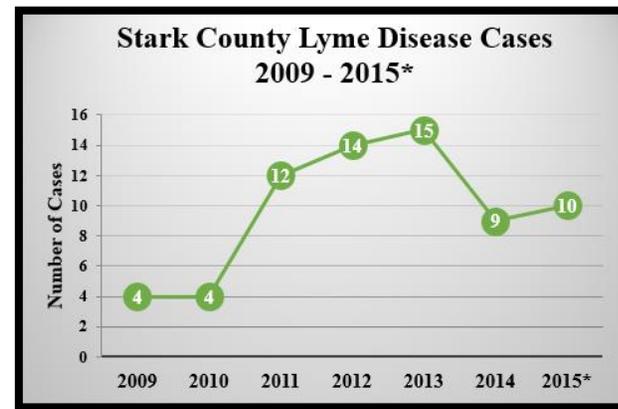


EPI Gram is a monthly publication of the Stark County Public Health Infrastructure Coalition. It contains a summary of provisional communicable disease reports and other key public health indicators, with summary tables for Stark County, Ohio. Some reportable conditions may be under investigation and,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

Monthly Highlight: Lyme Disease

Each year, approximately 30,000 cases of Lyme disease are reported to the CDC by state health departments and the District of Columbia. However, this number does not reflect every case of Lyme disease that is diagnosed in the United States each year, as some cases go unreported. Based on insurance claims and laboratory testing, estimations of Lyme disease in the US are closer to 329,000 (range 296,000–376,000) annual cases. According to the CDC, Lyme disease is the most commonly reported vectorborne illness in the United States. Although this disease does not occur nationwide and is heavily concentrated in the Northeast and upper Midwest regions of the United States, Ohio reported its highest incidence of cases (74) in 2013. With a 5 year annual average of 10.8 cases, Stark County has seen an increase in this number within its jurisdiction since 2010. Through July 31, 2015, 10 cases have been reported to Stark County health departments as either confirmed or suspected Lyme disease.



Source: Ohio Department of Health Data Warehouse.
Data retrieved on 08/03/2015.
*2015 data not finalized and only current through 7/31/2015.

Lyme disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans through the bite of an infected blacklegged tick. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to the joints, the heart and the nervous system. Lyme disease is diagnosed based on symptoms, physical findings (e.g., rash) and the possibility of exposure to infected ticks. Laboratory testing is helpful if used correctly and performed with validated methods. Most cases of Lyme disease can be treated successfully with a few weeks of antibiotics. Steps to prevent Lyme disease include using insect repellent, removing ticks properly and promptly, applying pesticides and reducing tick habitat. The ticks that transmit Lyme disease can occasionally transmit other tickborne diseases as well.

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

| | July 2015 | | | | August 2014 | | | |
|-------------------|--------------|-------------|----------------|---|--------------|-------------|----------------|---|
| | 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 | 20 | 1 | 5 | N/A | 165 | 10 | 50 | N/A |
| Mold Count | 7390 | 1490 | 3560 | 1 Moderate | 9600 | 1780 | 5870 | 6 Moderate |
| Air Quality Index | 93 | 40 | 49.5 | 10 Moderate | 68 | 32 | 41 | 4 Moderate |

**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

| | July 2015 | YTD 2015 | 2014 |
|-----------------|-----------|----------|------|
| Live Births | 489 | 2745 | 4512 |
| Births to Teens | 35 | 185 | 380 |
| Deaths | 362 | 2727 | 4288 |

Birth and Death Data is reported by the 4 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 330.493.9904 or Wagnerj@starkhealth.org.

Table 4: Jurisdictional Summary of Reportable Diseases in Stark County, OH (Provisional Data)

| | Alliance City | | Canton City | | Massillon City | | Stark County | | All Departments | |
|---|---------------|------------|-------------|------------|----------------|------------|--------------|------------|-----------------|-------------|
| | July | YTD | July | YTD | July | YTD | July | YTD | July | YTD |
| Amebiasis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Babesiosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Campylobacteriosis | 1 | 4 | 0 | 10 | 0 | 0 | 5 | 18 | 6 | 32 |
| Chlamydia infection | 7 | 40 | 53 | 404 | 12 | 106 | 38 | 323 | 110 | 873 |
| Coccidioidomycosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cryptosporidiosis | 2 | 3 | 0 | 1 | 0 | 0 | 3 | 8 | 5 | 12 |
| Cyclosporiasis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| E. coli, Shiga Toxin-Producing (O157:H7, Not O157, Unknown Serotype) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| Giardiasis | 1 | 1 | 0 | 3 | 0 | 1 | 3 | 9 | 4 | 14 |
| Gonococcal infection | 5 | 16 | 23 | 163 | 3 | 27 | 9 | 46 | 40 | 252 |
| Haemophilus influenzae (invasive disease) | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 7 |
| Hepatitis A | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Hepatitis B - Perinatal Infection | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 5 |
| Hepatitis B (including delta) - acute | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 |
| Hepatitis B (including delta) - chronic | 0 | 3 | 1 | 6 | 1 | 1 | 3 | 17 | 5 | 27 |
| Hepatitis C - acute | 1 | 3 | 0 | 1 | 1 | 3 | 1 | 3 | 3 | 10 |
| Hepatitis C - chronic | 3 | 29 | 10 | 63 | 5 | 28 | 7 | 80 | 25 | 200 |
| Influenza-associated hospitalization | 0 | 7 | 0 | 75 | 0 | 24 | 0 | 175 | 0 | 281 |
| Legionellosis - Legionnaires' Disease | 0 | 0 | 2 | 4 | 1 | 2 | 5 | 9 | 8 | 15 |
| Lyme Disease | 0 | 2 | 0 | 1 | 1 | 2 | 2 | 5 | 3 | 10 |
| Measles - indigenous to Ohio (call health department immediately) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Meningitis - aseptic/viral | 0 | 0 | 1 | 2 | 0 | 3 | 1 | 6 | 2 | 11 |
| Meningitis - bacterial (Not N. meningitidis) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Meningococcal disease - Neisseria meningitidis (call health department immediately) | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3 |
| Mumps | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 3 |
| Mycobacterial disease - other than tuberculosis | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 7 | 1 | 11 |
| Pertussis | 0 | 6 | 0 | 8 | 0 | 3 | 0 | 13 | 0 | 30 |
| Salmonellosis | 0 | 1 | 1 | 5 | 2 | 4 | 2 | 18 | 5 | 28 |
| Shigellosis | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 2 | 4 |
| Streptococcal - Group A -invasive | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 5 |
| Streptococcal toxic shock syndrome (STSS) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant | 0 | 1 | 1 | 5 | 0 | 1 | 1 | 7 | 2 | 14 |
| Streptococcus pneumoniae - invasive antibiotic resistant/intermediate | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 7 | 0 | 12 |
| Syphilis, Total | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 5 |
| Syphilis, Primary, Secondary and Early Latent | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 4 |
| Tuberculosis | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 2 |
| Varicella | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 13 | 1 | 14 |
| Vibriosis (not cholera) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Vibrio parahaemolyticus infection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Nile virus disease (also current infection) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Yersiniosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| Total | 21 | 121 | 95 | 774 | 26 | 213 | 82 | 794 | 224 | 1902 |

Source: Ohio Disease Reporting System, downloaded 8/3/15.

Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)

| | July 2015 | July 2014 | YTD 2015 | YTD 2014 | All of 2014 | 5 Yr. Annual Average | 5 Yr. Annual Rate |
|--|-----------|-----------|----------|----------|-------------|----------------------|-------------------|
| Amebiasis | 0 | 0 | 1 | 0 | 0 | 0.2 | 0.053 |
| Anaplasmosis | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Babesiosis | 0 | 0 | 1 | 0 | 0 | 0.2 | 0.053 |
| Brucellosis | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Campylobacteriosis | 6 | 8 | 32 | 37 | 74 | 59.2 | 15.762 |
| Chlamydia | 110 | 119 | 873 | 867 | 1530 | 1465.2 | 390.110 |
| Coccidioidomycosis | 0 | 0 | 0 | 0 | 1 | 0.4 | 0.107 |
| Creutzfeldt-Jakob Disease | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.160 |
| Cryptosporidiosis | 5 | 3 | 12 | 18 | 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 , STP, Not O157:H7 | 0 | 0 | 3 | 0 | 0 | 1.2 | 0.320 |
| Escherichia coli O157:H7 | 0 | 0 | 0 | 0 | 6 | 2.8 | 0.746 |
| Escherichia coli , STP, Unk Serotype | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.107 |
| Ehrlichiosis/Anaplasmosis | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Giardiasis | 4 | 3 | 14 | 6 | 15 | 44.2 | 11.768 |
| Gonorrhea | 40 | 36 | 252 | 333 | 527 | 562.8 | 149.846 |
| Haemophilus influenzae , Invasive | 0 | 0 | 7 | 3 | 6 | 7.4 | 1.970 |
| Hemolytic Uremic Syndrome (HUS) | 0 | 0 | 0 | 0 | 1 | 0.2 | 0.053 |
| Hepatitis A | 0 | 2 | 2 | 5 | 9 | 4.8 | 1.278 |
| Hepatitis B, Perinatal | 0 | 1 | 5 | 1 | 1 | 2.6 | 0.692 |
| Hepatitis B, Acute | 1 | 0 | 2 | 2 | 6 | 5.2 | 1.385 |
| Hepatitis B, Chronic | 5 | 4 | 27 | 31 | 40 | 32.4 | 8.627 |
| Hepatitis C, Acute | 3 | 1 | 10 | 2 | 3 | 6 | 1.597 |
| Hepatitis C, Chronic | 25 | 19 | 200 | 152 | 258 | 247.8 | 65.977 |
| Hepatitis E | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Influenza-associated hospitalization | 0 | 0 | 281 | 137 | 407 | 208.2 | 55.433 |
| 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 | 8 | 0 | 15 | 1 | 6 | 13.6 | 3.621 |
| Listeriosis | 0 | 0 | 0 | 0 | 1 | 1.4 | 0.373 |
| Lyme Disease | 3 | 1 | 10 | 4 | 9 | 10.8 | 2.876 |
| Malaria | 0 | 0 | 0 | 0 | 1 | 1 | 0.266 |
| Measles (indigenous to Ohio) | 0 | 0 | 0 | 7 | 9 | 1.8 | 0.479 |
| Meningitis, Aseptic | 2 | 4 | 11 | 12 | 24 | 35.6 | 9.479 |
| Meningitis, Other Bacterial | 0 | 0 | 2 | 2 | 2 | 3.2 | 0.852 |
| Meningococcal Disease | 0 | 0 | 3 | 1 | 2 | 1 | 0.266 |
| Mumps | 0 | 1 | 3 | 4 | 5 | 1.4 | 0.373 |
| Mycobacterial disease - Not TB | 1 | 3 | 11 | 21 | 34 | 30.4 | 8.094 |
| Other arthropod-borne disease | 0 | 0 | 0 | 0 | 1 | 0.2 | 0.053 |
| Pertussis | 0 | 13 | 30 | 42 | 81 | 45.6 | 12.141 |
| Q fever, acute | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.106 |
| Salmonellosis | 5 | 5 | 28 | 21 | 38 | 37.8 | 10.064 |
| Shigellosis | 2 | 19 | 4 | 61 | 69 | 34 | 9.053 |
| Spotted Fever Rickettsiosis | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.160 |
| Streptococcal Dis, Group A, Invasive | 0 | 0 | 5 | 7 | 10 | 15.8 | 4.207 |
| Streptococcal Dis, Group B, in Newborn | 0 | 0 | 0 | 0 | 1 | 2.4 | 0.639 |
| Streptococcal Toxic Shock Syndrome | 0 | 0 | 1 | 2 | 2 | 1 | 0.266 |
| Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant | 2 | 0 | 14 | 17 | 27 | 36 | 9.585 |
| Streptococcus pneumo - inv antibiotic resistant/intermediate | 0 | 2 | 12 | 4 | 9 | 18.8 | 5.006 |
| Syphilis, Total | 0 | 0 | 5 | 8 | 7 | 6.4 | 1.704 |
| Syphilis, Primary, Secondary and Early Latent | 0 | 0 | 4 | 3 | 7 | 0.8 | 0.213 |
| Toxic Shock Syndrome (TSS) | 0 | 0 | 0 | 0 | 0 | 0.8* | 0.213* |
| Tuberculosis | 1 | 0 | 2 | 1 | 1 | 1.8 | 0.479 |
| Typhoid Fever | 0 | 0 | 0 | 0 | 1 | 0.4 | 0.107 |
| Typhus Fever | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Varicella | 1 | 3 | 14 | 15 | 24 | 35.4 | 9.425 |
| Vibriosis - other (not cholera) | 0 | 0 | 2 | 0 | 0 | 0.6 | 0.160 |
| Vibriosis parahaemolyticus | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| West Nile Virus | 0 | 0 | 0 | 0 | 1 | 0.4 | 0.107 |
| Yersiniosis | 0 | 1 | 3 | 1 | 3 | 1.2 | 0.320 |

Source: Ohio Disease Reporting System, downloaded 8/3/15. Rates are per 100K population and based on 5 yr average incidence 09-13.*08-12 from ODH Stats pg.