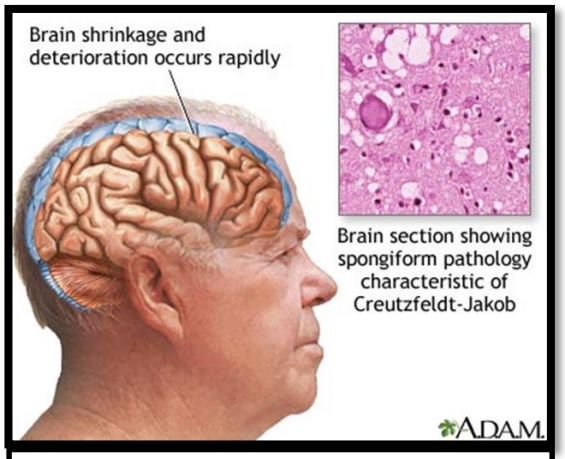
# EPI GRAM September, 2015

**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.*

## Monthly Highlight:




CJD belongs to a family of human and animal diseases known as the transmissible spongiform encephalopathies (TSEs). Spongiform refers to the characteristic appearance of infected brains, which become filled with holes until they resemble sponges under a microscope.

Creutzfeldt-Jakob disease (CJD) is a rapidly progressive, always fatal neurodegenerative disorder believed to be caused by abnormal versions of a type of protein called a prion. Normally these proteins are harmless; however, when they're misshapen, they become infectious and can harm normal biological processes.

CJD occurs worldwide, and the estimated annual incidence in many countries, including the United States, has been reported to be about 1 to 2 cases per million population. Although a case definition has not been established by the CDC, reports should be based upon the clinical signs and symptoms (after ruling out other forms of dementia, infections, toxic and metabolic encephalopathies and tumors) and laboratory criteria identifying the 14-3-3 protein. Symptoms include confusion, poor concentration, lethargy, progressive dementia, intermittent unsteadiness and variable ataxia. CJD is a Class B reportable disease in Ohio. A 10-year history of cases shows an average of 1 case/year among the four health jurisidictions in Stark County. Thirty-six percent of the cases were confirmed based on clinical and laboratory criteria. The remaing 64% were classified as either probable or suspect cases. No cases have been reported in 2015 for Stark County.

In about 85% of patients, classic CJD occurs as a sporadic disease with no recognizable pattern of transmission. A smaller proportion of patients (5 to 15%) develop CJD because of inherited mutations of the prion protein gene. Approximately 80% of patients are between the ages of 50 and 70 years old, with a median age of 68.

Public health management is limited. Contact tracing is not indicated. No effective treatment is currently available. However, it is recommended that a complete history is obtained, including previous surgical or dental procedures. Previous possible exposures to human hormones or transplanted tissue, as well as a family history of dementia should also be considered. Iatrogenic cases have been reported due to medical procedures, with the CNS tissue being the most infectious. The period of communicability appears to be late in the incubation period and throughout the symptomatic illness.

For more information visit the CDC's website at http://www.cdc.gov/prions/cjd/about.html or the Ohio Infectious Disease Control Manual at http://www.odh.ohio.gov/pdf/IDCM/cjd.pdf

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

| | September 2015 | | | | October 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 | 100 | 1 | 15 | N/A | 5 | 3 | 5 | N/A |
| Mold Count | 6130 | 1165 | 2800 | **0 Good** | 9790 | 980 | 4790 | **1 Moderate** |
| Air Quality Index | 78 | 10 | 42 | **5 Moderate** | 52 | 37 | 41 | **1 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**

| | Sept 2015 | YTD 2015 | 2014 |
|---|---|---|---|
| Live Births | 184 | 3255 | 4512 |
| Births to Teens | 12 | 237 | 380 |
| Deaths | 347 | 3338 | 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, or Amanda Archer, 330.489.3327 or aarcher@cantonhealth.org.

| **Table 4: Jurisdictional Summary of Reportable Diseases in Stark County, Ohio (Provisional Data)** | Alliance City | | Canton City | | Massillon City | | Stark County | | All Departments | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Sept** | **YTD** | **Sept** | **YTD** | **Sept** | **YTD** | **Sept** | **YTD** | **Sept** | **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 | 4 | 2 | 14 | 0 | 0 | 5 | 27 | 7 | 45 |
| Chlamydia infection | 7 | 52 | 70 | 551 | 9 | 126 | 53 | 427 | 139 | 1156 |
| Cryptosporidiosis | 0 | 3 | 0 | 1 | 2 | 3 | 4 | 13 | 6 | 20 |
| 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 | 3 | 0 | 1 | 2 | 10 | 2 | 14 |
| Giardiasis | 0 | 1 | 2 | 8 | 0 | 1 | 2 | 11 | 4 | 21 |
| Gonococcal infection | 3 | 21 | 31 | 243 | 4 | 35 | 10 | 67 | 48 | 366 |
| Haemophilus influenzae (invasive disease) | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 7 |
| Hepatitis A | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 3 |
| Hepatitis B - Perinatal Infection | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 6 |
| Hepatitis B (including delta) - acute | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Hepatitis B (including delta) - chronic | 0 | 3 | 1 | 8 | 0 | 1 | 4 | 23 | 5 | 35 |
| Hepatitis C - acute | 0 | 3 | 0 | 2 | 0 | 3 | 1 | 5 | 1 | 13 |
| Hepatitis C - chronic | 3 | 34 | 18 | 97 | 7 | 41 | 21 | 118 | 49 | 290 |
| Immigrant Investigation | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 |
| Influenza - ODH Lab Results | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Influenza-associated hospitalization | 0 | 7 | 0 | 75 | 0 | 24 | 0 | 175 | 0 | 281 |
| LaCrosse virus disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Legionellosis - Legionnaires' Disease | 0 | 0 | 0 | 4 | 0 | 2 | 2 | 11 | 2 | 17 |
| Lyme Disease | 0 | 2 | 0 | 2 | 0 | 2 | 2 | 9 | 2 | 15 |
| 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 | 2 | 4 | 0 | 3 | 4 | 14 | 6 | 21 |
| Meningitis - bacterial (Not N. meningitidis) | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 1 | 3 |
| Meningococcal disease - Neisseria meningitidis | 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 | 10 | 1 | 14 |
| Pertussis | 0 | 6 | 0 | 8 | 0 | 3 | 1 | 16 | 1 | 33 |
| Q fever, acute | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Salmonellosis | 0 | 1 | 4 | 10 | 0 | 4 | 2 | 21 | 6 | 36 |
| Shigellosis | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Spotted Fever Rickettsiosis,including Rocky Mountain spotted fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Streptococcal - Group A -invasive | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 5 | 0 | 8 |
| Streptococcal - Group B - in 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 or non-resistant | 0 | 1 | 1 | 7 | 0 | 1 | 1 | 8 | 2 | 17 |
| Streptococcus pneumoniae - invasive antibiotic resistant/intermediate | 0 | 2 | 0 | 3 | 0 | 0 | 1 | 8 | 1 | 13 |
| Syphilis, Total | 0 | 0 | 1 | 1 | 0 | 2 | 1 | 4 | 2 | 7 |
| Syphilis, Primary, Secondary and Early Latent | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 1 | 5 |
| Toxic shock syndrome (TSS) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| Tuberculosis | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Typhoid fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Typhus fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Varicella | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 14 | 1 | 17 |
| Vibriosis (not cholera) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| Vibrio parahaemolyticus infection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Nile virus disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Yersiniosis | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 1 | 5 |
| Total | 13 | 143 | 134 | 1066 | 23 | 261 | 119 | 1025 | 286 | 2483 |

Source: Ohio Disease Reporting System, downloaded 10/05/2015.

| **Table 5 – Summary Table of Diseases Reported in the Previous 5 years w/in Stark County (Provisional Data)** | Sept 2015 | Sept 2014 | YTD 2015 | YTD 2014 | All of 2014 | 5 Yr Anual Average | 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 | 7 | 10 | 45 | 56 | 74 | 59.2 | 15.762 |
| Chlamydia | 139 | 140 | 1156 | 1149 | 1530 | 1465.2 | 390.110 |
| Coccidioidomycosis | 0 | 1 | 0 | 1 | 1 | 0.4 | 0.107 |
| Creutzfeldt-Jakob Disease | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.160 |
| Cryptosporidiosis | 6 | 1 | 20 | 25 | 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 | 2 | 0 | 14 | 0 | 0 | 1.2 | 0.320 |
| Escherichia coli O157:H7 | 0 | 1 | 0 | 6 | 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 | 1 | 21 | 8 | 15 | 44.2 | 11.768 |
| Gonorrhea | 48 | 39 | 366 | 408 | 527 | 562.8 | 149.846 |
| Haemophilus influenzae , Invasive | 0 | 0 | 7 | 5 | 6 | 7.4 | 1.970 |
| Hemolytic Uremic Syndrome (HUS) | 0 | 1 | 0 | 1 | 1 | 0.2 | 0.053 |
| Hepatitis A | 0 | 0 | 3 | 6 | 9 | 4.8 | 1.278 |
| Hepatitis B, Perinatal | 0 | 0 | 6 | 1 | 1 | 2.6 | 0.692 |
| Hepatitis B, Acute | 0 | 0 | 2 | 5 | 6 | 5.2 | 1.385 |
| Hepatitis B, Chronic | 5 | 0 | 35 | 34 | 40 | 32.4 | 8.627 |
| Hepatitis C, Acute | 1 | 0 | 13 | 2 | 3 | 6 | 1.597 |
| Hepatitis C, Chronic | 49 | 17 | 290 | 206 | 264 | 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 | 2 | 1 | 17 | 4 | 6 | 13.6 | 3.621 |
| Listeriosis | 0 | 0 | 0 | 0 | 1 | 1.4 | 0.373 |
| Lyme Disease | 2 | 2 | 15 | 9 | 9 | 10.8 | 2.876 |
| Malaria | 0 | 0 | 0 | 1 | 1 | 1 | 0.266 |
| Measles (indigenous to Ohio) | 0 | 0 | 0 | 9 | 9 | 1.8 | 0.479 |
| Meningitis, Aseptic | 6 | 3 | 21 | 16 | 24 | 35.6 | 9.479 |
| Meningitis, Other Bacterial | 1 | 0 | 3 | 2 | 2 | 3.2 | 0.852 |
| Meningococcal Disease | 0 | 0 | 3 | 1 | 2 | 1 | 0.266 |
| Mumps | 0 | 0 | 3 | 4 | 5 | 1.4 | 0.373 |
| Mycobacterial disease - Not TB | 1 | 4 | 14 | 26 | 34 | 30.4 | 8.094 |
| Other arthropod-borne disease | 0 | 0 | 0 | 1 | 1 | 0.2 | 0.053 |
| Pertussis | 1 | 11 | 33 | 64 | 81 | 45.6 | 12.141 |
| Q fever, acute | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.106 |
| Salmonellosis | 6 | 7 | 36 | 31 | 38 | 37.8 | 10.064 |
| Shigellosis | 0 | 3 | 5 | 66 | 69 | 34 | 9.053 |
| Spotted Fever Rickettsiosis | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.160 |
| Streptococcal Dis, Group A, Invasive | 0 | 0 | 8 | 7 | 10 | 15.8 | 4.207 |
| 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 | 0.266 |
| Streptococcus pneumoniae (ISP) | 2 | 1 | 17 | 19 | 27 | 36 | 9.585 |
| Streptococcus pneumo - inv antibiotic resistant/intermediate | 1 | 0 | 13 | 5 | 9 | 18.8 | 5.006 |
| Syphilis, Total | 2 | 1 | 7 | 6 | 8 | 6.4 | 1.704 |
| Syphilis, Primary and Secondary | 1 | 1 | 5 | 6 | 8 | 0.8 | 0.213 |
| Toxic Shock Syndrome (TSS) | 1 | 4 | 1 | 0 | 0 | 0.8* | 0.213* |
| Tuberculosis | 0 | 0 | 2 | 1 | 1 | 1.8 | 0.479 |
| Thyphoid Fever | 0 | 0 | 0 | 1 | 1 | 0.4 | 0.107 |
| Typhus Fever | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Varicella | 1 | 1 | 17 | 17 | 24 | 35.4 | 9.425 |
| Vibriosis - other (not cholera) | 0 | 0 | 3 | 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 | 1 | 0 | 5 | 2 | 3 | 1.2 | 0.320 |

Source: Ohio Disease Reporting System, downloaded 1. Rates are per 100K population and based on 5 yr average incidence 09-13.*08-12 from ODH Stats pg.