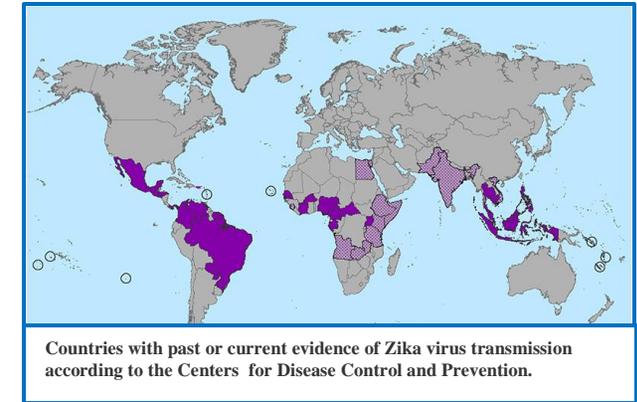


EPI Gram is a bimonthly publication of the Stark County Public Health Infrastructure Coalition. It contains a summary of provisional communicable disease reports and other key public health indicators, with summary tables for Stark County, Ohio. Some reportable conditions may be under investigation and, at any given time, data may fluctuate from month to month for a specific category.

Monthly Highlight: Zika Virus Disease

During the month of December Puerto Rico confirmed their first case of Zika Virus Disease. This disease is transmitted primarily through mosquito bites, specifically bites from the *Aedes* species. Local transmission has not been reported elsewhere in the United States, but has been reported from travelers upon their return home. These imported cases increase the risk of the Zika virus spreading throughout the United States. Any confirmed cases should take extra measures to avoid getting a mosquito bites during the first week of their illness in order to prevent the spread to other mosquitoes and subsequently to other people.

About 20% of those who become infected experience symptoms such as a fever, rash, joint pain, and red eyes. Severe manifestations are very rare and death from the Zika virus has not been reported. Unfortunately there is no vaccine nor cure. The only thing a person can do once ill is to treat the symptoms, get lost of rest and stay hydrated. With no cure and the high risk of spread through mosquitoes the best form of action is prevention. The following are ways to prevent contracting the Zika virus if one is traveling to an area where there are confirmed cases:



- Use insect repellents: products with DEET, picaridin, IR3535, and some oil of lemon eucalyptus and para-menthane-diol have long lasting protection.
 - Apply on the outer layer of clothing.
 - If applying on sunscreen and insect repellent, apply the sunscreen first and the insect repellent last.
 - Follow the instructions on the product container
- Wear long sleeve shirts and long pants when possible
- Use air conditioning or window/door screens to keep mosquitoes outside of the house
- Empty standing water from containers around your home. This is where mosquitoes lay their eggs.

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

| | December 2015 | | | | January 2015 | | | |
|-------------------|--|-------------|----------------|---|--------------|-------------|----------------|---|
| | 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 | Reported Seasonally; Currently Unavailable | | | | | | | |
| Mold Count | Reported Seasonally; Currently Unavailable | | | | | | | |
| Air Quality Index | 60 | 5 | 11.5 | 1 (All Good) | 32 | 17 | 20 | 0 (All Good) |

**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
Data source for this table is the Air Quality Division of the Canton City Health Department.

Table 2 Summaries of Select Vital Statistics for Stark County

| | December 2015 | YTD 2015 | 2014 |
|-----------------|---------------|----------|-------|
| Live Births | 395 | 4,314 | 4,512 |
| Births to Teens | 26 | 308 | 380 |
| Deaths | 378 | 4,362 | 4,288 |

Birth and Death Data is reported by the four health districts and may include non-county residents.

Table 3 Stark County Crude Birth Rate and Death Rates

| | 2009 | 2010 | 2011 | 2012 | 2013 |
|-------|------|------|------|------|------|
| Birth | 11.4 | 10.8 | 10.8 | 10.9 | 11.2 |
| Death | 10.9 | 10.9 | 11.3 | 11.4 | 11.3 |

*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population.

If you have any questions, including how to receive copies of this report, please contact Julia Wagner at 330.493.9914 or Wagnerj@starkhealth.org.

Table 4: Jurisdictional Summary of Reportable Diseases in Stark County

| | Alliance City | | Canton City | | Massillon City | | Stark County | | Total | |
|---|---------------|------------|-------------|--------------|----------------|------------|--------------|--------------|------------|--------------|
| | Dec. | YTD | Dec. | YTD | Dec. | YTD | Dec. | YTD | Dec. | YTD |
| Amebiasis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Babesiosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Campylobacteriosis | 0 | 5 | 1 | 16 | 0 | 1 | 1 | 35 | 2 | 57 |
| Chlamydia infection | 10 | 83 | 71 | 778 | 8 | 166 | 63 | 619 | 152 | 1,646 |
| Cholera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coccidioidomycosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cryptosporidiosis | 2 | 5 | 0 | 1 | 0 | 5 | 1 | 19 | 3 | 30 |
| Cyclosporiasis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| E. coli-O157:H7 and Shiga toxin producing | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 12 | 0 | 17 |
| Giardiasis | 1 | 3 | 33 | 9 | 0 | 1 | 0 | 15 | 1 | 28 |
| Gonococcal infection | 4 | 35 | 0 | 342 | 2 | 41 | 10 | 90 | 49 | 508 |
| Haemophilus Influenzae | 0 | 2 | 0 | 3 | 0 | 0 | 1 | 3 | 1 | 8 |
| Hemolytic Uremic Syndrome | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hepatitis A | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 5 |
| Hepatitis B - acute | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 |
| Hepatitis B - chronic | 0 | 3 | 0 | 11 | 0 | 2 | 3 | 27 | 3 | 43 |
| Hepatitis B - perinatal | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 5 |
| Hepatitis C - acute | 0 | 3 | 0 | 2 | 0 | 3 | 0 | 5 | 0 | 13 |
| Hepatitis C - chronic | 3 | 41 | 5 | 123 | 4 | 55 | 10 | 154 | 22 | 373 |
| Influenza-associated hospitalization | 0 | 7 | 0 | 75 | 0 | 25 | 0 | 177 | 0 | 284 |
| Legionellosis | 0 | 0 | 0 | 4 | 0 | 3 | 1 | 13 | 1 | 20 |
| Listeriosis | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| Lyme Disease | 0 | 2 | 0 | 2 | 0 | 2 | 1 | 12 | 1 | 18 |
| Malaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Measles-indigenous to Ohio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Meningitis - aseptic/viral | 0 | 0 | 0 | 8 | 0 | 3 | 2 | 19 | 2 | 30 |
| Meningitis - bacterial (Not N. meningitidis) | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 3 |
| Meningococcal disease | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3 |
| Mumps | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 4 |
| Mycobacterial disease - other than tuberculosis | 0 | 1 | 0 | 2 | 0 | 3 | 1 | 17 | 1 | 23 |
| Pertussis | 0 | 6 | 0 | 8 | 4 | 7 | 3 | 24 | 7 | 45 |
| Salmonellosis | 0 | 2 | 2 | 12 | 0 | 4 | 4 | 32 | 6 | 50 |
| Shigellosis | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 1 | 0 | 6 |
| Streptococcal - Group A -invasive | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 5 | 0 | 9 |
| Streptococcal - Group B -newborn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Streptococcal toxic shock syndrome (STSS) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Streptococcus pneumoniae - invasive antibiotic resistance unknown/non-resistant | 0 | 3 | 1 | 8 | 0 | 1 | 4 | 16 | 5 | 28 |
| Streptococcus pneumoniae - invasive antibiotic resistant/intermediate | 0 | 3 | 0 | 3 | 0 | 1 | 0 | 8 | 0 | 15 |
| Syphilis, Total | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 4 | 0 | 7 |
| Syphilis, Primary and Secondary | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 5 |
| Toxic Shock Syndrome (TSS) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Tuberculosis | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Typhoid Fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Varicella | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 22 | 1 | 26 |
| Vibriosis-Other (not cholera) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| West Nile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Yersiniosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 |
| Total | 20 | 207 | 113 | 1,430 | 18 | 330 | 107 | 1,352 | 158 | 3,319 |

| Table 5—Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data) | Dec. 2015 | Dec. 2014 | YTD 2015 | YTD 2014 | All of 2014 | 5 Yr. Annual Average | 5 Yr. Annual Rate |
|--|-----------|-----------|----------|----------|-------------|----------------------|-------------------|
| Amebiasis | 0 | 0 | 1 | 0 | 0 | 0.0 | 0.000 |
| Babesiosis | 0 | 0 | 1 | 0 | 0 | 0.0 | 0.000 |
| Brucellosis | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Campylobacteriosis | 2 | 3 | 57 | 74 | 74 | 59.2 | 15.762 |
| Chlamydia | 152 | 131 | 1,646 | 1,531 | 1,531 | 1,459.0 | 388.619 |
| Cholera | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.000 |
| Coccidioidomycosis | 0 | 0 | 0 | 1 | 1 | 0.4 | 0.107 |
| Creutzfeldt-Jakob Disease | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.160 |
| Cryptosporidiosis | 3 | 0 | 30 | 29 | 29 | 27.8 | 7.402 |
| Cyclosporiasis | 0 | 0 | 1 | 0 | 0 | 0.2 | 0.053 |
| Dengue | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.213 |
| Escherichia coli, Shiga Toxin-Producing | 0 | 0 | 17 | 8 | 8 | 4.8 | 1.279 |
| Ehrlichiosis/ Anaplasmosis | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.107 |
| Giardiasis | 1 | 0 | 28 | 15 | 15 | 44.2 | 11.773 |
| Gonorrhea | 49 | 40 | 508 | 527 | 527 | 561.6 | 149.588 |
| Haemophilus influenzae , Invasive | 1 | 0 | 8 | 6 | 6 | 7.4 | 1.971 |
| Hemolytic Uremic Syndrome (HUS) | 0 | 0 | 0 | 1 | 1 | 0.2 | 0.053 |
| Hepatitis A | 0 | 2 | 5 | 9 | 9 | 4.8 | 1.278 |
| Hepatitis B, Acute | 0 | 0 | 3 | 6 | 6 | 5.0 | 1.331 |
| Hepatitis B, Chronic | 3 | 4 | 43 | 41 | 41 | 32.6 | 8.683 |
| Hepatitis B, Perinatal | 0 | 0 | 5 | 1 | 1 | 0.8 | 0.21 |
| Hepatitis C, Acute | 0 | 0 | 13 | 4 | 4 | 4.8 | 1.279 |
| Hepatitis C, Chronic | 22 | 22 | 373 | 263 | 263 | 244.0 | 64.992 |
| Hepatitis E | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Influenza-associated hospitalization | 0 | 261 | 284 | 409 | 409 | 207.8 | 55.350 |
| Influenza-associated pediatric mortality | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| LaCrosse virus disease | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.213 |
| Legionellosis | 1 | 1 | 20 | 6 | 6 | 13.6 | 3.622 |
| Listeriosis | 1 | 1 | 1 | 1 | 1 | 1.4 | 0.373 |
| Lyme Disease | 1 | 0 | 18 | 9 | 9 | 10.8 | 2.876 |
| Malaria | 0 | 0 | 0 | 1 | 1 | 1.0 | 0.266 |
| Measles (indigenous to Ohio) | 0 | 0 | 0 | 9 | 9 | 1.8 | 0.479 |
| Meningitis, Aseptic/Viral | 2 | 3 | 30 | 24 | 24 | 35.6 | 9.482 |
| Meningitis, Other Bacterial | 0 | 0 | 3 | 2 | 2 | 3.2 | 0.852 |
| Meningococcal Disease | 0 | 1 | 3 | 2 | 2 | 1.0 | 0.266 |
| Mumps | 0 | 1 | 4 | 5 | 5 | 1.4 | 0.373 |
| Mycobacterial disease - Not TB | 1 | 2 | 23 | 34 | 34 | 29.6 | 7.884 |
| Other arthropod-borne disease | 0 | 0 | 0 | 1 | 1 | 0.2 | 0.053 |
| Pertussis | 7 | 2 | 45 | 81 | 81 | 45.6 | 12.146 |
| Q fever, acute | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.107 |
| Salmonellosis | 6 | 4 | 50 | 38 | 38 | 37.8 | 10.068 |
| Shigellosis | 0 | 0 | 6 | 69 | 69 | 33.8 | 9.003 |
| Spotted Fever Rickettsiosis | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.160 |
| Streptococcal Dis, Group A, Invasive | 0 | 1 | 9 | 10 | 10 | 15.8 | 4.208 |
| Streptococcal Dis, Group B, in Newborn | 0 | 0 | 0 | 1 | 1 | 2.4 | 0.639 |
| Streptococcal Toxic Shock Syndrome | 0 | 0 | 1 | 2 | 2 | 1.0 | 0.266 |
| Strep. pneumo. - invasive antibiotic resistance unknown / non-resistant | 5 | 3 | 28 | 27 | 27 | 35.6 | 9.482 |
| Strep. pneumo. - invasive antibiotic resistant /intermediate | 0 | 2 | 15 | 9 | 9 | 18.8 | 5.008 |
| Syphilis, Total | 0 | 0 | 7 | 7 | 7 | 10.4* | 2.770* |
| Syphilis, Primary and Secondary | 0 | 0 | 5 | 7 | 7 | 3.0* | 0.799* |
| Toxic Shock Syndrome (TSS) | 0 | 0 | 1 | 0 | 0 | 0.8 | 0.213 |
| Tuberculosis | 0 | 0 | 1 | 1 | 1 | 2.0 | 0.533 |
| Typhoid Fever | 0 | 0 | 0 | 1 | 1 | 0.4 | 0.107 |
| Typhus Fever | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Varicella | 1 | 3 | 26 | 24 | 24 | 35.0 | 9.323 |
| Vibriosis | 0 | 0 | 3 | 1 | 1 | 0.6 | 0.160 |
| West Nile Virus | 0 | 0 | 1 | 1 | 1 | 0.0 | 0.000 |
| Yersiniosis | 0 | 0 | 8 | 3 | 3 | 0.6 | 0.160 |