



## STARK COUNTY INFLUENZA SNAPSHOT, WEEK 48

Week ending December 1, 2012, with updates through 12/9/2012.

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.

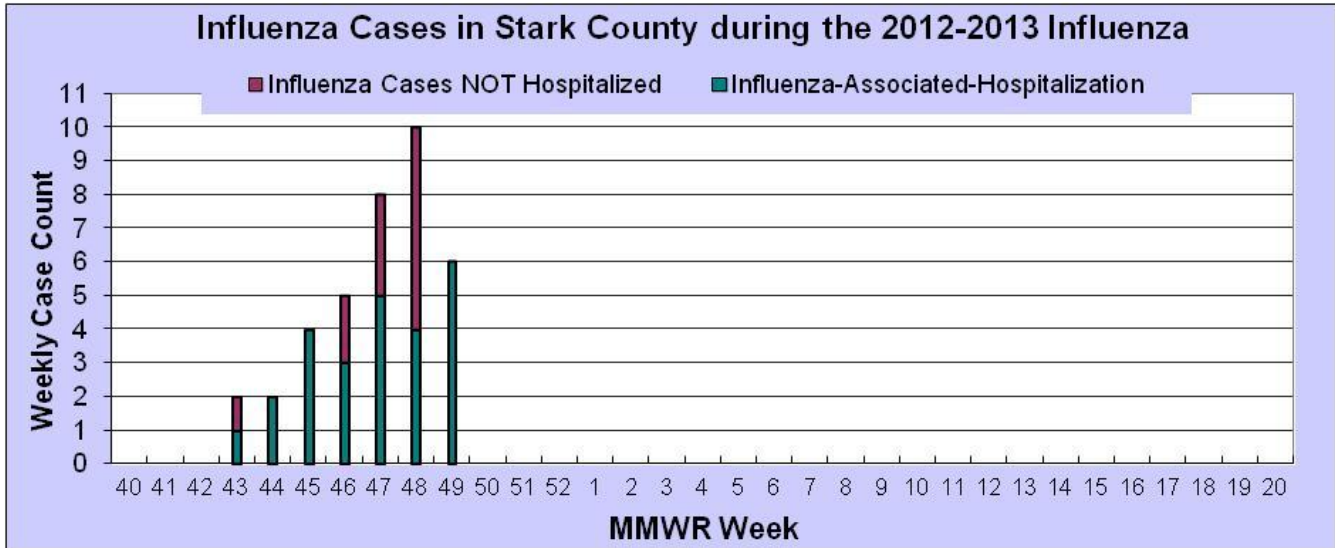
During week 48, (Nov 25-Dec 1, 2012) the state of Ohio level of geographical influenza activity increased to Widespread. Within Stark County, an increase was seen in the number of influenza positive reports, school absenteeism, Emergency Department visits for ILI symptoms, and sales of Over-The-Counter (OTC) products for fever reduction were noted. National indicators for influenza surveillance indicated continued geographical spread throughout the United States.

Information regarding all local surveillance indicators are detailed below:

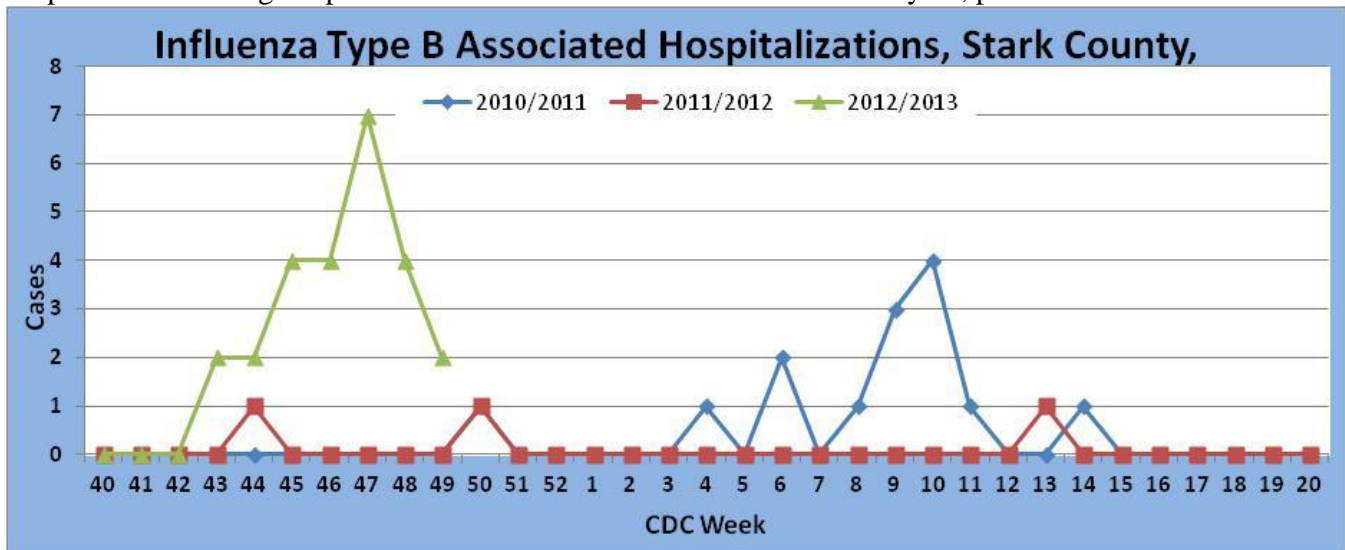
- Four Hospitalizations and six non-hospitalized cases of influenza were reported in Stark County residents during week CDC Week 48. Twenty-five hospitalizations and twelve non-hospitalized cases have been reported this season. (Graph 1)
- Demographics for the 25 influenza-associated hospitalized cases during the 2012-2013 season in Stark County are age range 1->90 years, median 64 years, predominantly male (72%) and 92% of cases with race information are reported as Caucasian.
- Among the thirty-seven cases of influenza identified in Stark County, twenty-five have been type B and twelve are type A. Graph 2 provides a historical picture of the number of influenza associated hospitalizations in Stark County. Note this has only been a reportable condition since 2009.
- Two of the influenza B viruses in Stark County 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 249 influenza viruses since Oct 1, 2012: 10 (4%) 2009 H1N1, 155(62%) influenza A (H3N2) viruses, and 84 (34%) influenza B viruses. Among the influenza B viruses 57 (67.9%) are from the Yamagata Lineage which is a part of this season's vaccine and 27 (32.1%) 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 48 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers, decreased slightly to 1.9%. Stark County Provider reports remained low at less than 0.5%. (Graph 3)
- Emergency Department (ED) visits for symptoms consistent with Constitutional and Respiratory (C & R) syndrome and for Influenza-Like-Illness (ILI) + Fever syndrome have increased for five consecutive weeks. C& R Syndrome now account for 35% of ED visits and ILI + Fever make up nearly 5%. (Graph 4)
- Over-The-Counter (OTC) sales of Cough and Cold Products and Thermometer sales were modest in week 48, however significant increases in sales of Thermometers were noted in week 49. (Graph 5) Not seen on the graph are additional increases in OTC products for fever reduction in both infant and adult categories.
- 42 Schools reported median daily absenteeism of 6.6%. This level exceeds all previous reports. Note: the number of schools reporting this season has been reduced, leading to an inability to compare direct values but rather for trend comparison only. (Graph 6)
- During week 48, the State of Ohio geographic level of influenza activity increased to Widespread activity. Nationally, Widespread geographic activity was reported by 8 states, Regional activity by 15 states, Local activity by 15 states and Sporadic activity by 12 states. (See Map)
- During CDC Week 48, 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 6.5%. This is below the P & I epidemic threshold, currently at 6.8%.
- Nationally, three influenza-associated pediatric deaths were reported to CDC during week 48. One of these deaths was associated with an influenza B virus and two were associated with influenza A viruses for which the subtype was not determined. One death occurred during the week ending November 24 (week 47) and two deaths 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 5. none from Ohio.

For questions, or to receive this report weekly by email, send requests to either [chenning@cantonhealth.org](mailto:chenning@cantonhealth.org) or [drinkardl@starkhealth.org](mailto: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.

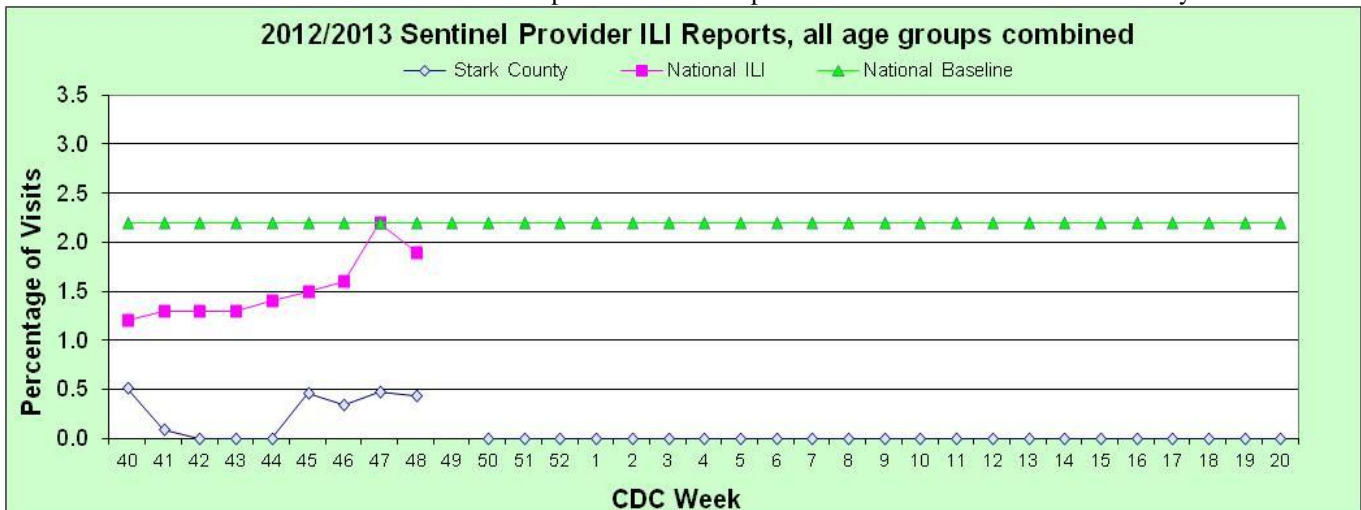


**Graph 2: Stark County Influenza Type B, by CDC Week.** The graph depicts the number of cases reported with hospitalization during the previous two influenza seasons and the current year, per CDC week.



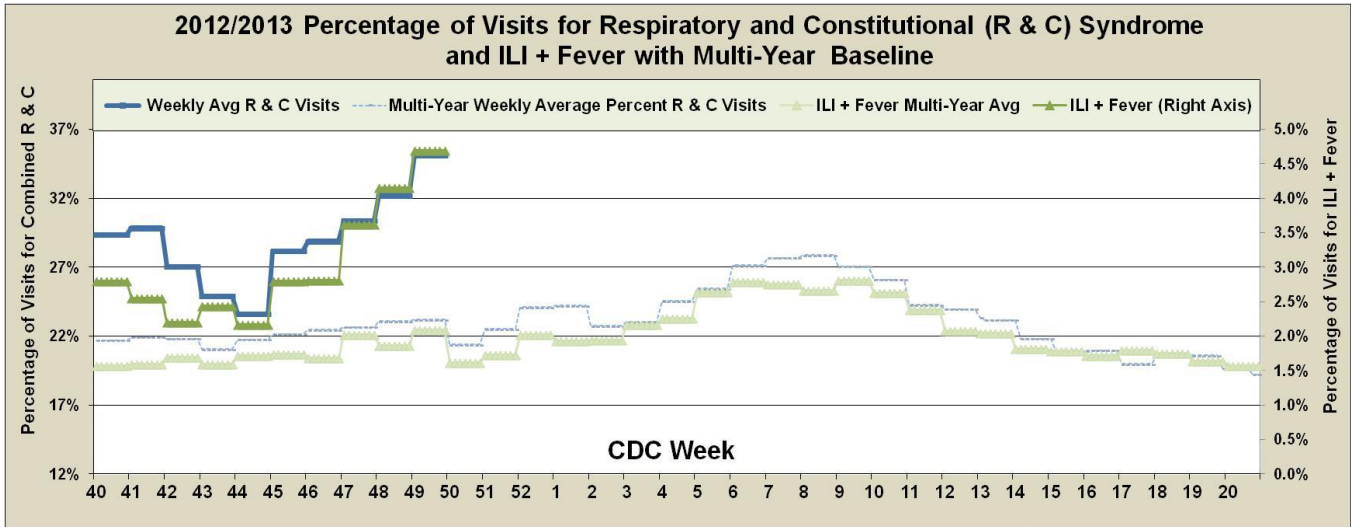
**Graph 3: Sentinel Provider Reported Influenza-Like-Illness in Stark County**

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.



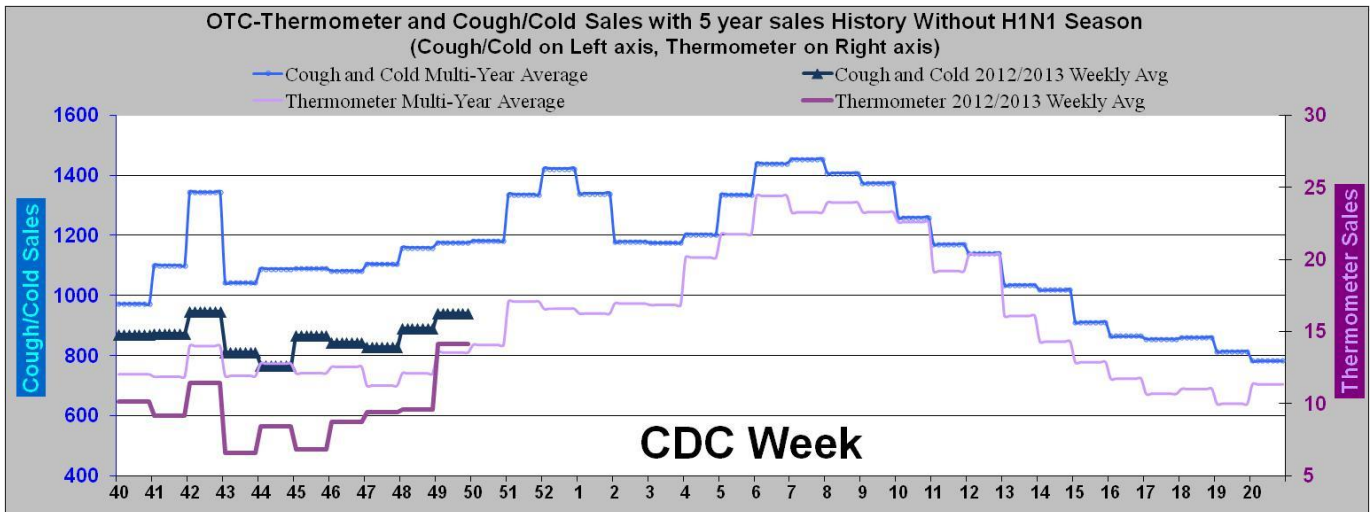
**Graph 4: Emergency Department Visits for combined Respiratory and Constitutional Syndromes**

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

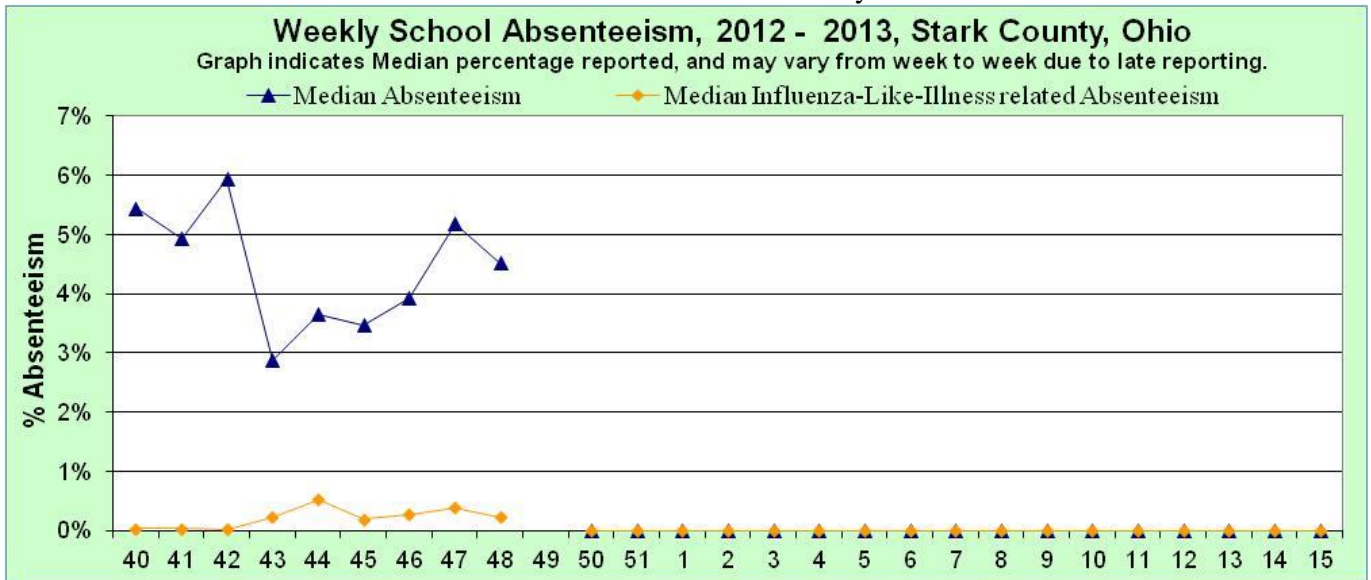


**Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County**

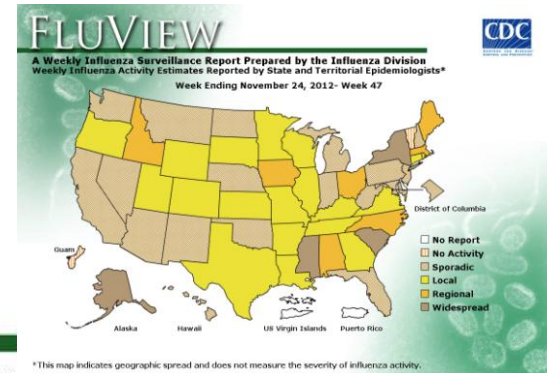
Source: RODS Real time Outbreak Disease Surveillance, Retail pharmaceutical sales.



**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.



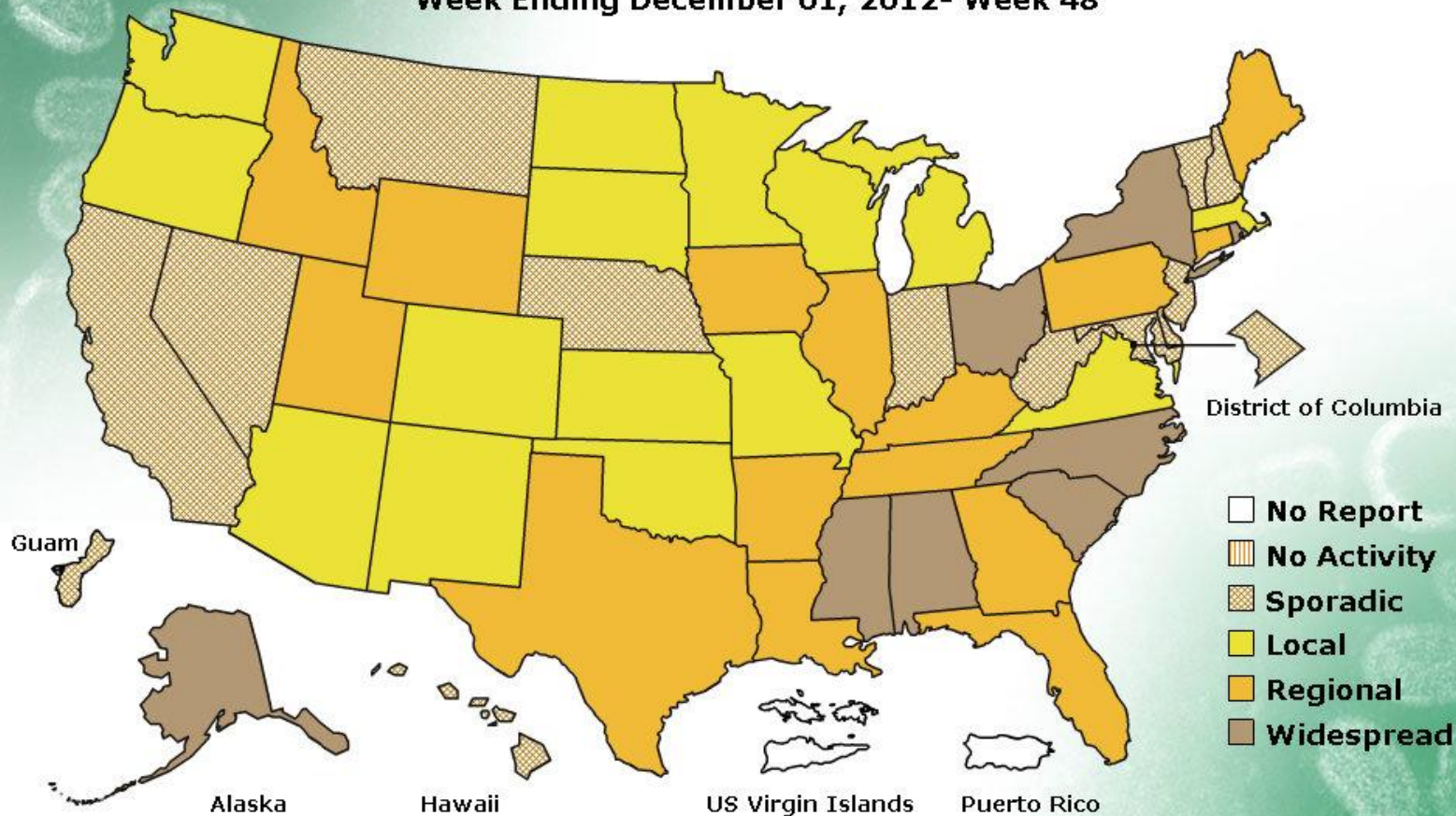
**Map: Weekly Geographic Influenza Activity Estimates Reported by State and Territorial Epidemiologists**  
**Epidemiologists**  
 (Inset is previous week)



# FLUVIEW

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

**Week Ending December 01, 2012- Week 48**



\*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.