

## STARK COUNTY INFLUENZA SNAPSHOT, WEEK 40

Week 40 ending October 10, 2009, with updates through 10/18/2009. All data are preliminary and may change as more reports are received.

\*Influenza season officially begins each year at week 40. This season, data from week 35 will be included to show the trend of influenza activity before the official start of the 2009-10 influenza season.

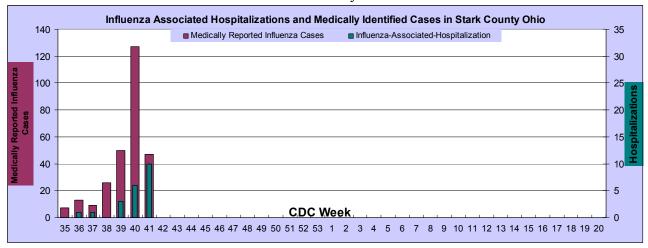
During week 40 (October 4 -10, 2009), influenza activity saw significant increases locally in the number of cases reported, sales of over-the-counter medications, school absenteeism and percentage of visits to Emergency Departments for syndromes related to influenza-like illness.

- An increase in the number of medically provided positive influenza cases was observed in Stark County. Week 40 had six influenza-associated hospitalizations and week 41 had an additionally ten hospitalizations. The number of medically reported and hospitalized patients mimics counts seen during our peak during the 2008/2009 season. (Graph 1)
- Of the medically reported cases, not hospitalized, the average age dropped to 15.5 years with a range of 4 months to 72 years and a median of 12 years. Additionally, **76%** of the reports are in the age group of 5 to 24 years. Hospitalized cases ranged in age from 3 months to 81 years with a median of 31 years, with the highest age group affected in the 25-50 years at 38% of the hospitalizations.
- Reports from four Sentinel Providers indicated an increase to 3.9% of all patient visits for Influenza-Like-Illness (ILI) in Stark County. The National level of ILI visits continued to climb reaching 6.1%, a level nearly **2.5 times** the national baseline of 2.3%. (See Graph 2)
- Combined Constitutional and Respiratory visits to Emergency Departments in Stark County increased to 41% above the multi-year average during week 40. This trend continued into week 41, bringing the total percentage of visits to area emergency departments for combined constitutional and respiratory syndromes to over 33%. Note, the highest average number of visits for these syndromes usually occurs in CDC week 7 (late February) and is 26.79%. (See Graph 3)
- For week 40, Cough/Cold Product sales increased 18% from week 39 and as can be seen in week 41 there is a single day in which sales were greater than **100% above** the 5-year average. Week 40 is the first week this season that the weekly average sales of Cough/Cold products exceeded the 5-year average. Over-The Counter sales of Thermometers continue to be **exceptionally high**, averaging **110% above** the 5-year average. (See Graphs 4 and 5)
- School Absenteeism, as reported by 59 local schools in Stark County, reveals an increasing trend in overall absenteeism which continues into week 41. Preliminary reporting in week 41 (47 schools) shows a median percentage of student absenteeism of 8.2%.
- The state of Ohio and 40 other states reported widespread geographic influenza activity. Note: this indicator is reported to the CDC by each state and does not describe severity of disease. In Ohio, Widespread Activity is defined as Increased ILI in at least half of the regions AND recent lab confirmed influenza in the state. (See National Map)
- Nationally, the CDC identified >99% of cocirculating strains of influenza (seasonal influenza A (H1), A (H3), and 2009 influenza A (H1N1) and influenza B) as 2009 influenza A (H1N1). Nationally no A (H1) or A (H3) strains were identified; however, Ohio identified one A (H1) last week through surveillance testing.
- National Pneumonia and Influenza (P & I) Mortality Surveillance **increased to 6.7**% of all deaths reported through the 122 Cities Mortality Reporting System as due to P & I. This percentage is **above** the epidemic threshold of 6.5% for week 40.
- One troubling indicator this week is the continued reporting of pediatric deaths. Ohio reported another case to the CDC bringing the national number of pediatric deaths reported in week 40 to 11. When tested, a significant number of these children were coinfected with a bacterial organism; the most commonly found bacteria was *Staphylococcus aureus*.

For questions, or to receive this report weekly by email, send requests to either <a href="mailto:chenning@cantonhealth.org">chenning@cantonhealth.org</a> or <a href="mailto:schanzk@starkhealth.org">schanzk@starkhealth.org</a>.

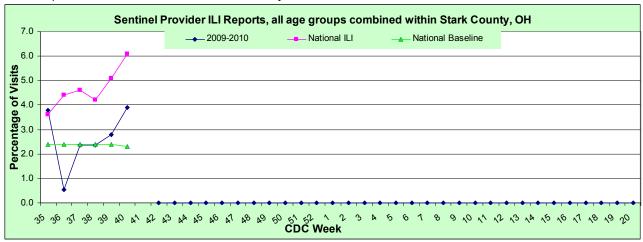
## **Graph 1: Influenza Cases reported to Local Health Departments**

Note: Influenza is only reportable if associated with a hospitalization; therefore, this only represents a small number of actual influenza cases in Stark County.

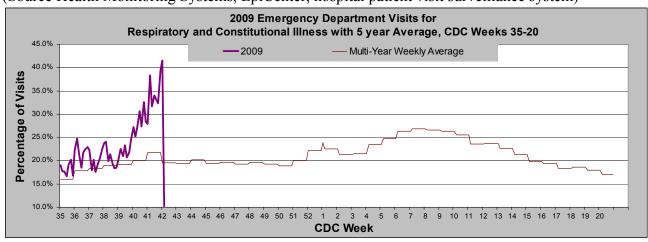


**Graph 2: Sentinel Provider Reported Influenza-Like-Illness in Stark County** 

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 provider's s are combined with other influenza surveillance data to provide a national picture of influenza virus and ILI activity.

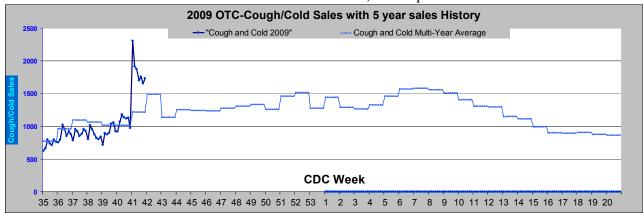


Graph 3: Emergency Department Visits for combined Respiratory and Constitutional Syndromes (Source Health Monitoring Systems, EpiCenter, hospital patient visit surveillance system)



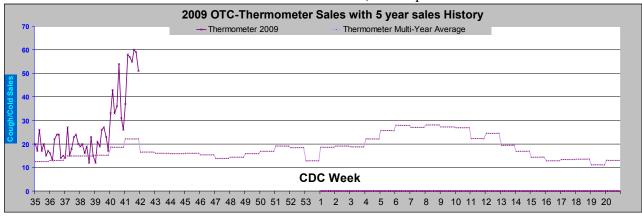
## Graph 4: Over-The-Counter Sales of Cough/Cold Product Sales in Stark County

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



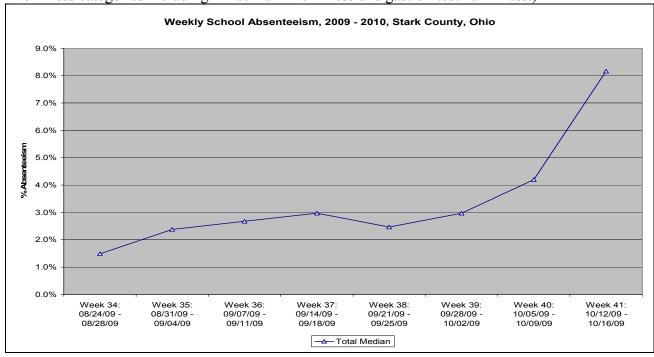
**Graph 5: Over-The-Counter Sales of Thermometers in Stark County** 

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



Graph 6: School Absenteeism, 2009-2010, Stark County, Ohio.

(Source: Voluntary reporting by area public and private schools. Schools report overall absenteeism and five illness categories including influenza –like-illness and gastrointestinal illness.)



## Map Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists

(Source: http://www.cdc.gov/flu/weekly)

