



STARK COUNTY INFLUENZA SNAPSHOT, WEEK 2

Week ending January 12, 2013, with updates through 12/20/2013.

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.

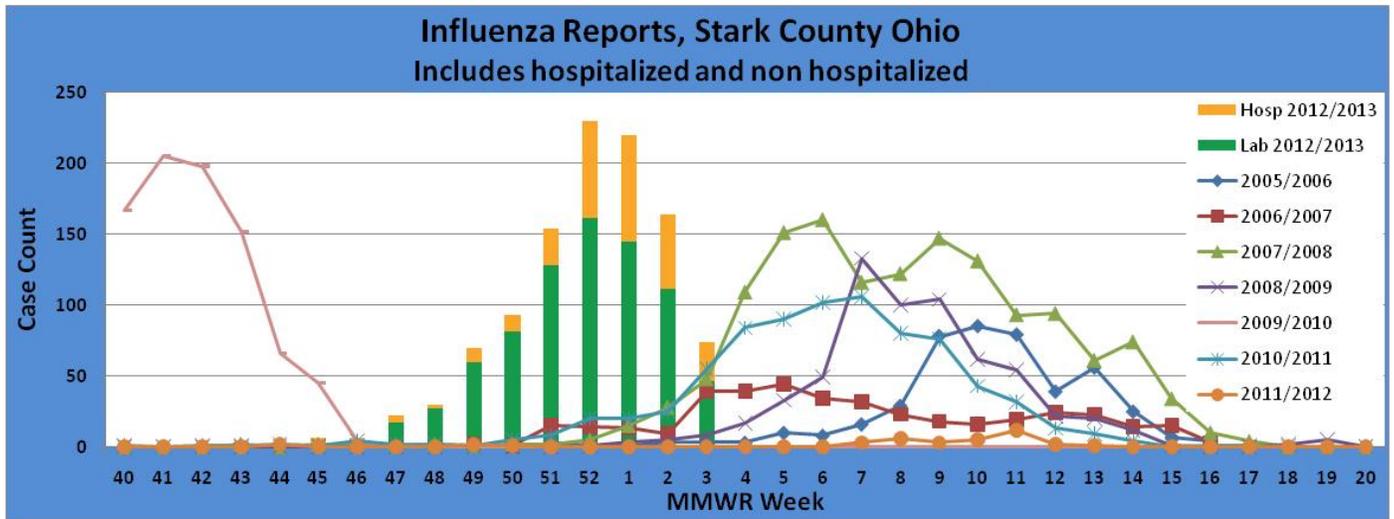
During week 2, (Jan 6-12, 2013) influenza activity decreased yet remained elevated in Stark County. Observed decreases occurred in hospital visits, sales of cough and cold products, and school absenteeism. The state of Ohio level of influenza geographical activity remained at Widespread but also decreasing indicators. National indicators for influenza surveillance demonstrated additional geographical spread and elevated activity throughout the United States. Of note nationally, there was a 14% increase in the percentage of pneumonia and influenza deaths. Several of those deaths were from Stark County residents.

Information regarding all local surveillance indicators are detailed below:

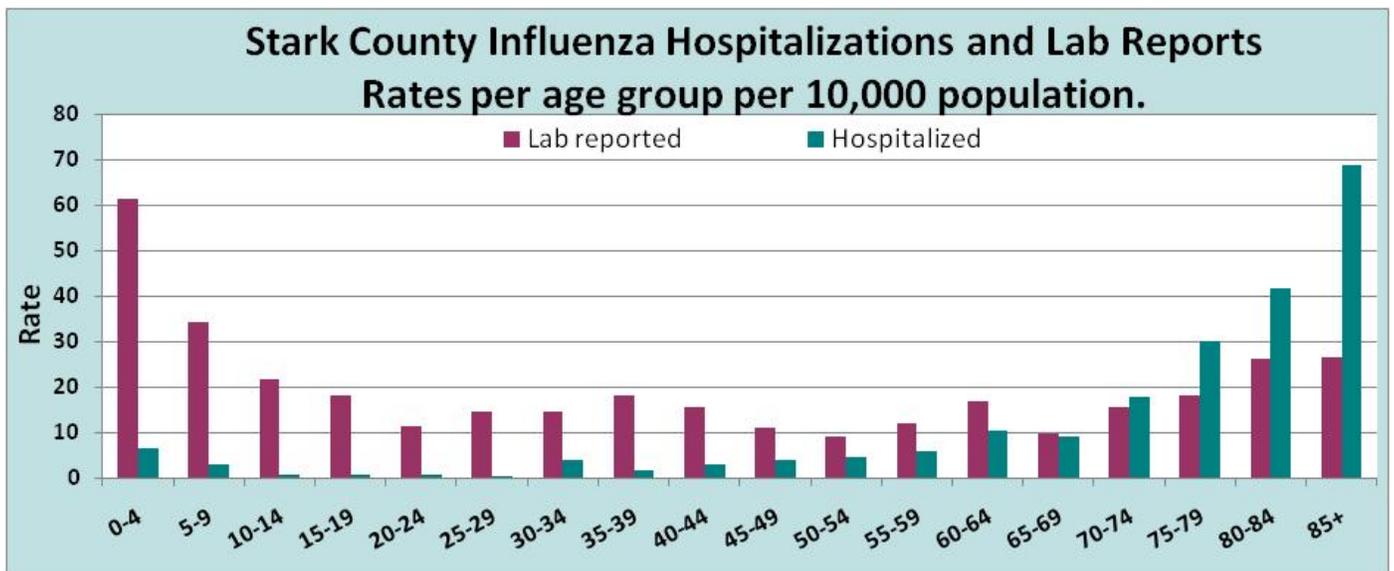
- **Fifty-three Hospitalizations**, a 29% decrease from week 1 and **one hundred eleven non-hospitalized** cases of influenza were reported in Stark County residents during week CDC Week 2. Two hundred ninety one (291) hospitalizations and 784 non-hospitalized cases have been reported this season. (Graph 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 68 per 10,000, the age group with the highest rate of positive lab results is 0-4 year old at a rate of 61 per 10,000. (**New 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 28 years.
- Locally 25% of influenza cases are type B. Nationally, the CDC has antigenically characterized 612 influenza viruses collected by U.S. laboratories since October 1, 2012: Forty-one (6.7%) 2009 H1N1 viruses, 394 (64.4%) influenza A (H3N2) viruses, and 177 (28.9%) influenza B viruses. Among the influenza B viruses 118 (67%) are from the Yamagata Lineage which is a part of this season's vaccine and 59 (33%) are Victoria Lineage.
- Week 2 indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers **decreased** nationally and locally. National ILI was 4.6%, which remains above the baseline of 2.2%. Stark County Providers report ILI at 3.8%. (Graph 3)
- Emergency Departments (ED) and Stat Care Facilities in our surveillance network reported significant decreases from week 1 to the most current week of data, week 3. Total visits during the previous two-week period decreased 14.3%, Constitutional or Respiratory (C & R) Syndrome visits **declined** 8% and Influenza-Like-Illness (ILI) + Fever syndrome **decreased** 35%. (Graph4)
- Over-The-Counter (OTC) sales of Thermometers **increased** 12% and exceeds historical averages. Cough and Cold products sales **decreased** for the first time this season. (Graph 5)
- School absenteeism has **declined** to preholiday levels. With 28 schools reporting, school absenteeism during CDC Week 2 is 4.9%.
- During week 2, the State of Ohio geographic level of influenza activity remained at Widespread activity. Nationally, Widespread geographic activity was reported by 48 states, Regional activity by 2 states, and Sporadic activity was reported in Hawaii. (See Map)
- During CDC Week 2, 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 8.3%. This is well above the P & I epidemic threshold, currently at 7.3%. Stark County reported 9 deaths among hospitalized patients with confirmed influenza virus.
- Nationally, nine influenza-associated pediatric deaths were reported to CDC during week 2. Two were associated with influenza A (H3) viruses, four were associated with influenza A viruses for which the subtype was not determined, and three were associated with influenza B viruses; one was from Ohio.

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.

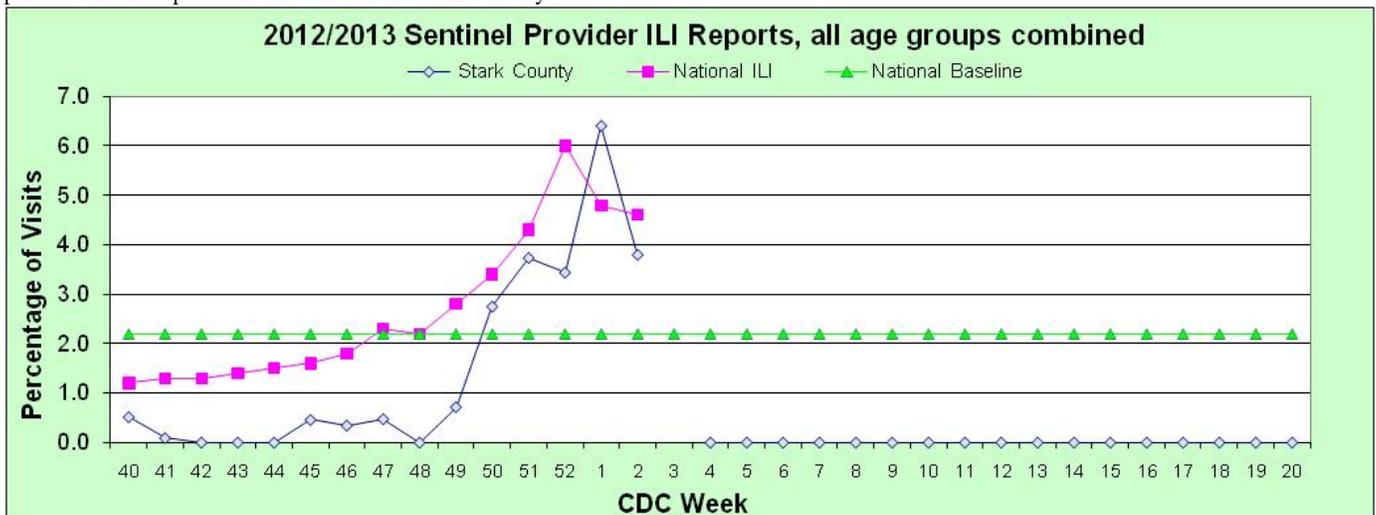


Graph 2: Stark County, Influenza by Age Group and Hospitalization Status.



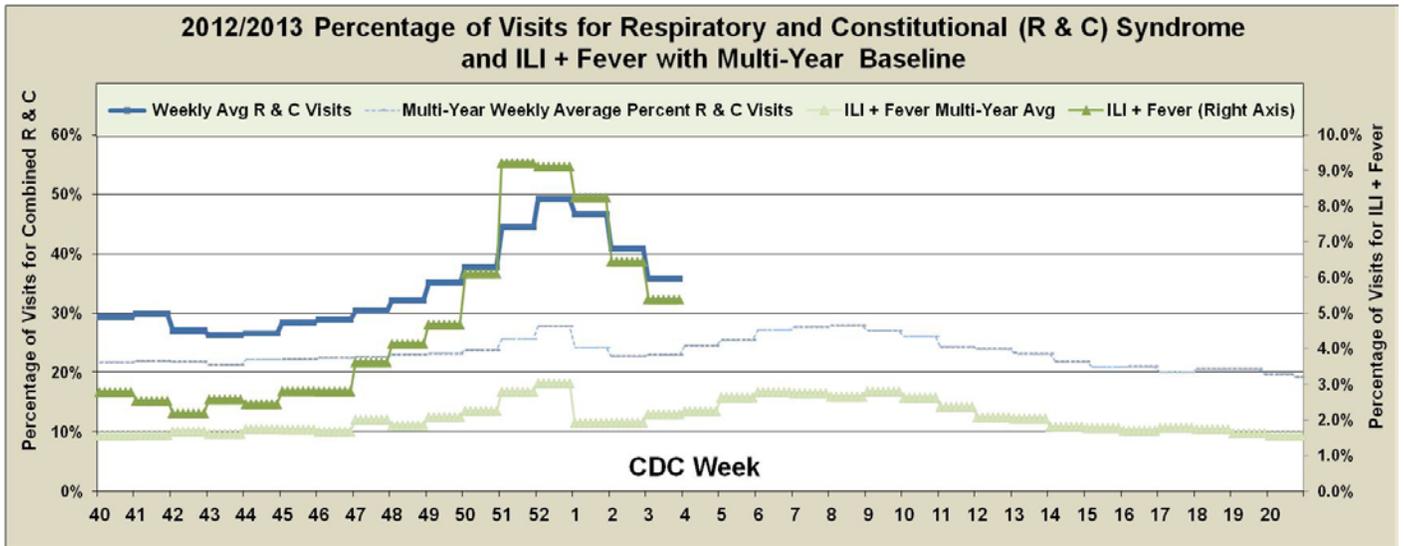
Graph 3: Sentinel Provider Reported Influenza-Like-Illness in Stark County

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.



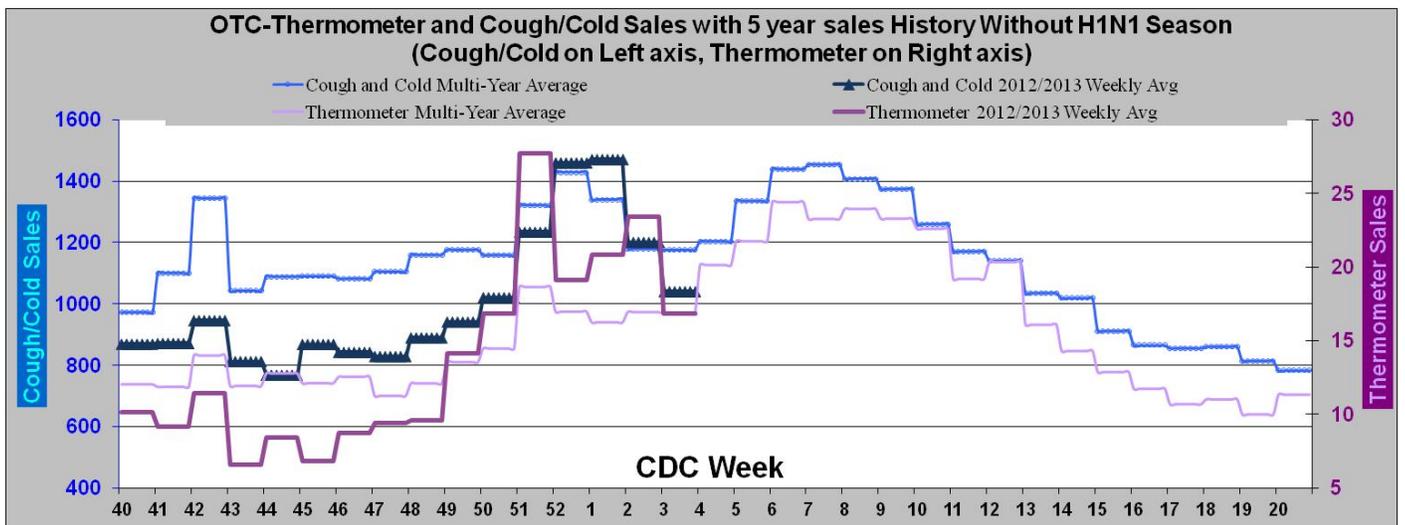
Graph 4: Emergency Department Visits for combined Respiratory and Constitutional Syndromes

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



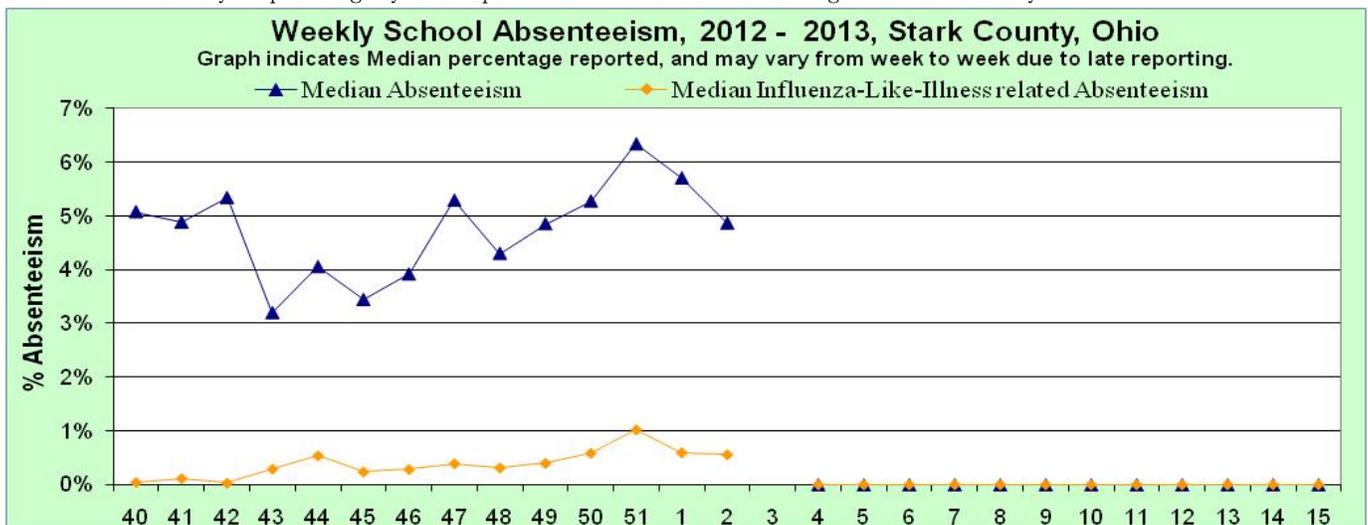
Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

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

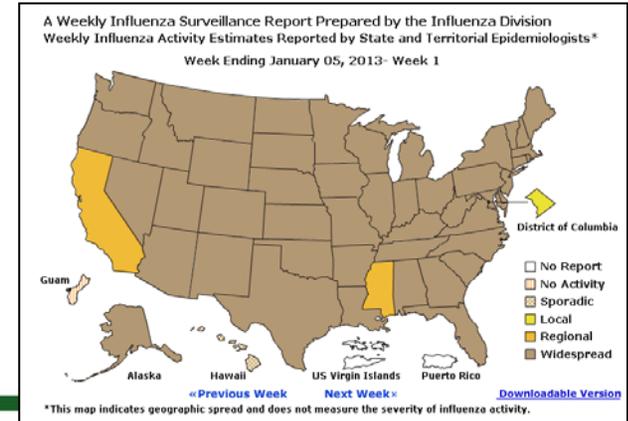


Graph 6: Stark County School

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

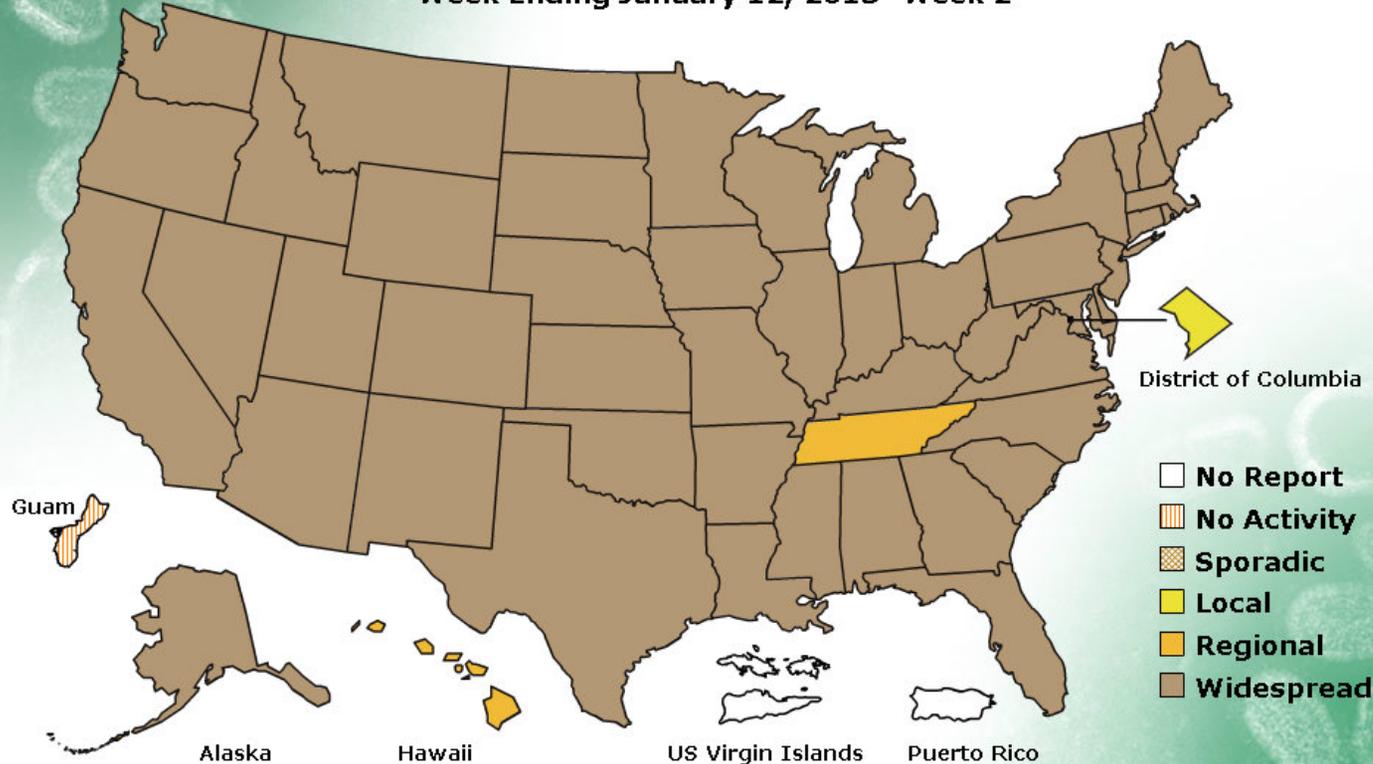


Map: Weekly Geographic Influenza Activity Estimates Reported by State and Territorial Epidemiologists
 (Inset is previous week)



FLUVIEW

A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*
 Week Ending January 12, 2013- Week 2



*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.