



STARK COUNTY INFLUENZA SNAPSHOT, WEEKS 13

Week ending April 2, 2011. With updates through 04/11/2011.

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

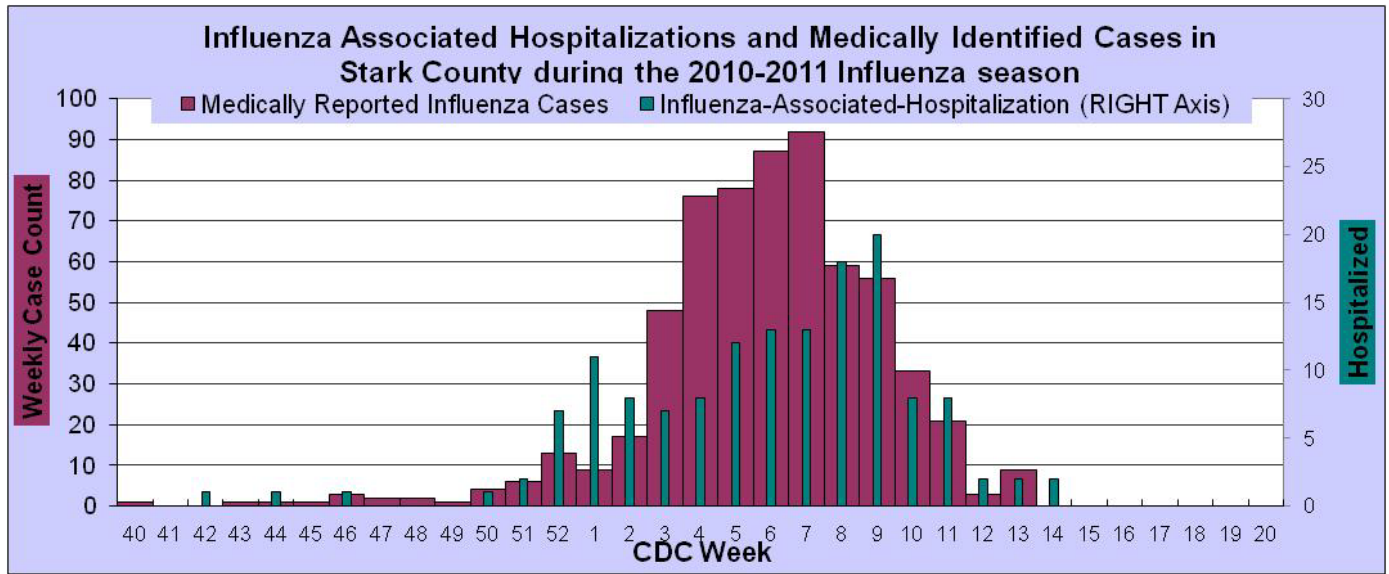
NOTE: Compilation of multiyear averages do not include the 2009/2010 H1N1 season.

During week 13, (March 27, 2011 – April 02, 2011) influenza activity remained low in Stark County. The state of Ohio continues to report Regional activity and nearly all National indicators have fallen to post influenza seasonal expectations.

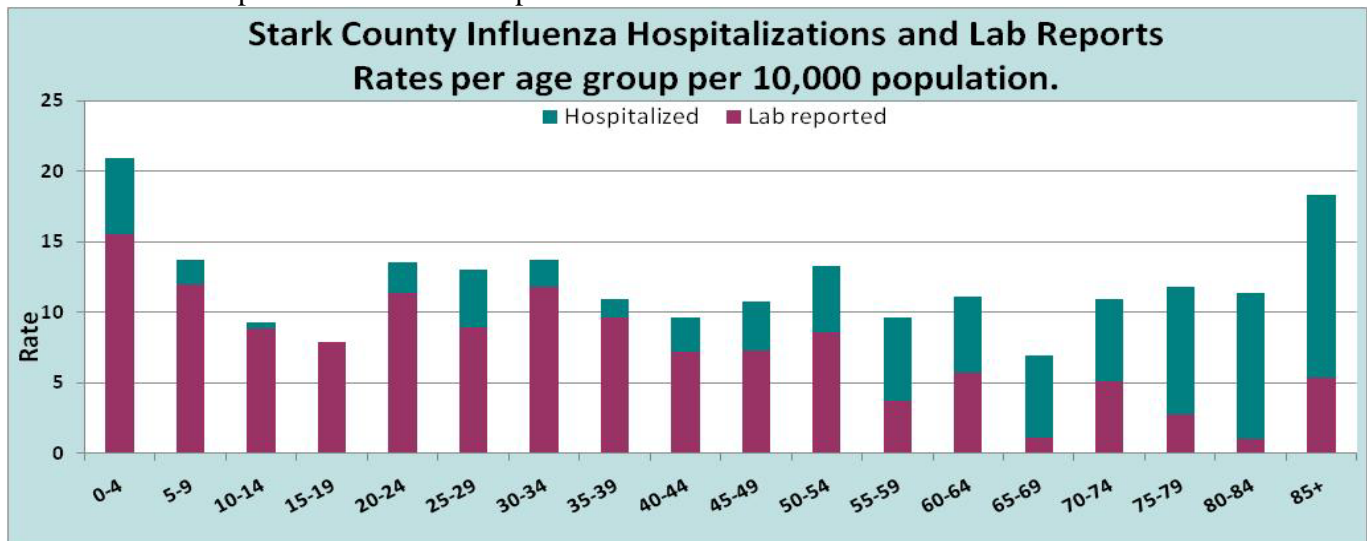
- Hospitalizations and Medically/Laboratory reported cases (herein after referred to as lab reports) **increased slightly**. However, the overall number of reports was exceptionally low, with only two influenza-associated hospitalizations and nine lab reports. (Graph 1)
- Demographics for the 145 influenza-associated hospitalized cases during the 2010-2011 in Stark County: the age range is less than 1 month to 90+ years with a **median of 55 years** and 7.91% self reported as African American.
- Demographics for the 274 of the 625 lab reported influenza cases with demographics in Stark County: the age range is 1 month to 90+ years with a **median of 29 years** and 13.9% self- identified as African American.
- The population rate of seniors affected by influenza **increased another 13%** from 16.2 per 10,000 population in week 12, to 18.4 per 10,000 population in week 13. This rate includes hospitalizations and lab reports. The overall disease burden continues to be highest in those 0-4 years of age, at 20.89 per 10,000 population. (Graph 2)
- Week 13 National indicators of outpatient activity of influenza-like-illness (ILI), as reported by Sentinel Providers, **declined** to 1.6%, below the epidemic baseline of 2.5%. The local level **remained steady**, currently at 0.4%. (Graph 3)
- Total emergency department patient visits **decreased** 10%. Over the previous three years, hospital emergency department visits have fallen during the week that includes April 1, and have then rebounded slightly in the following weeks. (Graph 4)
- Visits specifically for symptoms consistent with Constitutional and Respiratory (C & R) syndrome **increased slightly** to 23.8%; this is slightly above baseline levels for Week 13. However, and as can be seen in the graph, Week 14 falls back below baseline levels. ILI + Fever was **unchanged** and below expected levels at 1.85%. (Graph 5)
- Over-The-Counter (OTC) cough and cold product sales remained **constant**, while OTC sales of Thermometers decreased 20%, both are well below baseline levels. (Graph 6)
- During week 11, Ohio continued to report Regional influenza activity. For the fifth consecutive week, a **decrease** in the number of states reporting Widespread geographical activity was noted. Only three (3) states continue to report **Widespread** geographical influenza activity. (See Map)
- During CDC Week 12, 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 8.0%. This is the tenth consecutive week that the P & I has been at or exceeded the epidemic threshold.
- Nationally, ninety-one influenza-associated pediatric deaths have been reported to the CDC this season (one from Ohio). Thirty-three (36%) of the 91 deaths reported were associated with influenza B viruses; 23 (25%) were associated with 2009 influenza A (H1N1) viruses; 17 (19%) deaths reported were associated with influenza A (H3N2) viruses, and 18 were associated with an influenza A virus for which the subtype was not determined.
- School reporting is delayed this week, due to the spring break holidays. No report is available at this time.

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.

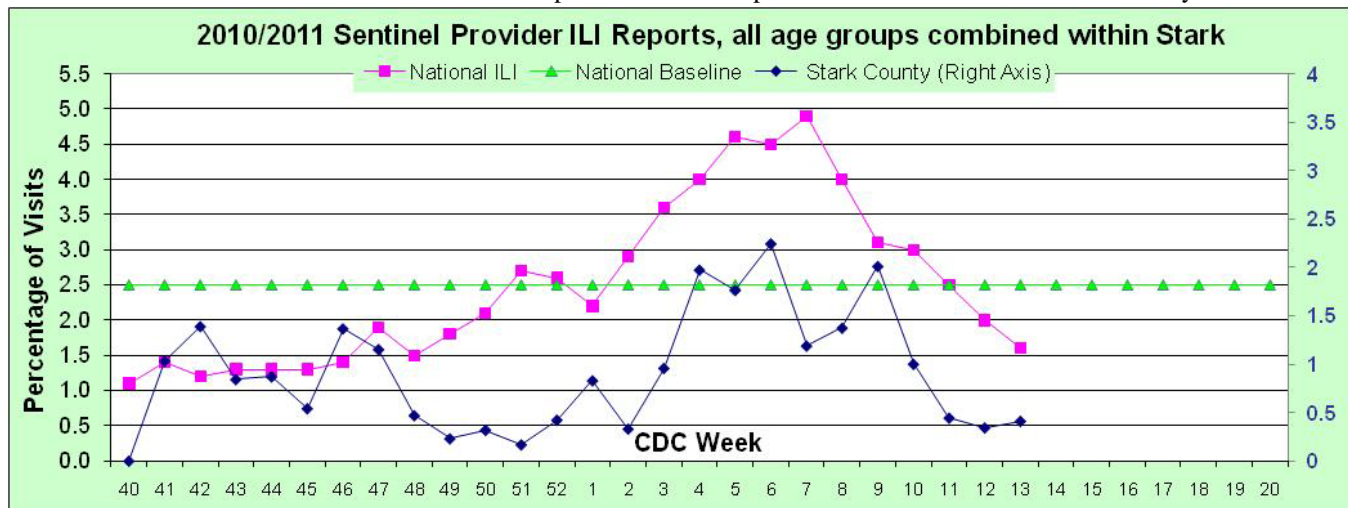


Graph 2: Stark County Rates per 10,000 population Influenza-Associated Hospitalizations and Lab Reported cases. The graph shows the age population category rate for the number of influenza-associated cases stacked with lab reports that have been reported in the 2010-2011 influenza season.



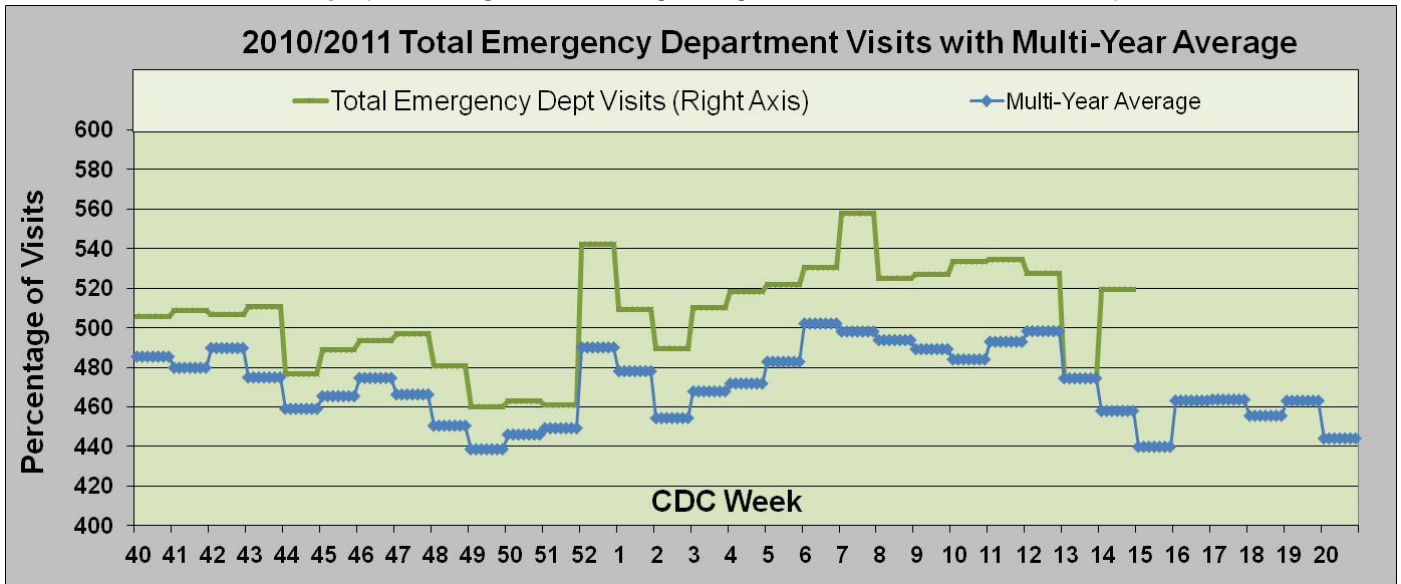
Graph 3: Sentinel Provider Reported Influenza-Like-Illness in Stark County

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.



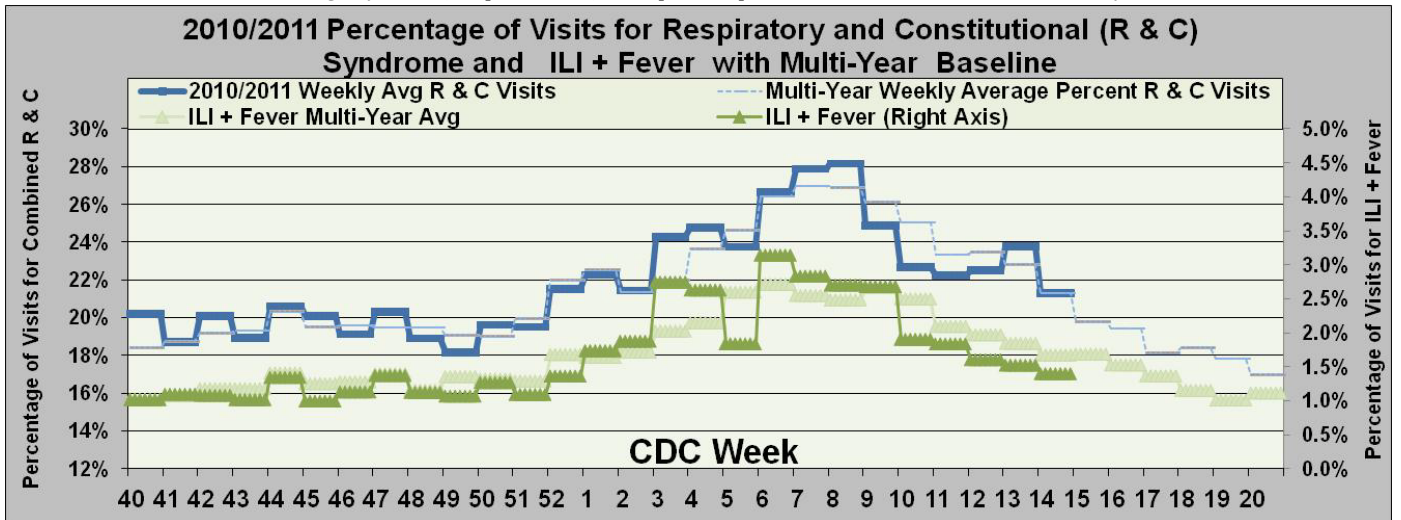
Graph 4: Total Emergency Department Visits by Stark County Residents.

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



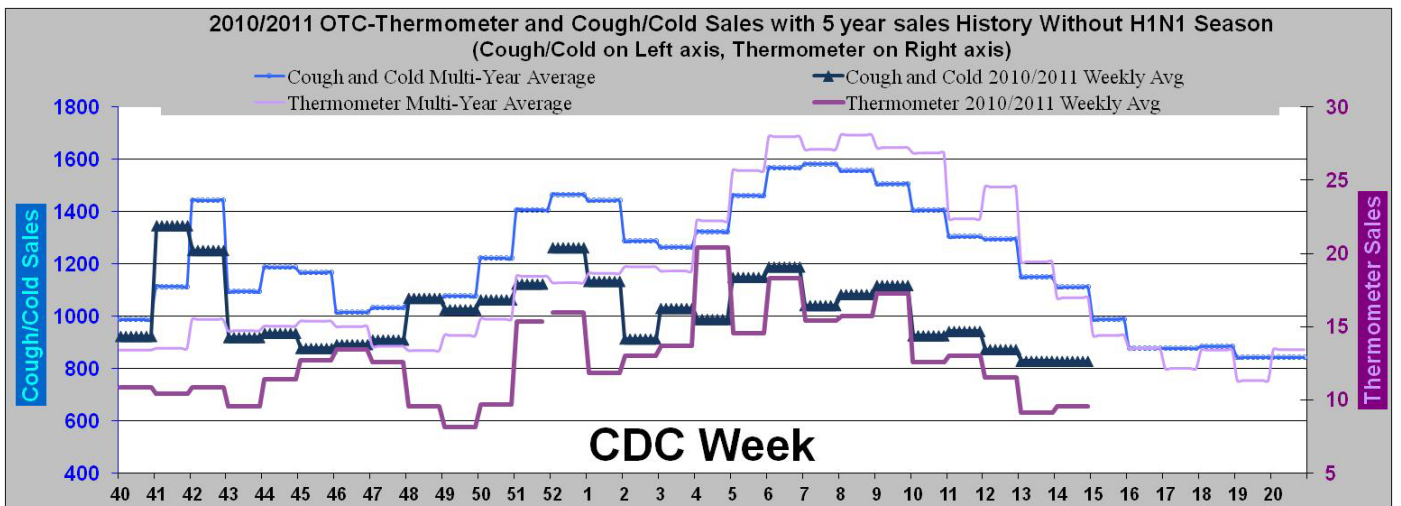
Graph 5: Emergency Department Visits for combined Respiratory and Constitutional Syndromes

(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.



Map: Weekly Geographic Influenza Activity Estimates Reported by State and Epidemiologists (Inset is previous week)
 (Source: <http://www.cdc.gov/flu/weekly>)

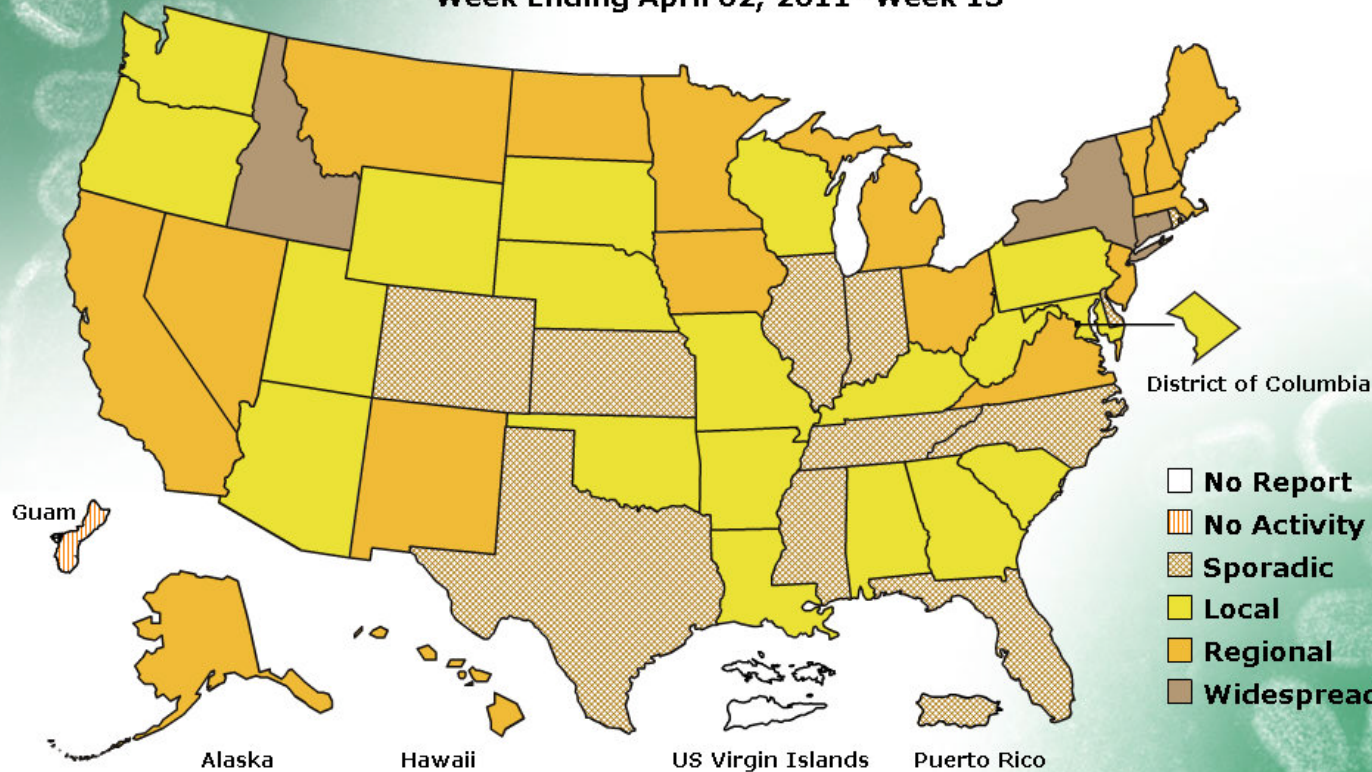


Territorial

FLUVIEW

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

Week Ending April 02, 2011 - Week 13



*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 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.