



STARK COUNTY INFLUENZA SNAPSHOT, WEEK 03

Week ending January 21, 2012, with updates through 01/29/2012.

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

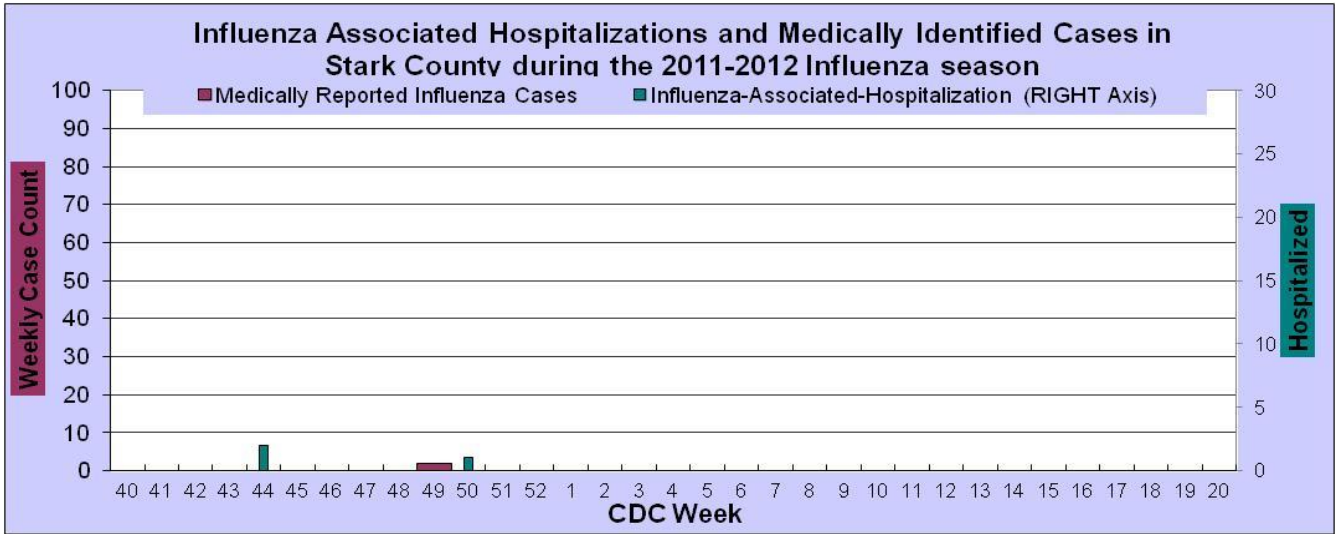
NOTE: Compilation of multiyear averages do not include the 2009/2010 H1N1 season.

During week 03, (Jan 15-21, 2012) overall indicators of influenza activity remained steady in Stark County. Nationally, the first pediatric death during the 2011-2012 season was reported. The death was from very early in the season and was from Type B influenza. Additionally at the National level, this is the first week this season that Pneumonia and Influenza (P & I) Mortality Surveillance has exceeded epidemic thresholds.

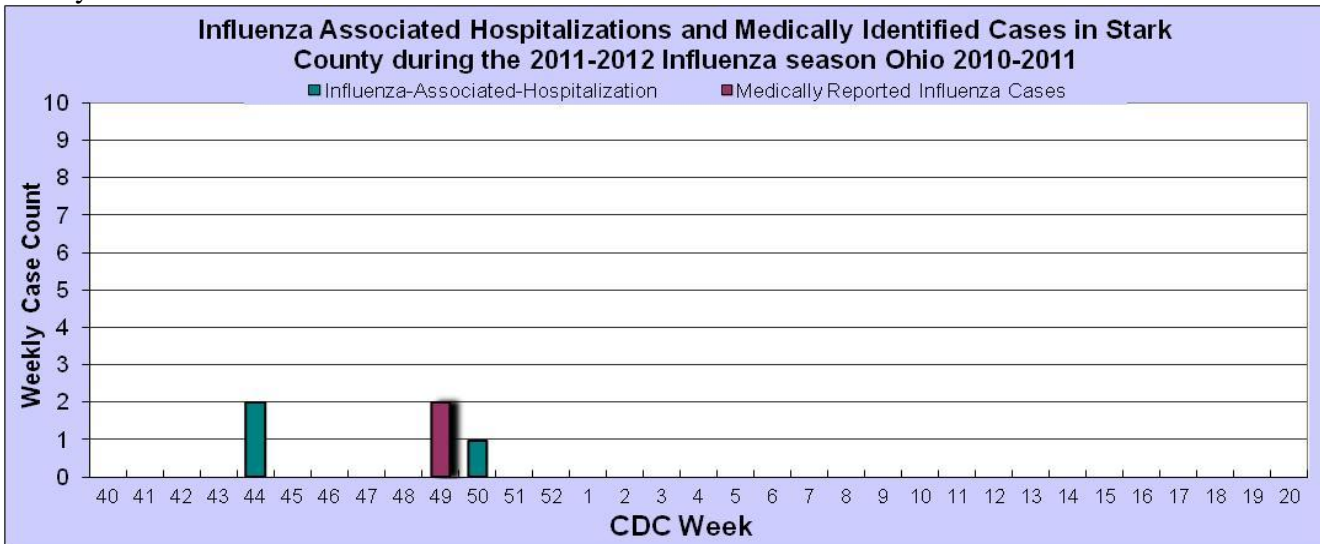
- No Hospitalizations or medically/laboratory reported cases of influenza were reported in Stark County residents during week CDC Week 03. Three hospitalizations have been reported this season. (Graph 1)
- Demographics for the 3 influenza-associated hospitalized cases during the 2011-2012 season in Stark County: the age range is 62 – 87 years with a **median of 80 years**. All cases reported this season reported their race as Caucasian.
- Those that sought medical treatment and did not require hospitalization were primarily young, and those requiring hospitalization were primarily the aged in our community.
- Among the five cases of influenza identified in Stark County, three have been type B, one was Type A (H3) and one was Type A with unknown characterization. (See Graph 2) The CDC has antigenically characterized 217 influenza viruses since Oct 1, 2011: 29 (13%) 2009 H1N1, 160 (74%) influenza A (H3N2) viruses, and 28 (13%) influenza B viruses (14 Victoria Lineage which is a part of this season's vaccine and 14 of the Yamagata Lineage). The CDC reports that it is too early to determine how well the seasonal vaccine and circulating strains will match.
- Week 03 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers, **increased** slightly to 1.4%. The National outpatient activity level remains below the epidemic baseline of 2.4%. Stark County Sentinel Providers reported an **increase** to 1% of patients with ILI. (Graph 3)
- Emergency Department visits specifically for symptoms consistent with Constitutional and Respiratory (C & R) syndrome **decreased** slightly during CDC week 3. However during week 4 they rebounded to a current total of 30% of all patient visits stemming from C & R syndromes. ED visits for ILI + Fever **decreased** for the 4th consecutive week, currently at 2.74%. (Graph 4)
- Over-The-Counter (OTC) sales of cough and cold products and thermometers remained steady. Both of these OTC products remain below baseline levels and continue to follow seasonally expected trends. (Graph 5)
- 29 Schools reported an increase in school absenteeism during the third week of school in 2012. School absenteeism **increased** to a median of 5.2%. Note, this increase is likely an artifact of the types of schools with data available at the time this report was generated. (Graph 6)
- During week 3, the State of Ohio and 34 other states reported “**Sporadic**” influenza activity. (Sporadic activity is defined as small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI). Four states, Colorado, Kentucky, Missouri, and Virginia reported Regional ILI activity, and eight states, California, Kansas, Massachusetts, Montana, New Hampshire, New Jersey and Texas reported Local influenza activity. No states reported Widespread geographical influenza activity. (See Map)
- During CDC Week 03, 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 7.8%. This is above the P & I epidemic threshold, now at 7.7%.
- Nationally, One influenza-associated pediatric death was reported to CDC during week 3 and was associated with an influenza B virus infection. The death reported during week 3 occurred during the week ending October 29, 2011 (week 43)

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.

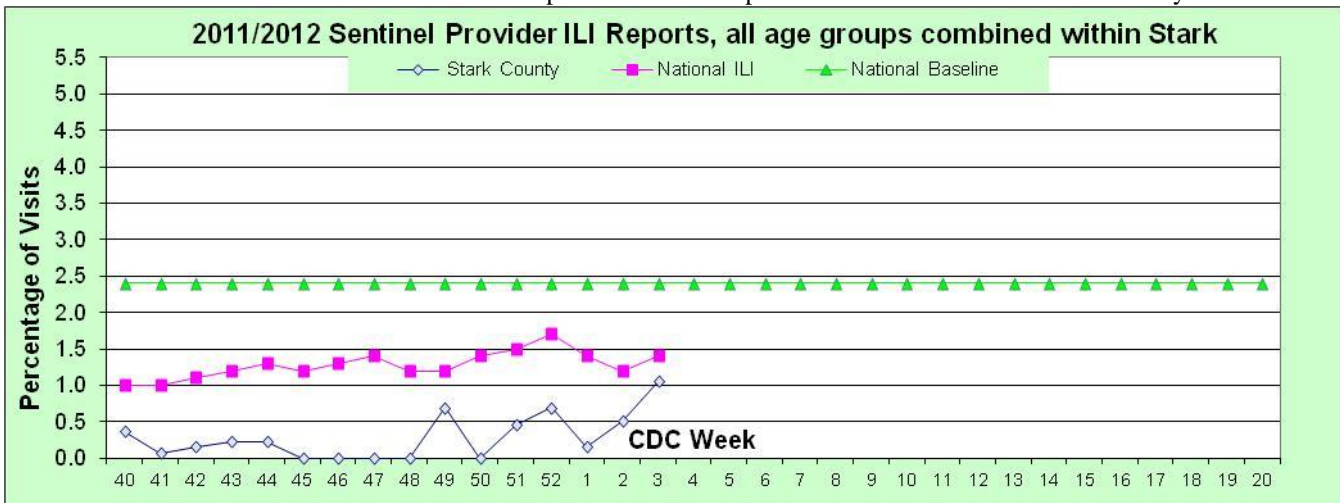


Graph 2: Stark County Influenza Type, by CDC Week in Stark County. The graph depicts the number of cases reported with hospitalization and by the medical community combined, per CDC week. All cases are Stark County residents.



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

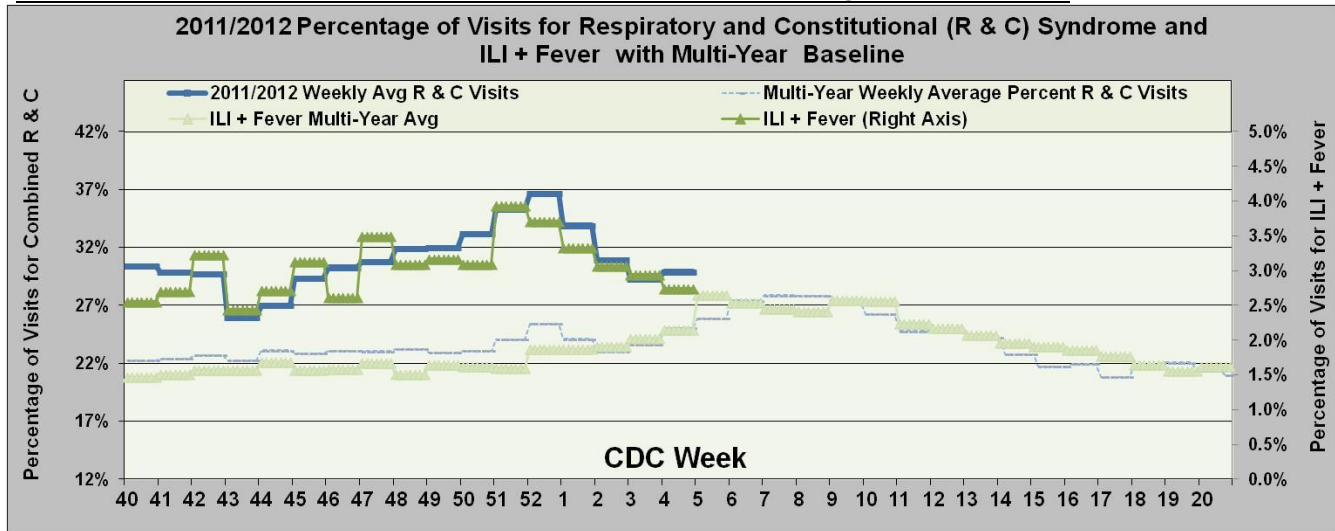
Sentinel Providers-An influenza sentinel provider conducts surveillance for influenza-like illness (ILI) in collaboration with the state health department and the Centers for Disease Control and Prevention (CDC). Data reported by Stark Counties 4 providers are combined with other influenza surveillance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



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

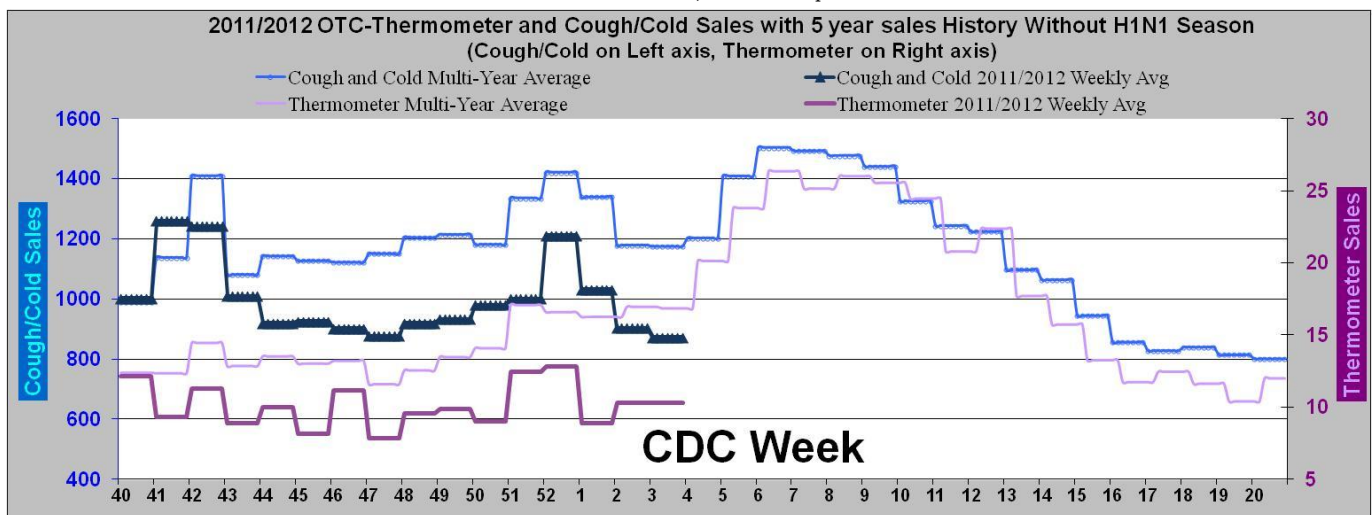
(Source Health Monitoring Systems, EpiCenter, hospital and stat care patient registration surveillance system)

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

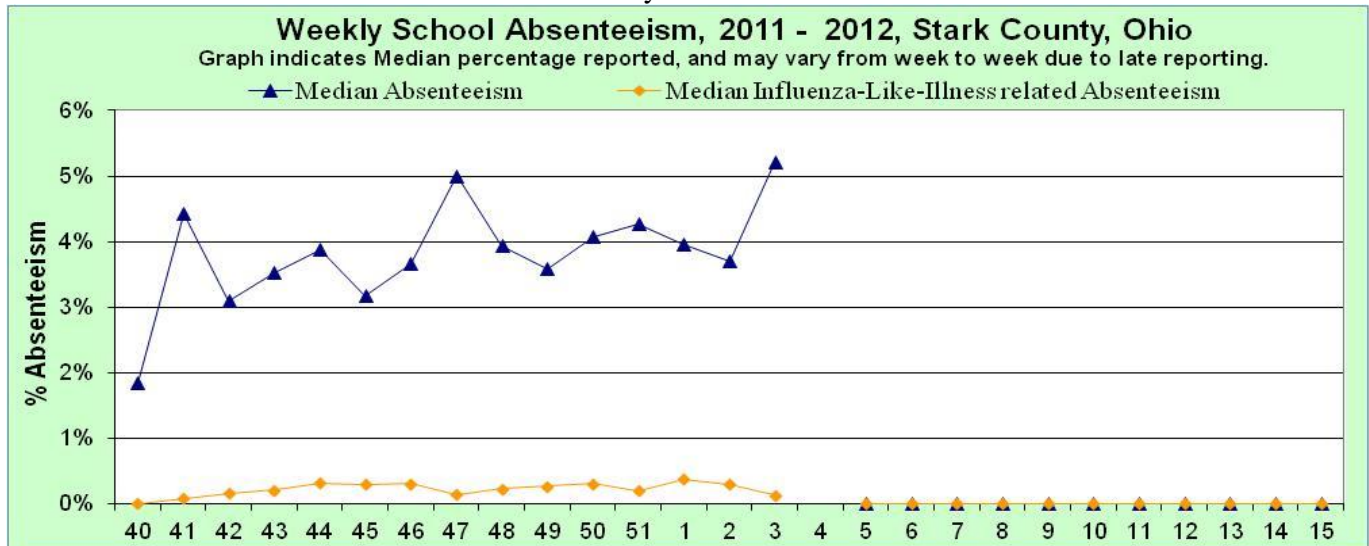


Graph 5: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

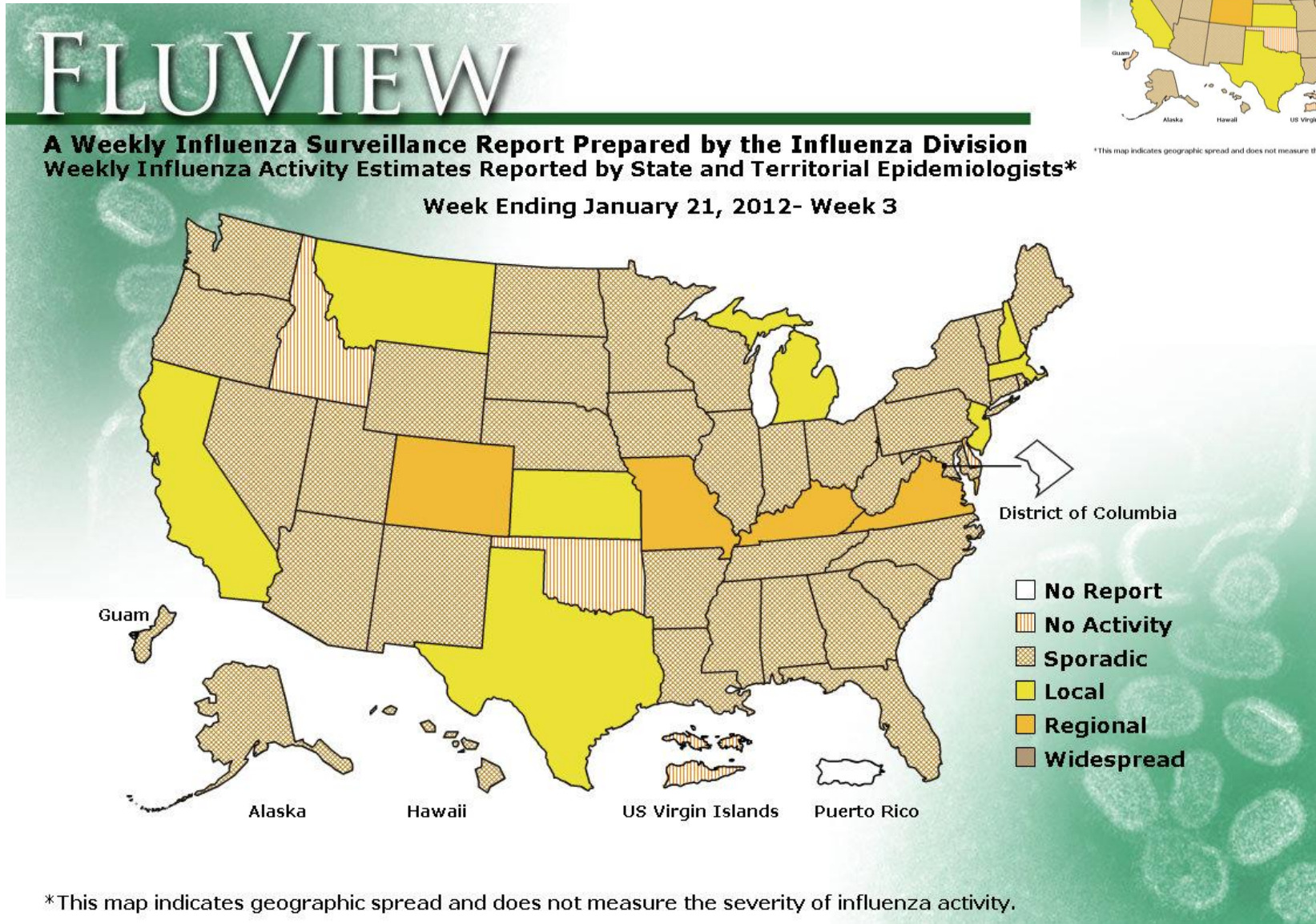
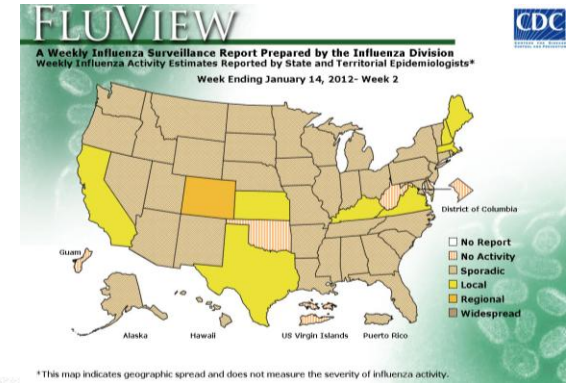
Source: RODS Real time Outbreak Disease Surveillance, Retail pharmaceutical sales.



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)



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.