



STARK COUNTY INFLUENZA SNAPSHOT, WEEK 08

Week ending February 25, 2012, with updates through 03/4/2012.

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

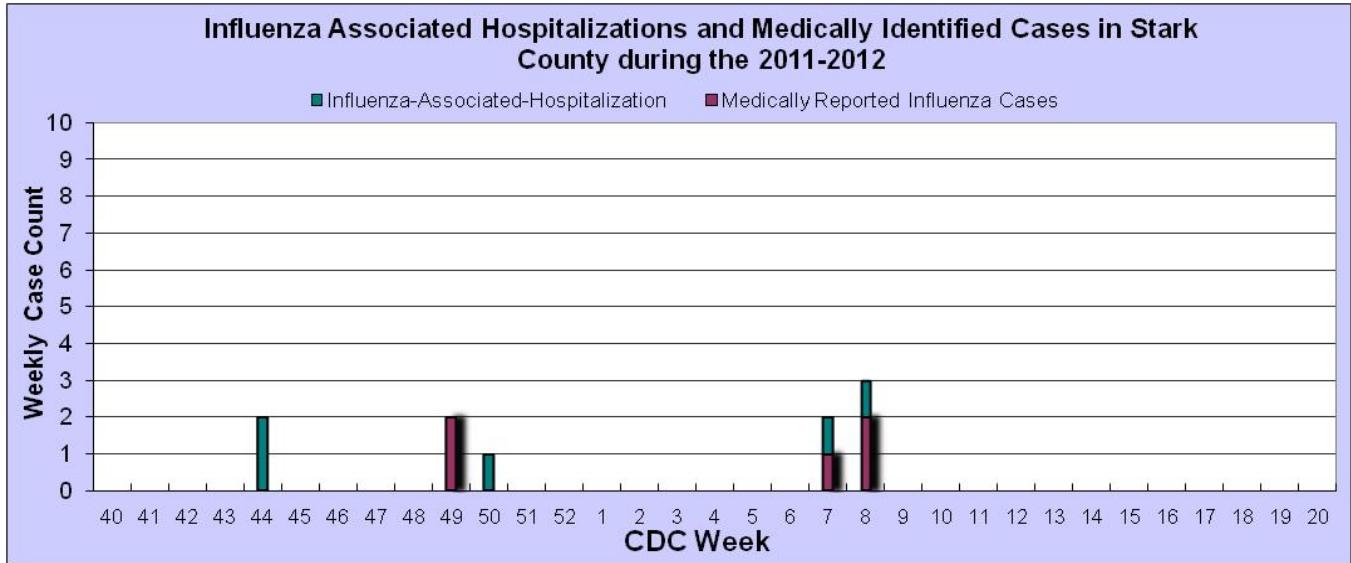
NOTE: Compilation of multiyear averages do not include the 2009/2010 H1N1 season.

During week 08, (Feb 19-25, 2012) the state of Ohio increased the influenza activity to Local. Within Stark County, an increase in hospitalizations was observed, while other indicators of influenza were mixed.

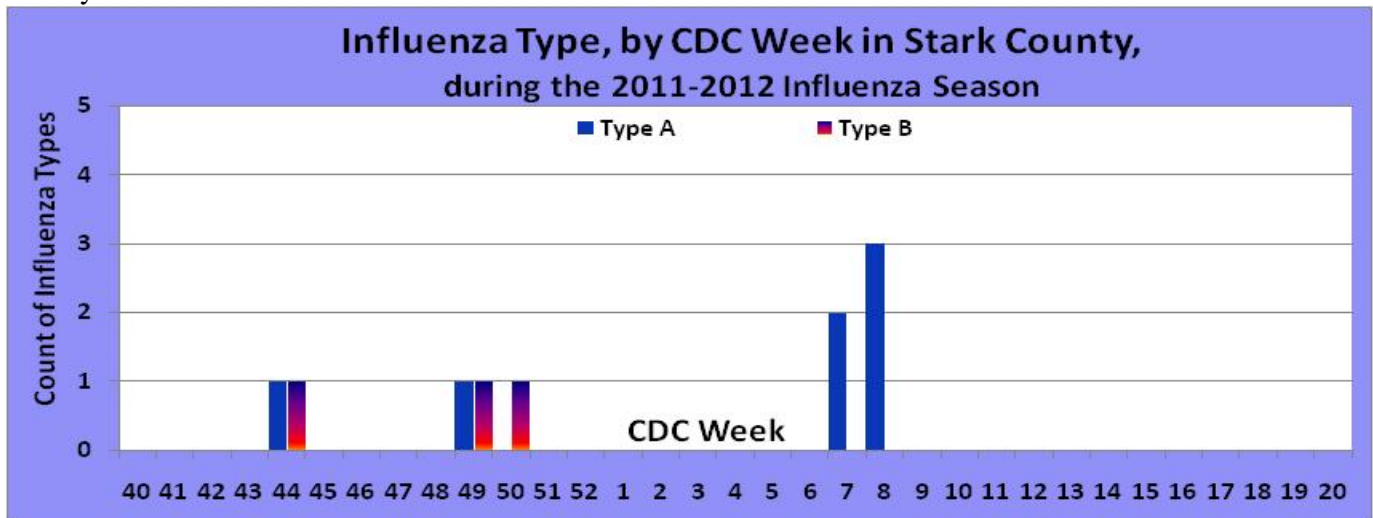
- Two Hospitalizations and one medically/laboratory reported cases of influenza were reported in Stark County residents during week CDC Week 08. Five hospitalizations and five medically/laboratory cases have been reported this season. (Graph 1)
- Demographics for the 5 influenza-associated hospitalized cases during the 2011-2012 season in Stark County: the age range is 29–87 years with a **median of 62 years**, and 100% of cases with race information are reported as Caucasian.
- Among the ten cases of influenza identified in Stark County, three have been type B, one was Type A (H3) and one was Type A (H1) and three were Type A with unknown characterization. (See Graph 2) The CDC has antigenically characterized 572 influenza viruses since Oct 1, 2011: 87 (15%) 2009 H1N1, 407(71%) influenza A (H3N2) viruses, and 78 (14%) influenza B viruses (36 Victoria Lineage which is a part of this season's vaccine and 42 of the Yamagata Lineage).
- Week 08 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers, remained **constant** at 1.9%. The National outpatient activity level continues below the epidemic baseline of 2.4%. Stark County Providers reports **decreased** to 0 patients with ILI. (Graph 3)
- Emergency Department visits specifically for symptoms consistent with Constitutional and Respiratory (C & R) Syndrome **increased** slightly during CDC Week 8. C & R syndrome has since decreased to 32%. Emergency Department visits for Influenza-Like-Illness (ILI) + Fever syndromes **decreased** slightly during CDC Weeks 8 and 9. (Graph 4)
- Over-The-Counter (OTC) sales of both cough and cold products and thermometers **decreased** during CDC Week 8. Both types of OTC products continued to decrease into Week 9. (Graph 5)
- 57 Schools reported a slight **decrease** in school absenteeism during CDC Week 8. Currently, the total median absenteeism is 4.1%. (Graph 6)
- During week 8, the State of Ohio increased the geographic level of influenza activity to Local activity. The definition for Local activity can be found at <http://www.odh.ohio.gov/ASSETS/6E21881CCC0D4D7292DBA0B1EFD3B7E1/Week%208%20flu%20summary.pdf>). Additionally, Widespread activity was reported by 6 states, Regional activity by 18 states Local activity by 13 states and Sporadic activity by 12 states. (See Map)
- During CDC Week 08, 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 7.3%. This is below the P & I epidemic threshold, currently at 7.9%.
- Nationally, one influenza-associated pediatric death was reported to CDC during week 8 and was associated with an influenza virus for which the type was not determined. The death reported during week 8 occurred during the week ending February 4, 2012 (week 5). This brings the total number of influenza-associated pediatric deaths reported during the 2011-2012 season to four.
- **Composition of the 2012-2013 Influenza Vaccine:**

The World Health Organization (WHO) has recommended vaccine viruses for the 2012-2013 Northern Hemisphere trivalent influenza vaccine, and FDA's Vaccines and Related Biological Products Advisory Committee (VRBPAC) has made recommendations for the composition of the 2012-2013 U.S. influenza vaccine. Both agencies recommend that the vaccine contain A/California/7/2009-like (2009 H1N1), A/Victoria/361/2011-like (H3N2), and B/Wisconsin/1/2010-like (B/Yamagata lineage) viruses. This recommendation changes the influenza A (H3N2) and influenza B components from the 2011-2012 Northern Hemisphere vaccine formulation. This recommendation was based on surveillance data related to epidemiology and antigenic characteristics, serological responses to 2011-2012 trivalent seasonal vaccines, and the availability of candidate strains and reagents.

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.

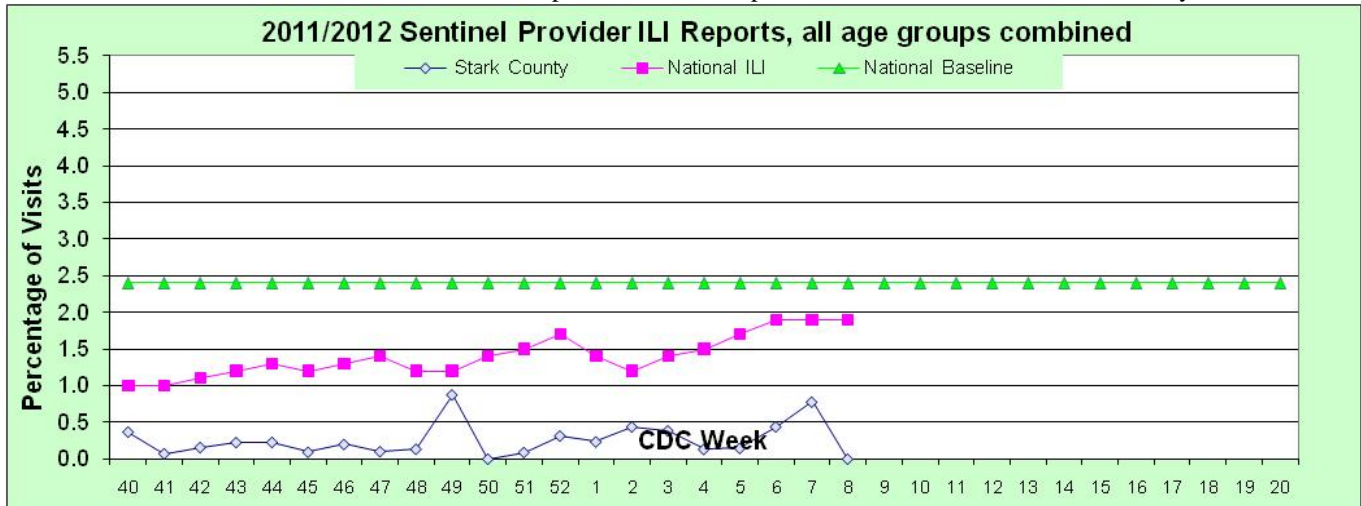


Graph 2: Stark County Influenza Type, by CDC Week in Stark County. The graph depicts the number of cases reported with hospitalization and by the medical community combined, per CDC week. All cases are Stark County residents.



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

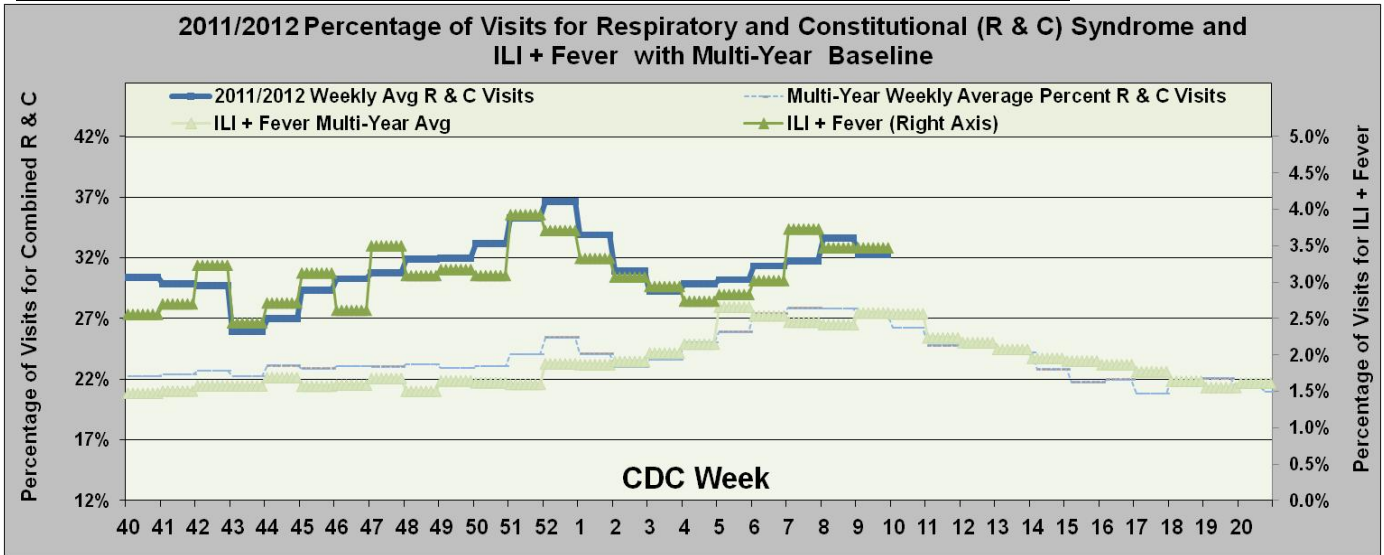
Sentinel Providers-An influenza sentinel provider conducts surveillance for influenza-like illness (ILI) in collaboration with the state health department and the Centers for Disease Control and Prevention (CDC). Data reported by Stark Counties 4 providers are combined with other influenza surveillance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



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

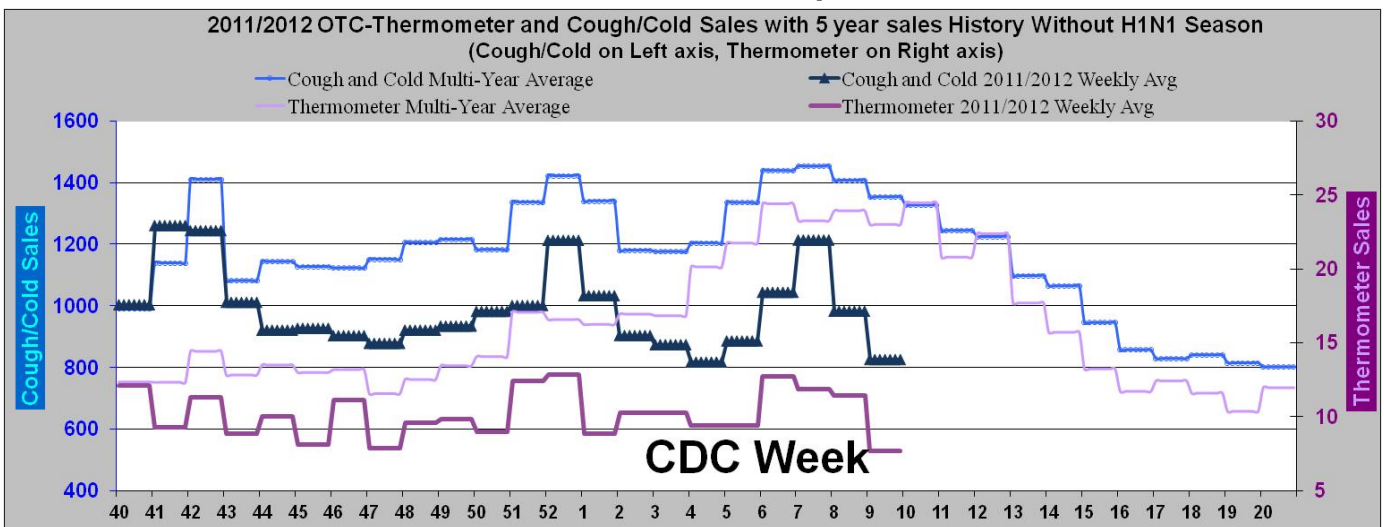
(Source Health Monitoring Systems, EpiCenter, hospital and stat care patient registration surveillance system)

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

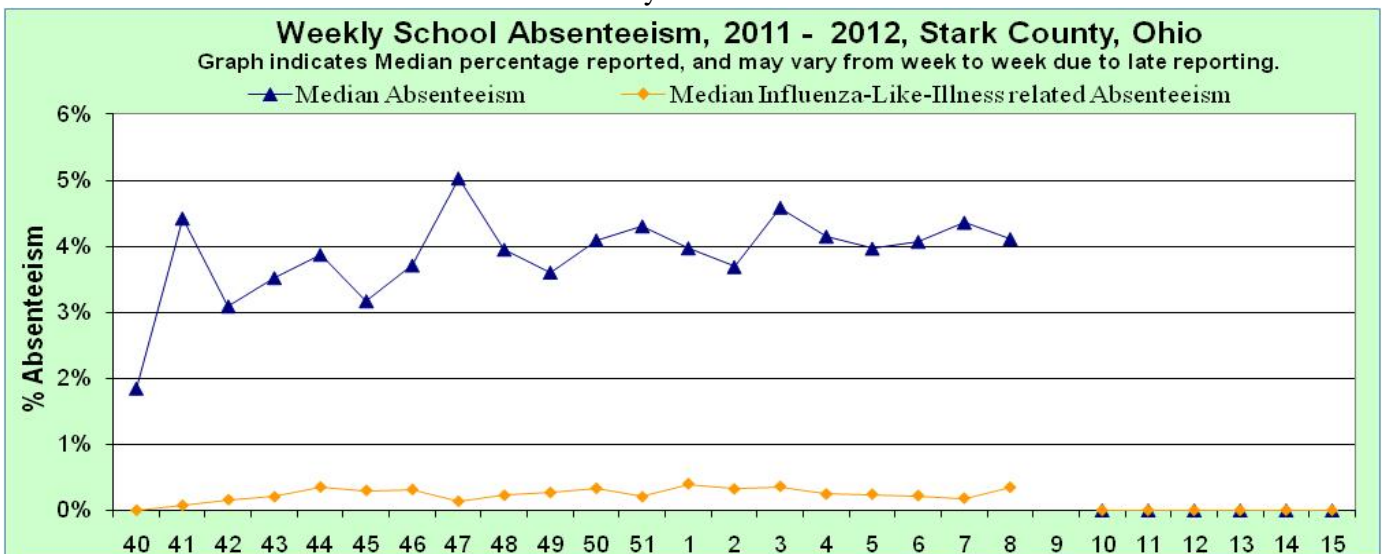


Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

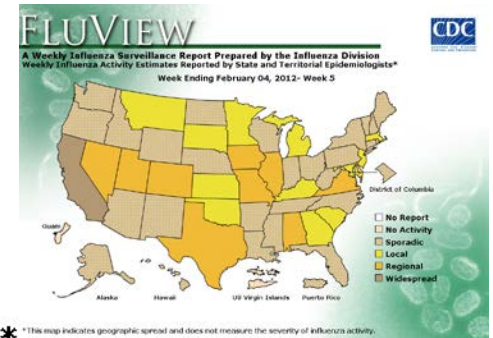
Source: RODS Real time Outbreak Disease Surveillance, Retail pharmaceutical sales.



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



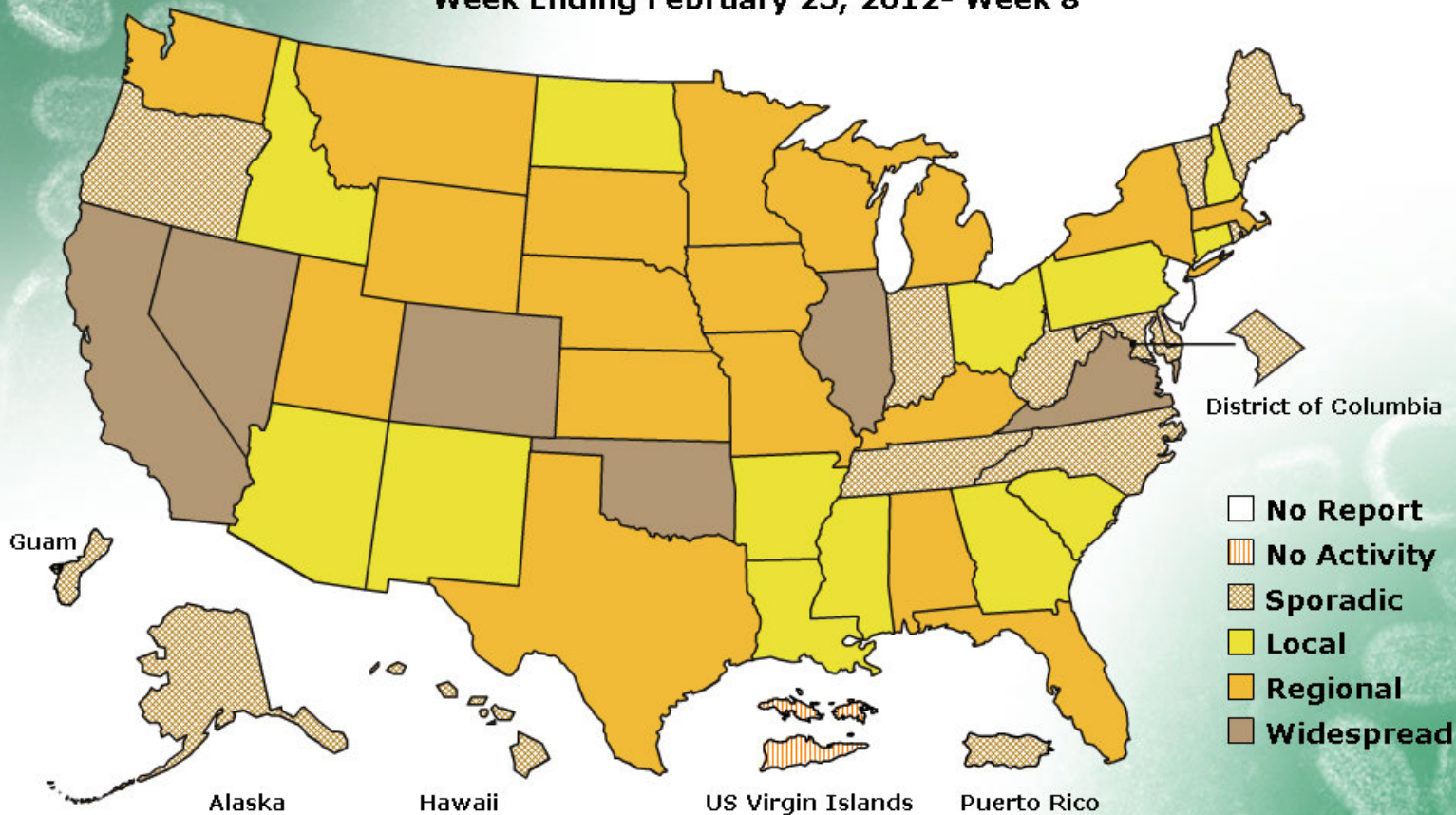
Map: Weekly Geographic Influenza Activity Estimates Reported by State and Territorial Epidemiologists
(Inset is previous week)



FLUVIEW

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

Week Ending February 25, 2012- Week 8



*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.