



## Ohio Department of Health Seasonal Influenza Activity Summary

### MMWR Week 9

### February 28<sup>th</sup> – March 5<sup>th</sup>, 2016

#### Current Influenza Activity:

##### **Current Ohio Activity Level (Geographic Spread) - *Widespread***

*Definition: Increased ILI in at least half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the state.*

During MMWR Week 9, public health surveillance data sources indicate minimal intensity for influenza-like illness (ILI) in outpatient settings reported by Ohio's sentinel ILINet providers. Data from other outpatient ILI indicators (athenahealth®) increased to near the average peak levels. The percentage of emergency department (ED) visits with patients exhibiting constitutional symptoms **increased and is above** baseline levels statewide; the percentage of fever and ILI specified ED visits **increased and is above** baseline levels. There were 254 influenza-associated hospitalizations reported.

#### Ohio Weekly Influenza-associated Hospitalizations by Ohio Public Health Region

Central	30
East Central	59
Northeast	33
Northwest	33
Southeast	26
Southwest	26
West Central	47
<b>Total</b>	<b>254</b>

#### **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 (ILINet Sentinel Provider Visits)	1.88%	6.82%	↑ 4	
Thermometer Sales (National Retail Data Monitor)	1754	-13.43%	↓ 1	
Fever and ILI Specified ED Visits (EpiCenter)	2.92%	12.31%	↑ 6	
Constitutional ED Visits (EpiCenter)	11.16%	9.30%	↑ 6	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	254	25.12%	↑ 7	
Outpatient Medical Claims Data <sup>4</sup>	1.21%	53.16%	↑ 6	

<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 represent current week's data; red lines represent baseline averages.

<sup>4</sup>Medical Claims Data provided by athenahealth®

## State, Regional, and National Data:

### Ohio Surveillance Data:

- **ODH lab** has reported **220** influenza tests from specimens sent from various submitters. 2015-2016 influenza season results: **(77) A/pdmH1N1; (6) A/H3N2; (12) Influenza B;** (through 3/5/16).
- The **National Respiratory and Enteric Virus Surveillance System (NREVSS)** has reported **17,752** influenza tests performed at participating facilities. 2015-2016 influenza season positive results: **(72) H1N1, (5) A/H3N2, (479) Flu A Not Subtyped, and (85) Flu B** (through 3/5/16).
- No **pediatric influenza-associated mortalities** have been reported during the 2015-2016 season (through 3/5/16).
- No **novel influenza A virus infections** have been reported during the 2015-2016 season (through 3/5/16).
- Incidence of confirmed **influenza-associated hospitalizations** in 2015-2016 season = **907** (through 3/5/16).

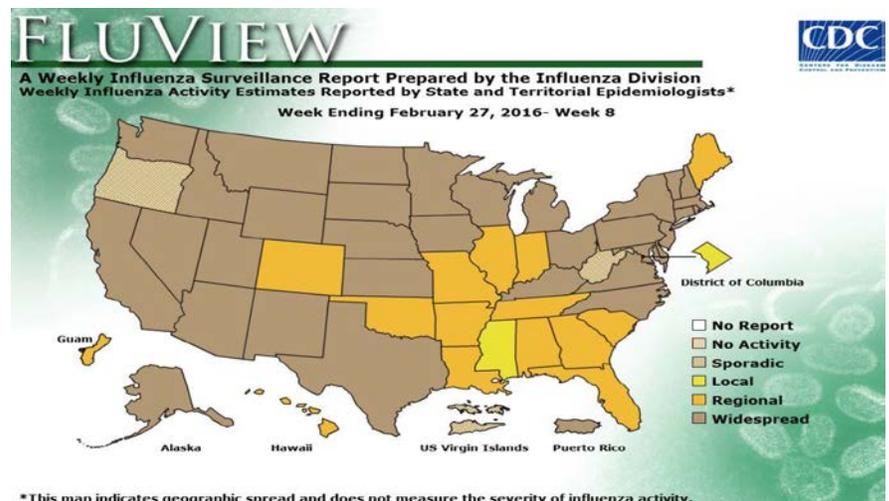
**HHS Regional Surveillance Data\***: During week 8 (February 21st – February 27<sup>th</sup>, 2015), the proportion of outpatient visits for ILI in Region 5 (Ohio is in Region 5) was 2.6%, which is above the regional baseline of 1.9%. West Virginia reported Sporadic Activity; Indiana reported Regional Activity; Ohio, Pennsylvania, Michigan, and Kentucky reported Widespread Activity;

**National Surveillance Data\***: During week 8 (February 21st – February 27<sup>th</sup>, 2015), the majority of U.S. states reported Minimal to Low influenza activity. The proportion of outpatient visits for ILI was 3.2%, which is **above** the national baseline of 2.1%. Nine of ten HHS regions reported ILI levels at or above their region-specific baseline levels. The most frequently identified influenza virus type reported by public health laboratories was influenza A (H1N1)pdm09.

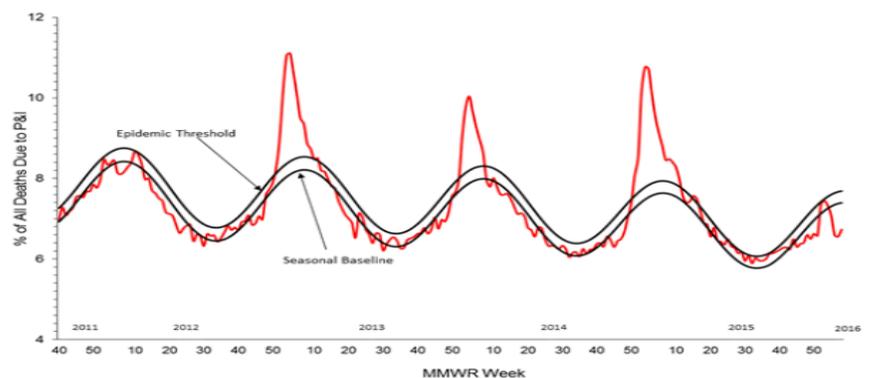
### **Influenza Virus Characterization:**

CDC has characterized 660 influenza viruses [271 A (H1N1)pdm09, 242 A (H3N2), and 147 influenza B viruses] collected by U.S. laboratories since October 1, 2015.

All of the influenza A and influenza B viruses that have been genetically characterized since October 1<sup>st</sup>, 2015 have been found to be genetically similar to the viruses included in the 2015-2016 influenza vaccine.



Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System  
Data through the week ending February 13, 2016, as of March 3, 2016

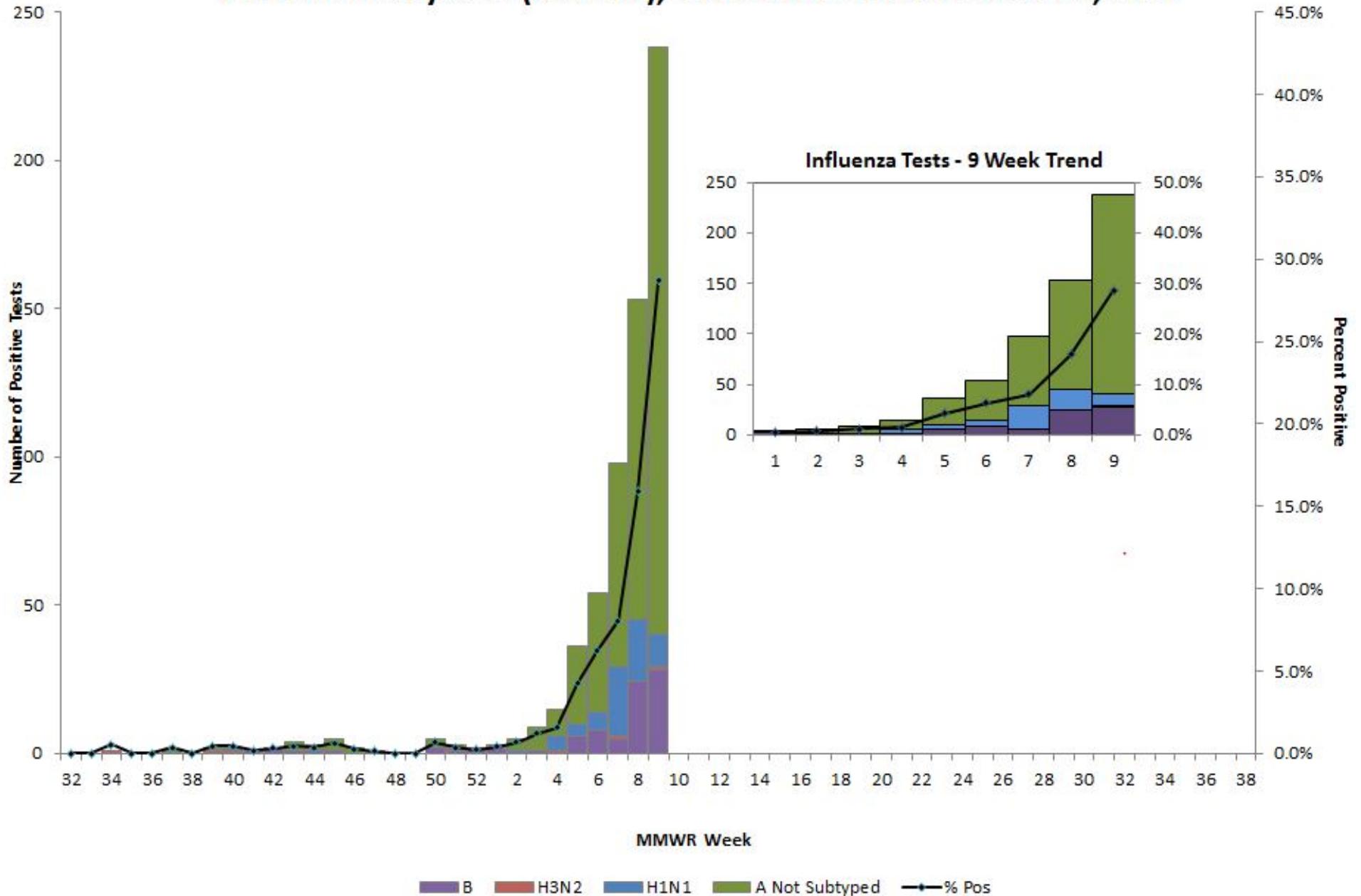


National activity levels and more information can be found at the following CDC pages:

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

\*National-level and regional-level data are reported one week later than Ohio state-level data

# Positive Influenza Tests (PCR), National Respiratory and Enteric Virus Surveillance System (NREVSS), 2015-2016 Influenza Season, Ohio



**Influenza-Associated Hospitalizations, Ohio  
2015-2016 Season\***

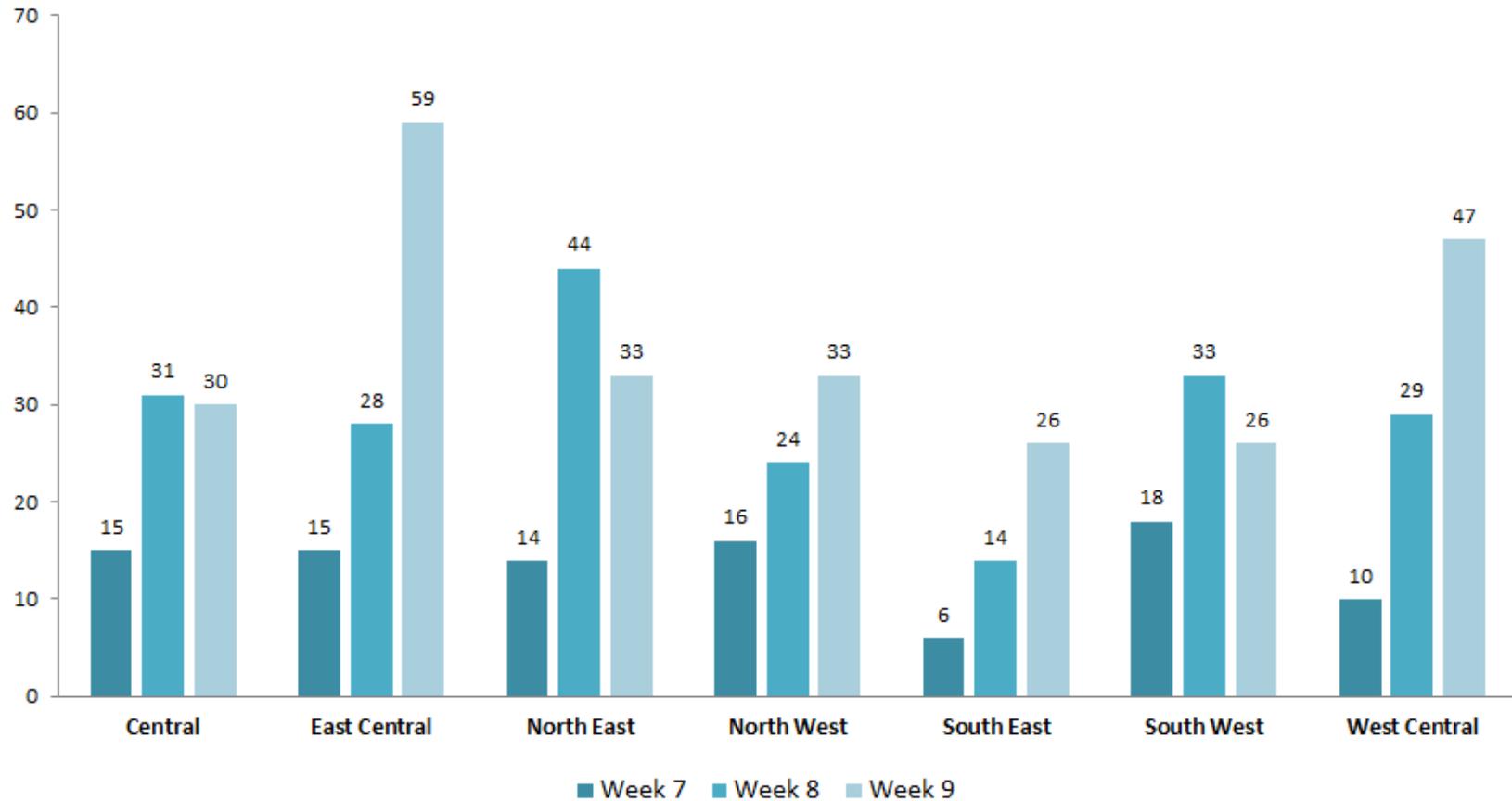
County	Influenza-Associated Hospitalizations	Percent of All Influenza-Associated Hospitalizations	Rate per 100,000 Population†	County	Influenza-Associated Hospitalizations	Percent of All Influenza-Associated Hospitalizations	Rate per 100,000 Population†
ADAMS	0	0.0%	0.00	LOGAN	1	0.1%	2.18
ALLEN	36	4.0%	33.86	LORAIN	7	0.8%	2.32
ASHLAND	3	0.3%	5.65	LUCAS	54	6.0%	12.22
ASHTABULA	4	0.4%	3.94	MADISON	2	0.2%	4.60
ATHENS	3	0.3%	4.63	MAHONING	28	3.1%	11.72
AUGLAIZE	7	0.8%	15.23	MARION	2	0.2%	3.01
BELMONT	3	0.3%	4.26	MEDINA	11	1.2%	6.38
BROWN	0	0.0%	0.00	MEIGS	2	0.2%	8.41
BUTLER	34	3.7%	9.24	MERCER	4	0.4%	9.80
CARROLL	0	0.0%	0.00	MIAMI	4	0.4%	3.90
CHAMPAIGN	2	0.2%	4.99	MONROE	0	0.0%	0.00
CLARK	24	2.6%	17.35	MONTGOMERY	76	8.4%	14.20
CLERMONT	18	2.0%	9.12	MORGAN	1	0.1%	6.64
CLINTON	0	0.0%	0.00	MORROW	2	0.2%	5.74
COLUMBIANA	3	0.3%	2.78	MUSKINGUM	16	1.8%	18.59
COSHOCTON	3	0.3%	8.13	NOBLE	1	0.1%	6.83
CRAWFORD	0	0.0%	0.00	OTTAWA	1	0.1%	2.41
CUYAHOGA	136	15.0%	10.62	PAULDING	0	0.0%	0.00
DARKE	6	0.7%	11.33	PERRY	0	0.0%	0.00
DEFIANCE	4	0.4%	10.25	PICKAWAY	5	0.6%	8.98
DELAWARE	1	0.1%	0.57	PIKE	2	0.2%	6.97
ERIE	1	0.1%	1.30	PORTAGE	7	0.8%	4.34
FAIRFIELD	5	0.6%	3.42	PREBLE	6	0.7%	14.19
FAYETTE	1	0.1%	3.44	PUTNAM	3	0.3%	8.70
FRANKLIN	80	8.8%	6.88	RICHLAND	5	0.6%	4.02
FULTON	1	0.1%	2.34	ROSS	2	0.2%	2.56
GALLIA	5	0.6%	16.16	SANDUSKY	4	0.4%	6.56
GEAUGA	4	0.4%	4.28	SCIOTO	0	0.0%	0.00
GREENE	12	1.3%	7.43	SENECA	4	0.4%	7.05
GUERNSEY	6	0.7%	14.97	SHELBY	0	0.0%	0.00
HAMILTON	46	5.1%	5.73	STARK	37	4.1%	9.85
HANCOCK	3	0.3%	4.01	SUMMIT	26	2.9%	4.80
HARDIN	1	0.1%	3.12	TRUMBULL	23	2.5%	10.94
HARRISON	0	0.0%	0.00	TUSCARAWAS	12	1.3%	12.96
HENRY	3	0.3%	10.63	UNION	2	0.2%	3.82
HIGHLAND	5	0.6%	11.47	VAN WERT	1	0.1%	3.48
HOCKING	2	0.2%	6.81	VINTON	1	0.1%	7.44
HOLMES	4	0.4%	9.44	WARREN	20	2.2%	9.40
HURON	4	0.4%	6.71	WASHINGTON	5	0.6%	8.09
JACKSON	2	0.2%	6.02	WAYNE	15	1.7%	13.10
JEFFERSON	5	0.6%	7.17	WILLIAMS	0	0.0%	0.00
KNOX	1	0.1%	1.64	WOOD	6	0.7%	4.78
LAKE	11	1.2%	4.78	WYANDOT	0	0.0%	0.00
LAWRENCE	12	1.3%	19.22	UNKNOWN	0	0.0%	*
LICKING	8	0.9%	4.81	<b>TOTAL</b>	<b>907</b>	<b>100%</b>	<b>7.86</b>

\*2015-2016 Season 10/4/2015 thru 3/5/2016

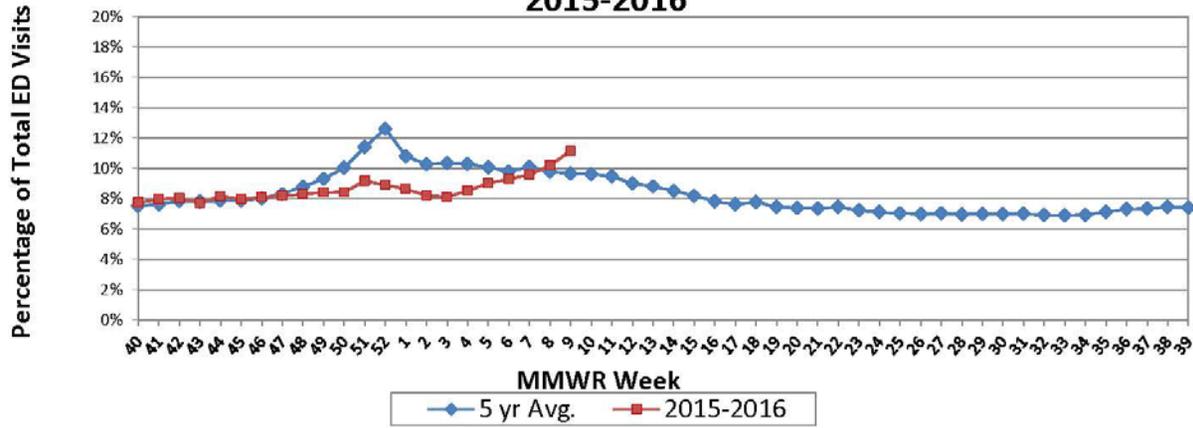
† Disease rates were calculated by number of cases per 100,000 residents using 2010 census data.

Source: Ohio Disease Reporting System

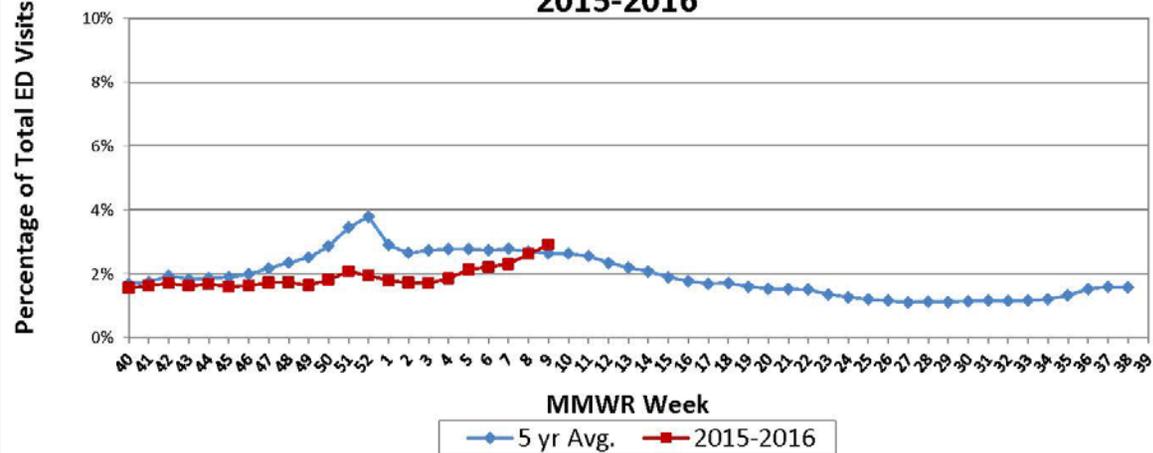
## Influenza-associated Hospitalizations by Public Health Region and MMWR Week, Ohio, 2015-2016 Influenza Season (n=907)



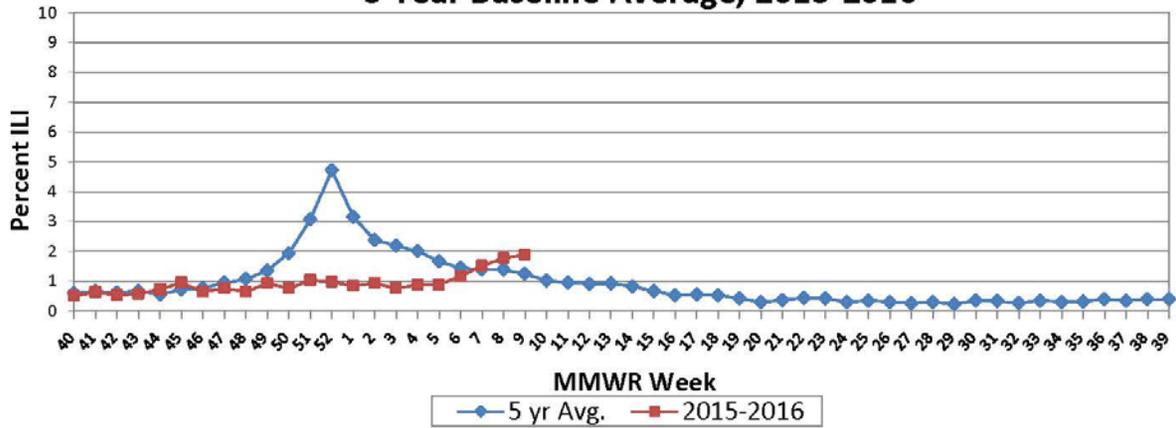
**Ohio Constitutional ED Visits with 5 Year Baseline Average;  
2015-2016**



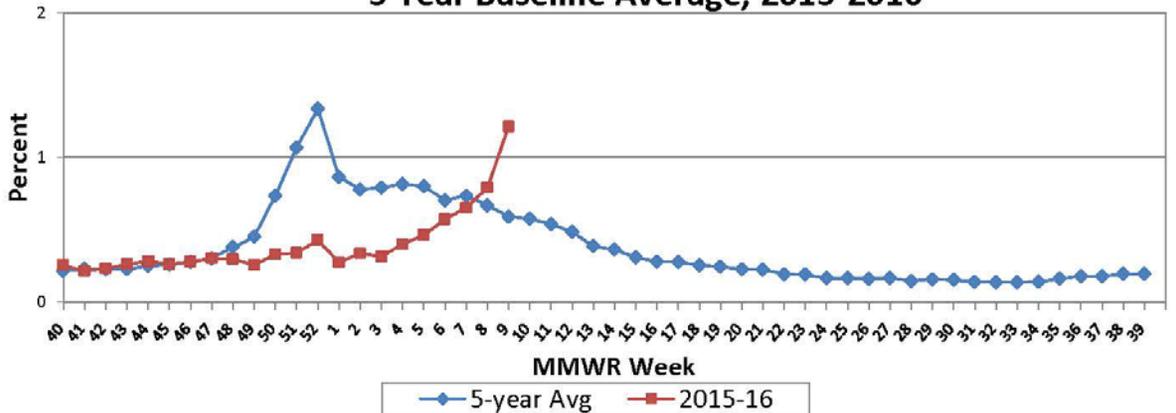
**Ohio Fever & ILI Specified ED Visits with 5 Year Baseline Average;  
2015-2016**

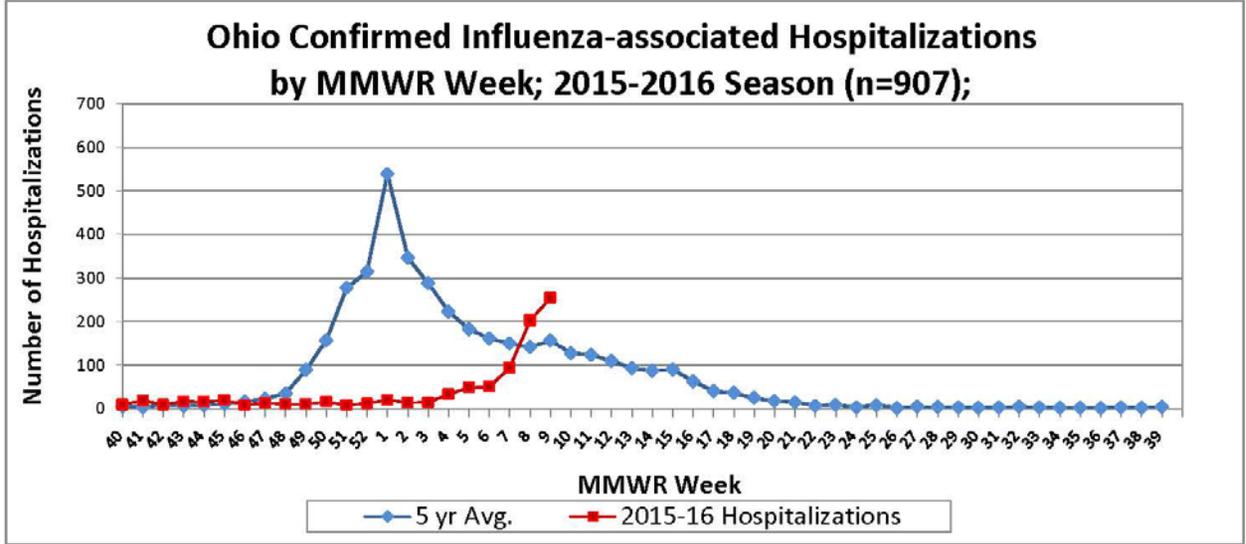
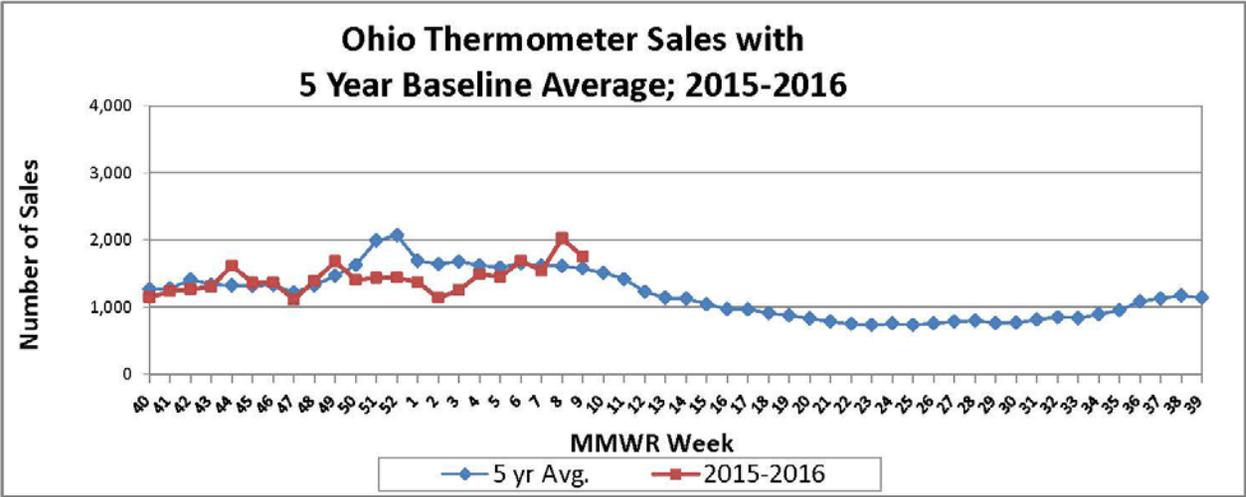


**Ohio Outpatient Influenza-like Illness Network (ILINet) with 5 Year Baseline Average; 2015-2016**



**AthenaHealth: Ohio Influenza Related Outpatient Medical Claims 5 Year Baseline Average; 2015-2016**





## Sources of Influenza Surveillance Data

- **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.
- **Emergency Department Visits (EpiCenter):** EpiCenter collects emergency department chief complaint data from 180 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 81 sentinel providers enrolled in Ohio for the 2015-2016 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.
- **National Respiratory and Enteric Virus Surveillance System (NREVSS):** The National Respiratory and Enteric Virus Surveillance System (NREVSS) is a laboratory-based system that monitors temporal and geographic patterns associated with the detection of respiratory syncytial virus (RSV), human parainfluenza viruses (HPIV), respiratory and enteric adenoviruses and rotavirus. There are 19 facilities in Ohio that submit data to this system.
- **athenahealth®:** athenahealth is a technology and services company for medical billing and electronic health records. Diagnosis and procedure data from primary care visits are automatically queried to produce influenza related statistics.

If you have any further questions or comments about surveillance for seasonal influenza for the State of Ohio, please contact the Public Health Informatics and Vaccine Preventable Disease Epidemiology Unit at [SMED@odh.ohio.gov](mailto:SMED@odh.ohio.gov) or call (614) 995-5599.