



STARK COUNTY INFLUENZA SNAPSHOT, WEEK 49

Week ending December 8, 2012, with updates through 12/16/2012.

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.

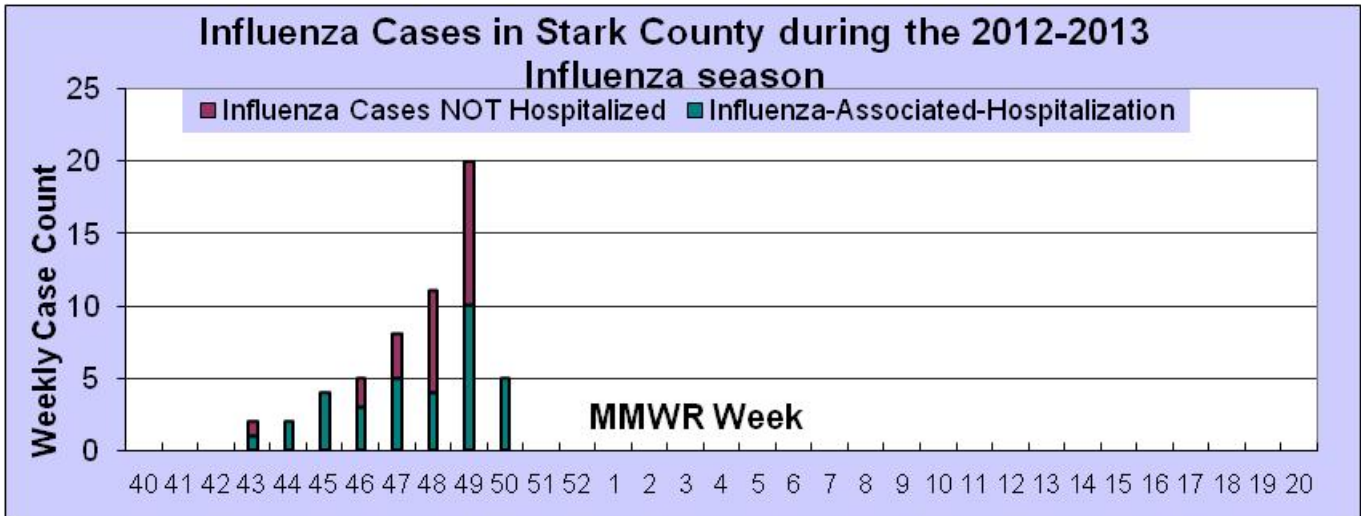
During week 49, (Dec 2-8, 2012) evidence of increasing Influenza-Like-Illness (ILI) activity in Stark County was observed with mounting trends in the number of associated hospitalizations, Emergency Department visits for ILI and significant sales of thermometers. The state of Ohio level of influenza geographical activity remained at Widespread. National indicators for influenza surveillance indicated continued spread throughout the United States and the proportion of outpatient visits for influenza-like illness (ILI) exceeded the national baseline.

Information regarding all local surveillance indicators are detailed below:

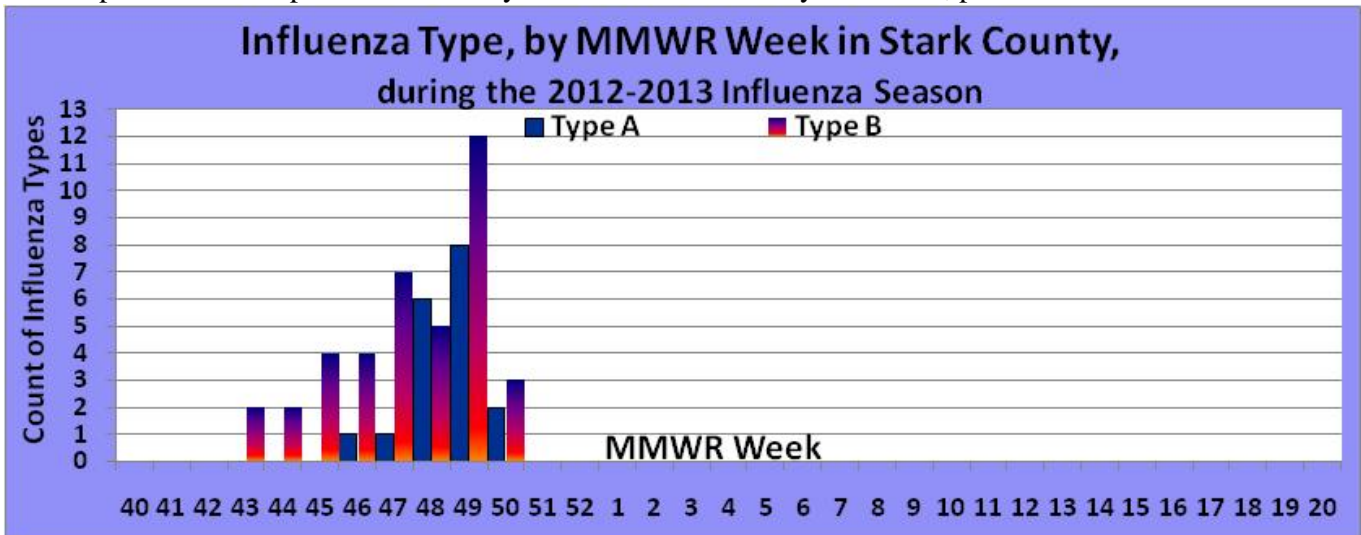
- **Ten Hospitalizations** and ten non-hospitalized cases of influenza were reported in Stark County residents during week CDC Week 49. Thirty-four (34) hospitalizations and twenty-three (23) non-hospitalized cases have been reported this season. (Graph 1)
- Demographics for the 34 influenza-associated hospitalized cases during the 2012-2013 season in Stark County: age range 1 – >90 years, median 65.5 years and 94% of cases with race information are reported as Caucasian.
- Among of the influenza reported in Stark County, thirty-nine(39) have been type B and eighteen (18) are type A. (See Graph 2) At the beginning of the influenza season, two of the B viruses received further typing and are identified as B/Brisbane-like, a strain which is not a component of the 2012/2013 influenza vaccine. The CDC has antigenically characterized 287 influenza viruses since Oct 1, 2012:10 (3.5%) 2009 H1N1, 182(63%) influenza A (H3N2) viruses, and 95 (33%) influenza B viruses. Among the influenza B viruses 63 (66.3%) are from the Yamagata Lineage which is a part of this season's vaccine and 32 (33.7%) are from the Victoria Lineage, which includes B/Brisbane-like, and are not a component of the 2012/2013 North American seasonal influenza vaccine.
- Week 49 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers, increased to 2.8%, which is above the epidemic baseline of 2.2%. There were **no local reports** during week 49. (Graph 3)
- Emergency Department (ED) visits specifically for symptoms consistent with Constitutional and Respiratory (C & R) Syndrome **increased** for the 6th consecutive. 37.5% of ED visits are for symptoms consistent C & R syndromes. ED visits for Influenza-Like-Illness (ILI) + Fever syndromes also **increased** for a 5th week. Both of these are well above expected levels. (Graph 4)
- Over-The-Counter (OTC) sales of Thermometer **increased 48%** between weeks 48 and 49. Sales of Cough and Cold products continued to increase. (Graph 5)
- School absenteeism remained relatively **steady** with a median absenteeism of 5% across 22 reporting schools. . (Graph 6)
- During week 49, the State of Ohio geographic level of influenza activity remained at Widespread. Nationally, Widespread geographic activity was reported by 18 states, Regional activity by 17 states, Local activity by 11 states and Sporadic activity by 4 states. (See Map)
- During CDC Week 49 , National Pneumonia and Influenza (P & I) Mortality Surveillance of all deaths reported through the 122 Cities Mortality Reporting System as due to P & I, decreased to 6.4%. This is **below** the P & I epidemic threshold, currently at 6.9%.
- Nationally, **one** influenza-associated pediatric death was reported to CDC during week 49 and was associated with an influenza B virus. This death occurred during the week ending December 1 (week 48). This brings the total number of influenza-associated pediatric deaths reported during the 2012-2013 season to 6, none from Ohio.

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

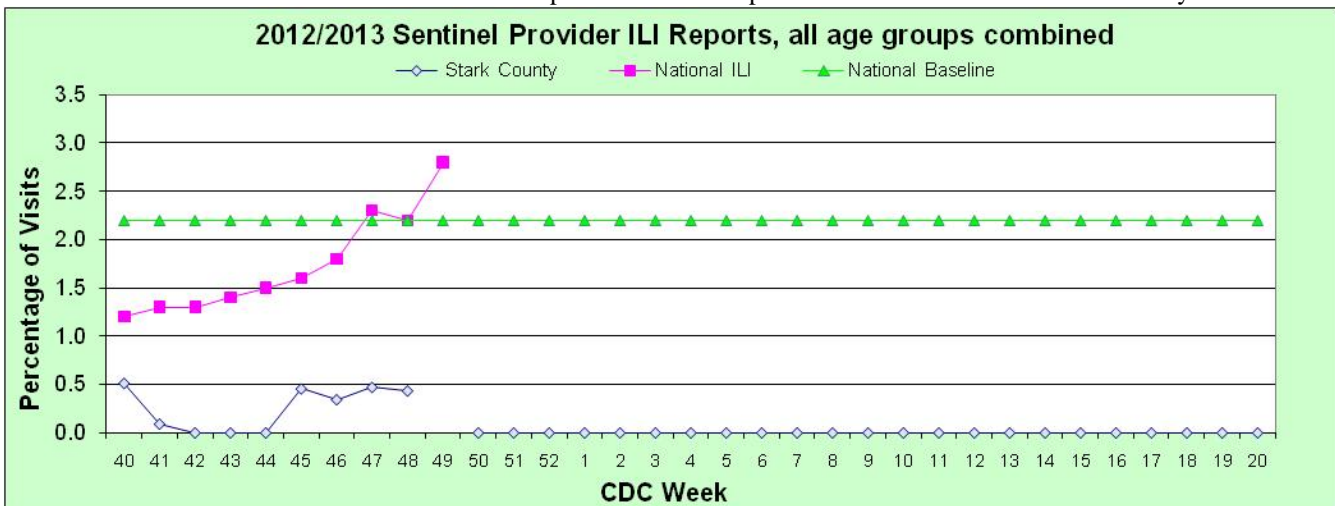


Graph 2: Stark County Influenza Type, by CDC Week in Stark County. The graph depicts the number of cases reported with hospitalization and by the medical community combined, per CDC week.



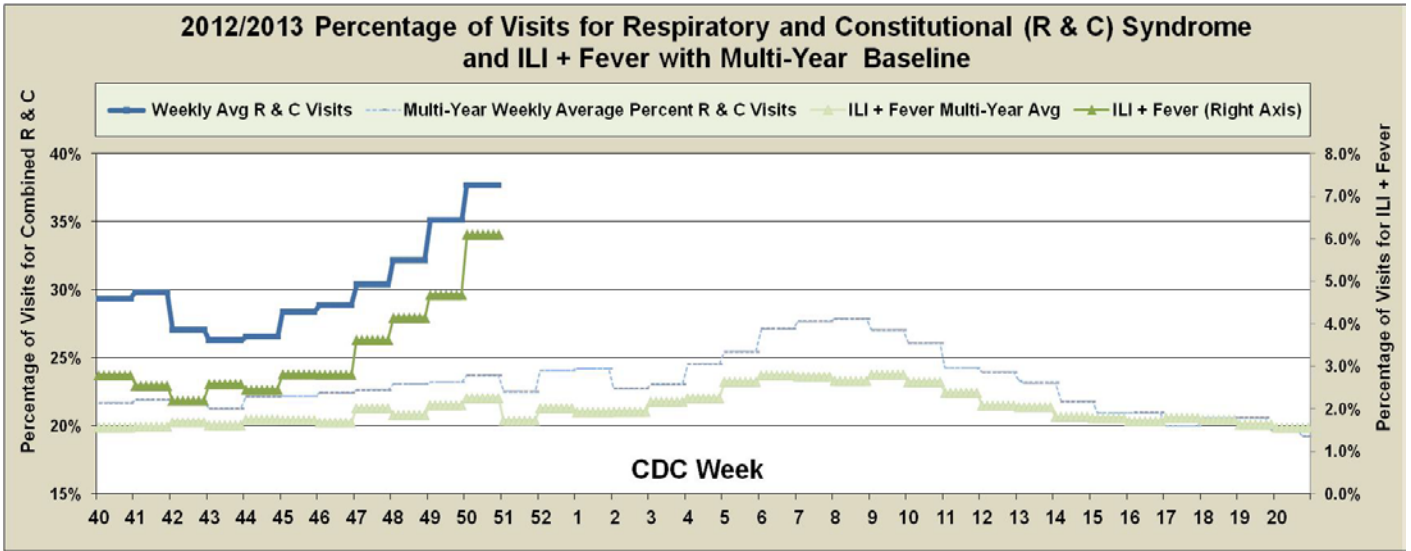
Graph 3: Sentinel Provider Reported Influenza-Like-Illness in Stark County

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.



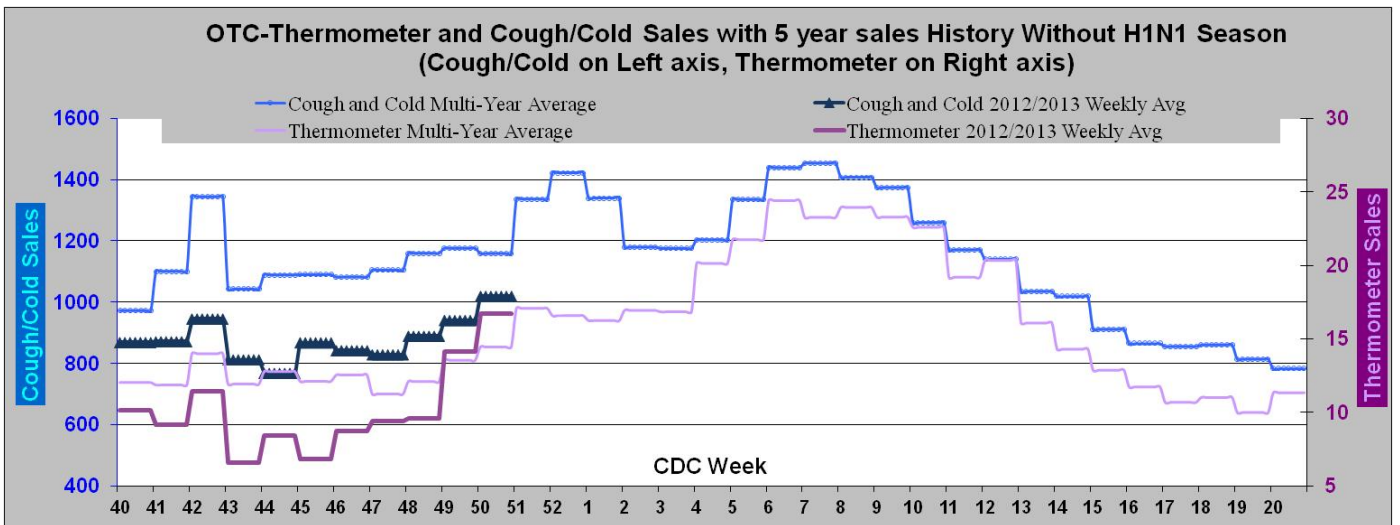
Graph 4: Emergency Department Visits for combined Respiratory and Constitutional Syndromes

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

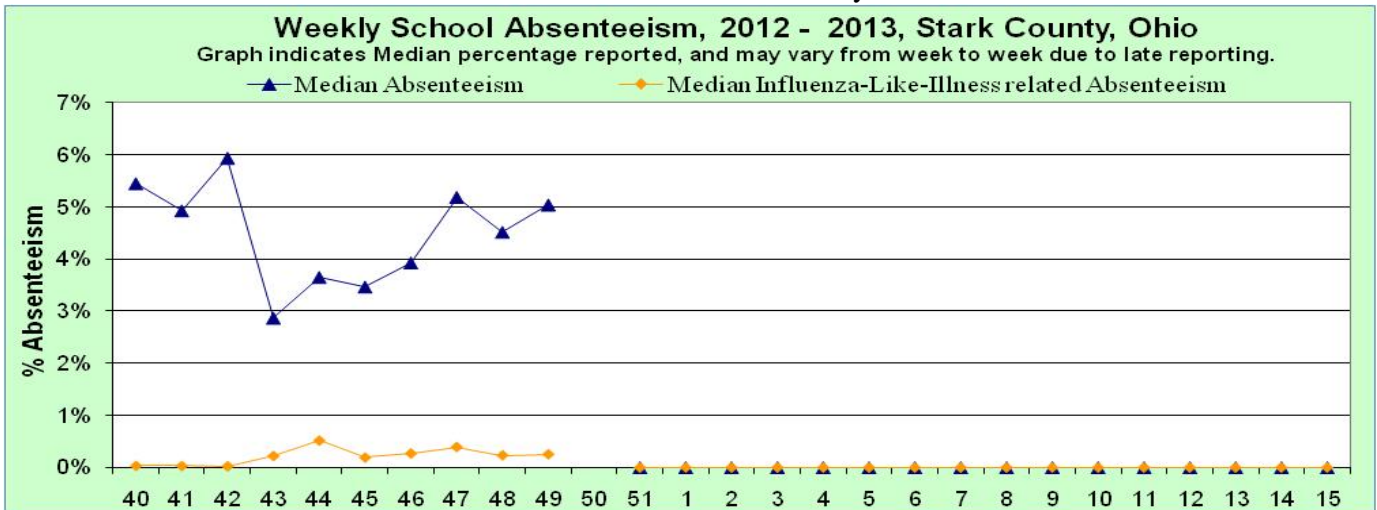


Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

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



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



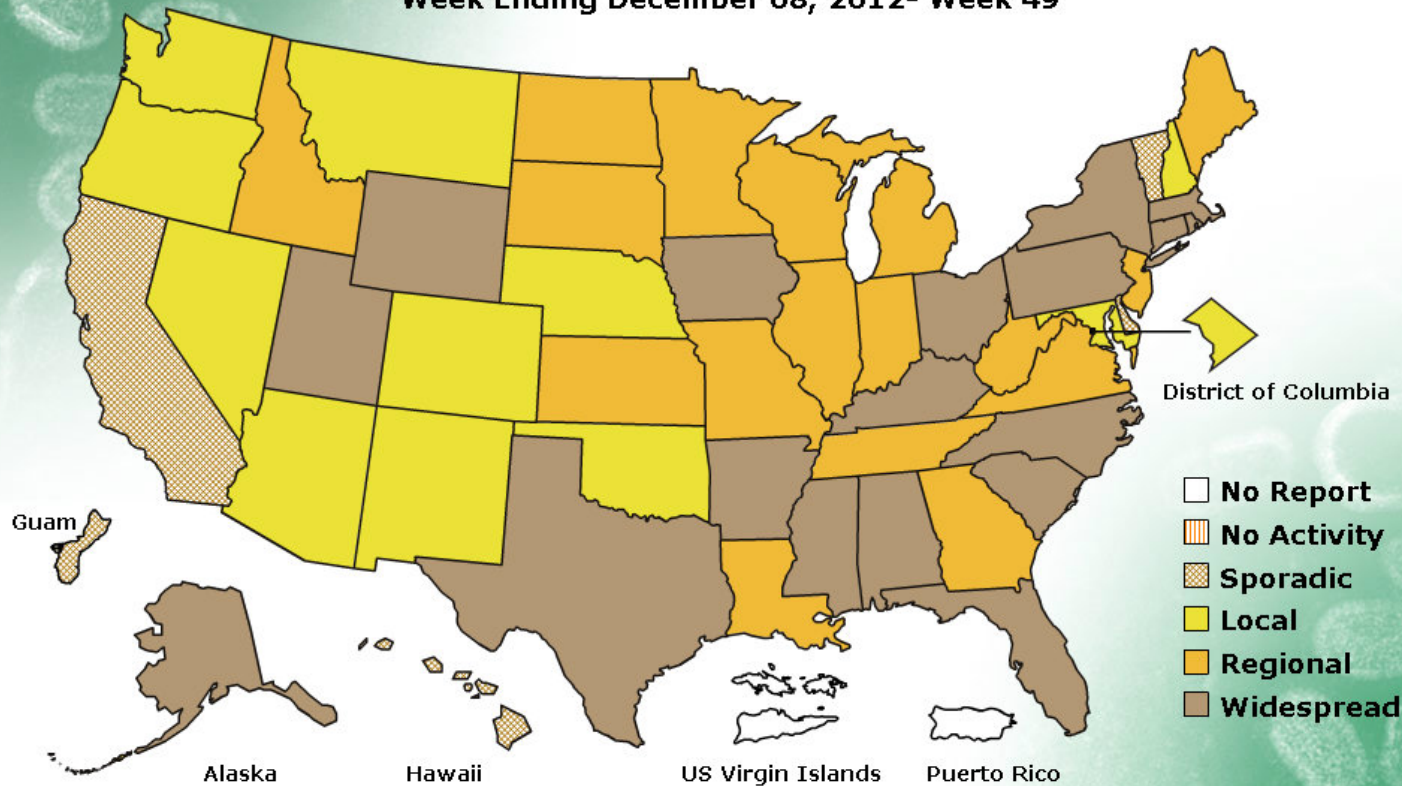
Map: Weekly Geographic Influenza Activity Estimates Reported by State and Territorial Epidemiologists
(Inset is previous week)



FLUVIEW

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

Week Ending December 08, 2012- Week 49



*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.