

STARK COUNTY INFLUENZA SNAPSHOT, WEEK 10

Week ending March 10, 2012, with updates through 03/19/2012.

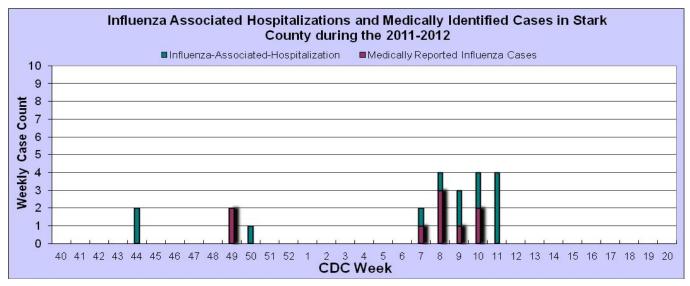
All data are preliminary and may change as additional information is received. NOTE: Compilation of multiyear averages does not include the 2009/2010 H1N1 season.

During CDC Week 10, (Mar 4-Mar 10, 2012) the State of Ohio increased the Geographic Spread Activity Level to Regional, although overall influenza is minimal when compared to previous seasons. Similarly, in Stark County influenza indicators are below expected baselines for this point in our season. The largest number of influenza-associated hospitalizations occurred in weeks 10 and 11 (six). Decreases were seen in Stark County in school absenteeism and sales of influenza related over-the-counter products.

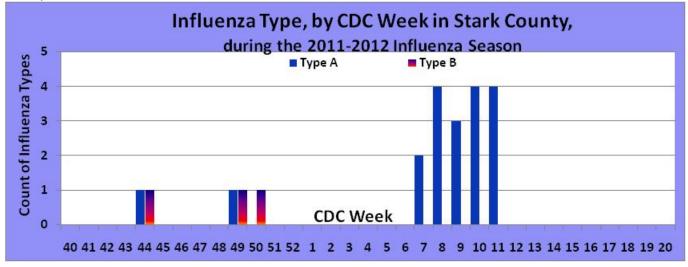
- Two Hospitalizations and two medically/laboratory reported cases of influenza were reported in Stark County residents during week CDC Week 10. Additionally, four hospitalization have been reported for Week 11. Thirteen hospitalizations and nine medically/laboratory cases have been reported this season. (Graph 1)
- Demographics for the 13 influenza-associated hospitalized cases during the 2011-2012 season in Stark County: the age range is 0.08–87 years with a **median of 70 years.** Twelve of thirteen cases were reported with race information of these 10 (83%) were Caucasian and 2 (17%) were African American/Black.
- Among the 22 cases of influenza identified in Stark County, three have been type B, one was Type A (H3), two are Type A (H1) and sixteen were Type A with unknown characterization. (See Graph 2) The CDC has antigenically characterized 626 influenza viruses since Oct 1, 2011: 127 (20.2%) 2009 H1N1, 410 (65.5%) influenza A (H3N2) viruses, and 89 (14.2%) influenza B virus (40 Victoria Lineage which is a part of this season's vaccine and 49 of the Yamagata Lineage which is the recommended influenza B component of the 2012-2013 vaccine.).
- Week 10 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers, **decreased** slightly to 2.2%. The National outpatient activity level continues below the epidemic baseline of 2.4%. Stark County Providers report steady activity. (Graph 3)
- Emergency Department visits specifically for symptoms consistent with Constitutional and Respiratory (C & R) Syndrome appears to be on a decreasing trend. In Week 10, 32% of visits were due to C & R, followed by Week 11 visits that fell to 30%. In contrast, Emergency Department visits for Influenza-Like-Illness (ILI) + Fever syndrome **increased** to a level last seen during the last week of 2011. (Graph 4)
- Over-The-Counter (OTC) sales of both cough and cold products and thermometers experienced mixed sales volumes during week 10. In contrast, sales of both OTC products revealed **decreasing** sales during the most recent week of observation. (Graph 5)
- 63 Schools reported a **decrease** in school absenteeism during CDC Week 10. Currently, the total median absenteeism is 3.9%, down from 4.2% in Week 9. (Graph 6)
- During week 10, the State of Ohio geographic spread activity level of influenza **increased** to 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 15 states, Regional activity by a total of 22 states, Local activity by 3 states and Sporadic activity by 10 states. (See Map)
- During CDC Week 10, 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 7.3%. This is below the P & I epidemic threshold, currently at 7.9%.
- Nationally, No influenza-associated pediatric deaths were reported to CDC during week 10. Five influenza-associated pediatric deaths have been reported during the 2011-2012 season. No influenza-associated pediatric deaths have been reported in the state of Ohio during the 2011-2012 season.

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.

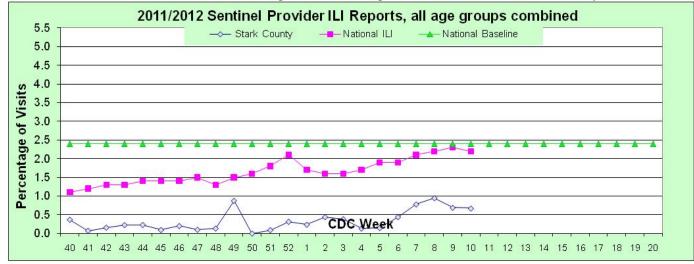


Graph 2: Stark County Influenza Type, by CDC Week in Stark County. The graph depicts the number of cases reported with hospitalization and by the medical community combined, per CDC week. All cases are Stark County residents.



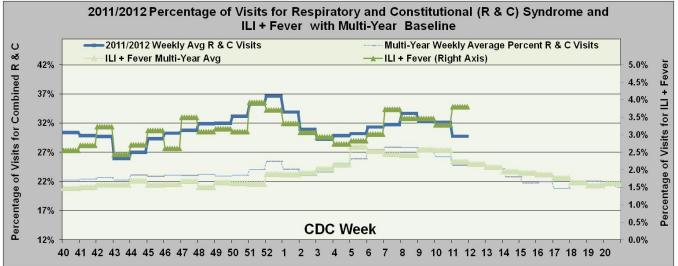
Graph 3: Sentinel Provider Reported Influenza-Like-Illness in Stark County

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.



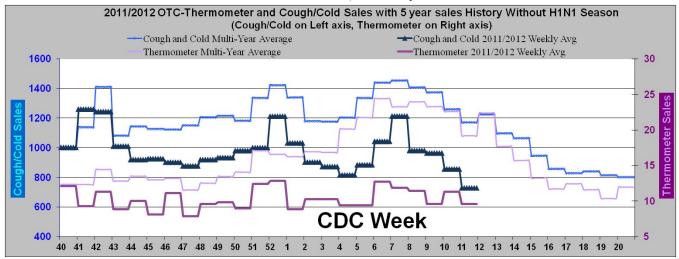
Graph 4: Emergency Department Visits for combined Respiratory and Constitutional Syndromes

(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)

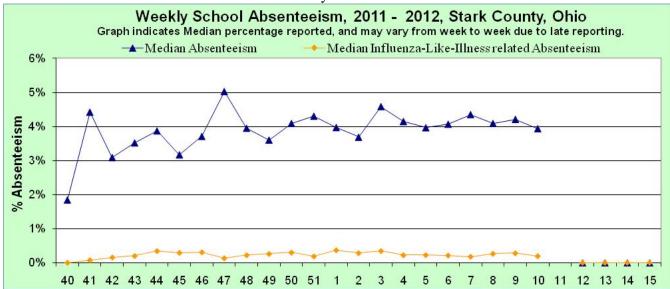


Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

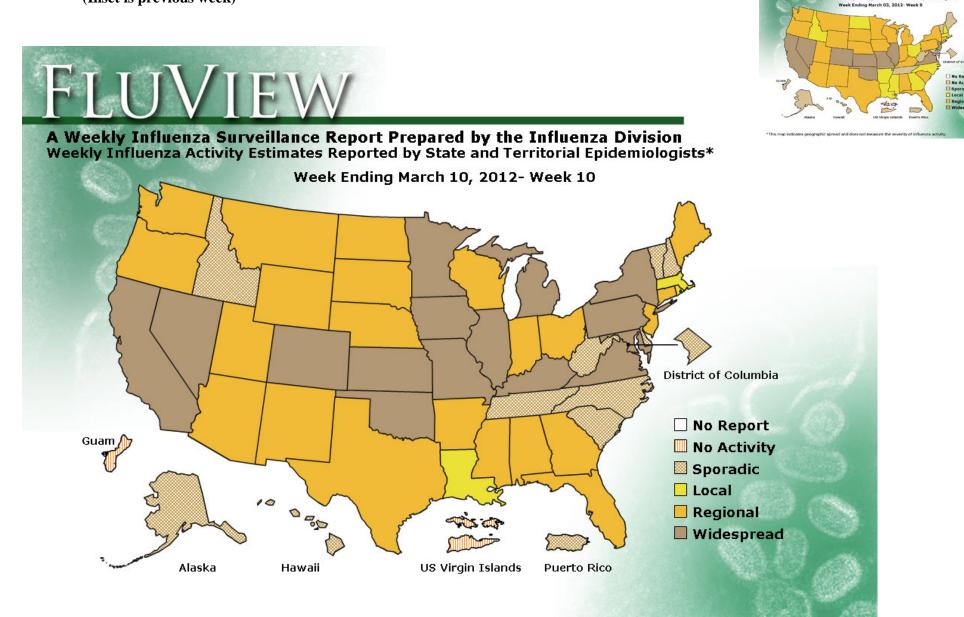




Graph 6: School Absenteeism. School systems from throughout Stark County report total absenteeism and absenteeism due to influenza-like-illness on a weekly basis.



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



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*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: <u>https://www.rods.pitt.edu/rods3/</u>.
- 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: <u>http://www.odh.ohio.gov/features/odhfeatures/seasflu/ohfluactivity.aspx</u> 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: <u>https://odhgateway.odh.ohio.gov/singlesignon/</u>.
- 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.