STARK COUNTY INFLUENZA SNAPSHOT, WEEK 13



Week ending March 30, 2013, with updates through 04/8/2013.

All data are preliminary and may change as additional information is received. NOTE: Compilation of multiyear averages does not include the 2009/2010 H1N1 season.

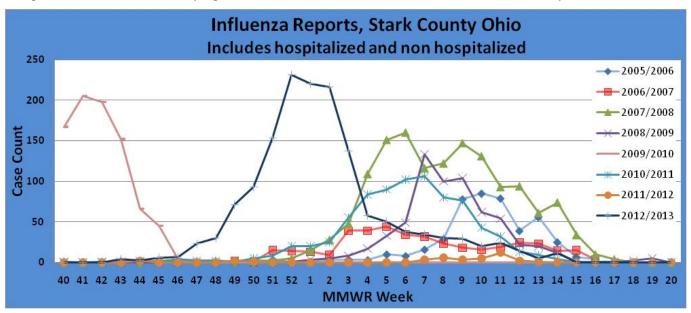
During week 13, (Mar 24– Mar 30, 2013) several local indicators of influenza activity fell to preseason levels. Additionally, there were NO reported cases of influenza-associated hospitalizations, breaking a 22 week long record of one or more cases reported. The state of Ohio geographic activity remains at Regional. National indicators of influenza activity continued to decrease.

Information regarding surveillance indicators are detailed below:

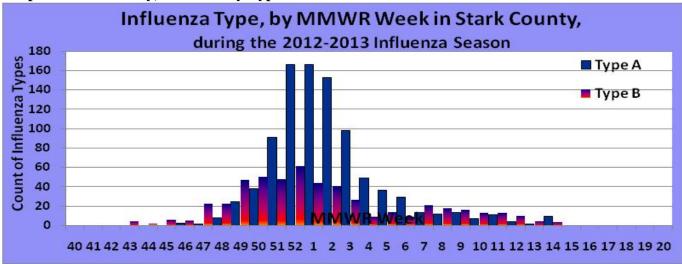
- For the first time since October, there were **NO** influenza-associated hospitalizations and only five non-hospitalized cases reported in Stark County residents during week 13. Four hundred and ten (410) hospitalizations and 1,099 non-hospitalized cases have been reported this season. (Graph 1)
- Influenza B was the predominant strain identified locally (80%) in week 13. (Graph 2) Nationally, the CDC has antigenically characterized 1,970 influenza viruses collected by U.S. laboratories since October 1, 2012: Two hundred three (10.3%) 2009 H1N1 viruses, 1,158 (58.8%) influenza A (H3N2) viruses, and 609 (30.9%) influenza B viruses. Among the influenza B viruses 426 (70%) are from the Yamagata Lineage which is a part of this season's vaccine and 183 (30%) are Victoria Lineage.
- The age group with the highest cumulative rate of hospitalizations is 85+ at a rate of 85.7 per 10,000, in contrast the age group with the highest rate of positive lab results is 0-4 year old at a rate of 80.2 per 10,000. Cases range in age from 2 weeks to > 90 years. Hospitalized median age is 72 years and lab positive cases have a median age of 30 years.
- Nationally, a cumulative rate for the season of 42.3 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. Locally, the cumulative rate for the season is 109.3 per 100,000.
- Week 13 indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers **decreased** nationally to 1.8%, which is below the national baseline of 2.2%. Local ILI is less than 1%. (Graph 3)
- Emergency Departments (ED) and Stat Care visits for both Constitutional or Respiratory (C & R) Syndrome visits and Influenza-Like-Illness (ILI) + Fever syndrome fell below pre-seasonal levels. However both classifiers still remain above multiyear averages. C & R constituted 23% of visits and ILI + Fever accounted for 3.05%. (Graph4)
- Over-The-Counter sales of Thermometers and Cough and Cold products both saw **decreases** in week 13. Additionally they are at pre-seasonal levels. (Graph 5)
- School absenteeism reporting is incomplete due to the spring holidays.
- During week 13, the State of Ohio geographic level of influenza activity remained at Regional. Nationally, widespread geographic activity was reported by 4 states, regional activity by 7 states, local activity was reported by 26 states, and sporadic activity by 12 states. (See Map)
- During CDC Week 13, National Pneumonia and Influenza (P & I) Mortality Surveillance of all deaths reported through the 122 Cities Mortality Reporting System as due to P & I, **fell below** the epidemic threshold to 7.4%. The P & I epidemic threshold is currently 7.5%.
- Nationally, one influenza-associated pediatric death was reported to CDC during week 13. The death was associated with influenza A virus for which the subtype was not determined. **Four** pediatric deaths have been confirmed from Ohio this season, and the nation has experienced 111.

For questions, or to receive this report weekly by email, send requests to either chenning@cantonhealth.org or drinkardl@starkhealth.org.

Graph 1: Influenza Cases reported to Local Health Departments Note, Influenza is only reportable if associated with a hospitalization; therefore, this only represents a small number of actual influenza cases in Stark County.

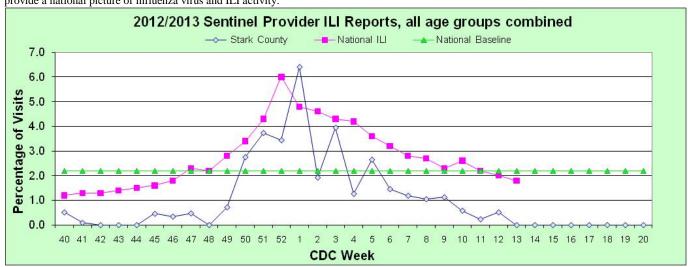


Graph 2: Stark County, Influenza by Type.



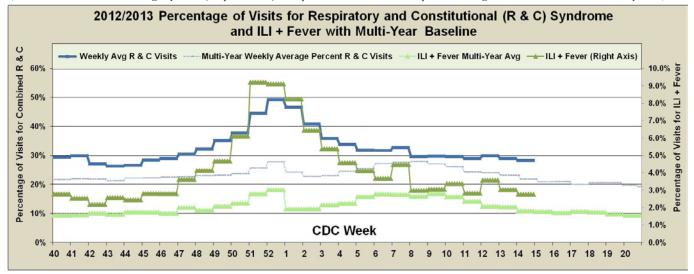
Graph 3: Sentinel Provider Reported Influenza-Like-Illness in Stark County

Sentinel Providers-An influenza sentinel provider conducts surveillance for influenza-like illness (ILI) in collaboration with the state health department and the Centers for Disease Control and Prevention (CDC). Data reported by Stark Counties 4 providers are combined with other influenza surveillance data to provide a national picture of influenza virus and ILI activity.



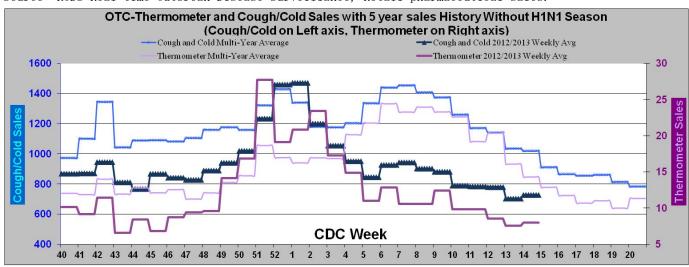
Graph 4: Emergency Department Visits for combined Respiratory and Constitutional Syndromes

(Source Health Monitoring Systems, EpiCenter, hospital and stat care patient registration surveillance system)



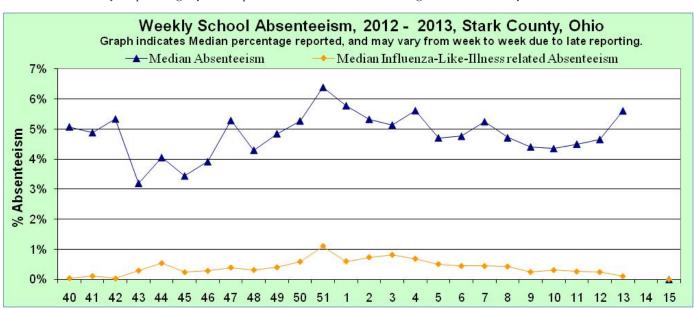
Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

Source: RODS Real time Outbreak Disease Surveillance, Retail pharmaceutical sales.



Graph 6: Stark County School

Source: Voluntary reporting by multiple school districts throughout the county.



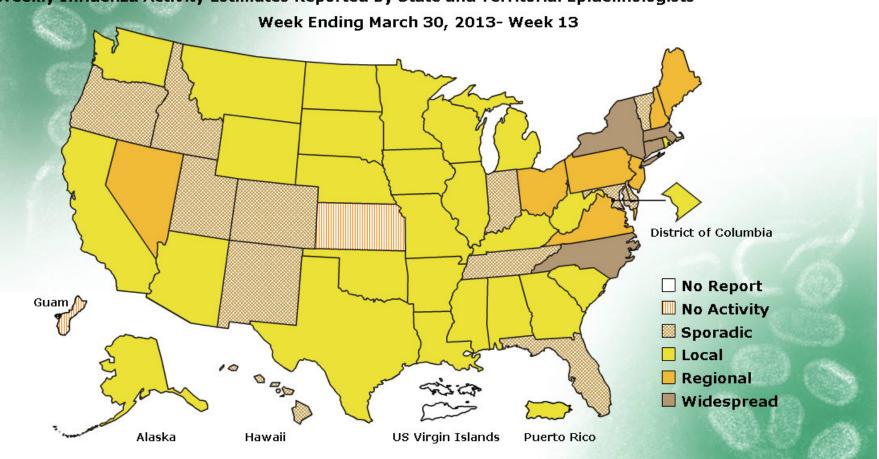
Map: Weekly Geographic Influenza Activity Estimates Reported by State and Territorial Epidemiologists

(Inset is previous week)





A Weekly Influenza Surveillance Report Prepared by the Influenza Division Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*



^{*}This map indicates geographic spread and does not measure the severity of influenza activity.

Sources of Influenza Surveillance Data

Six types of data sources are examined on a weekly basis to help paint a picture of influenza activity in our community:

- Emergency Department Visits (EpiCenter): EpiCenter collects emergency department chief complaint data from 4 hospital facilities and 5 Stat Cares across Stark County in real time and classifies them into symptom and syndrome categories. Chief complaints from the combined constitutional and respiratory syndrome category and the fever + ILI symptoms classifier are analyzed for influenza surveillance. Secure sign in source: https://epicenter.hmsinc.com/epicenter/login.html.
- National Retail Data Monitor (NRDM)-OTC Drug Purchases: The NRDM collects over-the-counter (OTC) drug sales information from approximately 1,420 Ohio chain drug stores and grocery stores. For influenza surveillance, thermometer and adult cold relief sales are monitored on a weekly basis from sales in Stark County. Secure sign in source: https://www.rods.pitt.edu/rods3/.
- Sentinel Providers (ILINet): Sentinel providers, through the US Influenza-like Illness Surveillance Network (ILINet), collect outpatient ILI data. Providers report the total number of patients seen and the number of patients with ILI by age group on a weekly basis. Sentinel providers also submit specimens for influenza testing to the ODH laboratory throughout the influenza season. There are 68 sentinel providers enrolled in Ohio and 3 in Stark County for the 2011-2012 season. Source: Ohio Department of Health Influenza Surveillance Coordinator.
- **ODH and Local Laboratory Surveillance:** The Ohio Department of Health Laboratory reports the number of specimens that test positive for influenza each week. Generally, specimens are submitted by sentinel provider participants. A subset of the positive specimens is sent to CDC for further testing during the season. Laboratory reports from larger physician practices and hospital laboratories in the county are voluntarily submitted each week to the four health departments. They may include age, zip code, and race and help to describe the demographic pattern of illness and type of influenza circulating in the community. Source for ODH information: http://www.odh.ohio.gov/features/odhfeatures/seasflu/ohfluactivity.aspx and individual medical and laboratory reports.
- Influenza-associated Hospitalizations (ODRS): Influenza-associated hospitalizations are reported to the four local health departments and hospitals by direct entry into the Ohio Disease Reporting System (ODRS). Hospitalizations can be used as an indicator of the severity of illness during a particular influenza season. This condition became reportable in 2009. Secure sign in source: https://odhgateway.odh.ohio.gov/singlesignon/.
- School Absenteeism, total and ILI: Numerous school systems of various sizes in Stark County report the number of students absent for medical reasons and for specific medical conditions including ILI. Increases in school absenteeism for ILI are often an early indicator to larger community trends. Source: Individual school reporting.