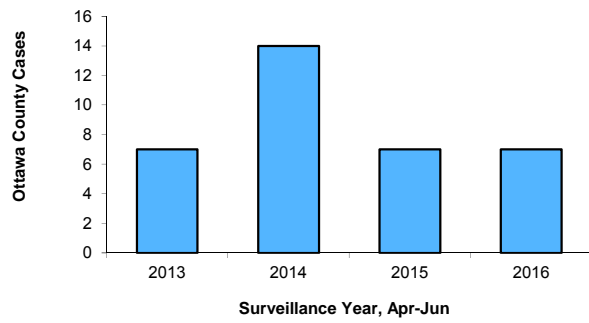
**All Types of Foodborne Illness Cases in Ottawa, County, Quarter 2 - Previous 4 Years**



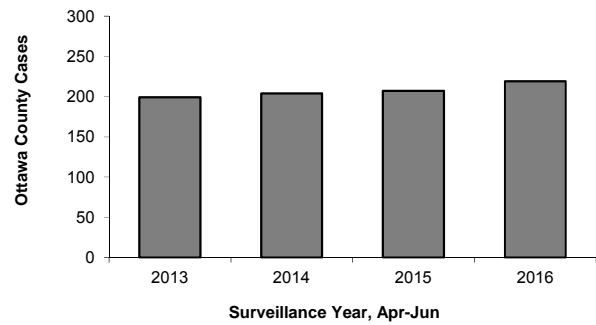
**Flu & Flu-Like Disease Cases in Ottawa County, Quarter 2 - Previous 4 Years**



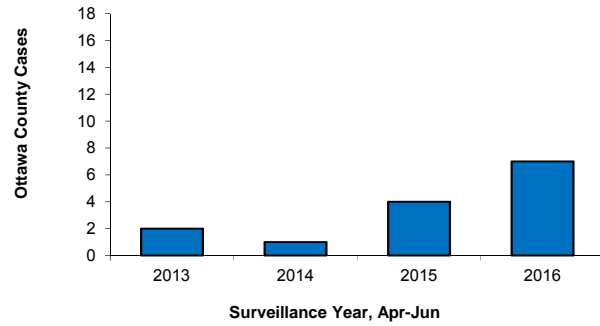
**All Types of Meningitis Cases in Ottawa County, Quarter 2 - Previous 4 Years**



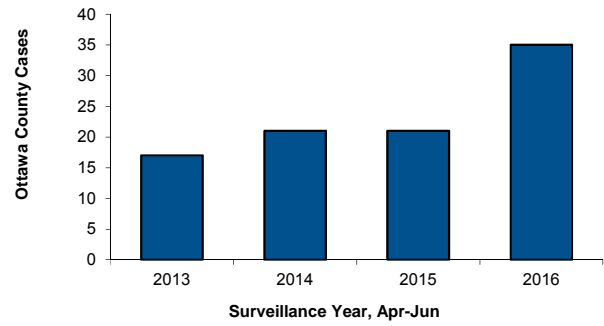
**All Types of Sexually Transmitted Disease Cases in Ottawa County, Quarter 2 - Previous 4 Years**



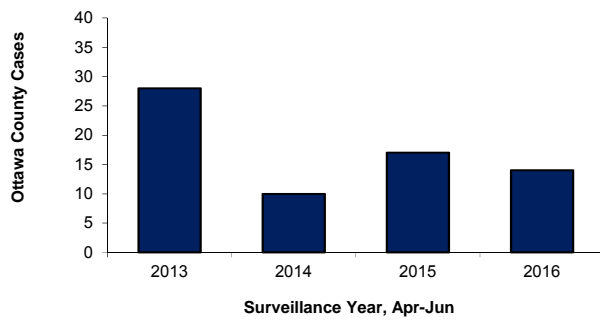
**All Types of Vectorborne Disease Cases in Ottawa County, Quarter 2 - Previous 4 Years**



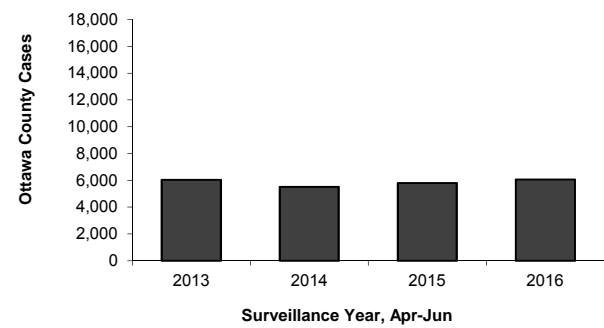
**All Types of Viral Hepatitis Cases in Ottawa County, Quarter 2 - Previous 4 Years**



**All Types of Vaccine Preventable Disease Cases in Ottawa County, Quarter 2 - Previous 4 Years**



**All Reportable Disease Cases in Ottawa County, Quarter 2 - Previous 4 Years**





## July - September 2016

*Each Disease Group has an accompanying graph at the end of the Quarter's section.*

| Disease Group                            | Reportable Condition                            | Cases in Last 4 Quarters** |               |              |              | Q3 Cases by Year |              |              |              |
|--|---|----------------------------|---------------|--------------|--------------|------------------|--------------|--------------|--------------|
|  |   | Q4-15                      | Q1-16         | Q2-16        | Q3-16        | Q3-13            | Q3-14        | Q3-15        | Q3-16        |
| <b>Foodborne</b>                         | Amebiasis                                       | -                          | -             | -            | -            | -                | 1            | -            | -            |
|  | Botulism - Foodborne                            | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Campylobacter                                   | 12                         | 14            | 17           | 21           | 22               | 13           | 23           | 21           |
|  | Cryptosporidiosis                               | 8                          | -             | 4            | 11           | 4                | 2            | 4            | 11           |
|  | Giardiasis                                      | 1                          | 5             | 11           | 5            | 11               | 5            | 5            | 5            |
|  | Listeriosis                                     | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Norovirus***                                    | -                          | 1             | -            | -            | -                | 5            | 1            | -            |
|  | Salmonellosis                                   | 5                          | 8             | 7            | 4            | 11               | 10           | 6            | 4            |
|  | Shiga toxin-producing Escherichia coli --(STEC) | 2                          | 3             | 1            | 3            | 3                | 3            | 3            | 3            |
|  | Shigellosis                                     | 11                         | 4             | -            | -            | 3                | 1            | 4            | -            |
|  | Typhoid Fever                                   | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Yersinia enterocolitica                         | -                          | -             | -            | 1            | -                | 2            | -            | 1            |
|  | <b>Foodborne Subtotal</b>                       | <b>39</b>                  | <b>35</b>     | <b>40</b>    | <b>45</b>    | <b>54</b>        | <b>42</b>    | <b>46</b>    | <b>45</b>    |
| <b>Influenza</b>                         | Flu Like Disease* ***                           | 9,618                      | 15,193        | 5,728        | 2,068        | 1,991            | 3,052        | 1,601        | 2,068        |
|  | Influenza                                       | -                          | 1             | 1            | -            | 4                | 1            | -            | -            |
|  | Influenza, Novel                                | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | <b>Influenza Subtotal</b>                       | <b>9,618</b>               | <b>15,194</b> | <b>5,729</b> | <b>2,068</b> | <b>1,995</b>     | <b>3,053</b> | <b>1,601</b> | <b>2,068</b> |
| <b>Meningitis</b>                        | Meningitis - Aseptic                            | 6                          | 1             | 3            | 10           | 11               | 9            | 11           | 10           |
|  | Meningitis - Bacterial Other                    | 1                          | 1             | 3            | -            | 1                | 1            | -            | -            |
|  | Meningococcal Disease                           | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Streptococcus pneumoniae, Inv                   | 4                          | 6             | 1            | 1            | -                | 1            | 1            | 1            |
|  | <b>Meningitis Subtotal</b>                      | <b>11</b>                  | <b>8</b>      | <b>7</b>     | <b>11</b>    | <b>12</b>        | <b>11</b>    | <b>12</b>    | <b>11</b>    |
| <b>Other</b>                             | Anthrax   | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Blastomycosis                                   | -                          | 1             | -            | -            | -                | 1            | -            | -            |
|  | Botulism - Infant                               | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Botulism - Other                                | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Brucellosis                                     | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Cholera   | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Coccidioidomycosis                              | -                          | -             | -            | 1            | -                | -            | 1            | 1            |
|  | Creutzfeldt-Jakob Disease                       | -                          | -             | -            | 1            | -                | -            | -            | 1            |
|  | Cryptococcosis                                  | 1                          | -             | -            | -            | -                | -            | -            | -            |
|  | Cyclosporiasis                                  | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Encephalitis, Post Chickenpox                   | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Encephalitis, Post Mumps                        | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Encephalitis, Post Other                        | -                          | -             | -            | 1            | -                | -            | -            | 1            |
|  | Encephalitis, Primary                           | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Guillain-Barre Syndrome                         | -                          | -             | -            | -            | -                | -            | 1            | -            |
|  | Hantavirus                                      | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Hantavirus, Other                               | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Hantavirus, Pulmonary                           | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Hemolytic Uremic Syndrome                       | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Hemorrhagic Fever                               | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Hepatitis - Unspecified                         | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Histoplasmosis                                  | 5                          | 2             | 2            | -            | 3                | 2            | 4            | -            |
|  | Kawasaki  | 1                          | -             | -            | -            | -                | -            | 1            | -            |
|  | Legionellosis                                   | -                          | 1             | -            | 2            | -                | 2            | 1            | 2            |
|  | Leprosy   | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Leptospirosis                                   | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Melioidosis                                     | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Plague  | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Psittacosis                                     | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Q Fever Acute                                   | -                          | 1             | -            | -            | -                | -            | -            | -            |
|  | Q Fever Chronic                                 | -                          | -             | -            | -            | -                | -            | -            | -            |
|  | Rabies Animal                                   | 1                          | -             | -            | 1            | -                | -            | -            | 1            |
|  | Rabies Human                                    | -                          | -             | -            | -            | -                | -            | -            | -            |
| Reye Syndrome                            | -   | -                          | -             | -            | -            | -                | -            | -            |              |
| Rheumatic Fever                          | -   | -                          | -             | -            | -            | -                | -            | -            |              |
| Rubella - Congenital                     | -   | -                          | -             | -            | -            | -                | -            | -            |              |
| Streptococcus pneumoniae, Drug Resistant | -   | -                          | -             | -            | -            | -                | -            | -            |              |
| Streptococcal Dis, Inv, Grp A            | 3   | 6                          | 3             | 1            | 1            | 3                | 2            | 1            |              |
| Streptococcal Toxic Shock                | -   | -                          | 1             | -            | -            | -                | -            | -            |              |

| Disease Group            | Reportable Condition                | Cases in Last 4 Quarters** |       |       |       | Q3 Cases by Year |       |       |       |
|--------------------------|-------------------------------------|----------------------------|-------|-------|-------|------------------|-------|-------|-------|
|                          |                                     | Q4-15                      | Q1-16 | Q2-16 | Q3-16 | Q3-13            | Q3-14 | Q3-15 | Q3-16 |
| <b>Other</b>             | Toxic Shock                         | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Trachoma                            | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Trichinosis                         | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Tularemia                           | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Vibriosis - Non Cholera             | -                          | -     | -     | -     | 1                | 1     | -     | -     |
|                          | VISA                                | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | VRSA                                | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Other Subtotal                      | 11                         | 11    | 6     | 7     | 5                | 9     | 10    | 7     |
| <b>STD</b>               | Chancroid                           | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Chlamydia (Genital)                 | 264                        | 214   | 198   | 234   | 190              | 204   | 216   | 234   |
|                          | Gonorrhea                           | 20                         | 24    | 18    | 31    | 22               | 27    | 20    | 31    |
|                          | Granuloma Inguinale                 | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Lymphogranuloma venereum            | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Primary & Secondary Syphilis        | -                          | -     | 2     | 3     | -                | -     | 2     | 3     |
|                          | All Syphilis                        | 5                          | 1     | 3     | 5     | -                | 1     | 2     | 5     |
|                          | STD Subtotal                        | 289                        | 239   | 219   | 270   | 212              | 232   | 238   | 270   |
| <b>Tuberculosis</b>      | Tuberculosis                        | 1                          | -     | -     | -     | 1                | 2     | -     | -     |
|                          | Mycobacterium - Other               | 5                          | 10    | 4     | 5     | 7                | 3     | 6     | 5     |
|                          | Tuberculosis Subtotal               | 6                          | 10    | 4     | 5     | 8                | 5     | 6     | 5     |
| <b>VPD</b>               | Chickenpox (Varicella)              | 6                          | 5     | 10    | 5     | 12               | 4     | 2     | 5     |
|                          | Diphtheria                          | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | H. influenzae Disease - Inv. †      | 2                          | 2     | -     | 1     | 1                | -     | 1     | 1     |
|                          | Measles                             | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Mumps                               | -                          | -     | 1     | -     | -                | -     | -     | -     |
|                          | Pertussis                           | 1                          | 4     | -     | 2     | 17               | 8     | 10    | 2     |
|                          | Polio                               | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Rubella                             | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Shingles                            | 7                          | 4     | 2     | 2     | -                | 6     | 7     | 2     |
|                          | Tetanus                             | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | VZ Infection, Unspecified           | -                          | 2     | 1     | 1     | 1                | -     | -     | 1     |
| VPD Subtotal             | 16                                  | 17                         | 14    | 11    | 31    | 18               | 20    | 11    |       |
| <b>Vectorborne</b>       | Babesiosis                          | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Dengue Fever                        | -                          | -     | -     | -     | -                | -     | 1     | -     |
|                          | Ehrlichiosis                        | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Encephalitis, California            | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Encephalitis, Eastern Equine        | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Encephalitis, Powassan              | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Encephalitis, St. Louis             | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Encephalitis, Western Equine        | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Lyme Disease                        | -                          | -     | 2     | 6     | 1                | 2     | 4     | 6     |
|                          | Malaria                             | -                          | -     | 3     | 1     | -                | -     | -     | 1     |
|                          | Rickettsial Disease - Spotted Fever | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Rickettsial Disease - Typhus        | -                          | -     | 1     | -     | -                | -     | -     | -     |
|                          | West Nile Virus                     | -                          | -     | -     | -     | 1                | -     | 1     | -     |
|                          | Yellow Fever                        | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Zika                                | -                          | -     | 1     | 9     | -                | -     | -     | 9     |
| Vectorborne Subtotal     | 0                                   | 0                          | 7     | 16    | 2     | 2                | 6     | 16    |       |
| <b>Viral Hepatitis</b>   | Hepatitis A                         | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Hepatitis B, Acute                  | 1                          | -     | 2     | -     | -                | -     | -     | -     |
|                          | Hepatitis B, Chronic                | 6                          | 5     | 5     | 2     | 2                | 2     | 2     |       |
|                          | Hepatitis B, Perinatal              | -                          | -     | -     | -     | 1                | -     | -     | -     |
|                          | Hepatitis C, Acute ~                | -                          | 1     | 1     | -     | -                | 1     | -     | -     |
|                          | Hepatitis C, Chronic ~              | 17                         | 34    | 27    | 22    | 12               | 13    | 17    | 22    |
|                          | Hepatitis C, Unknown*               | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Hepatitis D                         | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Hepatitis E                         | -                          | -     | -     | -     | -                | -     | -     | -     |
|                          | Hepatitis Non A Non B               | -                          | -     | -     | -     | -                | -     | -     | -     |
| Viral Hepatitis Subtotal | 24                                  | 40                         | 35    | 24    | 15    | 16               | 19    | 24    |       |
| <b>Total</b>             | 10,014                              | 15,554                     | 6,061 | 2,457 | 2,334 | 3,388            | 1,958 | 2,457 |       |

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

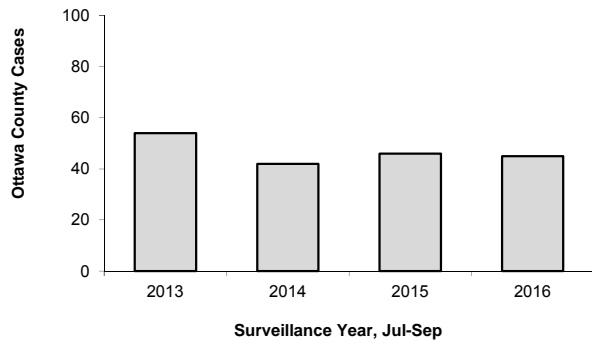
\*\* Data for cases reported is based on date of symptom onset, if available, or date of referral to the public health department.

\*\*\* The Ottawa County Department of Public Health began reporting outbreak aggregate counts of these diseases to the MDSS in 2015.

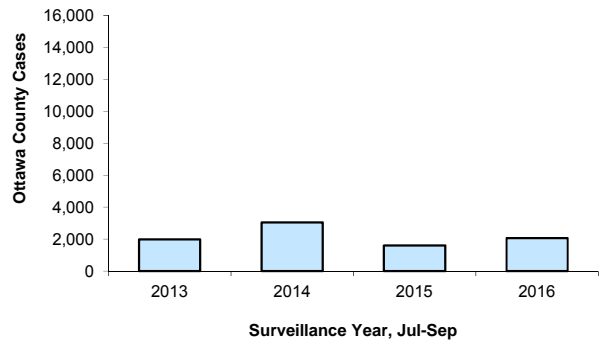
† All serotypes of invasive H. influenzae (Hi) disease are included in this report, though only H. influenzae serotype b disease (Hib) is vaccine-preventable.

~ Indicates a change in the case definition for 2016, which may increase the number of confirmed and probable cases.

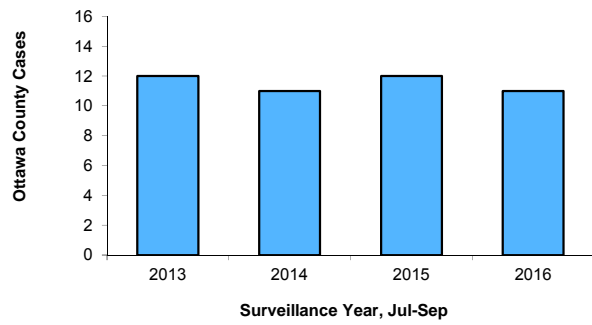
**All Types of Foodborne Illness Cases in Ottawa, County, Quarter 3 - Previous 4 Years**



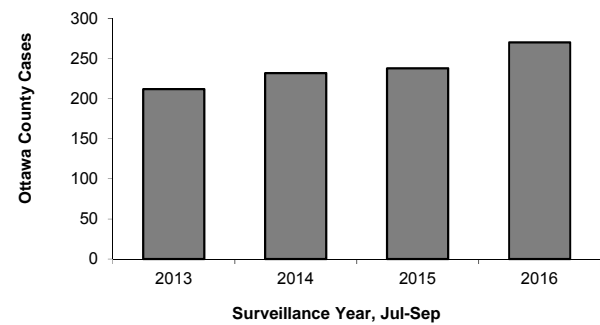
**Flu & Flu-Like Disease Cases in Ottawa County, Quarter 3 - Previous 4 Years**



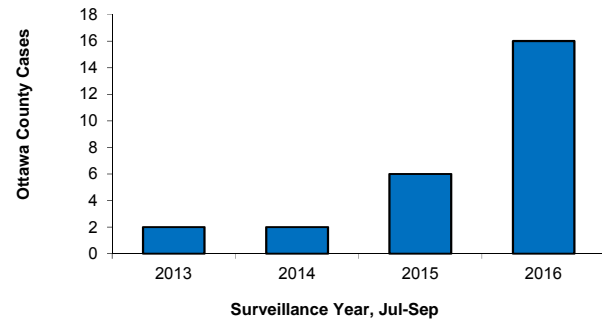
**All Types of Meningitis Cases in Ottawa County, Quarter 3 - Previous 4 Years**



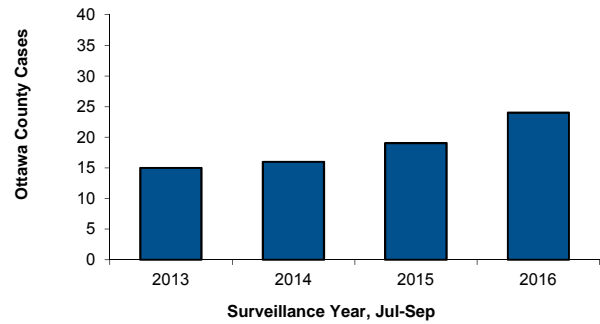
**All Types of Sexually Transmitted Disease Cases in Ottawa County, Quarter 3 - Previous 4 Years**



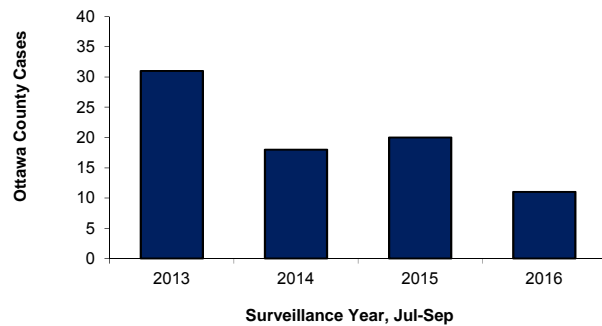
**All Types of Vectorborne Disease Cases in Ottawa County, Quarter 3 - Previous 4 Years**



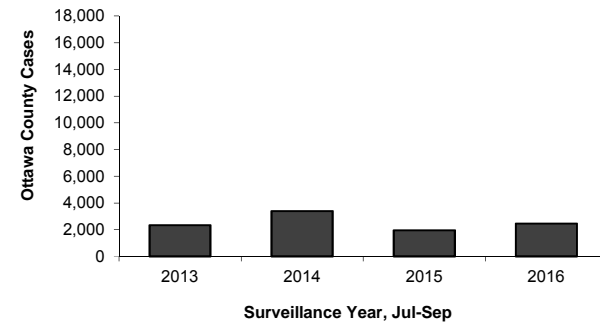
**All Types of Viral Hepatitis Cases in Ottawa County, Quarter 3 - Previous 4 Years**



**All Types of Vaccine Preventable Disease Cases in Ottawa County, Quarter 3 - Previous 4 Years**



**All Reportable Disease Cases in Ottawa County, Quarter 3 - Previous 4 Years**



## October - December 2016

*Each Disease Group has an accompanying graph at the end of the Quarter's section.*

| Disease Group                            | Reportable Condition                            | Cases in Last 4 Quarters** |              |              |              | Q4 Cases by Year |               |              |              |
|--|---|----------------------------|--------------|--------------|--------------|------------------|---------------|--------------|--------------|
|  |   | Q1-16                      | Q2-16        | Q3-16        | Q4-16        | Q4-13            | Q4-14         | Q4-15        | Q4-16        |
| <b>Foodborne</b>                         | Amebiasis                                       | -                          | -            | -            | -            | -                | 1             | -            | -            |
|  | Botulism - Foodborne                            | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Campylobacter                                   | 14                         | 17           | 21           | 18           | 10               | 15            | 12           | 18           |
|  | Cryptosporidiosis                               | -                          | 4            | 11           | 2            | 1                | 3             | 8            | 2            |
|  | Giardiasis                                      | 5                          | 11           | 5            | 7            | 5                | 4             | 1            | 7            |
|  | Listeriosis                                     | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Norovirus***                                    | 1                          | -            | -            | -            | -                | 4             | -            | -            |
|  | Salmonellosis                                   | 8                          | 7            | 4            | 7            | 13               | 8             | 5            | 7            |
|  | Shiga toxin-producing Escherichia coli --(STEC) | 3                          | 1            | 3            | 3            | 1                | 2             | 2            | 3            |
|  | Shigellosis                                     | 4                          | -            | -            | 1            | 2                | 2             | 11           | 1            |
|  | Typhoid Fever                                   | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Yersinia enteritis                              | -                          | -            | 1            | -            | -                | -             | -            | -            |
| <b>Foodborne Subtotal</b>                | <b>35</b>                                       | <b>40</b>                  | <b>45</b>    | <b>38</b>    | <b>32</b>    | <b>39</b>        | <b>39</b>     | <b>38</b>    |              |
| <b>Influenza</b>                         | Flu Like Disease* ***                           | 15,193                     | 5,728        | 2,068        | <b>8,680</b> | 8,190            | 11,963        | 9,618        | 8,680        |
|  | Influenza                                       | 1                          | 1            | -            | 2            | 9                | 34            | -            | 2            |
|  | Influenza, Novel                                | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | <b>Influenza Subtotal</b>                       | <b>15,194</b>              | <b>5,729</b> | <b>2,068</b> | <b>8,682</b> | <b>8,199</b>     | <b>11,997</b> | <b>9,618</b> | <b>8,682</b> |
| <b>Meningitis</b>                        | Meningitis - Aseptic                            | 1                          | 3            | 10           | 7            | 5                | 6             | 6            | 7            |
|  | Meningitis - Bacterial Other                    | 1                          | 3            | -            | 2            | -                | 1             | 1            | 2            |
|  | Meningococcal Disease                           | -                          | -            | -            | 1            | -                | -             | -            | 1            |
|  | Streptococcus pneumoniae, Inv                   | 6                          | 1            | 1            | 4            | 4                | 5             | 4            | 4            |
|  | <b>Meningitis Subtotal</b>                      | <b>8</b>                   | <b>7</b>     | <b>11</b>    | <b>14</b>    | <b>9</b>         | <b>12</b>     | <b>11</b>    | <b>14</b>    |
| <b>Other</b>                             | Anthrax   | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Blastomycosis                                   | 1                          | -            | -            | -            | 1                | -             | -            | -            |
|  | Botulism - Infant                               | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Botulism - Other                                | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Brucellosis                                     | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Cholera   | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Coccidioidomycosis                              | -                          | -            | 1            | -            | 1                | -             | -            | -            |
|  | Creutzfeldt-Jakob Disease                       | -                          | -            | 1            | -            | -                | -             | -            | -            |
|  | Cryptococcosis                                  | -                          | -            | -            | -            | -                | -             | 1            | -            |
|  | Cyclosporiasis                                  | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Encephalitis, Post Chickenpox                   | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Encephalitis, Post Mumps                        | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Encephalitis, Post Other                        | -                          | -            | 1            | -            | -                | -             | -            | -            |
|  | Encephalitis, Primary                           | -                          | -            | -            | -            | -                | 1             | -            | -            |
|  | Guillain-Barre Syndrome                         | -                          | -            | -            | 1            | 1                | -             | -            | 1            |
|  | Hantavirus                                      | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Hantavirus, Other                               | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Hantavirus, Pulmonary                           | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Hemolytic Uremic Syndrome                       | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Hemorrhagic Fever                               | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Hepatitis - Unspecified                         | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Histoplasmosis                                  | 2                          | 2            | -            | -            | 6                | 6             | 5            | -            |
|  | Kawasaki  | -                          | -            | -            | -            | -                | -             | 1            | -            |
|  | Legionellosis                                   | 1                          | -            | 2            | 1            | -                | 1             | -            | 1            |
|  | Leprosy   | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Leptospirosis                                   | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Melioidosis                                     | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Plague  | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Psittacosis                                     | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Q Fever Acute                                   | 1                          | -            | -            | -            | -                | -             | -            | -            |
|  | Q Fever Chronic                                 | -                          | -            | -            | -            | -                | -             | -            | -            |
|  | Rabies Animal                                   | -                          | -            | 1            | -            | -                | -             | 1            | -            |
|  | Rabies Human                                    | -                          | -            | -            | -            | -                | -             | -            | -            |
| Reye Syndrome                            | -   | -                          | -            | -            | -            | -                | -             | -            |              |
| Rheumatic Fever                          | -   | -                          | -            | -            | 1            | -                | -             | -            |              |
| Rubella - Congenital                     | -   | -                          | -            | -            | -            | -                | -             | -            |              |
| Streptococcus pneumoniae, Drug Resistant | -   | -                          | -            | 1            | -            | -                | -             | 1            |              |
| Streptococcal Dis, Inv, Grp A            | 6   | 3                          | 1            | 4            | 3            | 1                | 3             | 4            |              |
| Streptococcal Toxic Shock                | -   | 1                          | -            | -            | -            | -                | -             | -            |              |

| Disease Group          | Reportable Condition                | Cases in Last 4 Quarters**   |              |              |              | Q4 Cases by Year |               |               |              |
|------------------------|-------------------------------------|------------------------------|--------------|--------------|--------------|------------------|---------------|---------------|--------------|
|                        |                                     | Q1-16                        | Q2-16        | Q3-16        | Q4-16        | Q4-13            | Q4-14         | Q4-15         | Q4-16        |
| <b>Other</b>           | Toxic Shock                         | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Trachoma                            | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Trichinosis                         | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Tularemia                           | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Vibriosis - Non Cholera             | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | VISA                                | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | VRSA                                | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | <b>Other Subtotal</b>               | <b>11</b>                    | <b>6</b>     | <b>7</b>     | <b>7</b>     | <b>13</b>        | <b>9</b>      | <b>11</b>     | <b>7</b>     |
| <b>STD</b>             | Chancroid                           | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Chlamydia (Genital)                 | 214                          | 198          | 234          | <b>199</b>   | 174              | 170           | 264           | 199          |
|                        | Gonorrhea                           | 24                           | 18           | 31           | <b>37</b>    | 23               | 21            | 20            | 37           |
|                        | Granuloma Inguinale                 | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Lymphogranuloma venereum            | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Primary & Secondary Syphilis        | -                            | 2            | 3            | -            | -                | 4             | -             | -            |
|                        | All Syphilis                        | 1                            | 3            | 5            | <b>4</b>     | -                | 5             | 5             | 4            |
|                        |                                     | <b>STD Subtotal</b>          | <b>239</b>   | <b>219</b>   | <b>270</b>   | <b>240</b>       | <b>197</b>    | <b>196</b>    | <b>289</b>   |
| <b>Tuberculosis</b>    | Tuberculosis                        | -                            | -            | -            | -            | 1                | -             | 1             | -            |
|                        | Mycobacterium - Other               | 10                           | 4            | 5            | <b>3</b>     | 5                | 7             | 5             | 3            |
|                        |                                     | <b>Tuberculosis Subtotal</b> | <b>10</b>    | <b>4</b>     | <b>5</b>     | <b>3</b>         | <b>6</b>      | <b>7</b>      | <b>6</b>     |
| <b>VPD</b>             | Chickenpox (Varicella)              | 5                            | 10           | 5            | <b>6</b>     | 17               | 13            | 6             | 6            |
|                        | Diphtheria                          | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | H. influenzae Disease - Inv. †      | 2                            | -            | 1            | -            | 1                | 1             | 2             | -            |
|                        | Measles                             | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Mumps                               | -                            | 1            | -            | -            | -                | -             | -             | -            |
|                        | Pertussis                           | 4                            | -            | 2            | <b>1</b>     | 16               | 21            | 1             | 1            |
|                        | Polio                               | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Rubella                             | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Shingles                            | 4                            | 2            | 2            | <b>7</b>     | 1                | -             | 7             | 7            |
|                        | Tetanus                             | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | VZ Infection, Unspecified           | 2                            | 1            | 1            | <b>1</b>     | -                | 2             | -             | 1            |
|                        |                                     | <b>VPD Subtotal</b>          | <b>17</b>    | <b>14</b>    | <b>11</b>    | <b>15</b>        | <b>35</b>     | <b>37</b>     | <b>16</b>    |
| <b>Vectorborne</b>     | Babesiosis                          | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Dengue Fever                        | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Ehrlichiosis                        | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Encephalitis, California            | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Encephalitis, Eastern Equine        | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Encephalitis, Powassan              | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Encephalitis, St. Louis             | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Encephalitis, Western Equine        | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Lyme Disease                        | -                            | 2            | 6            | <b>2</b>     | -                | 1             | -             | 2            |
|                        | Malaria                             | -                            | 3            | 1            | -            | -                | -             | -             | -            |
|                        | Rickettsial Disease - Spotted Fever | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Rickettsial Disease - Typhus        | -                            | 1            | -            | -            | -                | -             | -             | -            |
|                        | West Nile Virus                     | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Yellow Fever                        | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Zika                                | -                            | 1            | 9            | -            | -                | -             | -             | -            |
|                        | <b>Vectorborne Subtotal</b>         | <b>0</b>                     | <b>7</b>     | <b>16</b>    | <b>2</b>     | <b>0</b>         | <b>1</b>      | <b>0</b>      | <b>2</b>     |
| <b>Viral Hepatitis</b> | Hepatitis A                         | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Hepatitis B, Acute                  | -                            | 2            | -            | -            | -                | -             | 1             | -            |
|                        | Hepatitis B, Chronic                | 5                            | 5            | 2            | <b>7</b>     | 5                | 1             | 6             | 7            |
|                        | Hepatitis B, Perinatal              | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Hepatitis C, Acute ~                | 1                            | 1            | -            | -            | -                | -             | -             | -            |
|                        | Hepatitis C, Chronic ~              | 34                           | 27           | 22           | <b>30</b>    | 11               | 18            | 17            | 30           |
|                        | Hepatitis C, Unknown*               | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Hepatitis D                         | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Hepatitis E                         | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | Hepatitis Non A Non B               | -                            | -            | -            | -            | -                | -             | -             | -            |
|                        | <b>Viral Hepatitis Subtotal</b>     | <b>40</b>                    | <b>35</b>    | <b>24</b>    | <b>37</b>    | <b>16</b>        | <b>19</b>     | <b>24</b>     | <b>37</b>    |
|                        | <b>Total</b>                        | <b>15,554</b>                | <b>6,061</b> | <b>2,457</b> | <b>9,038</b> | <b>8,507</b>     | <b>12,317</b> | <b>10,014</b> | <b>9,038</b> |

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

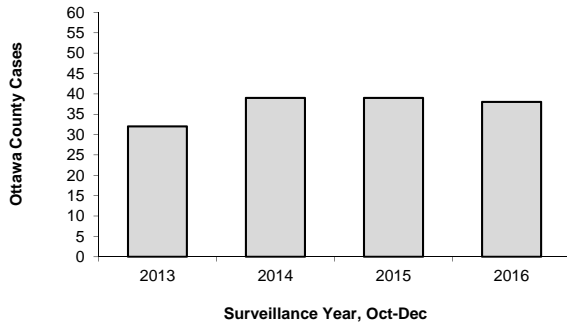
\*\* Data for cases reported is based on date of symptom onset, if available, or date of referral to the public health department.

\*\*\* The Ottawa County Department of Public Health began reporting outbreak aggregate counts of these diseases to the MDSS in 2015.

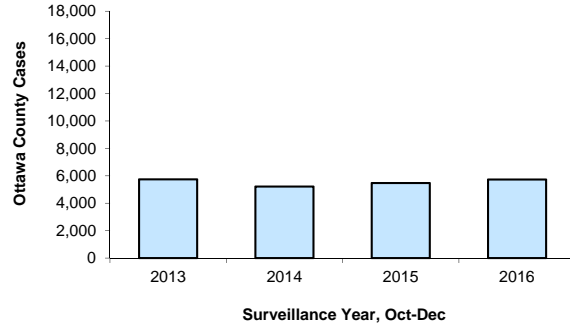
† All serotypes of invasive H. influenzae (Hi) disease are included in this report, though only H. influenzae serotype b disease (Hib) is vaccine-preventable.

~ Indicates a change in the case definition for 2016, which may increase the number of confirmed and probable cases.

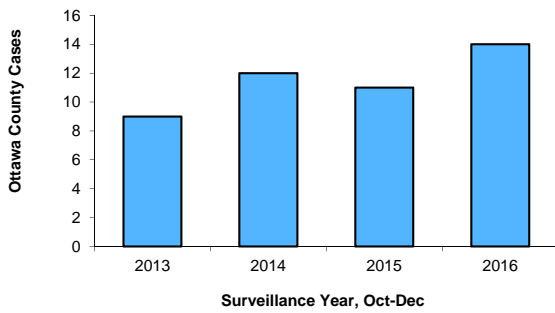
**All Types of Foodborne Illness Cases in Ottawa County, Quarter 4 - Previous 4 Years**



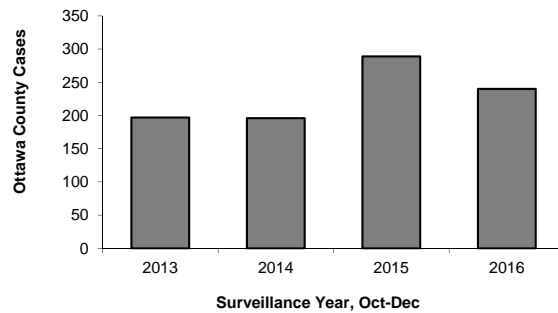
**Flu-Like Disease Cases in Ottawa County Quarter 4 - Previous 4 Years**



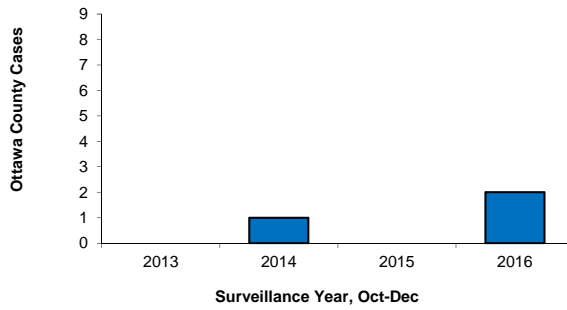
**All Types of Meningitis Cases in Ottawa County Quarter 4 - Previous 4 Years**



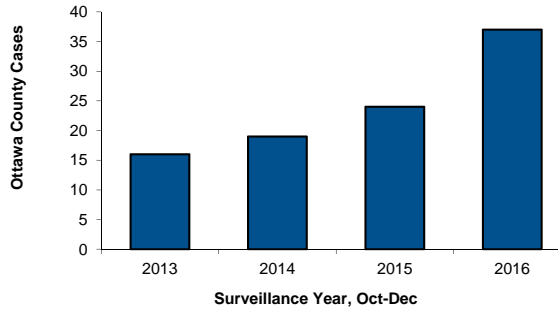
**All Types of Sexually Transmitted Disease Cases in Ottawa County, Quarter 4 - Previous 4 Years**



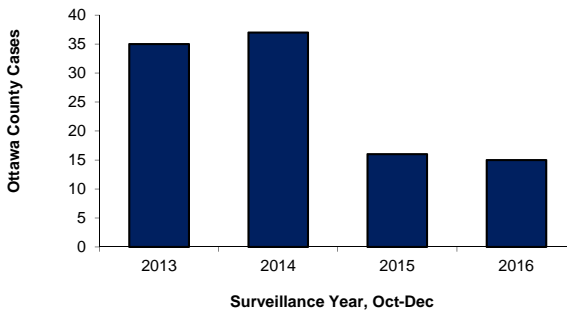
**All Types of Vectorborne Disease Cases in Ottawa County, Quarter 4 - Previous 4 Years**



**All Types of Viral Hepatitis Cases in Ottawa County, Quarter 4 - Previous 4 Years**



**All Types of Vaccine Preventable Disease Cases in Ottawa County, Quarter 4 - Previous 4 Years**



**All Reportable Disease Cases in Ottawa County Quarter 4 - Previous 4 Years**

