



STARK COUNTY INFLUENZA SNAPSHOT, WEEK 46

Week ending November 17, 2012, with updates through 11/25/2012.

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

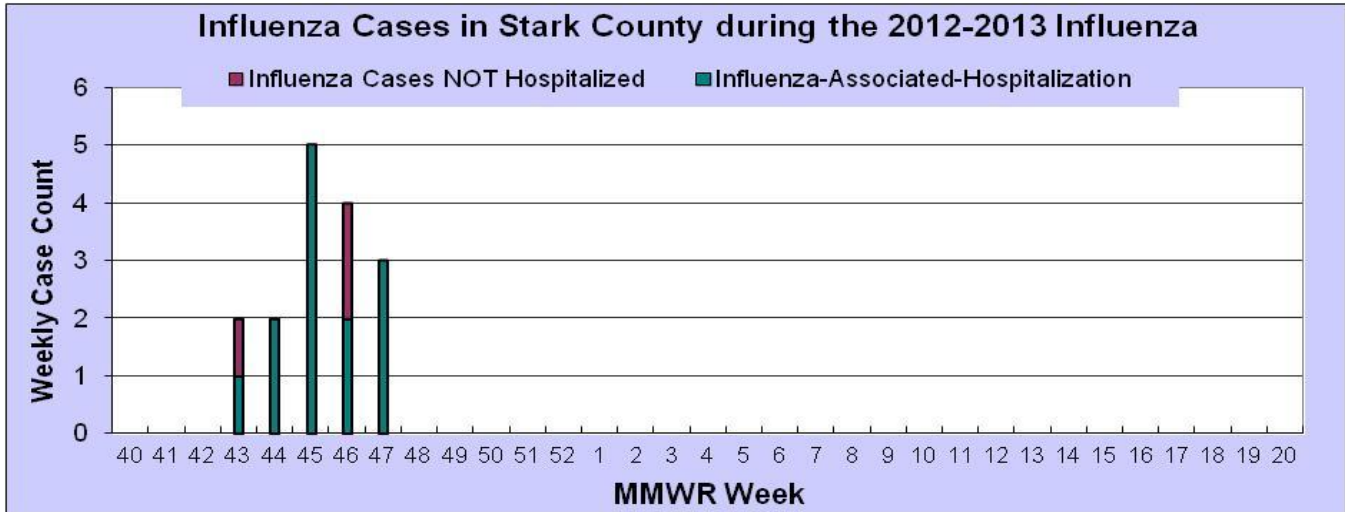
NOTE: Compilation of multiyear averages does not include the 2009/2010 H1N1 season.

During week 46, (Nov 11-17, 2012) the state of Ohio increased the geographical influenza activity level to Regional. Within Stark County, an unusual pattern of influenza B cases is present. Additionally, two of the influenza B specimens have been identified as B/Brisbane-like, which is not a component of the 2012/2013 Northern Hemisphere seasonal influenza vaccine. Information regarding all surveillance indicators are detailed below:

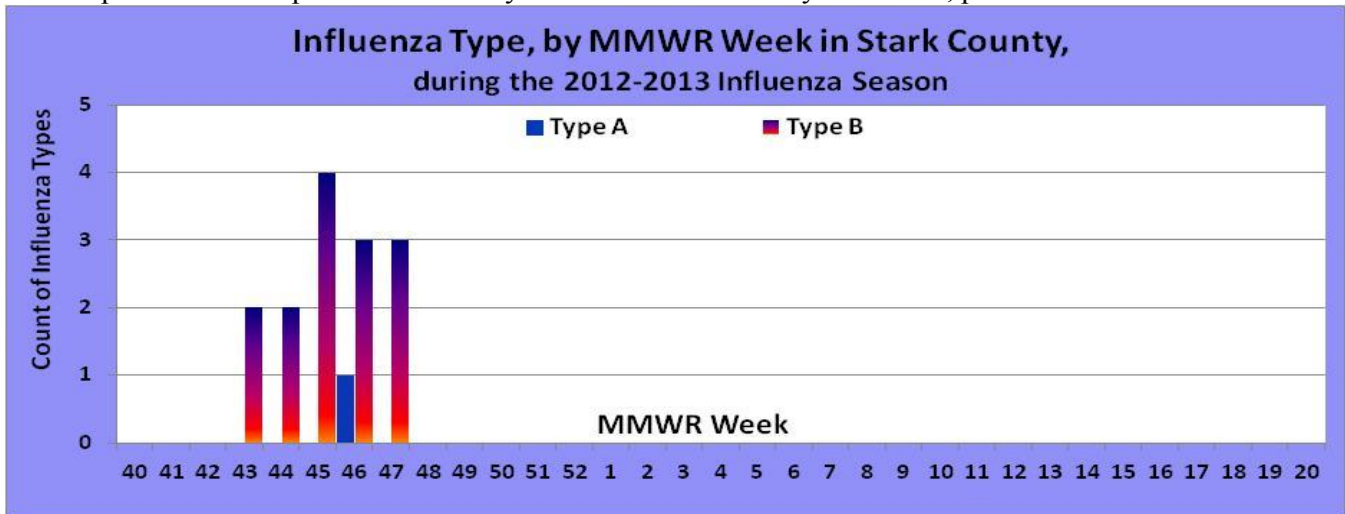
- Two Hospitalizations and two non-hospitalized cases of influenza were reported in Stark County residents during week CDC Week 46. Thirteen hospitalizations and three non-hospitalized cases have been reported this season. (Graph 1)
- Demographics for the 13 influenza-associated hospitalized cases during the 2012-2013 season in Stark County: age range 1–89 years, median 65 years and 92% of cases with race information are reported as Caucasian.
- Among the sixteen cases of influenza identified in Stark County, fourteen have been type B, one was type A with unknown characterization, and one is unknown. (See Graph 2) 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. In Stark County influenza B viruses are rarely identified in the fall and are typically observed in February and March. The CDC has antigenically characterized 91 influenza viruses since Oct 1, 2012: 2 (2%) 2009 H1N1, 41(45%) influenza A (H3N2) viruses, and 48 (53%) influenza B viruses. Among the influenza B viruses 34 (70.8%) are from the Yamagata Lineage which is a part of this season's vaccine and 14 (29.2%) 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 46 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers, remained constant at 1.6%. The National outpatient activity level continues below the epidemic baseline of 2.2%. Stark County Provider reports remained low at less than 0.5%. (Graph 3)
- Emergency Department (ED) visits specifically for symptoms consistent with Constitutional and Respiratory (C & R) Syndrome increased during CDC Week 46. An additional increase in CDC week 47 brings our current percentage of ED visits for symptoms consistent C & R syndromes to 30%. ED visits for Influenza-Like-Illness (ILI) + Fever syndromes remained steady in week 46 and increased in week 47. (Graph 4)
- Over-The-Counter (OTC) sales data is temporarily unavailable. (Graph 5)
- Due to the school holidays, school data is currently experiencing a slight delay in reporting. (Graph 6)
- During week 46, the State of Ohio increased the geographic level of influenza activity to Regional activity. Nationally, Widespread geographic activity was reported by 1 state, Regional activity by 6 states, Local activity by 8 states and Sporadic activity by 31 states, and no activity was reported in 3 states. (See Map)
- During CDC Week 46, 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 6.6%.
- Nationally, one influenza-associated pediatric death was reported to CDC during week 46 and was associated with an influenza virus A (H3). This brings the total number of influenza-associated pediatric deaths reported during the 2011-2012 season to two, none 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.

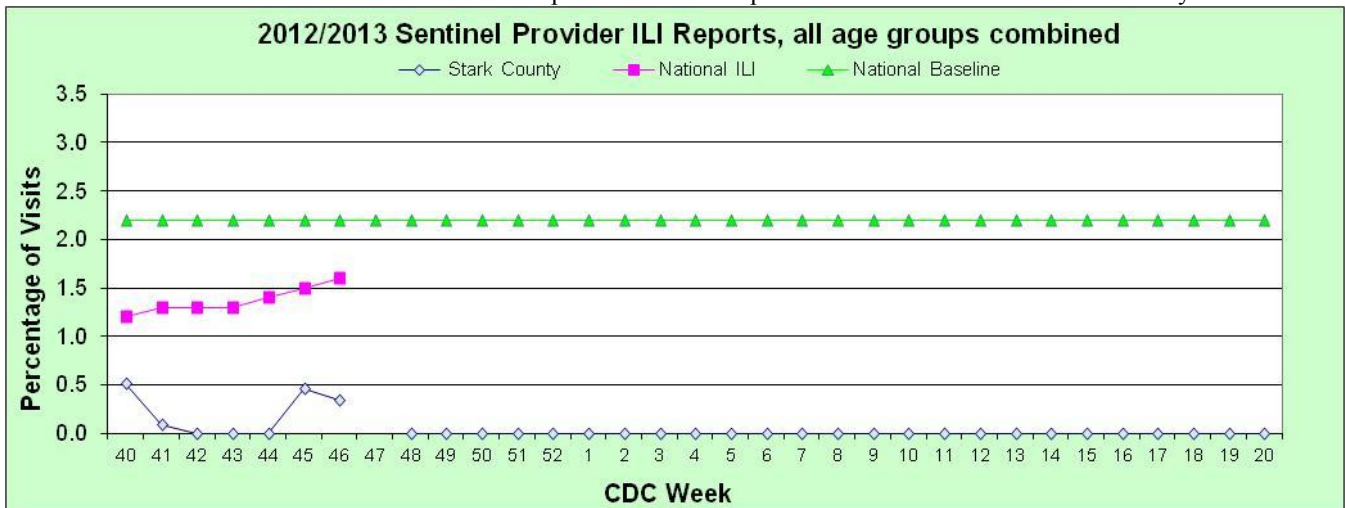


Graph 2: Stark County Influenza Type, by CDC Week in Stark County. The graph depicts the number of cases reported with hospitalization and by the medical community combined, per CDC week.



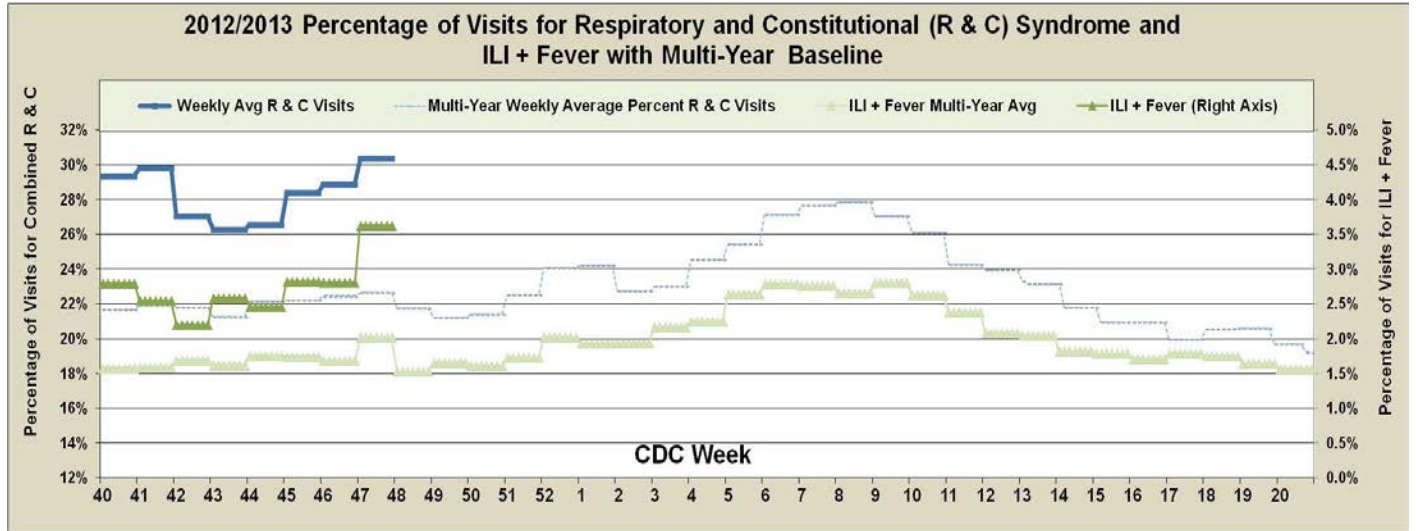
Graph 3: Sentinel Provider Reported Influenza-Like-Illness in Stark County

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)

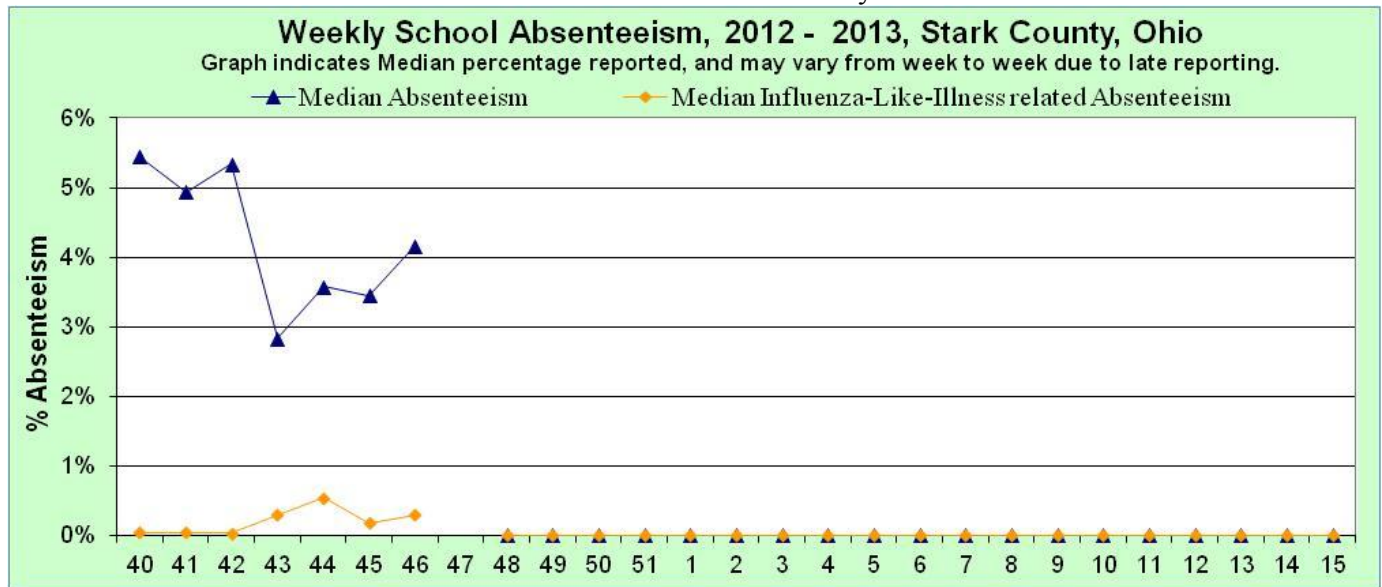


Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

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

Graph temporarily unavailable.

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.

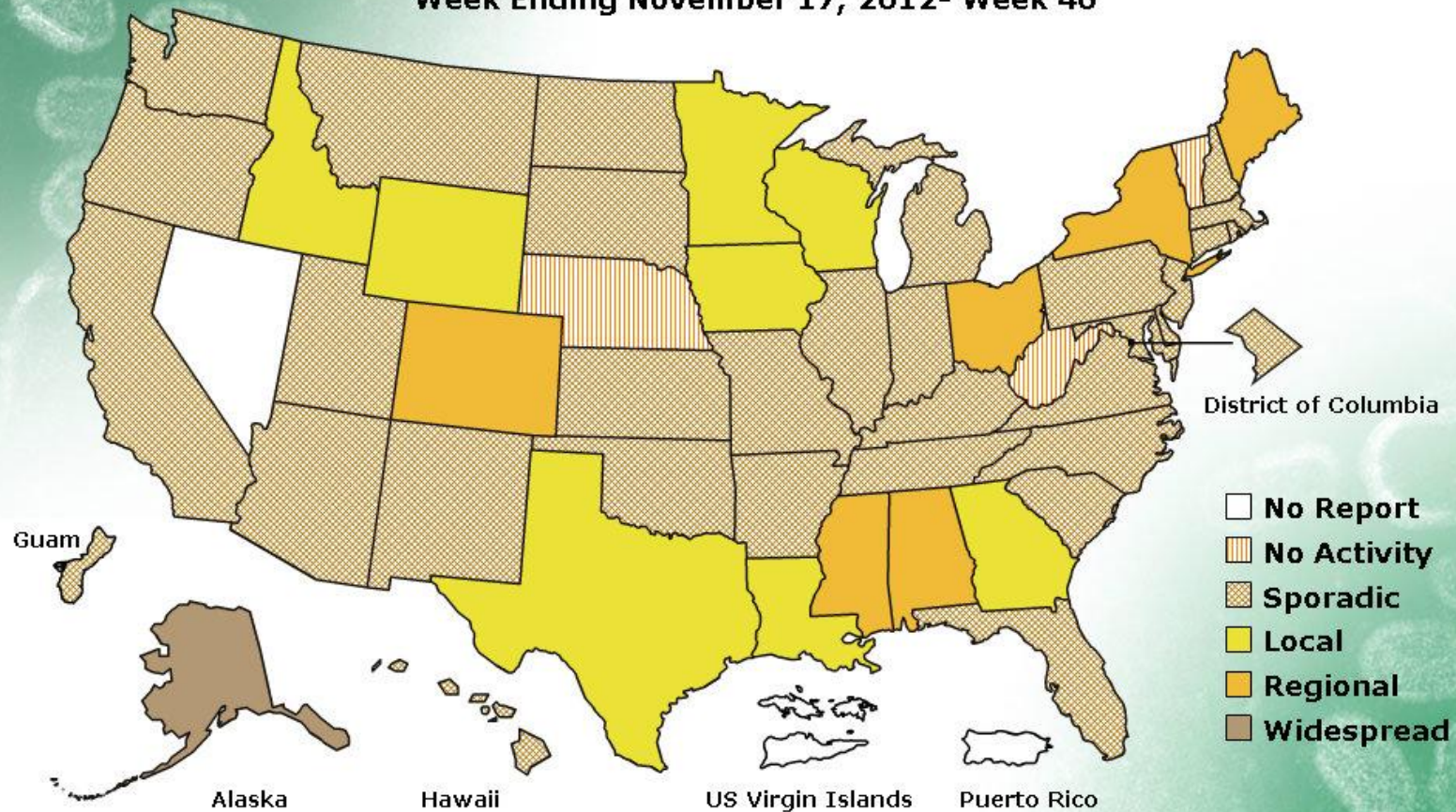




FLUVIEW

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

Week Ending November 17, 2012- Week 46



*This map indicates geographic spread and does not measure the severity of influenza activity.

(Inset is previous week)

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.