

# EPI GRAM August, 2019

## A Monthly Publication of the Stark Public Health Infrastructure Coalition

*EPI Gram* is a monthly publication of the Stark County Public Health Infrastructure Coalition. It contains a summary of provisional communicable disease reports and other key public health indicators, with summary tables for Stark County, Ohio. Some reportable conditions may be under investigation and, at any given time, data may fluctuate from month to month for a specific category. **If you have any questions please contact Avinash Joseph at 330.493.9914 or [josepha@starkhealth.org](mailto:josepha@starkhealth.org), or Amanda Archer at 330.489.3327 or [aarcher@cantonhealth.org](mailto:aarcher@cantonhealth.org).**



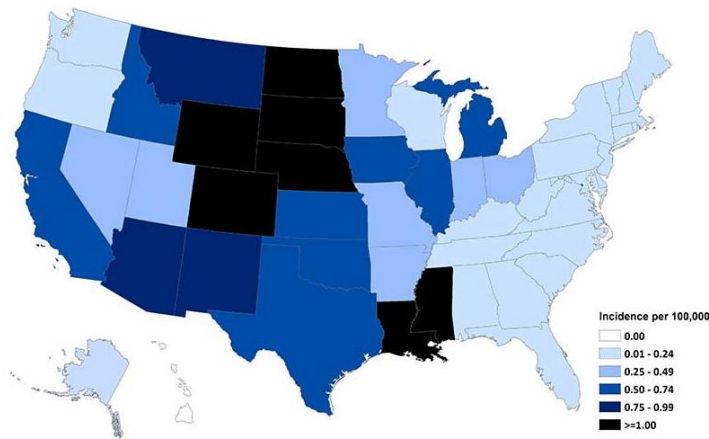
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### Monthly Highlight: West Nile Virus Infection

West Nile Virus Infection is a disease caused by the West Nile Virus, an arthropod-borne virus (arbovirus) most commonly found in mosquitos. The majority (~80%) of people who become infected display no symptoms of illness at all. About one fifth of those infected have symptoms of a febrile illness including headache, body ache, joint pain, vomiting, diarrhea, or rash. The most severe symptoms occur in <1% of those infected, who develop a significant neuroinvasive disease such as encephalitis or meningitis.

There are currently no medications or vaccines available to treat or prevent WNV. The most effective methods of reducing transmission are surveillance and control of mosquito populations and prevention of mosquito bites. It is particularly important to spray insecticides and larvicides regularly and eliminate stagnant water pools. It is also crucial for people in areas with risk of arboviral transmission to wear protective clothing (i.e. long sleeves), use personal insect repellent, and utilize mosquito netting.

Average annual incidence of West Nile virus neuroinvasive disease reported to CDC by state, 1999–2018



Source: ArboNET, Arboviral Diseases Branch, Centers for Disease Control and Prevention

Arboviral infections like WNV are most common in the late summer and early fall months. While Stark County and Ohio as a whole have yet to report any cases, last September there were 3 cases reported in the county alone, and mosquito pools in the county have tested positive for WNV this year. Preventive measures and surveillance are crucial to preventing the transmission of vector borne illnesses such as WNV in our community.

**Table 1 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, including historical data.**

|                   | August 2019  |             |                |   | August 2018  |             |                |   |
|-------------------|--------------|-------------|----------------|---|--------------|-------------|----------------|---|
|                   | Monthly High | Monthly Low | Monthly Median | Counts in highest reported health risk category | Monthly High | Monthly Low | Monthly Median | Counts in highest reported health risk category |
| Pollen Count      | 327          | 0           | 25             | N/A   | 163          | 1           | 42             | N/A   |
| Mold Count        | 7,200        | 0           | 4,260          | <b>1 (Moderate)</b>                             | 6,680        | 2,220       | 4,100          | <b>1 (Moderate)</b>                             |
| Air Quality Index | 71           | 36          | 52.5           | <b>12 (Moderate)</b>                            | 71           | 36          | 51             | <b>7 (Moderate)</b>                             |

\*\*See the following websites for updated Air Quality Index and mold index terminology and color coding: <http://www.airnow.gov/index.cfm?action=aqibasics.aqi>  
[https://pollen.aaaai.org/nab/index.cfm?p=reading\\_charts](https://pollen.aaaai.org/nab/index.cfm?p=reading_charts). Data source for this table is the Air Quality Division of the Canton City Health Department.

**Table 2 Select Vital Statistics for Stark County**

|                 | AUG 2019 | YTD 2019 | 2018  |
|-----------------|----------|----------|-------|
| Live Births     | 345      | 2790     | 4052* |
| Births to Teens | 19       | 179      | 230*  |
| Deaths          | 343      | 2847     | 4230* |

\* Birth and death data is preliminary

**Table 3 Stark County Crude Birth Rate and Death Rates**

|       | 2014 | 2015 | 2016 | 2017 | 2018* |
|-------|------|------|------|------|-------|
| Birth | 11.3 | 11.2 | 11.3 | 10.7 | 10.9  |
| Death | 11.4 | 11.6 | 11.7 | 11.9 | 11.4  |

\*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population. 2018 data is preliminary.

| Table 4: Jurisdictional Summary of Reportable Diseases in Stark County, OH (Provisional Data) | Alliance City |            | Canton City |             | Massillon City |            | Stark County |             | All Departments |             |
|---|---------------|------------|-------------|-------------|----------------|------------|--------------|-------------|-----------------|-------------|
|   | AUG           | YTD        | AUG         | YTD         | AUG            | YTD        | AUG          | YTD         | AUG             | YTD         |
| Campylobacteriosis  | 0             | 0          | 4           | 11          | 1              | 4          | 10           | 48          | 15              | 63          |
| Chlamydia infection   | 13            | 101        | 84          | 547         | 21             | 120        | 80           | 480         | 198             | 1248        |
| CP-CRE  | 0             | 0          | 0           | 3           | 0              | 4          | 1            | 8           | 1               | 15          |
| Creutzfeldt-Jakob Disease   | 0             | 0          | 0           | 0           | 0              | 0          | 0            | 2           | 0               | 2           |
| Cryptosporidiosis   | 0             | 3          | 1           | 3           | 0              | 0          | 8            | 25          | 9               | 31          |
| E. coli, Shiga Toxin-Producing  | 0             | 0          | 2           | 3           | 0              | 2          | 1            | 4           | 3               | 9           |
| Giardiasis  | 0             | 0          | 0           | 3           | 0              | 2          | 0            | 7           | 0               | 12          |
| Gonococcal infection  | 3             | 22         | 22          | 212         | 5              | 40         | 22           | 108         | 52              | 382         |
| Haemophilus influenzae (invasive disease)   | 0             | 0          | 0           | 1           | 0              | 0          | 0            | 2           | 0               | 3           |
| Hepatitis A   | 0             | 2          | 0           | 1           | 0              | 3          | 1            | 8           | 1               | 14          |
| Hepatitis B (including delta) - acute   | 0             | 1          | 0           | 3           | 0              | 2          | 0            | 0           | 0               | 6           |
| Hepatitis B (including delta) - chronic   | 0             | 2          | 3           | 14          | 1              | 4          | 3            | 27          | 7               | 47          |
| Hepatitis C - acute   | 0             | 0          | 0           | 1           | 0              | 0          | 0            | 0           | 0               | 1           |
| Hepatitis C - chronic   | 3             | 21         | 6           | 79          | 3              | 29         | 13           | 102         | 25              | 231         |
| Hepatitis E   | 0             | 0          | 0           | 0           | 0              | 0          | 0            | 0           | 0               | 0           |
| Influenza-associated hospitalization  | 0             | 15         | 1           | 116         | 0              | 32         | 0            | 249         | 1               | 412         |
| Legionellosis - Legionnaires' Disease   | 0             | 1          | 2           | 6           | 0              | 2          | 1            | 6           | 3               | 15          |
| Listeriosis   | 0             | 0          | 0           | 0           | 0              | 0          | 0            | 2           | 0               | 2           |
| Lyme Disease  | 0             | 1          | 1           | 2           | 1              | 1          | 9            | 37          | 11              | 41          |
| Meningitis - aseptic/viral  | 1             | 2          | 0           | 2           | 0              | 3          | 0            | 2           | 1               | 9           |
| Mumps   | 0             | 0          | 0           | 0           | 0              | 0          | 0            | 1           | 0               | 1           |
| Pertussis   | 0             | 2          | 1           | 10          | 0              | 2          | 3            | 20          | 4               | 34          |
| Salmonellosis   | 1             | 1          | 0           | 3           | 1              | 4          | 8            | 20          | 10              | 28          |
| Shigellosis   | 0             | 0          | 0           | 3           | 0              | 0          | 0            | 18          | 0               | 21          |
| Streptococcal - Group A -invasive   | 0             | 0          | 0           | 2           | 0              | 1          | 0            | 8           | 0               | 11          |
| Streptococcal - Group B - in newborn  | 0             | 0          | 0           | 0           | 0              | 0          | 0            | 1           | 0               | 1           |
| Streptococcus pneumoniae - inv antibiotic resistance unknown or non-resistant                 | 0             | 1          | 0           | 3           | 0              | 0          | 2            | 12          | 2               | 16          |
| Streptococcus pneumoniae – inv antibiotic resistant/intermediate                              | 0             | 2          | 0           | 1           | 0              | 2          | 0            | 3           | 0               | 8           |
| Syphilis, Total   | 0             | 2          | 2           | 11          | 0              | 1          | 0            | 8           | 2               | 22          |
| ➤ Syphilis, Primary, Secondary & Early Latent   | 0             | 2          | 1           | 6           | 0              | 0          | 0            | 7           | 1               | 16          |
| Tuberculosis  | 0             | 0          | 0           | 1           | 0              | 0          | 0            | 2           | 0               | 3           |
| Varicella   | 0             | 0          | 0           | 6           | 1              | 2          | 1            | 9           | 2               | 17          |
| Vibriosis (not cholera)   | 0             | 0          | 0           | 0           | 0              | 1          | 2            | 2           | 2               | 3           |
| Yersiniosis   | 0             | 0          | 0           | 0           | 0              | 0          | 0            | 3           | 0               | 3           |
| <b>Total</b>  | <b>22</b>     | <b>179</b> | <b>131</b>  | <b>1054</b> | <b>34</b>      | <b>261</b> | <b>167</b>   | <b>1240</b> | <b>354</b>      | <b>2734</b> |



Alliance City  
Health Department  
[cityofalliance.com/health](http://cityofalliance.com/health)



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Canton City  
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**Health Department**

Massillon City  
Health Department  
[massillonohio.com/health](http://massillonohio.com/health)



Stark County  
Health Department  
[starkhealth.org](http://starkhealth.org)

| <b>Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)</b> | <b>AUG-19</b> | <b>AUG-18</b> | <b>YTD 2019</b> | <b>YTD 2018</b> | <b>All of 2018</b> | <b>5 Yr Annual Average</b> | <b>Rate</b> |
|--|---------------|---------------|-----------------|-----------------|--------------------|----------------------------|-------------|
| Amebiasis  | 0             | 0             | 0               | 0               | 0                  | 0.4                        | 0.107       |
| Anaplasmosis   | 0             | 0             | 0               | 2               | 2                  | 0.6                        | 0.161       |
| Babesiosis   | 0             | 0             | 0               | 2               | 2                  | 0.8                        | 0.214       |
| Brucellosis  | 0             | 0             | 0               | 0               | 0                  | 0.2                        | 0.054       |
| Campylobacteriosis   | 15            | 11            | 63              | 57              | 85                 | 77.6                       | 20.761      |
| Chlamydia  | 198           | 143           | 1248            | 1122            | 1713               | 1720.0                     | 460.169     |
| CP-CRE   | 1             | 3             | 15              | 4               | 27                 | 24.0                       | 6.421       |
| Coccidioidomycosis   | 0             | 0             | 0               | 0               | 0                  | 0.4                        | 0.107       |
| Creutzfeldt-Jakob Disease  | 0             | 0             | 2               | 0               | 1                  | 1.2                        | 0.321       |
| Cryptosporidiosis  | 9             | 6             | 31              | 24              | 33                 | 33.8                       | 9.043       |
| Cyclosporiasis   | 0             | 1             | 4               | 8               | 8                  | 3.0                        | 0.803       |
| E. coli, Shiga Toxin-Producing (O157:H7, Not O157, Unknown Serotype)   | 3             | 2             | 9               | 12              | 17                 | 14.0                       | 3.746       |
| Giardiasis   | 0             | 5             | 12              | 16              | 23                 | 21.8                       | 5.832       |
| Gonorrhea  | 52            | 60            | 382             | 389             | 643                | 580.2                      | 155.227     |
| Haemophilus influenzae , Invasive  | 0             | 1             | 3               | 3               | 4                  | 6.4                        | 1.712       |
| Hemolytic Uremic Syndrome (HUS)  | 1             | 0             | 0               | 0               | 0                  | 0.2                        | 0.054       |
| Hepatitis A  | 1             | 2             | 14              | 3               | 11                 | 7.6                        | 2.033       |
| Hepatitis B, Perinatal   | 0             | 0             | 1               | 0               | 1                  | 1.8                        | 0.482       |
| Hepatitis B, Acute   | 0             | 0             | 6               | 7               | 11                 | 6.4                        | 1.712       |
| Hepatitis B, Chronic   | 7             | 6             | 47              | 59              | 85                 | 57.6                       | 15.410      |
| Hepatitis C, Acute   | 0             | 2             | 1               | 6               | 5                  | 6.2                        | 1.659       |
| Hepatitis C, Chronic   | 25            | 25            | 231             | 217             | 313                | 313.0                      | 83.740      |
| Hepatitis C-Perinatal Infection  | 1             | 2             | 2               | 2               | 4                  | 4.0                        | 1.070       |
| Hepatitis E  | 0             | 0             | 0               | 0               | 0                  | 0.2                        | 0.054       |
| Influenza-associated hospitalization   | 1             | 0             | 412             | 578             | 595                | 379.0                      | 101.398     |
| LaCrosse virus disease   | 0             | 1             | 0               | 3               | 4                  | 1.0                        | 0.268       |
| Legionellosis  | 3             | 4             | 15              | 17              | 34                 | 18.0                       | 4.816       |
| Listeriosis  | 0             | 1             | 2               | 1               | 1                  | 1.0                        | 0.268       |
| Lyme Disease   | 11            | 10            | 41              | 31              | 38                 | 24.0                       | 6.421       |
| Malaria  | 0             | 0             | 0               | 0               | 0                  | 0.4                        | 0.107       |
| Measles (indigenous to Ohio)   | 0             | 0             | 1               | 0               | 0                  | 2.0                        | 0.535       |
| Meningitis, Aseptic  | 1             | 9             | 9               | 31              | 46                 | 34.6                       | 9.257       |
| Meningitis, Other Bacterial  | 0             | 0             | 1               | 3               | 4                  | 3.4                        | 0.910       |
| Meningococcal Disease  | 0             | 0             | 0               | 0               | 0                  | 1.0                        | 0.268       |
| Mumps  | 0             | 0             | 1               | 2               | 2                  | 3.2                        | 0.856       |
| Pertussis  | 4             | 2             | 34              | 33              | 54                 | 50.4                       | 13.484      |
| Q fever, chronic   | 0             | 0             | 0               | 0               | 0                  | 0.2                        | 0.054       |
| Salmonellosis  | 10            | 4             | 28              | 35              | 61                 | 47.8                       | 12.788      |
| Shigellosis  | 0             | 2             | 21              | 23              | 25                 | 26.2                       | 7.010       |
| Spotted Fever Rickettsiosis  | 0             | 0             | 0               | 3               | 5                  | 2.2                        | 0.589       |
| Staphylococcal aureus - intermediate resistance to vancomycin (VISA)   | 0             | 0             | 0               | 0               | 0                  | 0.2                        | 0.054       |
| Streptococcal Dis, Group A, Invasive   | 0             | 1             | 11              | 23              | 25                 | 15.2                       | 4.067       |
| Streptococcal Dis, Group B, in Newborn   | 0             | 1             | 1               | 2               | 2                  | 1.6                        | 0.428       |
| Streptococcal Toxic Shock Syndrome   | 0             | 0             | 0               | 0               | 0                  | 0.8                        | 0.214       |
| Streptococcus pneumoniae – inv. antibiotic resistance unknown or non-resistant                                     | 2             | 2             | 16              | 21              | 29                 | 30.6                       | 8.187       |
| Streptococcus pneumo – inv. antibiotic resistant/intermediate  | 0             | 1             | 8               | 5               | 10                 | 13.4                       | 3.585       |
| Syphilis, Total  | 2             | 3             | 22              | 23              | 33                 | 19.4                       | 5.190       |
| Syphilis, Primary, Secondary and Early Latent  | 1             | 1             | 16              | 11              | 19                 | 11.8                       | 3.157       |
| Toxic Shock Syndrome (TSS)   | 0             | 0             | 0               | 0               | 0                  | 0.2                        | 0.054       |
| Tuberculosis   | 0             | 0             | 3               | 1               | 5                  | 2.4                        | 0.642       |
| Varicella  | 2             | 3             | 17              | 11              | 16                 | 24.2                       | 6.474       |
| Vibriosis - other (not cholera)  | 2             | 0             | 3               | 0               | 1                  | 2.2                        | 0.589       |
| Vibrio parahaemolyticus infection  | 0             | 0             | 0               | 0               | 0                  | 0.0                        | 0.000       |
| West Nile Virus  | 0             | 1             | 0               | 1               | 8                  | 2.2                        | 0.589       |
| Yersiniosis  | 0             | 0             | 3               | 1               | 3                  | 6.4                        | 1.712       |
| Zika virus infection   | 0             | 0             | 0               | 0               | 0                  | 1.0                        | 0.268       |

Source: Ohio Disease Reporting System, downloaded 9/2019. Rates are per 100K population and based on 5 yr average incidence '14 – '18.