



## Ohio Department of Health Seasonal Influenza Activity Summary

### MMWR Week 51

### December 18-24, 2011

#### Current Influenza Activity Levels:

- **Ohio:** Sporadic Activity
  - Definition: 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.
  - **Summary:** Public health surveillance data sources indicate minimal intensity for influenza-like illness in outpatient settings reported by Ohio's sentinel providers. Nine influenza-associated hospitalizations were reported: five in the Northwest, three in the Northeast, and one in the East Central region.
- **Regional:** States surrounding Ohio are reporting low influenza activity. Indiana, Kentucky, Michigan, and Pennsylvania, and report sporadic activity; West Virginia reports no activity. Levels of influenza-like illness from sentinel providers are below baseline for the region.
- **National:** During week 50 (December 11-17, 2011), influenza activity remained low in the U.S. The proportion of outpatient visits for ILI was 1.4%, which is below the national baseline of 2.4%. All 10 regions reported ILI below region-specific baseline levels (Ohio is in Region 5). The geographic spread of influenza in two states was reported as local; Guam, Puerto Rico, and 37 states reported sporadic activity; and the District of Columbia, the U.S. Virgin Islands, and 11 states reported no influenza activity.
  - **Novel Influenza A Virus:** Two human infections with novel influenza A viruses were detected in two states (West Virginia and Wisconsin). One patient (WI) was infected with an influenza A (H1N1) variant virus with genes from human, swine, and avian lineages (A(H1N1)v) and reported close contact with pigs prior to illness onset. The other patient (WV) was infected with an influenza A (H3N2) variant virus (A(H3N2)v) with no prior pig exposure, but had contact with another confirmed case of A(H3N2)v. Both patients have recovered from their illnesses.

#### 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>
Influenza-like Illness (ILI) Outpatient Data (Sentinel Provider Visits)	0.26%	-138.46%	↓ 1	
Thermometer Sales	1348	4.08%	↑ 1	
Fever and ILI Specified ED Visits	2.31%	9.09%	↑ 2	
Constitutional ED Visits	8.56%	5.37%	↑ 1	
Confirmed Influenza-associated Hospitalizations	9	55.56%	↑ 1	
Google Flu Trends (Flu-related Internet Search Queries)	2.50%	14.00%	↑ 4	

<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 and the blue line is data from the previous season. 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/H3 (total through 12/24/11).
- No pediatric influenza-associated mortalities have been reported (through 12/28/11).
- Incidence of confirmed influenza-associated hospitalizations in 2011-2012 season =65 (through 12/24/11).

### 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:

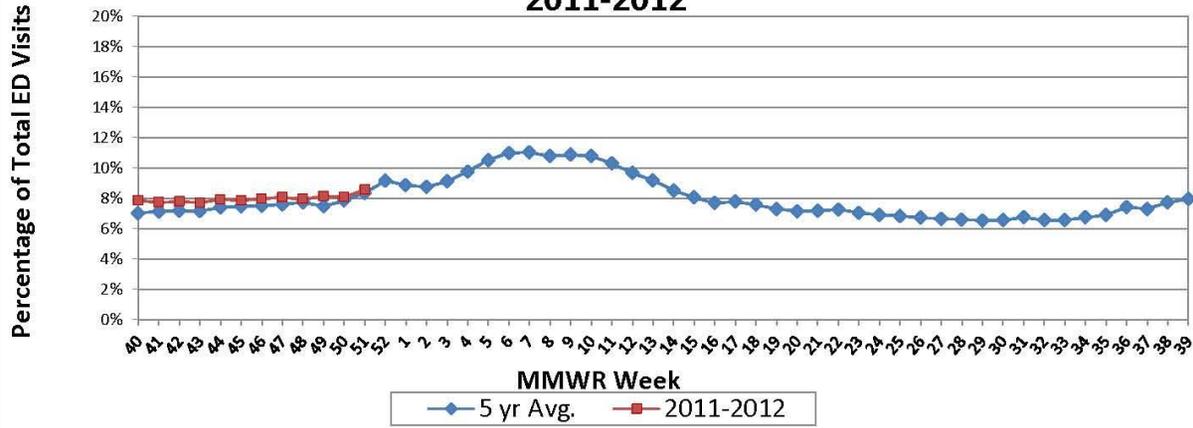
- <http://www.cdc.gov/flu/weekly/usmap.htm>
- <http://www.cdc.gov/flu/>

Ohio Department of Health Seasonal Influenza Activity Summaries are now available online:

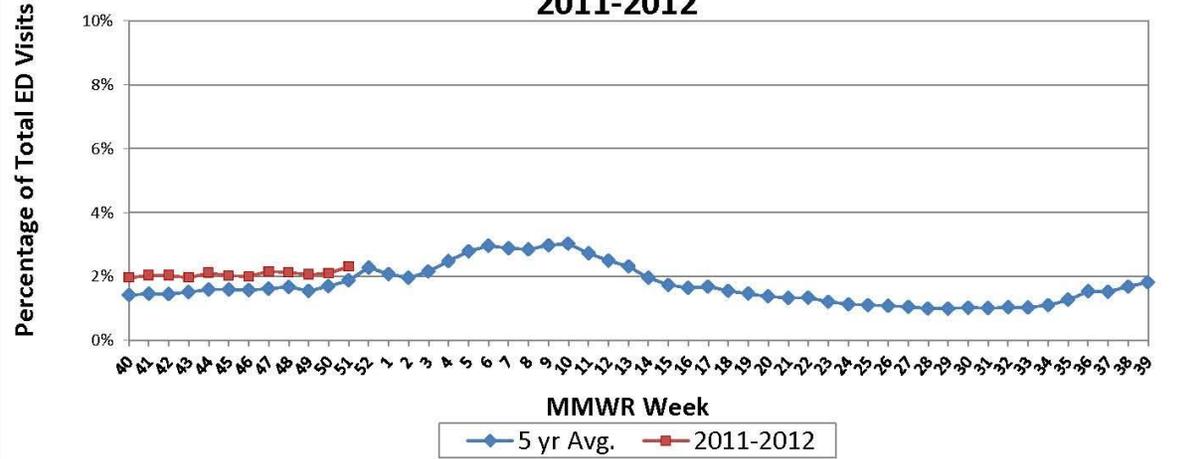
<http://www.odh.ohio.gov/features/odhfeatures/seasflu/ohfluactivity.aspx>

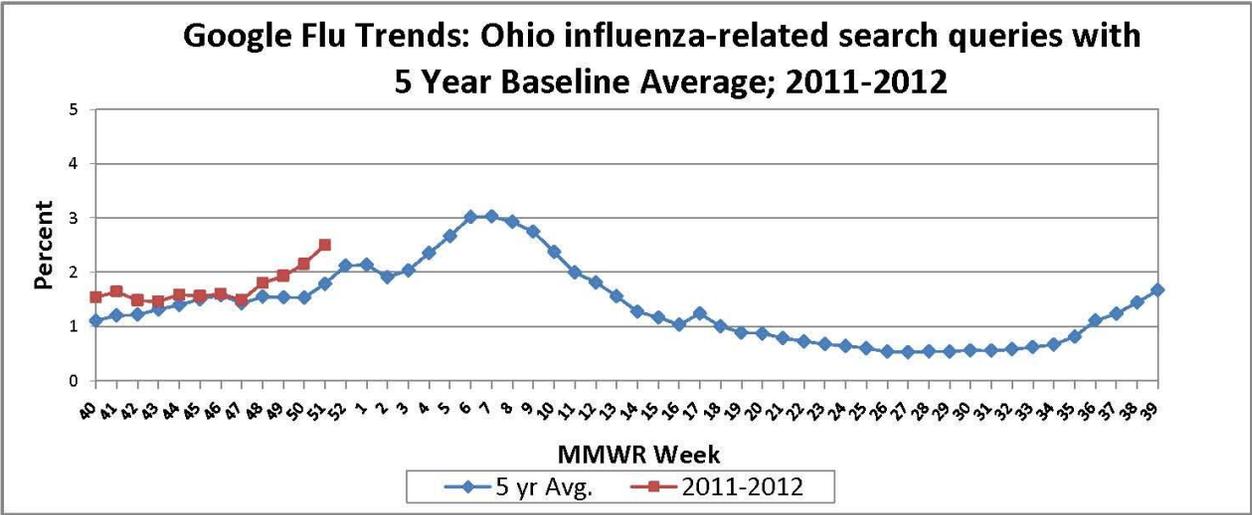
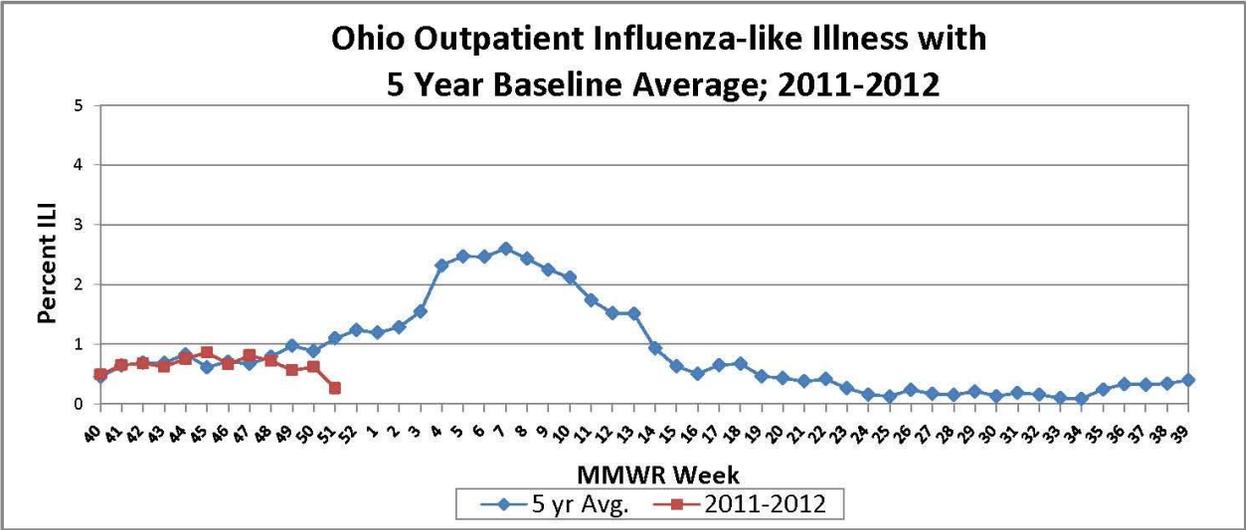
If you have any further questions or comments about surveillance for seasonal influenza for the State of Ohio, please contact the Situational Monitoring and Event Detection Unit at [SMED@odh.ohio.gov](mailto:SMED@odh.ohio.gov) or call (614) 995-5599.

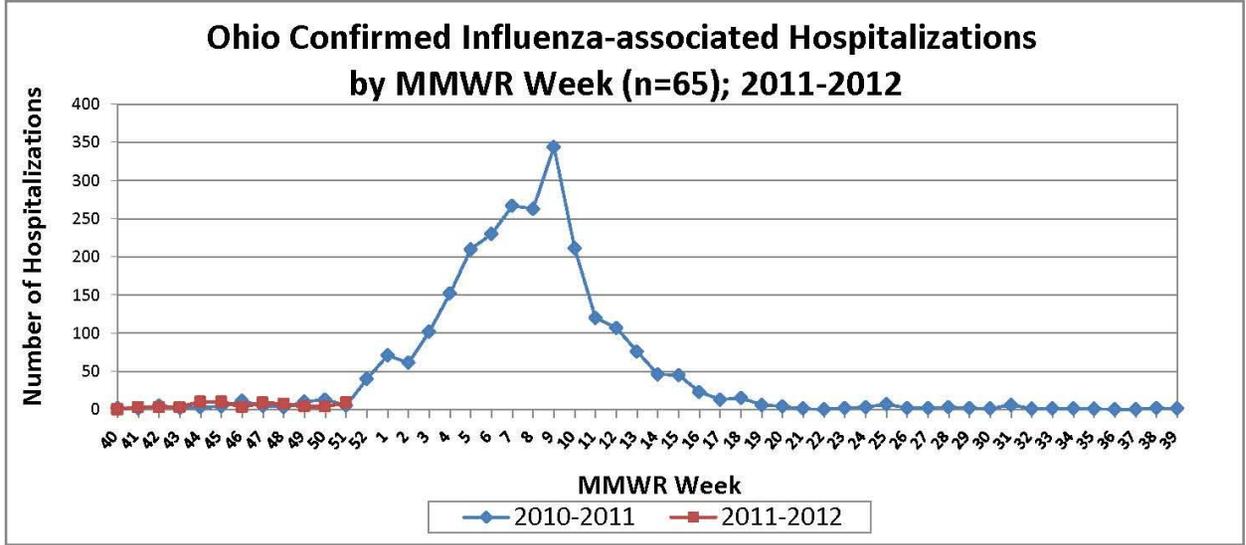
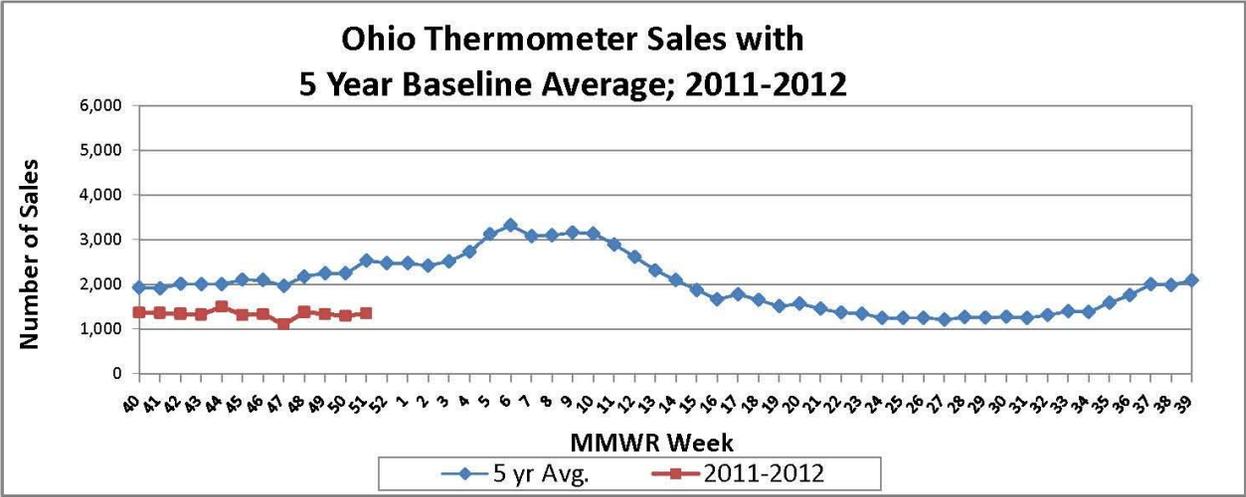
**Ohio Constitutional ED Visits with 5 Year Baseline Average;  
2011-2012**



**Ohio Fever & ILI Specified ED Visits with 5 Year Baseline Average;  
2011-2012**







## 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 170 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 75 sentinel providers enrolled in Ohio for the 2011-2012 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.