STARK COUNTY INFLUENZA SNAPSHOT, WEEK 3

Week ending January 19, 2013, with updates through 1/27/2013.

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.

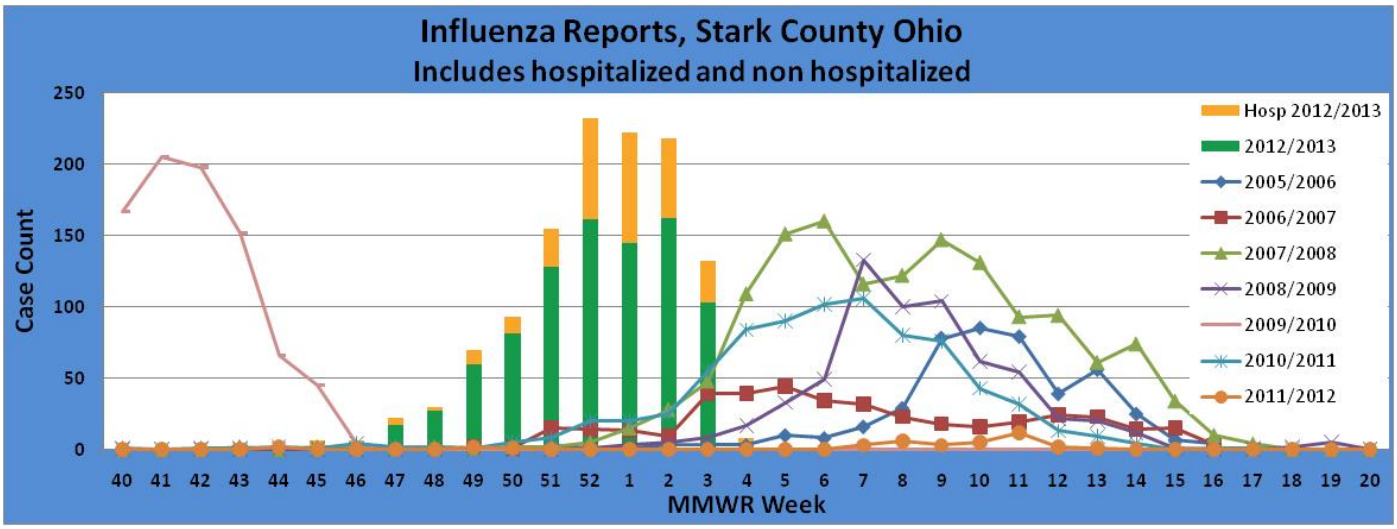
During week 3, (Jan 13-19, 2013) influenza activity continued to decrease in Stark County, however most indicators remain elevated. Locally, observed decreases occurred in hospital visits, sales of cough and cold products, and school absenteeism. The state of Ohio, level of influenza geographical activity remained at Widespread and with mixed surveillance indicators. National indicators for influenza surveillance remain elevated, but also with decreasing trends. The one significant exception is that National Pneumonia and Influenza (P & I) Mortality Surveillance rose to 9.8%, a percentage last seen in the 2003/2004 influenza season.

Information regarding surveillance indicators are detailed below:

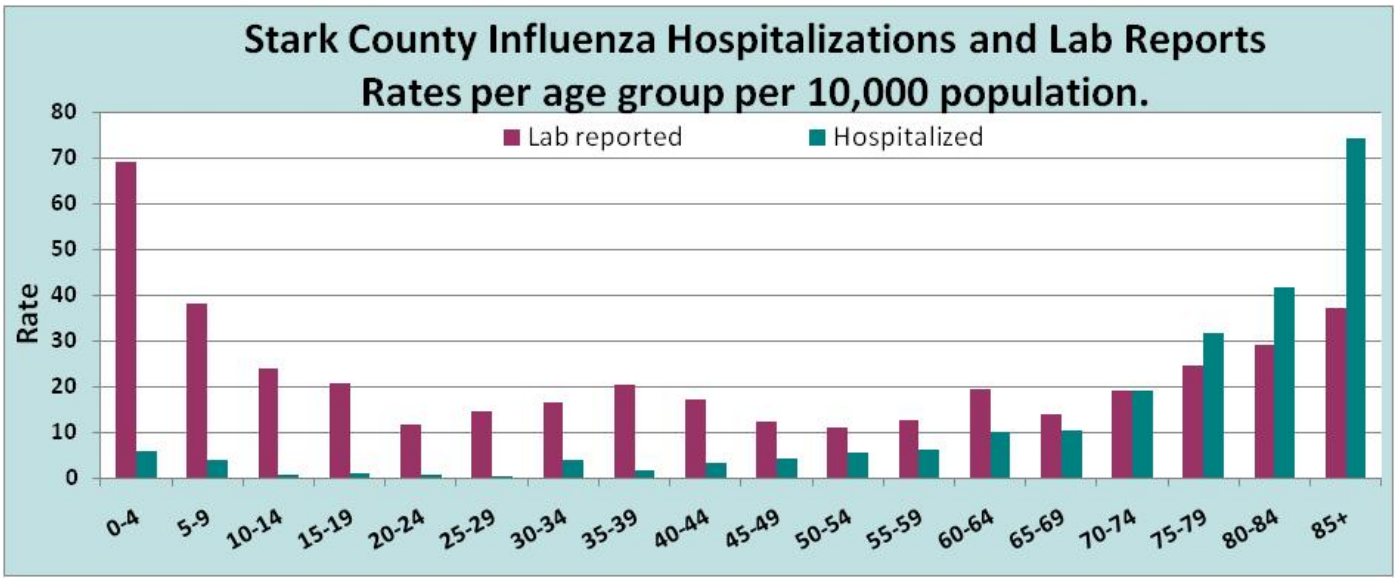
- **Thirty Hospitalizations,** a 54% **decrease** from week 2, and **one hundred three non-hospitalized** cases of influenza were reported in Stark County residents during week CDC Week 3. Three hundred nine (309) hospitalizations and 908 non-hospitalized cases have been reported this season. (Graph 1)
- Case rates by age reflect both extremes of age categories when comparing hospitalization to the non hospitalized. The age group with the highest rate of hospitalizations is 85+ at a rate of 74 per 10,000, the age group with the highest rate of positive lab results is 0-4 year old at a rate of 69 per 10,000. (Graph 2) Cases range in age from 2 weeks to > 90 years; hospitalized median 73 years and lab positive cases have a median age of 29 years.
- Week 2 indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers **decreased** nationally but **increased** locally. National ILI was 4.3%, which remains above the baseline of 2.2%. Stark County Providers report ILI at 4.0%. (Graph 3)
- Emergency Departments (ED) and Stat Care Facilities in our surveillance network reported **decreased** activity for the 4th week in both Constitutional or Respiratory (C & R) Syndrome visits and Influenza-Like-Illness (ILI) + Fever syndrome. However, overall activity remains elevated with C & R at 36% and ILI + Fever accounting for 2.9% of hospitalized visits. (Graph4)
- Over-The-Counter sales of Thermometers and Cough and Cold products **decreased,** 26% and 12% respectively. Both of these products fell below baseline levels for the first time this season.(Graph 5)
- School absenteeism continued to **decline**. With 62 schools reporting, school absenteeism during CDC Week 3 is 5.1%.
- Nationally, the CDC has antigenically characterized 751 influenza viruses collected by U.S. laboratories since October 1, 2012: Fifty-four (7.2%) 2009 H1N1 viruses, 465 (61.9%) influenza A (H3N2) viruses, and 232 (30.9%) influenza B viruses. Among the influenza B viruses 160 (69%) are from the Yamagata Lineage which is a part of this season's vaccine and 72 (31%) are Victoria Lineage.
- During week 3, the State of Ohio geographic level of influenza activity remained at Widespread activity. Nationally, Widespread geographic activity was reported by 47 states, Regional activity by 2 states, and Local activity was reported in Hawaii. (See Map)
- During CDC Week 3, 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 9.8%. This is well above the P & I epidemic threshold, currently at 7.3%.
- Nationally, eight influenza-associated pediatric deaths were reported to CDC during week 3. Two were associated with influenza A viruses for which the subtype was not determined, and six were associated with influenza B viruses. One pediatric death has been reported from Ohio this season.

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.

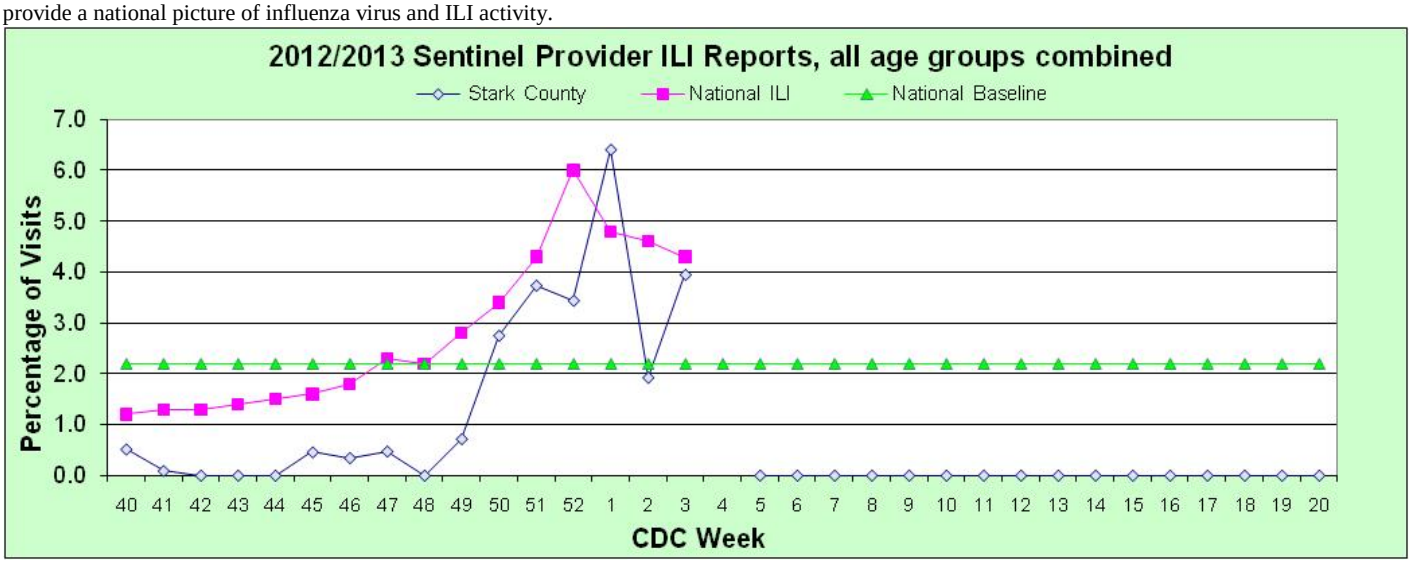


Graph 2: Stark County, Influenza by Age Group and Hospitalization Status.



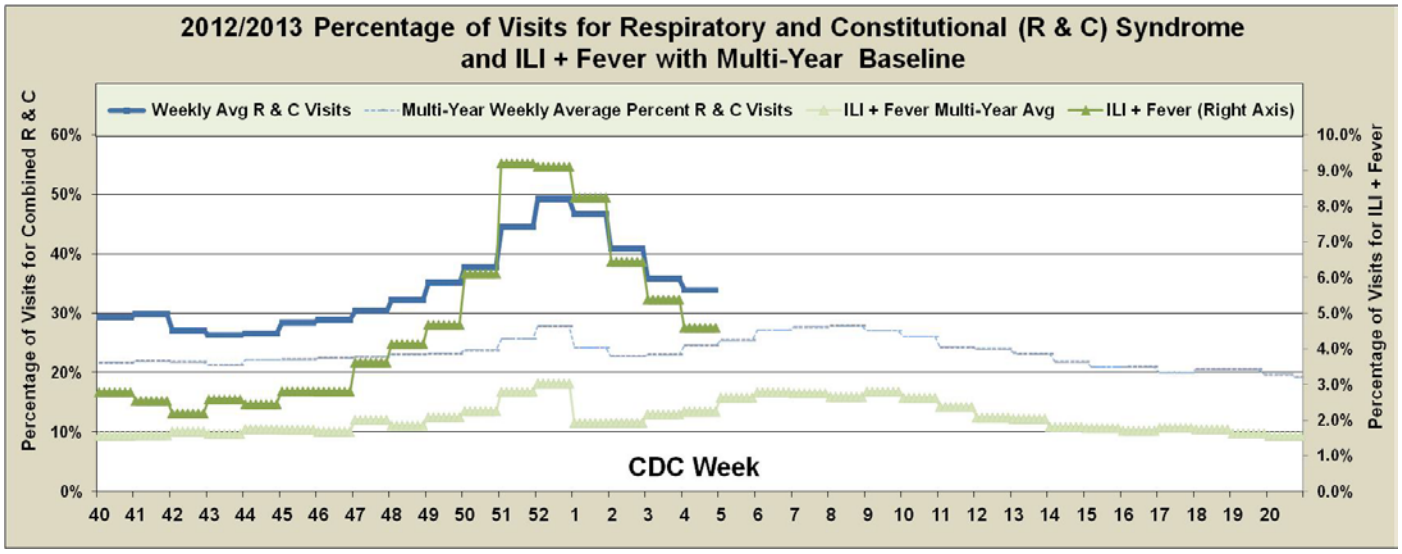
Graph 3: Sentinel Provider Reported Influenza-Like-Illness in Stark County

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.



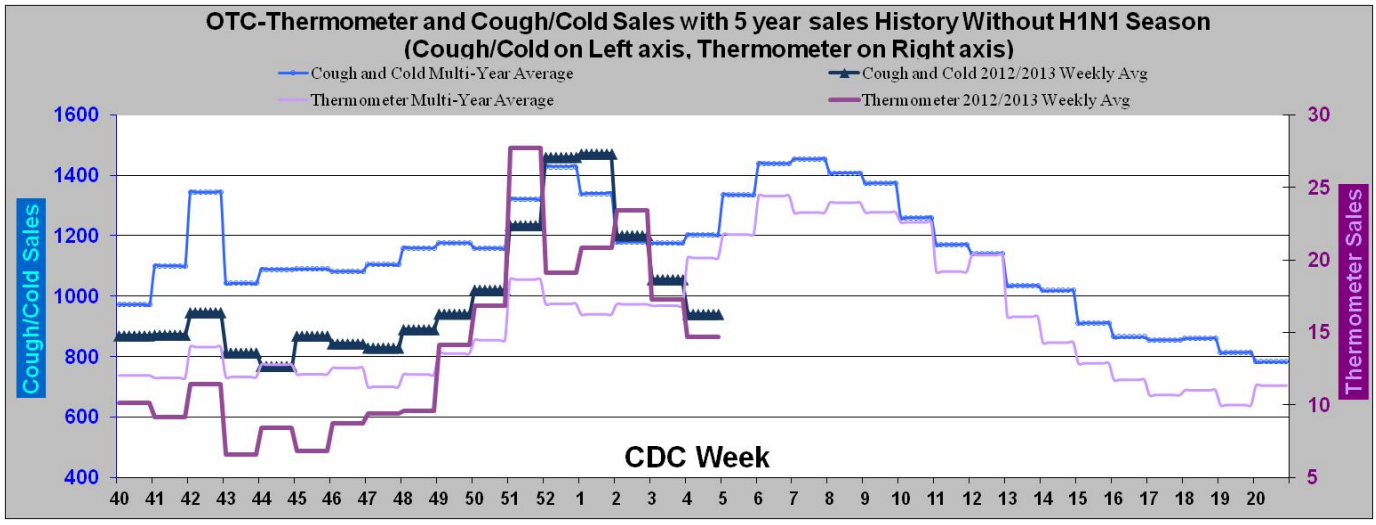
Graph 4: Emergency Department Visits for combined Respiratory and Constitutional Syndromes

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



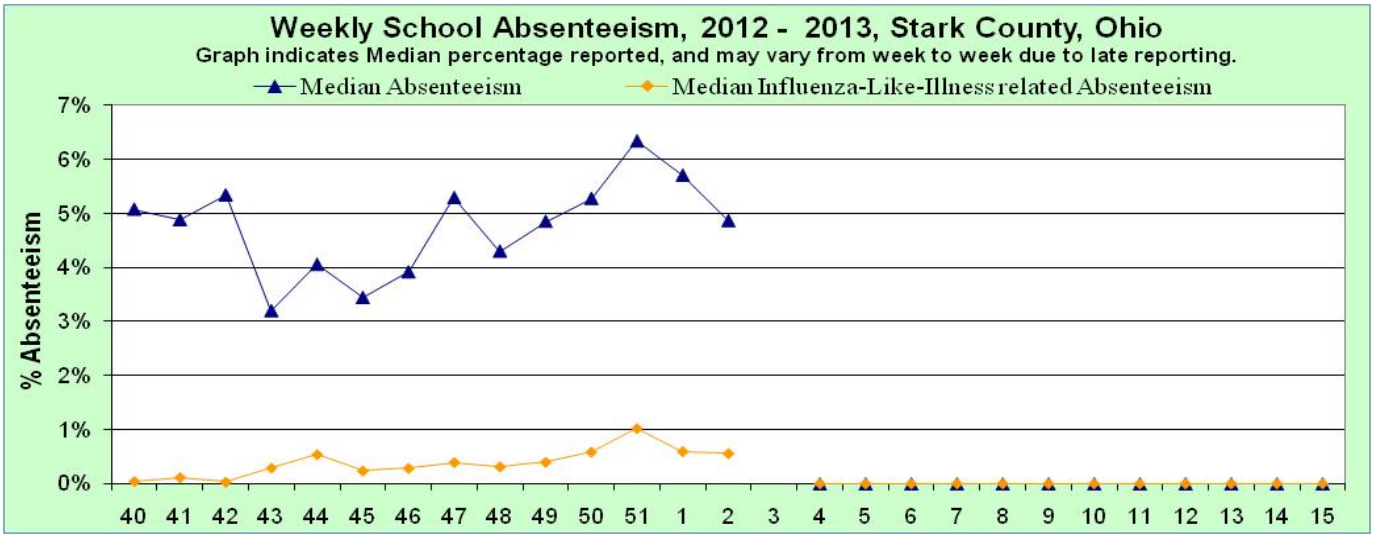
Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

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



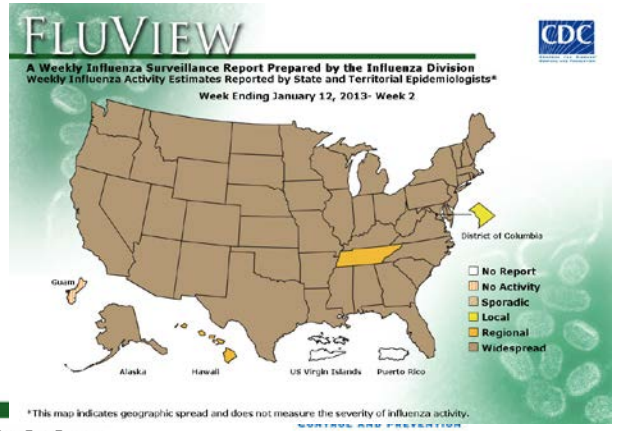
Graph 6: Stark County School

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)



FLUVIEW

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending January 19, 2013- Week 3

District of Columbia

Guam

Alaska

Hawaii

US Virgin Islands

Puerto Rico

- No Report
- No Activity
- Sporadic
- Local
- Regional
- Widespread

*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.