

EPI Gram is a monthly publication of the Stark County Public Health 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 might be under investigation; and, at any given time, data might fluctuate from month to month for a specific category.

IN THE NEWS:

LaCrosse Virus Disease. Two children in Stark County were diagnosed with LaCrosse Virus Disease in September 2010. After suffering from the encephalitic form of the disease and requiring hospitalization, both of these children are recovering.

Mosquitoes commonly found throughout Ohio, *Aedes triseriatus*, carry LaCrosse Virus Disease. The infectious dose is considered to be a single bite from an infected mosquito. As would be expected from an arboviral disease, seasonal patterns exist; most cases occur from May through October.

Although this disease is rare in Stark County, our last was in 2004, it is endemic in the State of Ohio. As of 10/18/2010, 23 human cases have been reported in Ohio from the following counties: Allen (1), Coshocton (2), Fairfield (1), Holmes (5), Licking (1), Morrow (1), Preble (1), Richland (1), Shelby (1), Stark (2), Summit (2), Trumbull (1), Tuscarawas (2), Warren (1) and Wayne (1) counties. Note that many of the cases have been found in neighboring or nearby counties in Northeast and Northeast Central Ohio.

Although death from LaCrosse encephalitis is rare, less than 1% of clinical cases, at least one child's death in Ohio was attributed to it this year. The encephalitic form of LaCrosse Virus Disease commonly presents as a nonspecific summertime illness with fever, headache, nausea, vomiting and lethargy. Severe disease occurs most commonly in children under the age of 16 and is characterized by seizures, coma, paralysis, and a variety of neurological sequelae after recovery.

More information on LaCrosse Virus Disease can be found at: <http://www.odh.ohio.gov/pdf/IDCM/lac.pdf> and information on the vector and reservoir of LAC in nature, *Aedes triseriatus* can be found at: http://animaldiversity.ummz.umich.edu/site/accounts/information/Aedes_triseriatus.html.



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

| | Sep 2010 | | | | Oct 2009 | | | |
|-------------------|--------------|-------------|----------------|---|--------------|-------------|----------------|---|
| | 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 | 220 | 2 | 40 | N/A | 10 | 1 | 3 | N/A |
| Mold Count | 12,371 | 830 | 4000 | 3 Moderate | 18,430 | 1,170 | 3655 | 4 High |
| Air Quality Index | 77 | 14 | 39 | 6 Moderate | 43 | 15 | 31 | All Good |

**See the following website for updated Air Quality Index terminology and color coding <http://www.airnow.gov/index.cfm?action=aqibasics.aqi> Data source for this table is the Air Quality Division of the Canton City Health Department.

Table 2 Summary of Select Vital Statistics for Stark County, Ohio

| | Sep-2010 | YTD 2010 | 2009 Total |
|-----------------|-------------------------|----------|------------|
| Live Births | | | 4839 |
| Births to Teens | | | 521 |
| Deaths | Temporarily Unavailable | | 4110 |

Due to the current method of reporting, all data is provisional.

If you have any questions, including how to receive copies of this report, please contact Karen Schanz at 330.493.9928 or Schanzk@starkhealth.org or Christina Henning at 330.489.3327 or Chenning@cantonhealth.org.

Table 3 Stark County Crude Birth and Death Rates per 100,000 Population

*Source: Ohio Department of Health Data Warehouse

| | 2004 | 2005 | 2006 | 2007 | 2008 |
|-------|-------|-------|-------|-------|-------|
| Birth | 1172* | 1163* | 1191* | 1190* | 1166* |
| Death | 971* | 1022* | 1000* | 1035* | 1067 |

Table 4: Jurisdictional summary of Reportable Diseases in Stark County, OH

| | Alliance City | | Canton City | | Massillon City | | Stark County | | All | |
|--|---------------|-----|-------------|-----|----------------|-----|--------------|-----|-----|-----|
| | Sep | YTD | Sep | YTD | Sep | YTD | Sep | YTD | Sep | YTD |
| Campylobacteriosis | 0 | 1 | 1 | 10 | 1 | 6 | 4 | 21 | 6 | 38 |
| Chlamydia infection | 15 | 71 | 61 | 540 | 10 | 89 | 31 | 281 | 117 | 981 |
| Cryptosporidiosis | 0 | 1 | 0 | 1 | 0 | 2 | 2 | 15 | 2 | 19 |
| Dengue | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| E. coli - enterohemorrhagic (stp) O157:H7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| E. coli - enterohemorrhagic (shiga toxin producing) Unknown serotype | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Giardiasis | 2 | 2 | 0 | 5 | 2 | 5 | 0 | 32 | 4 | 44 |
| Gonococcal infection | 5 | 30 | 24 | 156 | 1 | 25 | 11 | 86 | 41 | 297 |
| Haemophilus influenzae (invasive disease) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 0 | 7 |
| Hepatitis B (including delta) - acute | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 4 |
| Hepatitis B (including delta) - chronic | 0 | 4 | 1 | 13 | 0 | 1 | 0 | 13 | 1 | 31 |
| Hepatitis C - acute | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 4 |
| Hepatitis C - chronic | 2 | 17 | 7 | 65 | 1 | 24 | 5 | 84 | 15 | 190 |
| Influenza-associated hospitalization | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| LaCrosse virus disease | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 |
| Legionellosis - Legionnaires' Disease | 0 | 0 | 1 | 4 | 0 | 3 | 2 | 7 | 3 | 14 |
| Listeriosis | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Lyme Disease | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 3 |
| Malaria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Meningitis - aseptic/viral | 0 | 1 | 2 | 8 | 0 | 0 | 0 | 12 | 2 | 21 |
| Meningitis - bacterial (Not N. meningitidis) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 |
| Meningococcal disease - Neisseria meningitidis | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Mumps | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Mycobacterial disease - not tuberculosis | 1 | 4 | 1 | 5 | 0 | 3 | 1 | 14 | 3 | 26 |
| Pertussis | 34 | 48 | 1 | 3 | 2 | 2 | 15 | 27 | 52 | 80 |
| Rocky Mountain spotted fever (RMSF) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| Salmonellosis | 0 | 2 | 0 | 3 | 1 | 1 | 5 | 26 | 6 | 32 |
| Shigellosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| Streptococcal - Group A -invasive | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 5 | 2 | 7 |
| Streptococcal - Group B - in newborn | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| Streptococcus pneumoniae - invasive antibiotic resistance unk or non-resistant | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 13 | 2 | 15 |
| Streptococcus pneumoniae - invasive antibiotic resistant/intermediate | 0 | 1 | 0 | 5 | 0 | 1 | 0 | 5 | 0 | 12 |
| Syphilis, Total | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 7 |
| Syphilis, Pr & Secondary | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 |
| Varicella | 1 | 2 | 0 | 5 | 1 | 1 | 3 | 25 | 5 | 33 |

Case Definitions for Infectious Conditions Under Public Health Surveillance can be found in “MMWR 1997; 46 (No. RR-10). This report contains confirmed, probable and suspect cases, as reported by the local health jurisdictions in Stark County, Ohio.

Table 5 – Summary Table of Diseases Reported in the previous 5 years within Stark County, Ohio.(provisional data only)

| | Stark County Totals | | | | | |
|--|---------------------|----------|----------|-------------|---------------------|--------|
| | Sep 2010 | YTD 2010 | YTD 2009 | All of 2009 | 5 Yr annual average | Rate |
| Amebiasis | 0 | 0 | 0 | 0 | 0.2 | 0.05 |
| Anaplasmosis | 0 | 0 | 0 | 0 | 0.2 | 0.05 |
| Campylobacteriosis | 6 | 38 | 45 | 55 | 50.8 | 13.44 |
| Chlamydia | 117 | 987 | 904 | 1190 | 1216 | 321.61 |
| Creutzfeldt-Jakob Disease | 0 | 0 | 2 | 3 | 1.4 | 0.37 |
| Cryptosporidiosis | 2 | 19 | 12 | 19 | 18.6 | 4.92 |
| Cytomegalovirus, Congenital | 0 | 0 | 1 | 1 | 1.2 | 0.32 |
| Dengue | 0 | 1 | 0 | 0 | 0.2 | 0.05 |
| Enceph., Post Other | 0 | 0 | 0 | 0 | 0.2 | 0.05 |
| Enceph, Primary viral | 0 | 0 | 0 | 0 | 1.6 | 0.42 |
| E. coli - enterohemorrhagic (STP) NOT O157:H7 | 0 | 0 | 3 | 3 | 0.4 | 0.11 |
| E. coli - enterohemorrhagic (STP) O157:H7 | 0 | 3 | 3 | 4 | 2.8 | 0.74 |
| E coli , STP, Unknown | 0 | 2 | 1 | 1 | 2.2 | 0.58 |
| Giardiasis | 4 | 44 | 54 | 57 | 43.8 | 11.58 |
| Gonorrhea | 41 | 300 | 326 | 435 | 567 | 149.96 |
| Haemo. Influz., Bacteria | 0 | 7 | 6 | 9 | 5.8 | 1.53 |
| Hemolytic Uremic Syndrome | 0 | 0 | 0 | 0 | 0.8 | 0.21 |
| Hepatitis A | 0 | 0 | 2 | 2 | 3 | 0.79 |
| Hep B, Acute | 0 | 4 | 2 | 2 | 3 | 0.79 |
| Hep B, Chronic | 1 | 31 | 33 | 39 | 29.4 | 7.78 |
| Hep C, Acute | 0 | 4 | 1 | 4 | 2.8 | 0.74 |
| Hep C, Past or Present | 15 | 190 | 139 | 191 | 216.6 | 57.29 |
| Herpes, Congenital | 0 | 0 | 0 | 1 | 0.4 | 0.11 |
| Influenza A - novel virus infection | 0 | 0 | 2 | 2 | 0.4 | 0.11 |
| Influenza-Hospitalized | 0 | 1 | 62 | 194 | N/A | N/A |
| LaCrosse virus disease | 2 | 2 | 0 | 0 | 0 | 0 |
| Legionellosis | 3 | 14 | 16 | 21 | 14.8 | 3.91 |
| Listeriosis | 0 | 1 | 4 | 4 | 3.2 | 0.85 |
| Lyme Disease | 1 | 3 | 4 | 4 | 1.4 | 0.37 |
| Malaria | 0 | 2 | 3 | 3 | 0.6 | 0.16 |
| Meningitis, Asep | 2 | 21 | 14 | 23 | 40.2 | 10.63 |
| Meningitis Bac. | 0 | 2 | 4 | 5 | 2.2 | 0.58 |
| Meningococcal Dis. | 0 | 1 | 1 | 1 | 1.2 | 0.32 |
| Mumps | 0 | 1 | 0 | 1 | 1 | 0.26 |
| Mycobacterial disease - other than tuberculosis | 3 | 27 | 10 | 20 | 16.8 | 4.44 |
| Pertussis | 53 | 81 | 43 | 48 | 22 | 5.82 |
| Rheumatic fever | 0 | 0 | 0 | 0 | 0.2 | 0.05 |
| Rocky Mountain Spotted | 1 | 1 | 0 | 0 | 0.2 | 0.05 |
| Salmonellosis | 6 | 32 | 34 | 39 | 39.4 | 10.42 |
| Shigellosis | 0 | 4 | 25 | 28 | 51.8 | 13.7 |
| Strep Inv A GAS | 2 | 7 | 6 | 7 | 7.6 | 2.01 |
| Strep B Newborn | 0 | 2 | 5 | 5 | 3.2 | 0.85 |
| Strep toxic shock (STSS) | 0 | 0 | 0 | 0 | 0.6 | 0.16 |
| Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant | 2 | 15 | 26 | 31 | 31 | 8.2 |
| Streptococcus pneumoniae - invasive antibiotic resistant/intermediate | 0 | 12 | 10 | 16 | 24.2 | 6.4 |
| Syphilis, Total | 0 | 7 | 7 | 9 | 14 | 3.7 |
| Syphilis, Pri & Secondary | 0 | 3 | 4 | 4 | 4.6 | 1.22 |
| Toxic shock syndrome (TSS) | 0 | 0 | 0 | 0 | 0.4 | 0.11 |
| Typhoid Fever | 0 | 0 | 0 | 0 | 0.2 | 0.05 |
| Varicella# | 5 | 33 | 46 | 61 | 121 | 32 |
| West Nile Virus | 0 | 0 | 0 | 0 | 0.8 | 0.21 |
| Yersiniosis | 0 | 0 | 0 | 0 | 1.6 | 0.42 |

This report includes confirmed, probable and suspect cases, as reported in the Ohio Disease Reporting System (ODRS).

*Annual Rate per 100,000 population is derived from a five year average of disease incidence and on a total population of 378,098