STARK COUNTY INFLUENZA SNAPSHOT, WEEK 01



Week ending January 5, 2013, with updates through 1/13/2013.

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.

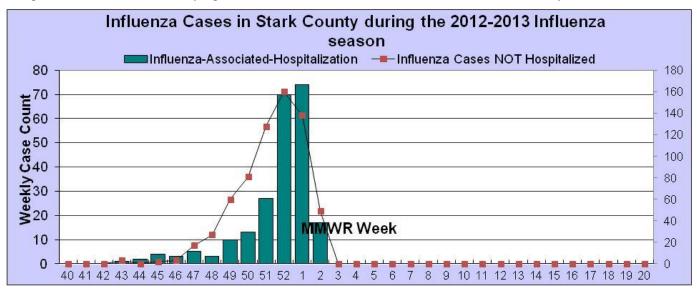
During week 01, (Dec 30-Jan 5, 2013) influenza activity remained elevated in Stark County. Early reporting for week 2 provides evidence of decreasing or plateauing activity in several surveillance indicators. The state of Ohio level of influenza geographical activity remained at Widespread. Nationally, the CDC reports influenza activity remained elevated in the U.S., but may be decreasing in some areas.

Information regarding all local surveillance indicators are detailed below:

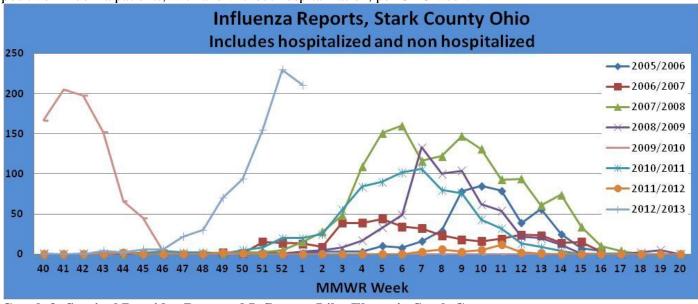
- Seventy four Hospitalizations and one hundred thirty eight non-hospitalized cases of influenza were reported in Stark County residents during week CDC Week 01. Two hundred twenty nine (229) hospitalizations and 668 non-hospitalized cases have been reported this season. (Graph 1 and 2)
- Demographics for the 178 influenza-associated hospitalized cases during the 2012-2013 season in Stark County: age range 2 weeks—> 90 years, median 73 years and 88% of cases with race information are reported as Caucasian. In contrast, non hospitalized cases have a median age of 27 years.
- During CDC Week 01, influenza type B saw the **first decline** of the season, it was countered by an increase in type A.(Graph 3) The CDC has antigenically characterized 521 influenza viruses since Oct 1, 2012: 17 (3%) 2009 H1N1, 327 (63%) influenza A (H3N2) viruses, and 177 (34%) influenza B viruses. Among the influenza B viruses 118 (66.7%) are from the Yamagata Lineage which is a part of this season's vaccine and 59 (33%) are Victoria Lineage.
- Week 01 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers was 4.3%, well above the baseline of 2.2%. Stark County Provider reports **increased** for the third week. (Graph 3)
- Emergency Departments (ED) and Stat Care Facilities in our surveillance network saw slight **decreases** in the number of flu related visits in MMWR Week 1. This decrease follows a seasonal post holiday pattern of decline. Visits specifically for symptoms consistent with Influenza-Like-Illness (ILI) + Fever decreased 9% to 8.3%. Flu related visits remain **above** baseline levels. (Graph 4)
- Over-The-Counter (OTC) sales of Cough and Cold Products and Thermometers continued to exceed historical averages. Cough and Cold products sales increased for the 6th consecutive week and Thermometer sales also increased in MMWR week 1. (Graph 5)
- Forty two schools reported absenteeism nearly identical to the preholiday week. The current total median percentage of absenteeism is 6.1% and the median percentage of ILI is .58%. (Graph 6)
- During week 1, the State of Ohio geographic level of influenza activity remained at Widespread. Nationally, Widespread geographic activity was reported by 47 states, Regional activity by 2 states, and Sporadic activity was reported in Hawaii. (See Map)
- During week 1, National Pneumonia and Influenza (P & I) Mortality Surveillance of all deaths reported through the 122 Cities Mortality Reporting System as due to P & I, **increased** to 7.3%. This is above the P & I epidemic threshold, currently at 7.2%.
- Nationally, **two** influenza-associated pediatric deaths were reported to CDC during week 1. One was associated with an influenza A (H3) virus and occurred during week 52 (week ending December 29, 2012) and one was associated with an influenza A virus for which the subtype was not determined and occurred during week 1 (week ending January 5, 2013). This brings the total number of influenza-associated pediatric deaths reported during the 2012-2013 season to 20. Ohio reported a pediatric death in week 2.

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.

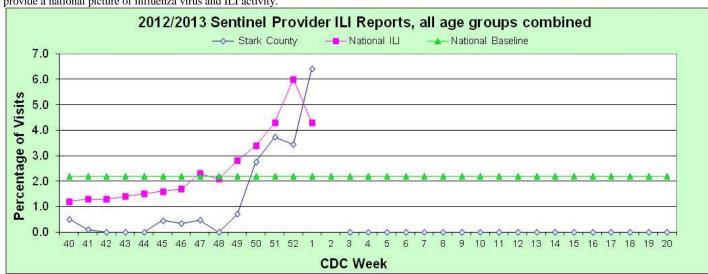


Graph 2: Stark County Influenza Historical Count. The graph depicts the number of laboratory identified positive influenza patients, with and without hospitalization, per CDC week.



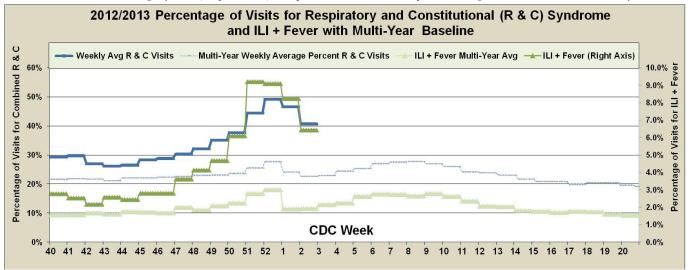
Graph 3: Sentinel Provider Reported Influenza-Like-Illness in Stark County

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.



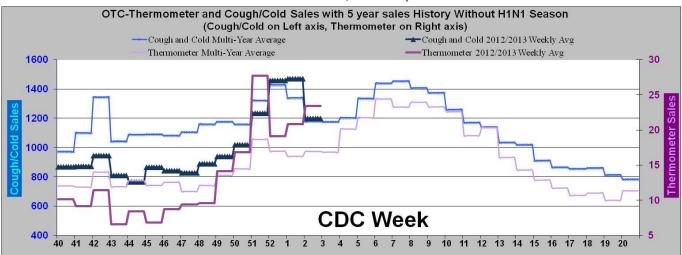
Graph 4: Emergency Department Visits for combined Respiratory and Constitutional Syndromes

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



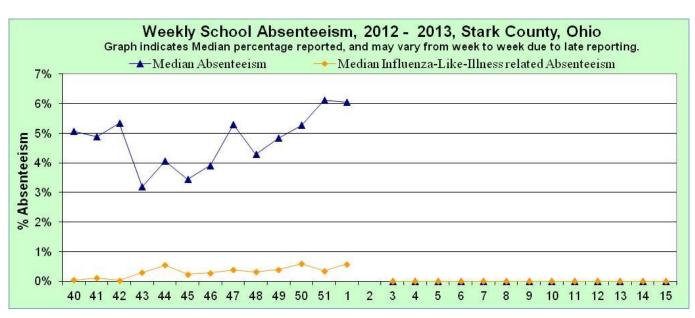
Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

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



Graph 6: Stark County School Absenteeism.

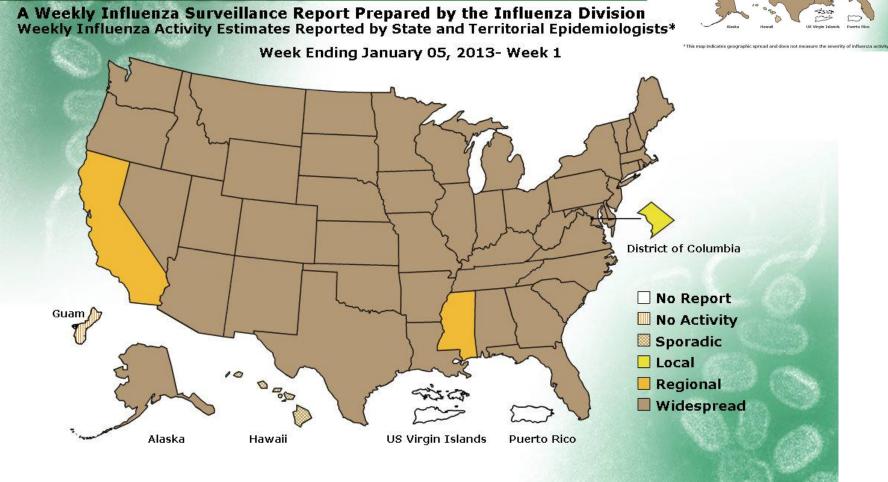
A variety of Stark County schools voluntarily report total daily absenteeism and ILI absenteeism.



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

(Inset is previous week)

FLUVIEW



CDC

eillance Report Prepared by the Influenza Divisio estimates Reported by State and Territorial Epidemiolo Week Ending January 04, 2014- Week 52

^{*}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.