



## Ohio Department of Health Seasonal Influenza Activity Summary MMWR Week 52 December 23-29, 2012

### Current Influenza Activity Levels:

- **Ohio:** Widespread
  - Definition: Outbreaks of influenza or increased ILI in at least half of the regions AND recent (within the past 3 weeks) lab-confirmed influenza in the affected regions.
  - **Summary:** Public health surveillance data sources indicate high intensity for influenza-like illness in outpatient settings reported by Ohio's sentinel providers. Three hundred sixty-eight confirmed influenza-associated hospitalizations were reported this week: 116 in the Northeast, 109 in the East Central, 55 in the Central, 35 in the Southeast, 23 in the West Central, 17 in the Southwest, and 13 in the Northwest region. The percentage of emergency department visits with patients exhibiting constitutional symptoms continue to remain above baseline levels statewide.
- **Regional:** States surrounding Ohio continue to report increased influenza activity. Indiana, Kentucky, Pennsylvania, and West Virginia report widespread activity; Michigan reports regional activity. Levels of influenza-like illness from sentinel providers are above baseline for the region.
- **National:** During week 51 (December 16-22, 2012), influenza activity increased in the U.S. The proportion of outpatient visits for ILI was 4.2%, which is above the national baseline of 2.2%. Nine of ten regions (Regions 1-8 and 10) reported ILI above their region-specific baseline levels (Ohio is in Region 5). The geographic spread of influenza in 31 states was reported as widespread; 14 states reported regional activity; the District of Columbia and three states reported local activity; two states reported sporadic activity; Guam reported no influenza activity; Puerto Rico and the U.S. Virgin Islands did not report.

### Ohio Influenza Activity Summary Dashboard:

Data Source	Current week value	Percent Change from last week <sup>1</sup>	# of weeks <sup>2</sup>	Trend Chart <sup>3</sup>
<b>Influenza-like Illness (ILI) Outpatient Data (Sentinel Provider Visits)</b>	7.61%	40.21%	↑ 4	
<b>Thermometer Sales</b>	2075	-9.06%	↓ 1	
<b>Fever and ILI Specified ED Visits</b>	5.25%	0.38%	↑ 8	
<b>Constitutional ED Visits</b>	14.96%	6.02%	↑ 8	
<b>Confirmed Influenza-associated Hospitalizations</b>	368	11.41%	↑ 9	
<b>Google Flu Trends (Flu-related Internet Search Queries)</b>	8.19%	22.22%	↑ 7	

<sup>1</sup>Interpret percent changes with caution. Large variability may be exhibited in data sources with low weekly values.

<sup>2</sup>Number of weeks that the % change is increasing or decreasing.

<sup>3</sup>Black lines are data from the current season. Red lines are baseline averages. Data from the 2009-10 season was not used for baseline calculations due to the irregular pattern caused by the H1N1 pandemic.

## State Surveillance Data:

- ODH lab reported results for those cases that are PCR positive for seasonal influenza. Positive results: (1) influenza A/2009 H1N1; (146) influenza A/H3; (32) Influenza B (total through 12/29/12).
  - Three influenza B specimens have undergone influenza antigenic characterization testing either at the ODH lab or CDC. All have been characterized as B/Brisbane/60/2008-like, which is from a lineage of B viruses that is not included in the 2012-2013 influenza vaccine.
- No pediatric influenza-associated mortalities have been reported (through 12/29/12).
- Incidence of confirmed influenza-associated hospitalizations in 2012-2013 season = 1230 (through 12/29/12).

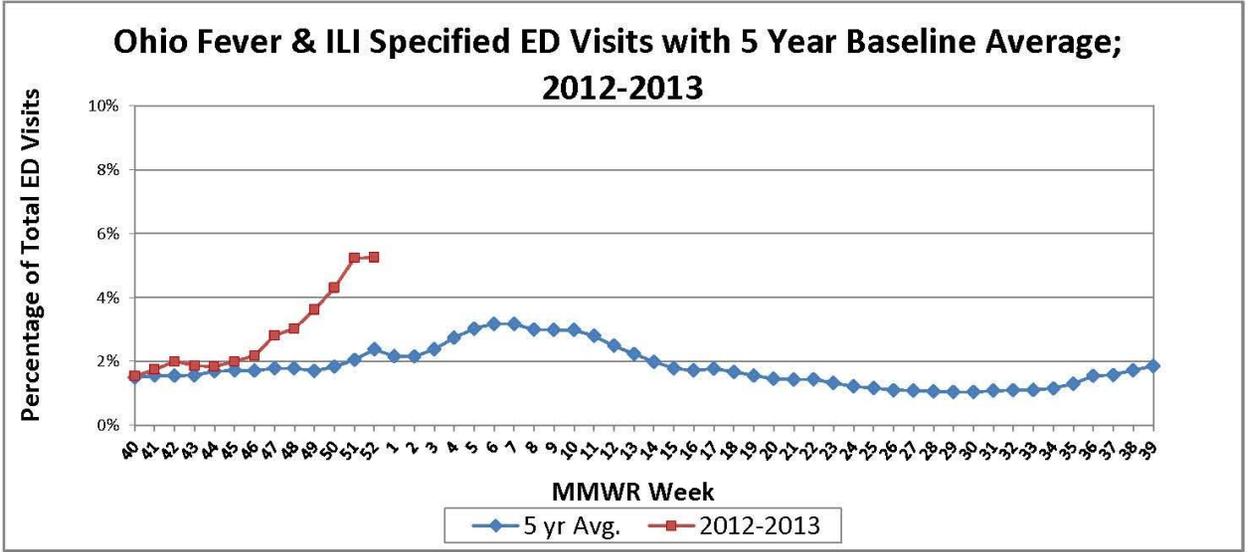
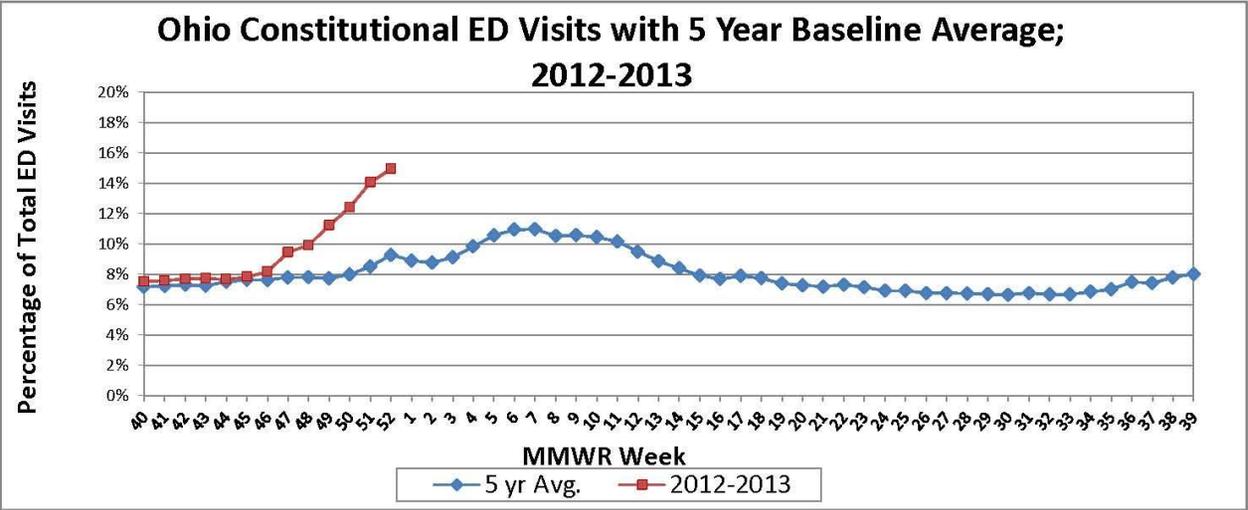
### Analysis Considerations:

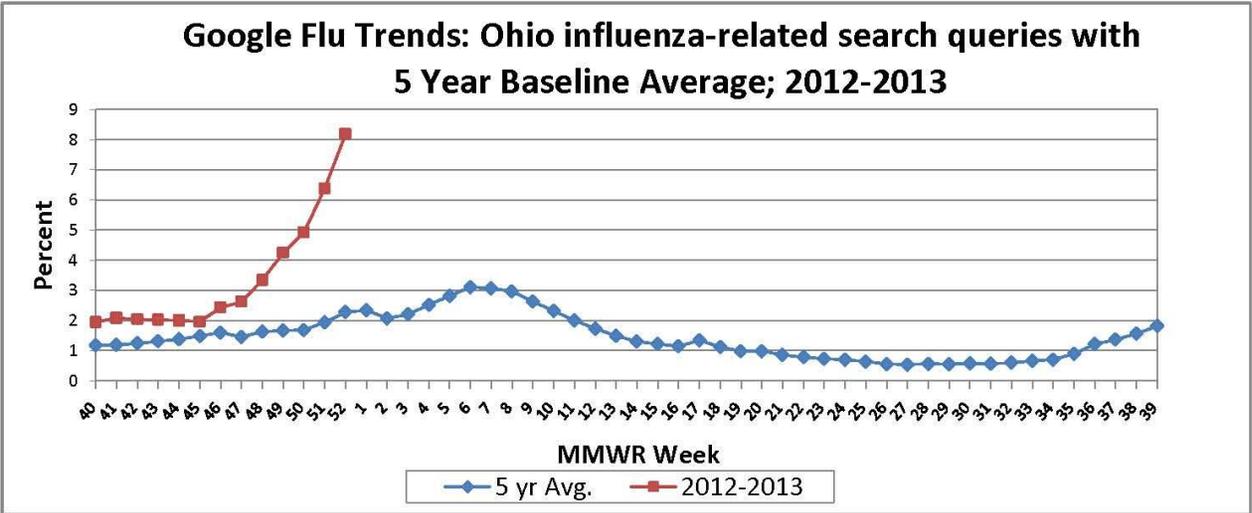
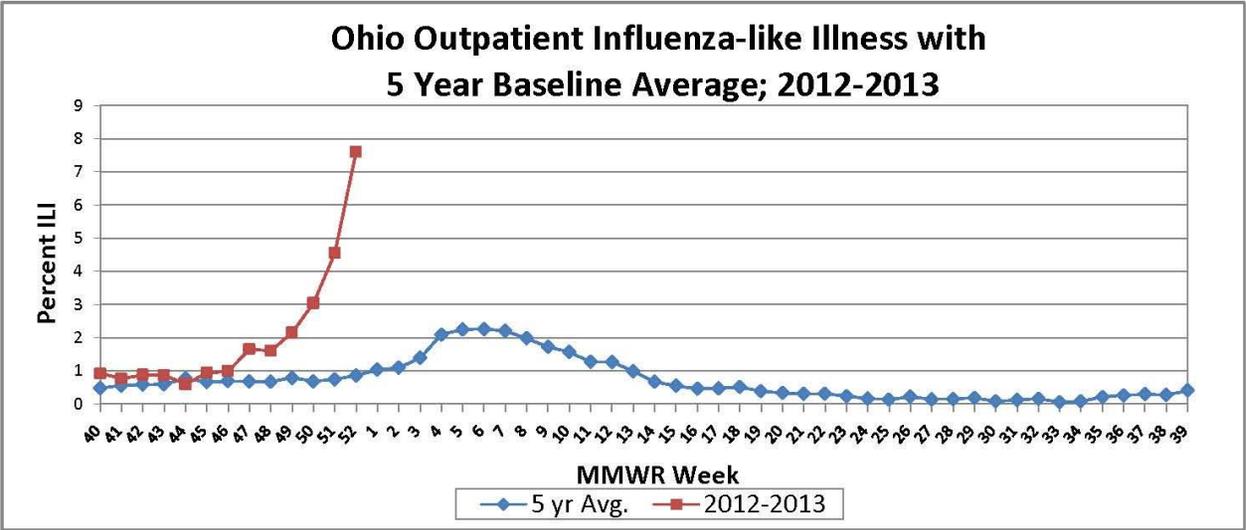
- Historical data from the 2009-10 influenza season was not used for baseline calculations due to the irregular pattern caused by the H1N1 pandemic.

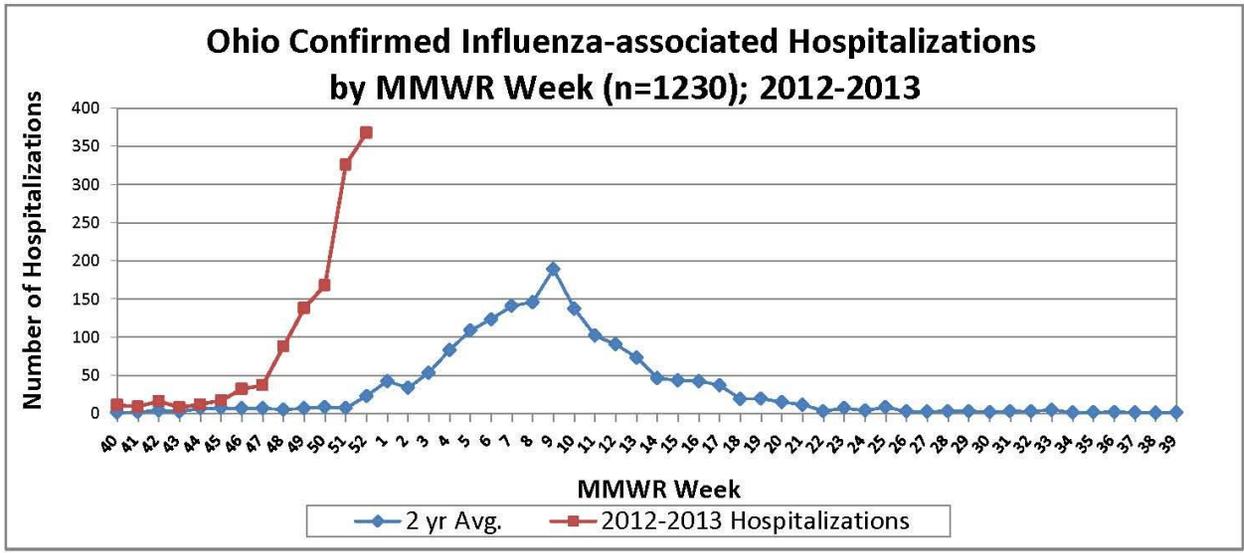
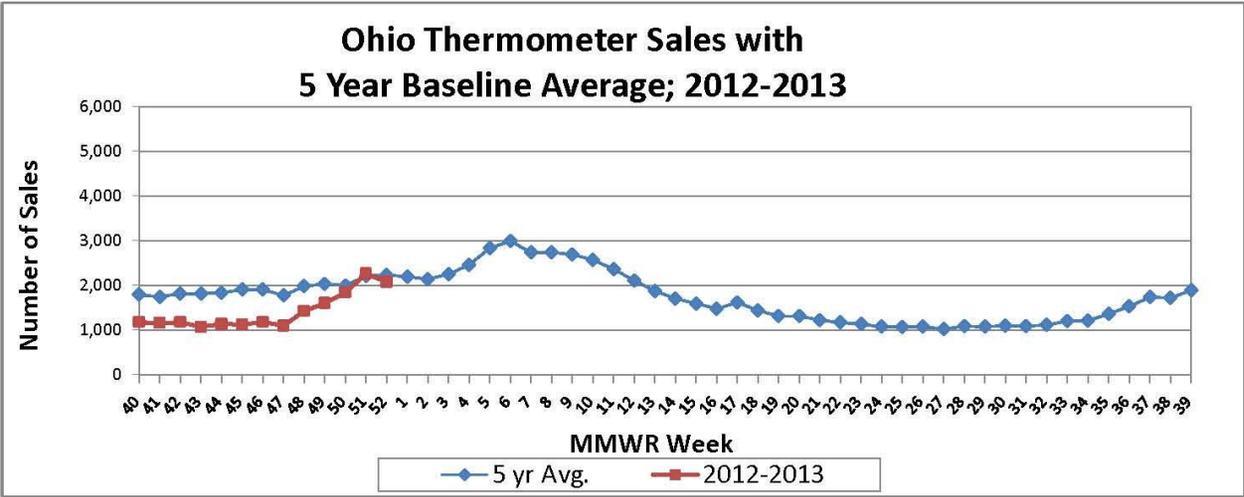
National activity levels and more information can be found at the following CDC pages:

- <http://www.cdc.gov/flu/weekly/usmap.htm>
- <http://www.cdc.gov/flu/>

If you have any further questions or comments about surveillance for seasonal influenza for the State of Ohio, please contact the Situational Monitoring and Event Detection Unit at [SMED@odh.ohio.gov](mailto:SMED@odh.ohio.gov) or call (614) 995-5599.







## Sources of Influenza Surveillance Data

Eight types of data sources are examined on a weekly basis to help determine the influenza activity level for Ohio:

- **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.
- **Google Flu Trends:** Google Flu Trends tracks influenza-related internet search queries and uses these counts as estimates of influenza-like illness (ILI) in each state. See <http://www.google.org/flutrends/> for more information.
- **Emergency Department Visits (EpiCenter):** EpiCenter collects emergency department chief complaint data from 176 hospitals and urgent care facilities across Ohio in real time and classifies them into symptom and syndrome categories. Chief complaints from the constitutional syndrome category and the fever + ILI symptoms classifier are analyzed for influenza surveillance.
- **Sentinel Providers (ILINet):** Sentinel providers, through the US Influenza-like Illness Surveillance Network (ILINet), collect outpatient influenza-like illness (ILI) data. ILI is defined as a fever ( $\geq 100$  F), **and** cough and/or sore throat without another known cause. 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 76 sentinel providers enrolled in Ohio for the 2012-2013 season.
- **ODH 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.
- **Influenza-associated Hospitalizations (ODRS):** Influenza-associated hospitalizations are reported to ODH from 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.
- **122 Cities Mortality Reporting System (Vital Statistics):** Ohio's eight largest cities participate in this reporting on a weekly basis. Vital statistics offices from across the country report the number of death certificates received, along with how many of those have pneumonia or influenza listed as an underlying or contributing cause of death.
- **Influenza-associated Pediatric Mortality (ODRS):** Influenza-associated pediatric mortalities are reported into ODRS by local health department and hospital staff. Pediatric deaths can be an indicator of the severity of illness during the influenza season. This condition became reportable in 2005.