



STARK COUNTY INFLUENZA SNAPSHOT, WEEK 15

Week ending April 16, 2011, with updates through 04/25/2011.

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

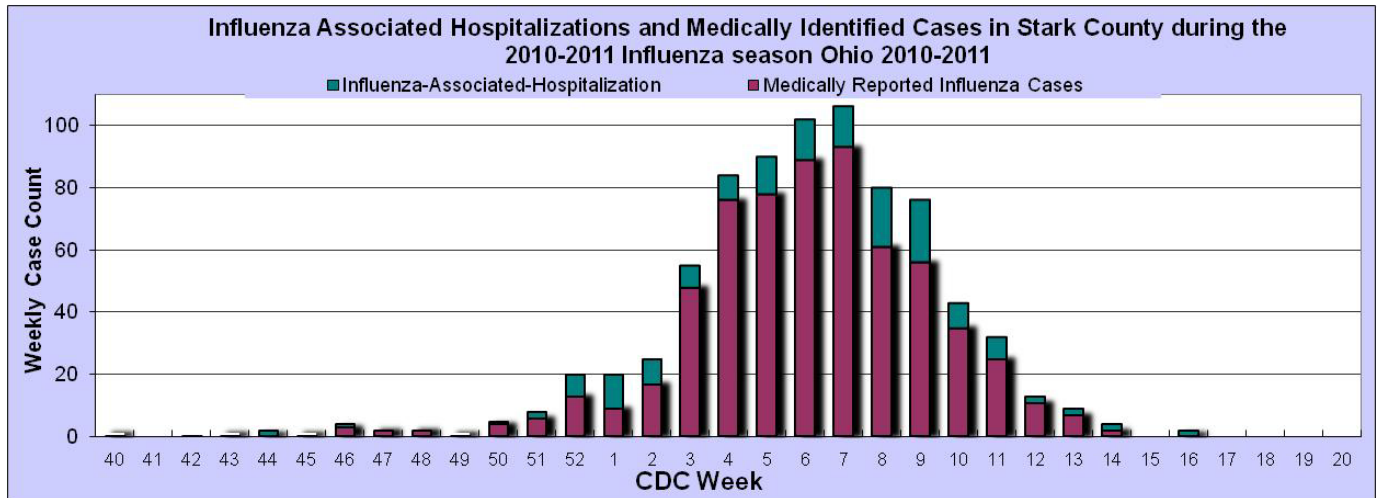
NOTE: Compilation of multiyear averages do not include the 2009/2010 H1N1 season.

During week 15, (April 10, 2011 – April 16, 2011) there was no laboratory confirmation of influenza activity in Stark County. The state of Ohio remained at Local activity and National indicators continued to decline.

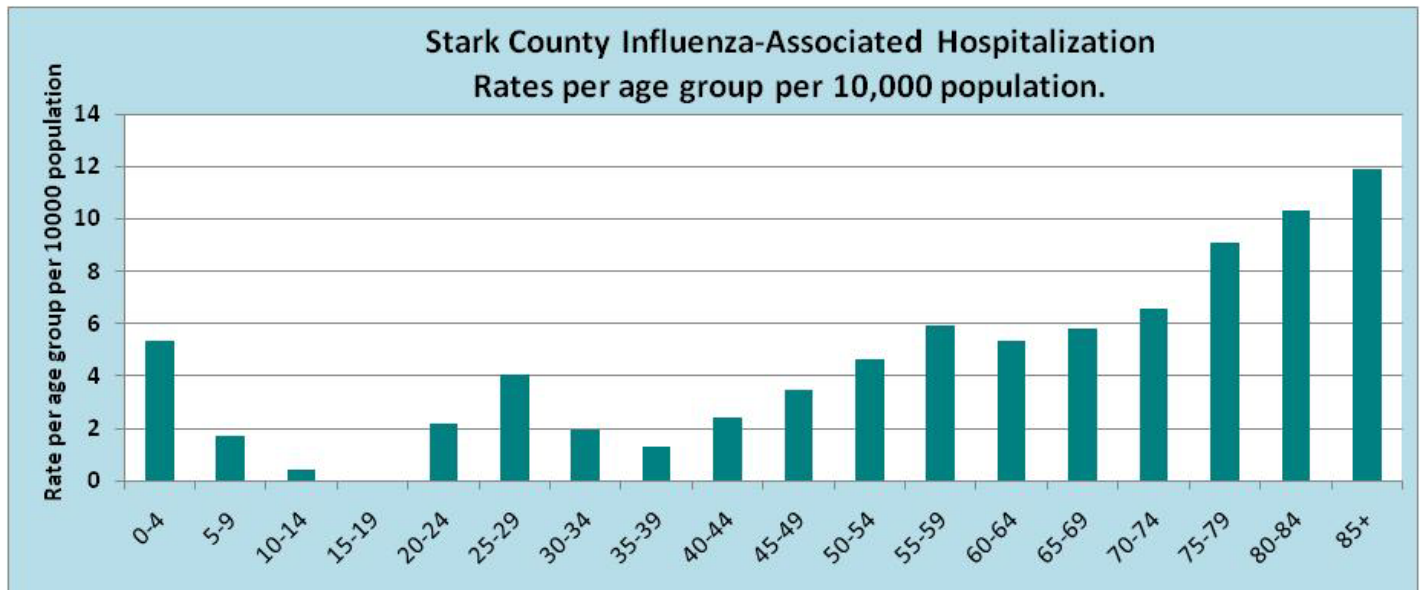
- No Hospitalizations or Medically/Laboratory reported cases (herein after referred to as lab reports) were reported in any Stark County residents during week 15. (Graph 1)
- Demographics for the 146 influenza-associated hospitalized cases during the 2010-2011 season in Stark County: the age range is less than 1 month to 90+ years with a **median of 55 years** and 8.57% self reported as African American.
- Demographics for 329 of the 645 lab reported influenza cases with demographics in Stark County: the age range is 1 month to 90+ years with a **median of 29.5 years** and 14.1% self- identified as African American.
- The population age rate for those seeking medical diagnosis and obtaining a lab result positive for influenza is nearly inverse of those requiring hospitalization. Those that sought medical treatment and did not require hospitalization were primarily young,(0-4, 20-24, & 30-34 years) and those requiring hospitalization were primarily the aged in our community, 75 and over. Age group rates for hospitalization ranged from a minimum of 0 in the 15-19 year olds to a maximum of 11.88 in those aged 85 and over. The rate for lab positive cases ranged from a low of 1.03 in 80-84 year olds to a high of 16.45 in 0-4 year olds. (All rates are per 10,000 population. See Graph 2 and 3)
- Week 15 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers, **declined** to 1.3%. The National outpatient activity level is well below the epidemic baseline of 2.5%.No local reports are available for week 15. (Graph 4)
- Visits specifically for symptoms consistent with Constitutional and Respiratory (C & R) syndrome and ILI + Fever continued their declining trends. Additionally, both syndromes are below expected levels for this time of year, further they are approaching non-flu season levels. (Graph 5)
- Over-The-Counter (OTC) cough and cold product and Thermometer sales **decreased**, and remain well below baseline levels. (Graph 6)
- With 39 schools reporting, school absenteeism **increased** slightly to 4.1%. Note due to spring break absenteeism for week 13 is not reported on the graph. (Graph 7)
- During week 15, the State of Ohio remained at “Local” influenza activity. For the seventh consecutive week, a **decrease** in the number of states reporting Widespread geographical activity was noted; no states reported **Widespread** geographical influenza activity. Five states reported Regional activity, twenty reported Local activity, twenty-four reported Sporadic activity and one (Ky) reported no activity. (See Map)
- During CDC Week 15 , 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 7.8%. This is the twelfth consecutive week that the P & I has been at or exceeded the epidemic threshold, now at 7.8%.
- Nationally, ninety-five influenza-associated pediatric deaths have been reported to the CDC this season (one from Ohio). Thirty-seven (39%) of the 95 deaths reported were associated with influenza B viruses; 24(25%) were associated with 2009 influenza A (H1N1) viruses; 17 (18%) deaths reported were associated with influenza A (H3N2) viruses, and 17 were associated with an influenza A virus for which the subtype was not determined.
- NEW. Graph 8 provides a pictorial representation of the influenza season by influenza type. As can be seen, type A influenza peaked during CDC week 7 and type B peaked approximately during CDC week 10. Low levels of both types continue to be identified.

For questions, or to receive this report weekly by email, send requests to either chenning@cantonhealth.org or schanzk@starkhealth.org.

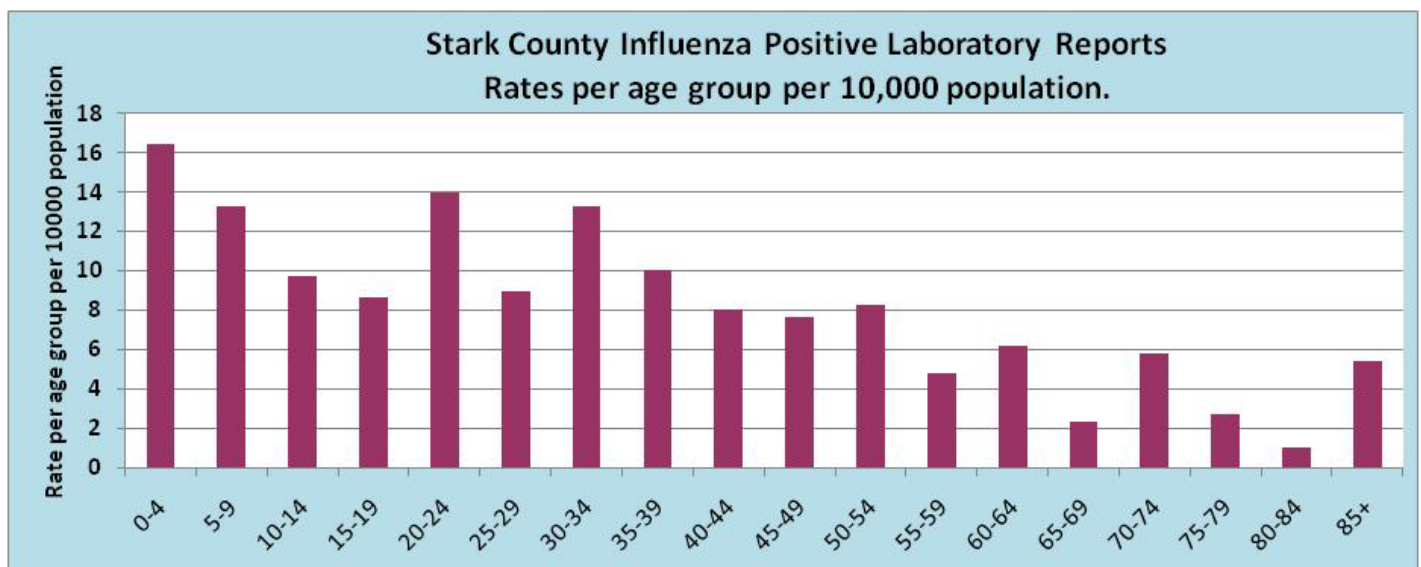
Graph 1: Influenza Cases reported to Local Health Departments Note, Influenza is only reportable if associated with a hospitalization; therefore, this only represents a small number of actual influenza cases in Stark County.



Graph 2: Stark County Rates per 10,000 population Influenza-Associated Hospitalizations. The graph shows the age population category rate for the number of influenza-associated cases reported in the 2010-2011 influenza season.

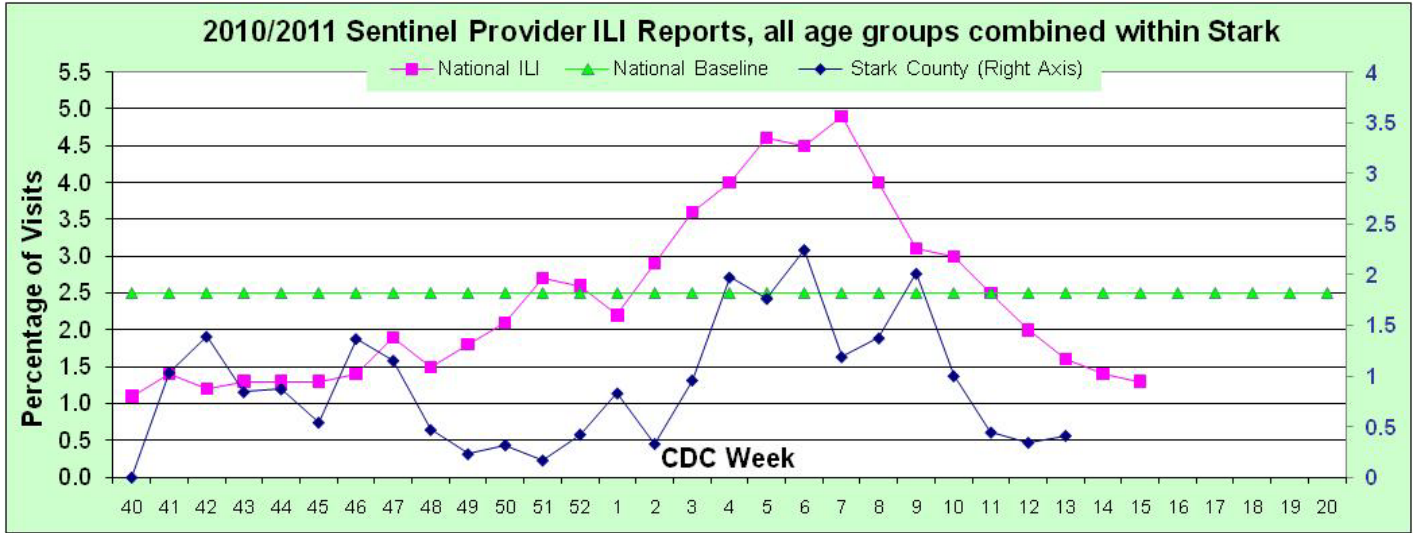


Graph 3: Stark County Rates per 10,000 population Influenza positive tests as reported by area laboratories and Physician Groups. The graph shows the age population category rate.



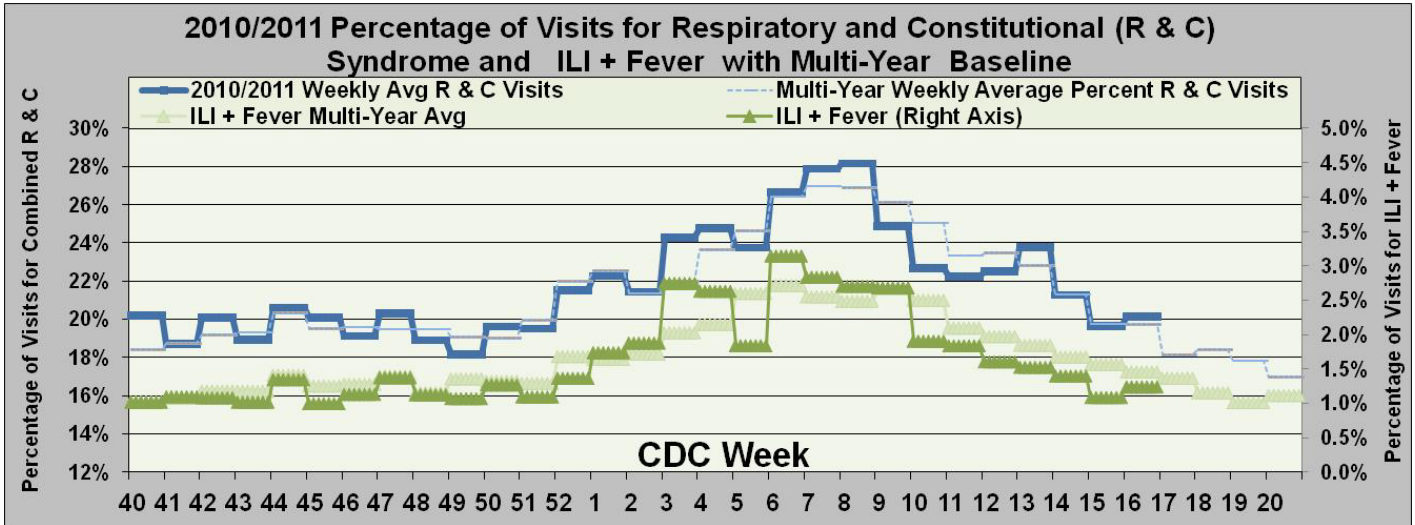
Graph 4: Sentinel Provider Reported Influenza-Like-Illness in Stark County

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.



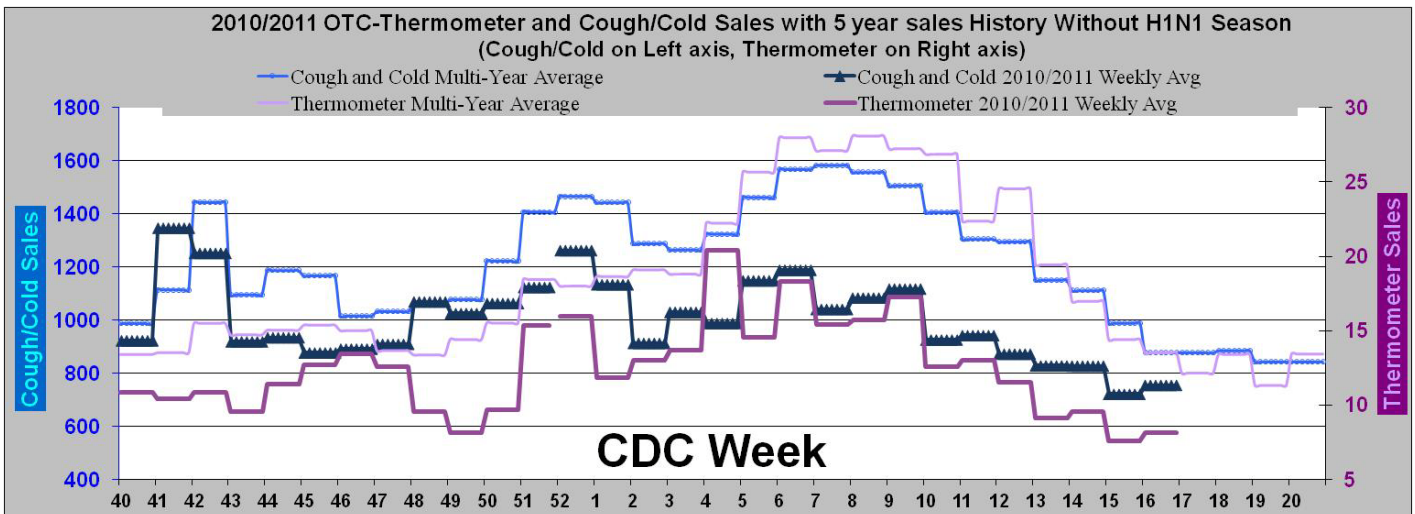
Graph 5: Emergency Department Visits for combined Respiratory and Constitutional Syndromes

(Source Health Monitoring Systems, EpiCenter, hospital patient visit surveillance system)

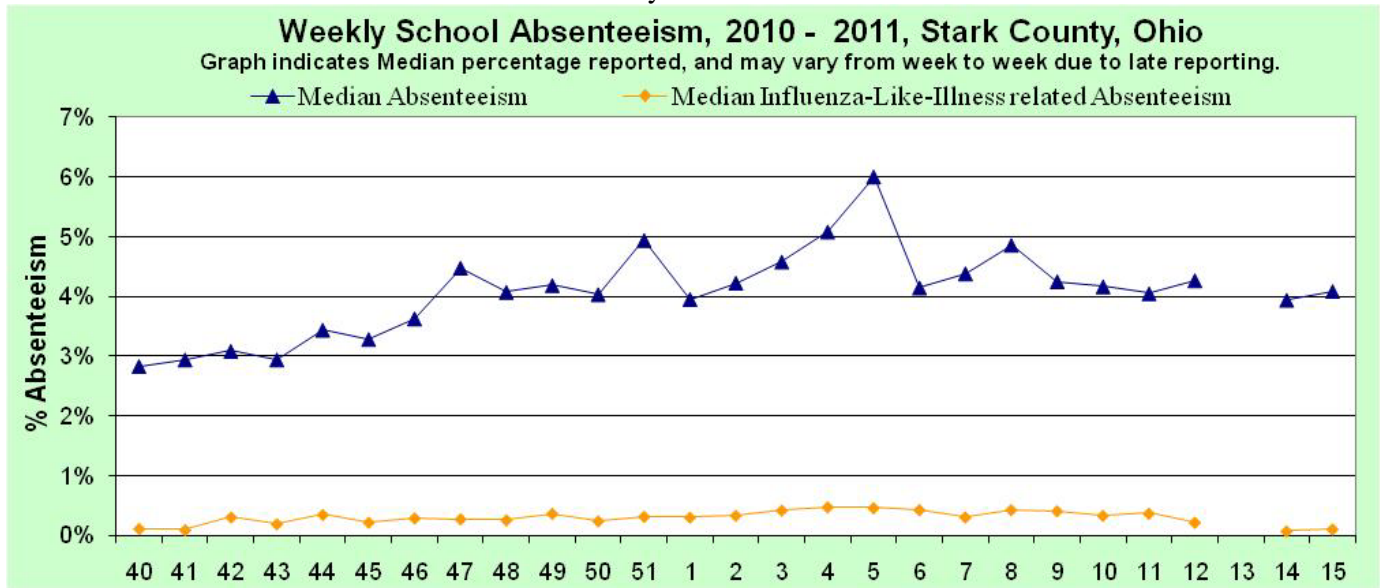


Graph 6: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County Over-The-Counter Sales of Thermometers in Stark County

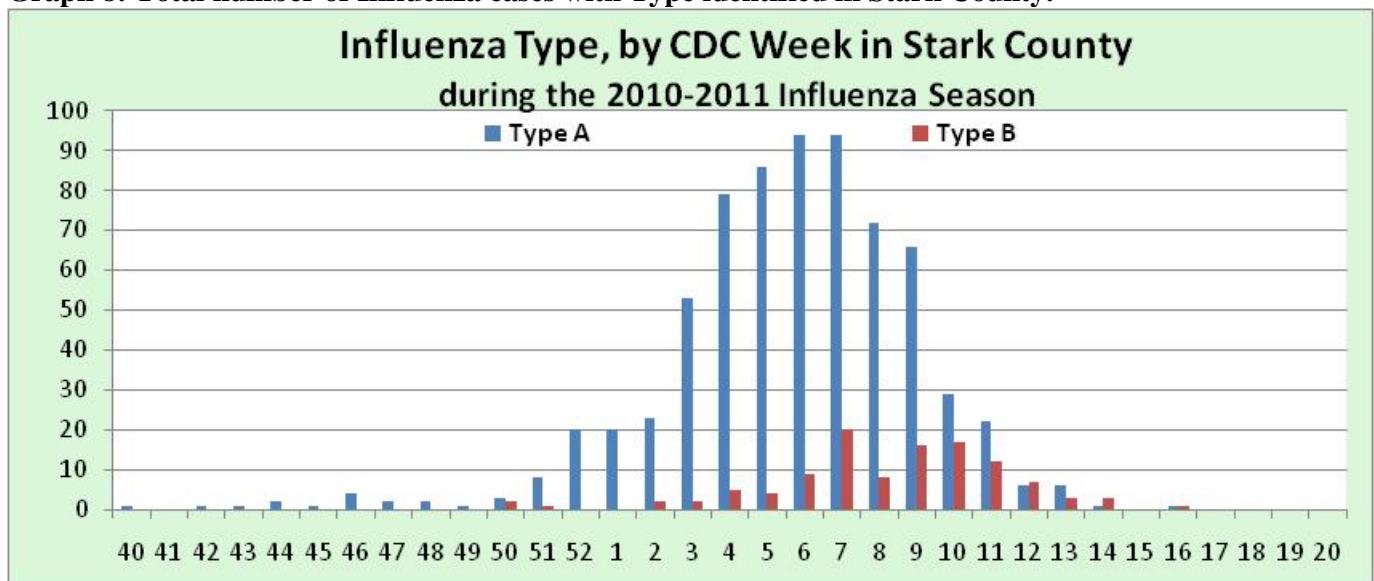
Source: RODS Real time Outbreak Disease Surveillance, Retail pharmaceutical sales.



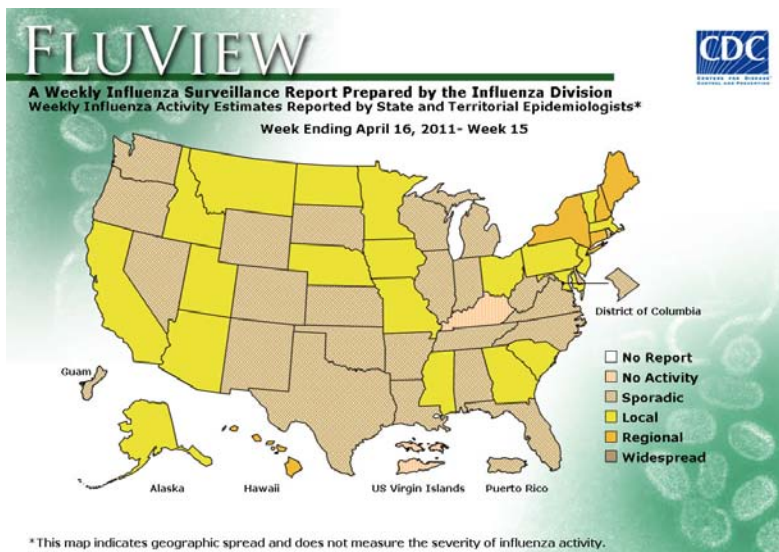
Graph 7: School Absenteeism. School systems from throughout Stark County report total absenteeism and absenteeism due to influenza-like-illness on a weekly basis.



Graph 8: Total number of Influenza cases with Type identified in Stark County.



Map: Weekly Geographic Influenza Activity Estimates Reported by State and Territorial Epidemiologists



ources 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 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 coming soon the fever + ILI symptoms classifier are analyzed for influenza surveillance.

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.

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 4 in Stark County for the 2010-2011 season.

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.

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.

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.