EPI GRAM February, 2014

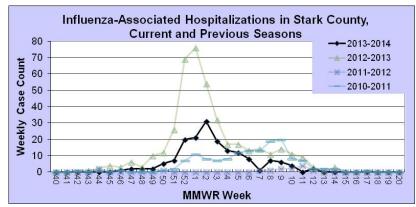
A Monthly Publication of the Stark Public Health Infrastructure Coalition

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: Influenza

February brought a sharp decrease in the number of influenza-associated hospitalizations in Stark County though activity does persist. This decrease follows a peak in January, a trend similar to the prior influenza season. Locally, type A influenza has dominated this season (96%) which is consistent with national trends. Of type A influenza cultures available for antigenic characterization nationally, 99% have been A/California/7/2009, commonly referred to as H1N1.

Certain geographical locations had elevated rates of hospitalizations (44702, 44704, 44707 and 44688), however, all areas of the county felt the affects of influenza.



Hospitalizations associated with influenza lasted an average of nearly 5 days, with a median of 3 days and include the deaths of at least 8 Stark Couny residents. The median age of individuals hospitalized was 59 years with a range of less than 4 weeks to greater than 90 years. Less than 30% of these hospitalized patients reported receiving a vaccination during the current season. Alarmingly, the lowest percentage of vaccination observed was in children 0-17 years (10%), followed by adults 18-65 (20%) and seniors 65+ (49%). Additionally, of those not reporting a history of vaccination this season, at least 30% had a chronic medical condition placing them at high risk for complications related to influenza. These medical conditions included chronic heart, kidney and pulmonary diseases and diabetes. There was no statistical difference between races in the likelihood of receiving a vaccine this year or having a chronic medical condition.

The CDC estimates that during the last influenza season over 79,000 hospitalizations would have been prevented by vaccination. Although this season appears to be coming to an end, it is never too early or late to promote the benefits of influenza vaccination for our community and reduce the burden of this preventable disease.

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

| | | , | * | | | | | | | |
|-------------------|--------------|-------------------|-----------------------|---|--------------|-------------|----------------|---|--|--|
| | | | February 2014 | | March 2013 | | | | | |
| | 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 | т | D-41141 C- | | 41:1-1-1- | 850 | 30 | 210 | | | |
| Mold Count | 1 | Jata collected Se | easonally, not curren | itty avaitable. | 4,740 | 370 | 1,040 | 1 Moderate | | |
| Air Quality Index | 48 | 18 | 35 | 0 | 53 | 24 | 42.5 | 0 | | |

**See the following websites for updated Air Quality Index and mold index terminology and color-coding https://pollen.aaaai.org/nab/index.cfm?p=reading_chart
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

| | Feb 2014 | YTD 2014 | 2013 |
|-----------------|----------|----------|------|
| Live Births | 249 | 569 | 4211 |
| Births to Teens | 25 | 55 | 370 |
| Deaths | 411 | 819 | 4229 |

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

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------|------|------|------|------|------|
| Birth | 11.8 | 11.4 | 10.8 | 10.8 | 10.9 |
| Death | 11.4 | 10.9 | 10.9 | 11.3 | 11.4 |

*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 Christina Henning at 330.489.3327 or Chenning@cantonhealth.org.

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

| | Alliance City | | Canton City | | Massillon City | | Stark County | | All of Stark County | |
|--|---------------|-----|-------------|-----|-------------------|-----|--------------|-----|------------------------|-----|
| | Feb | YTD | Feb | YTD | Feb | YTD | Feb | YTD | Feb | YTD |
| Campylobacteriosis | 1 | 1 | 0 | 1 | 0 | 0 | 2 | 5 | 3 | 7 |
| Chlamydia infection | 4 | 17 | 71 | 134 | 11 | 34 | 53 | 99 | 139 | 284 |
| Cryptosporidiosis | 0 | 1 | 2 | 2 | 0 | 0 | 2 | 2 | 4 | 5 |
| Giardiasis | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 2 |
| Gonococcal infection | 4 | 9 | 37 | 70 | 3 | 8 | 13 | 29 | 57 | 116 |
| Hepatitis B (including delta) - | | | | | | | | | | |
| chronic | 0 | 0 | 0 | 0 | 1 | 3 | 7 | 8 | 8 | 11 |
| Hepatitis C - chronic | 1 | 4 | 7 | 24 | 4 | 6 | 11 | 25 | 23 | 59 |
| Influenza-associated | | | | | | | | | | |
| hospitalization | 3 | 8 | 6 | 41 | 3 | 13 | 12 | 57 | 24 | 119 |
| Legionellosis - Legionnaires' | | | | | | | | | | |
| Disease | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 2 |
| Lyme Disease | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Meningitis - aseptic/viral | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Meningitis - bacterial (Not N. meningitidis) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| Mycobacterial disease - other | | | | | | | | | | |
| than tuberculosis | 0 | 1 | 1 | 2 | 0 | 0 | 4 | 5 | 5 | 8 |
| Pertussis | 0 | 0 | 0 | 1 | 4 | 4 | 1 | 3 | 5 | 8 |
| Salmonellosis | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 1 | 3 |
| Shigellosis | 2 | 2 | 0 | 9 | 0 | 0 | 1 | 7 | 3 | 18 |
| Streptococcal - Group A -invasive | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 |
| Streptococcal toxic shock syndrome (STSS) | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| Streptococcus pneumoniae - | | | | | | | | | | |
| invasive antibiotic resistance | | | | | | | | | | |
| unknown or non-resistant | 1 | 1 | 3 | 4 | 0 | 0 | 0 | 1 | 4 | 6 |
| Streptococcus pneumoniae - invasive antibiotic | | | | | | | | | | |
| resistant/intermediate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Varicella | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 2 | 3 |

Source: Ohio Disease Reporting System, downloaded 3/21/2014.

Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County

| • | | <u>.</u> | | | | | |
|---|--------|----------|------|------|------|-------------|---------------|
| | | | YTD | YTD | | 5 Yr Annual | 5 Yr Annual |
| (Provisional Data) | Feb-14 | Feb-13 | 2014 | 2013 | 2013 | Average | Rate |
| Brucellosis | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Campylobacteriosis | 3 | 2 | 7 | 7 | 67 | 55.4 | 14.75 |
| Chlamydia | 139 | 122 | 284 | 252 | 1467 | 1391 | 370.46 |
| Coccidioidomycosis | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Creutzfeldt-Jakob Disease | 0 | 0 | 0 | 0 | 2 | 1.2 | 0.32 |
| Cryptosporidiosis | 4 | 4 | 5 | 6 | 27 | 25.8 | 6.87 |
| Cyclosporiasis | 0 | 0 | 0 | 0 | 1 | 0.2 | 0.053 |
| Dengue | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.213 |
| Escherichia coli , STP, Not O157:H7 | 0 | 0 | 0 | 0 | 2 | 1.8 | 0.479 |
| Escherichia coli O157:H7 | 0 | 0 | 0 | 0 | 0 | 2.4 | 0.639 |
| Escherichia coli , STP, Unk Serotype | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.16 |
| Ehrlichiosis/Anaplasmosis | 0 | 0 | 0 | 0 | 1 | 0.4 | 0.107 |
| Giardiasis | 2 | 4 | 2 | 11 | 40 | 52.6 | 14.01 |
| Gonorrhea | 57 | 51 | 116 | 104 | 618 | 543.2 | 144.63 |
| Haemophilus influenzae, Invasive | 0 | 1 | 0 | 2 | 7 | 8 | 2.13 |
| Hepatitis A | 0 | 0 | 0 | 0 | 15 | 3.4 | 0.91 |
| Hepatitis B-Perinatal | 0 | 1 | 0 | 1 | 7 | 2.4 | 0.639 |
| Hepatitis B, Acute | 0 | 1 | 0 | 2 | 11 | 4.4 | 1.172 |
| Hepatitis B, Chronic | 8 | 3 | 11 | 5 | 26 | 32.4 | 8.627 |
| Hepatitis C, Acute | 0 | 3 | 0 | 3 | 7 | 5.6 | 1.491 |
| Hepatitis C, Chronic | 23 | 17 | 59 | 38 | 280 | 231 | 61.5 |
| Hepatitis E | 0 | 0 | 0 | 0 | 0 | 0 | 0.053 |
| Influenza-associated hospitalization | 24 | 56 | 119 | 263 | 356 | 165.2 | 43.99 |
| Influenza-associated pediatric mortality | 0 | 0 | 0 | 0 | 1 | 0.2 | 0.053 |
| LaCrosse virus disease | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.213 |
| Legionellosis | 1 | 4 | 2 | 5 | 32 | 16.6 | 4.42 |
| Listeriosis | 0 | 1 | 0 | 1 | 2 | 2 | 0.533 |
| Lyme Disease | 0 | 3 | 1 | 3 | 17 | 9.8 | 2.609 |
| Malaria | 0 | 0 | 0 | 0 | 1 | 1.4 | 0.373 |
| Meningitis, Aseptic | 0 | 2 | 1 | 2 | 25 | 35.4 | 9.425 |
| Meningitis, Other Bacterial | 1 | 0 | 1 | 1 | 5 | 3.8 | 1.012 |
| Meningococcal Disease | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.213 |
| Mumps | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.16 |
| Mycobacterial disease - Not TB | 5 | 2 | 8 | 3 | 37 | 27.6 | 7.349 |
| Pertussis | 5 | 1 | 8 | 3 | 18 | 39 | 10.384 |
| Q fever, acute | 0 | 0 | 0 | 0 | 2 | 0.4 | 0.107 |
| Salmonellosis | 1 | 4 | 3 | 5 | 46 | 38 | 10.12 |
| Shigellosis | 3 | 3 | 18 | 5 | 89 | 25.6 | 6.816 |
| Spotted Fever Rickettsiosis | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.16 |
| Streptococcal Dis, Group A, Invasive | 2 | 3 | 2 | 4 | 16 | 15.2 | 4.047 |
| Streptococcal Dis, Group B, in Newborn | 0 | 0 | 0 | 0 | 2 | 3.2 | 0.852 |
| Streptococcal Toxic Shock Syndrome | 1 | 0 | 1 | 0 | 0 | 0.6 | 0.16 |
| Streptococcus pneumoniae - invasive | _ | | | | | 0.0 | 0.10 |
| antibiotic resistance unknown or non-resistant | 4 | 3 | 6 | 11 | 34 | 36.6 | 9.745 |
| Streptococcus pneumo - inv antibiotic | _ | | Ü | | | 200 | <i>y</i> , 10 |
| resistant/intermediate | 0 | 0 | 1 | 9 | 27 | 20.2 | 5.378 |
| Syphilis, Total | 0 | 1 | 0 | 1 | 14 | 11.6 | 3.089 |
| Syphilis, Primary and Secondary | 0 | 0 | 0 | 0 | 8 | 3.4* | 0.91* |
| Toxic Shock Syndrome (TSS) | 0 | 0 | 2 | 0 | 2 | 3 | 0.213* |
| Tuberculosis | 0 | 0 | 0 | 0 | 1 | 2.4 | 0.639 |
| Typhoid Fever | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Varicella | 2 | 4 | 3 | 5 | 31 | 42.4 | 11.29 |
| Vibriosis - other (not cholera) | 0 | 0 | 0 | 0 | 1 | 0.4 | 0.107 |
| Vibriosis - other (not cholera) Vibriosis parahaemolyticus | 0 | 0 | 0 | 0 | 1 | 0.4 | 0.053 |
| West Nile Virus | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.053 |
| Yersiniosis | 0 | 0 | 0 | 1 | 1 | 0.2 | 0.055 |
| Source: Objecting System downloaded 3/21/2 | - | v | Ţ | _ | 1 | | |

Source: Ohio Disease Reporting System, downloaded 3/21/2014. Rates are per 100K population and based on 5 yr average incidence 09-13.*08-12 from ODH Stats pg.