STARK COUNTY INFLUENZA SNAPSHOT, WEEK 12

Week ending March 24, 2012, with updates through 04/01/2012.

All data are preliminary and may change as additional information is received.

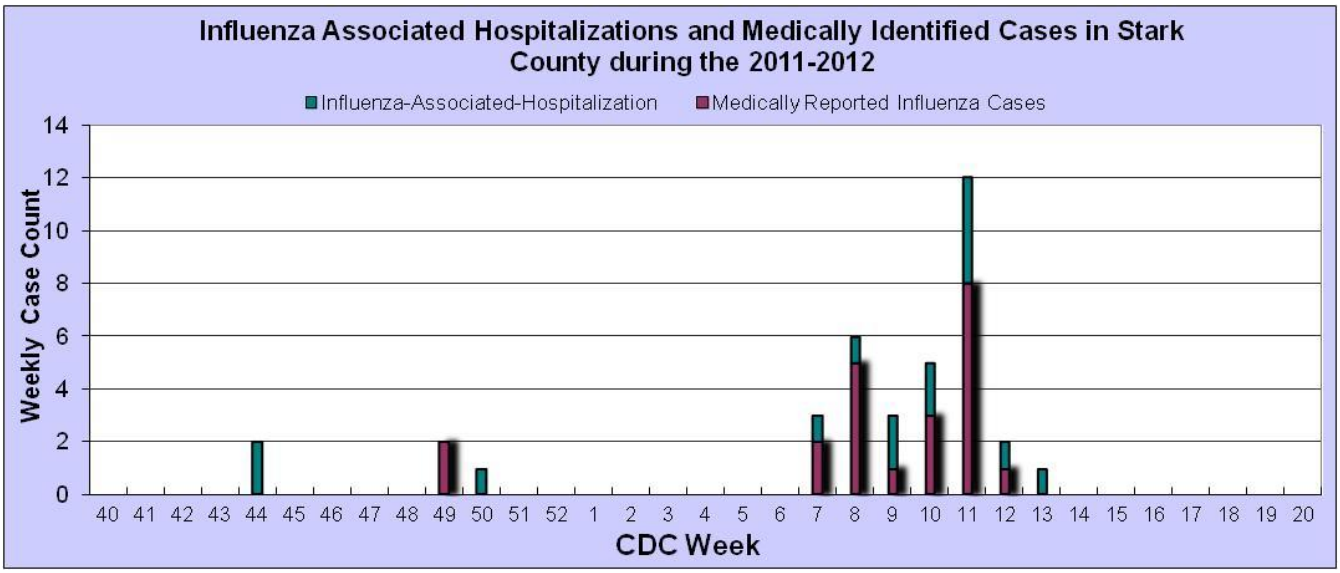
NOTE: Compilation of multiyear averages does not include the 2009/2010 H1N1 season.

During CDC Week 12, (Mar 18-Mar 24, 2012) influenza activity in the United States remained relatively low nationally and in Ohio. Stark County saw decreasing activity in nearly all indicators of influenza activity.

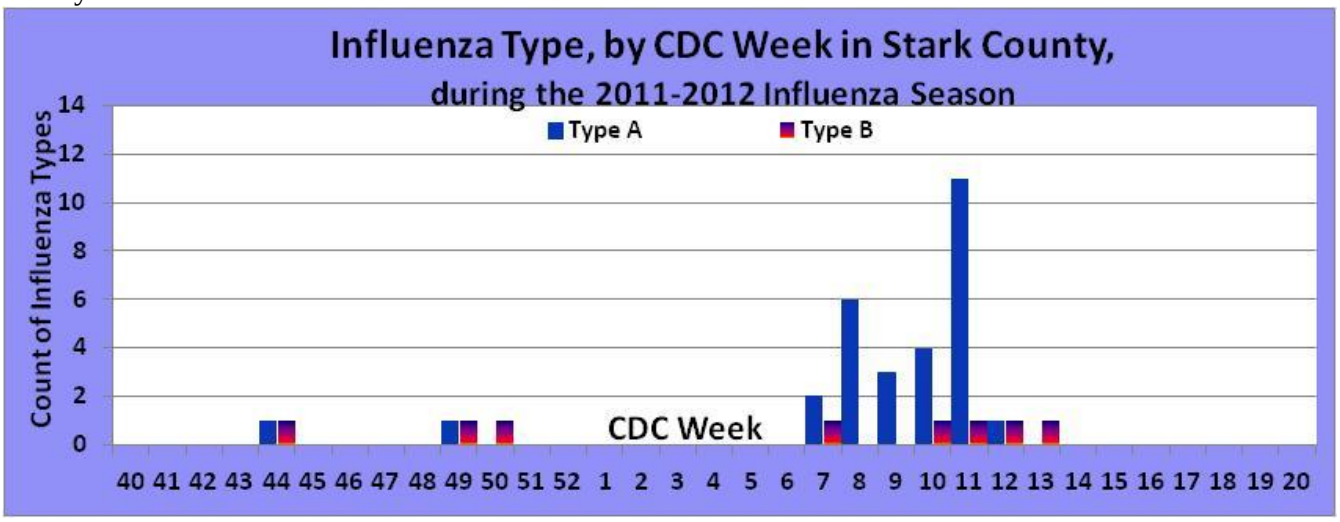
- One influenza-associated hospitalization and one medically/laboratory reported case of influenza were reported in Stark County residents during week CDC Week 12. Fifteen hospitalizations and twenty-two medically/laboratory cases have been reported this season. (Graph 1)
- Demographics for the 15 influenza-associated hospitalized cases during the 2011-2012 season in Stark County: the age range is 0.08–87 years with a **median of 69 years.** Fourteen cases were reported with race information of these 11 (79%) were Caucasian and 3 (21%) were African American/Black.
- Among the 37 cases of influenza identified in Stark County, eight have been type B, five were Type A (H3), two are Type A (H1) and 22 were Type A with unknown characterization. (See Graph 2) The CDC has antigenically characterized 918 influenza viruses since Oct 1, 2011: 240 (26%) 2009 H1N1, 561 (61%) influenza A (H3N2) viruses, and 117 (13%) influenza B virus (49 Victoria Lineage which is a part of this season's vaccine and 68 of the Yamagata Lineage which is the recommended influenza B component of the 2012-2013 vaccine).
- Week 12 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers, **decreased** to 2.0%. The National outpatient activity level fell below the epidemic baseline of 2.4%. Stark County Providers reported very low levels of influenza activity this week. (Graph 3)
- Emergency Department visits specifically for symptoms consistent with Constitutional and Respiratory (C & R) Syndrome **decreased** for the 4th consecutive week. Currently C & R rates are 26%.Likewise, Emergency Department visits for Influenza-Like-Illness (ILI) + Fever syndrome also **decreased**. (Graph 4)
- Over-The-Counter (OTC) sales of both cough and cold products and thermometers experienced **declining** sales volumes during week 12. Declines did not continue into week 13 for sales of cough and cold products. Specifically, in week 13 sales of antifever medications and throat lozenges increased. (Graph 5)
- 30 Schools reported an **increase** in school absenteeism during CDC Week 12. However, both the percentage of absences due to illness and absences specifically for ILI, fell to the lowest levels this season. Currently, the total median absenteeism is 4.1%, up from 3.5% in Week 11. (Graph 6)
- During week 12, the State of Ohio geographic spread activity level of influenza remained at Regional activity. The activity level definition for Ohio can be found at http://www.odh.ohio.gov/features/odhfeatures/seasflu/ohfluactivity.aspx. Nationally, Widespread activity was reported by 16 states, Regional activity by a total of 21 states, Local activity by 9 states and Sporadic activity by 4 states. (See Map)
- During CDC Week 12, 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 7.8%. This is below the P & I epidemic threshold, currently at 7.9%.
- Nationally, four influenza-associated pediatric deaths were reported to CDC during week; one 2009 H1N1 and three influenza A viruses for which the subtype was not determined. The deaths reported during week 12 occurred during the weeks ending March 3, 2012 (week 9) and March 10, 2012 (week 10). This brings the total number of influenza-associated pediatric deaths reported during the 2011-2012 season to 12. There have been no influenza-associated pediatric deaths reported 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.

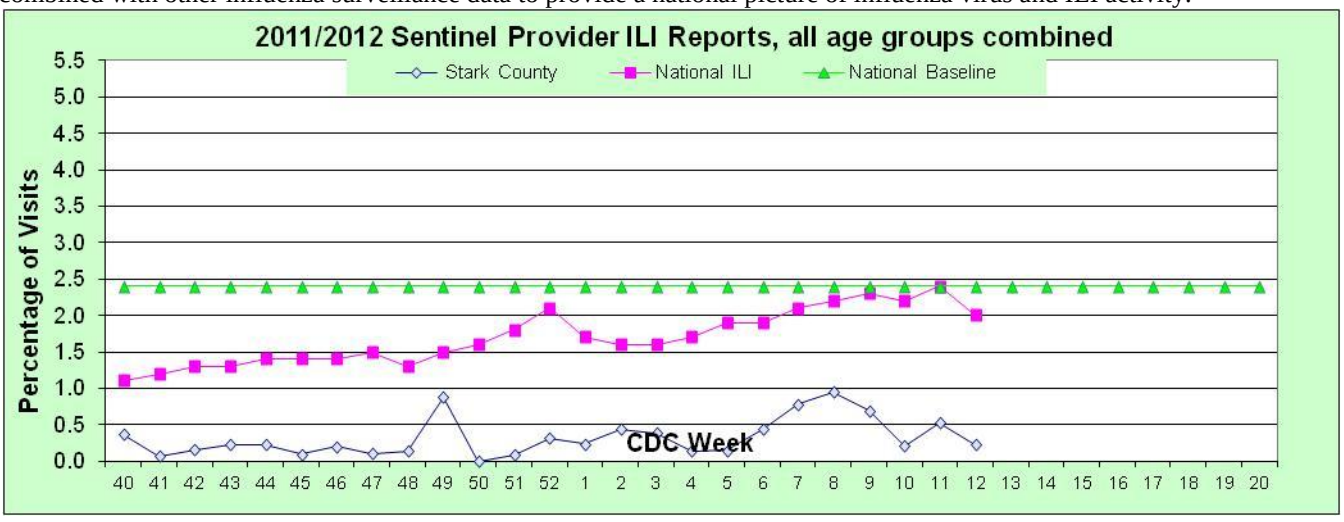


Graph 2: Stark County Influenza Type, by CDC Week in Stark County. The graph depicts the number of cases reported with hospitalization and by the medical community combined, per CDC week. All cases are Stark County residents.



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

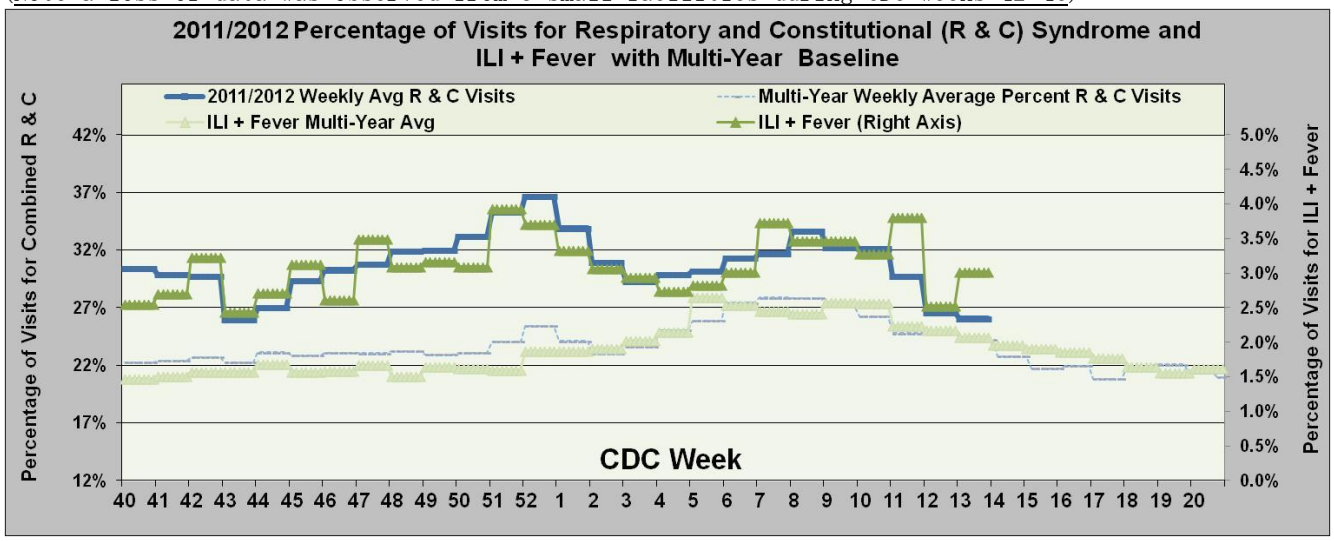
Sentinel Providers-An influenza sentinel provider conducts surveillance for influenza-like illness (ILI) in collaboration with the state health department and the Centers for Disease Control and Prevention (CDC). Data reported by Stark Counties 4 providers are combined with other influenza surveillance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



Graph 4: Emergency Department Visits for combined Respiratory and Constitutional Syndromes and for ILI + Fever Syndrome

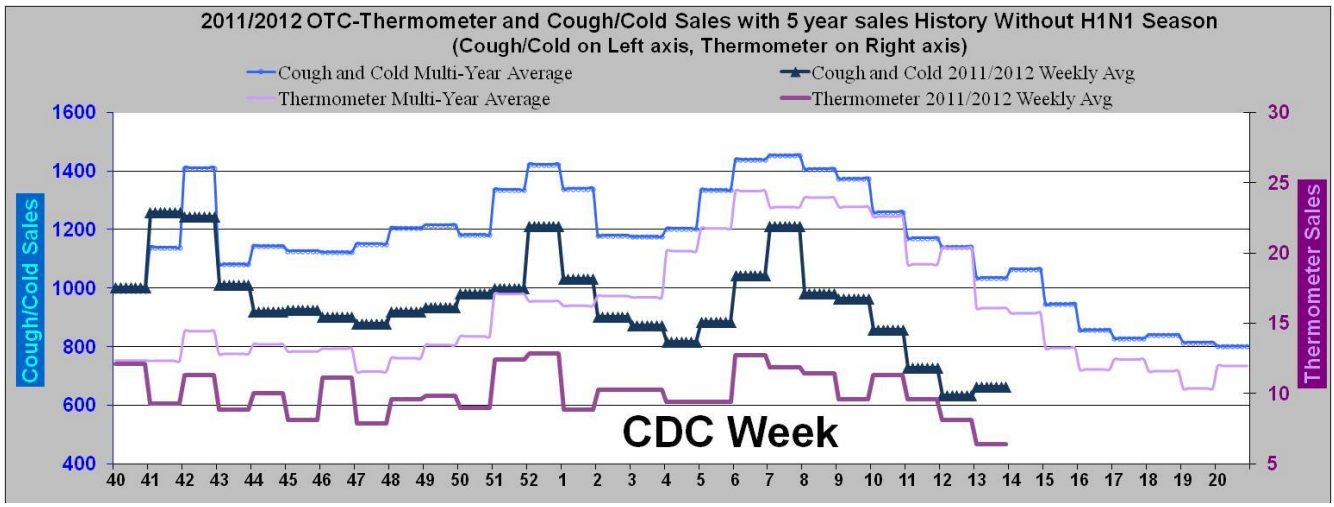
(Source Health Monitoring Systems, EpiCenter, hospital and stat care patient registration surveillance system)

(Note a loss of data was observed from 3 small facilities during CDC weeks 42-46)

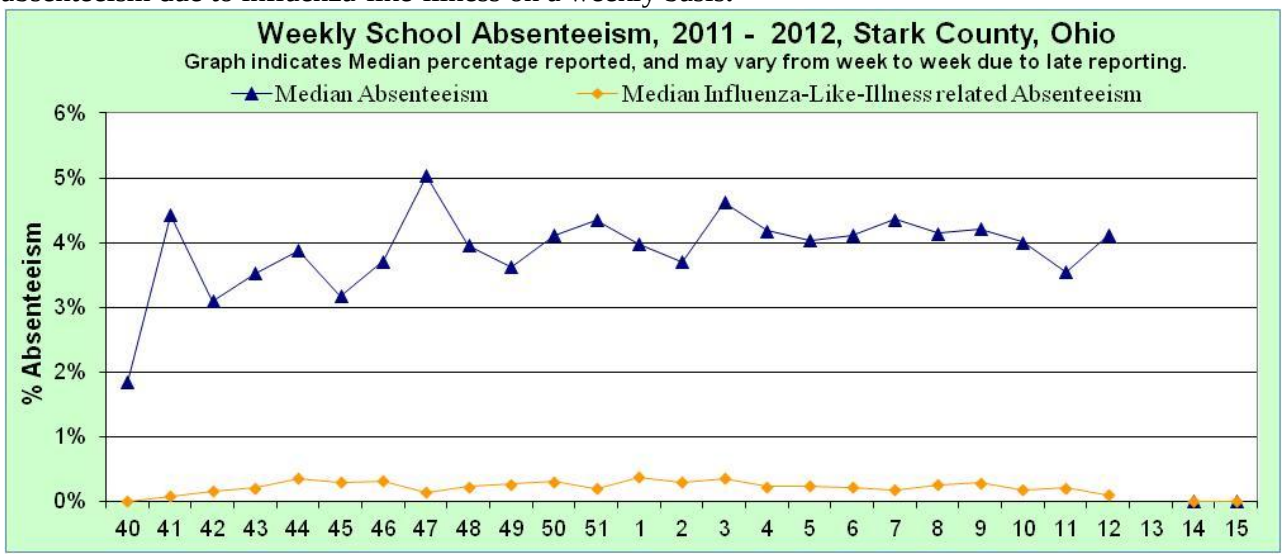


Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

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

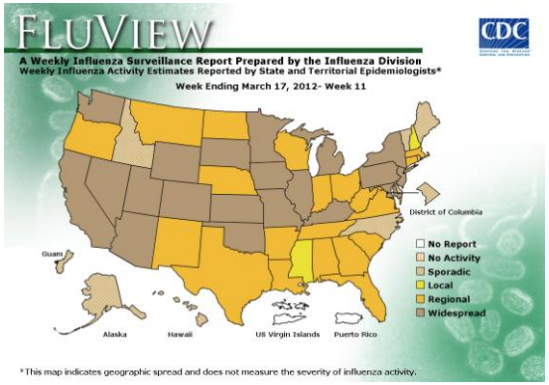


Graph 6: School Absenteeism. School systems from throughout Stark County report total absenteeism and absenteeism due to influenza-like-illness on a weekly basis**.**



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

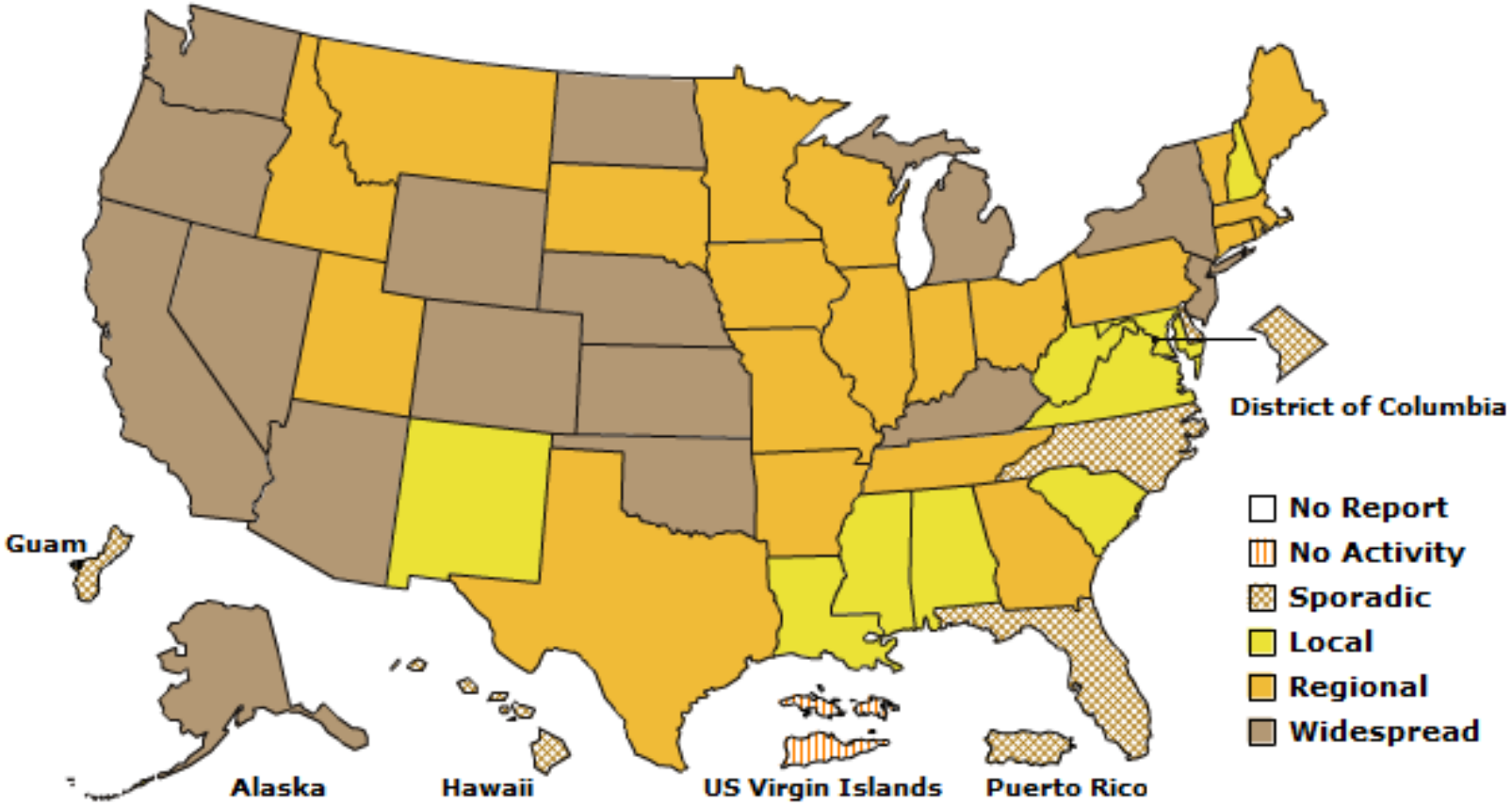
(Inset is previous week)



A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending March 24, 2012- Week 12



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.