Ohio Department of Health Seasonal Influenza Activity Summary
MMWR Week 3
January 17th – January 23rd, 2016

Current Influenza Activity:

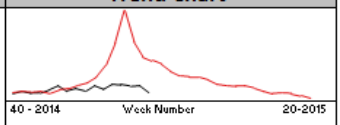
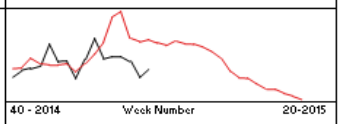
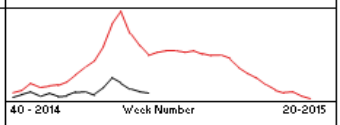
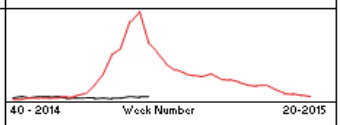
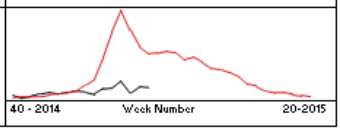
Ohio Data

Current Ohio Activity Level (Geographic Spread) - *Sporadic:* *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.*

During MMWR Week 3, public health surveillance data sources indicate minimal intensity for influenza-like illness (ILI) in outpatient settings reported by Ohio's sentinel providers. The percentage of emergency department visits with patients exhibiting constitutional symptoms **are below** baseline levels statewide; fever and ILI specified ED visits **are also below** baseline levels. There were 17 influenza-associated hospitalizations reported.

Ohio Weekly Influenza-associated Hospitalizations by Ohio Public Health Region	
Central	2
East Central	4
Northeast	4
Northwest	1
Southeast	1
Southwest	2
West Central	3
Total	17

Ohio Influenza Activity Summary Dashboard:

Data Source	Current week value	Percent Change from last week[1]	# of weeks[2]	Trend Chart[3]
Influenza-like Illness (ILI) Outpatient Data (ILINet Sentinel Provider Visits)	0.58%	-37.63%	↓ 1	
Thermometer Sales (National Retail Data Monitor)	1251	10.12%	↑ 1	
Fever and ILI Specified ED Visits (EpiCenter)	1.69%	-1.74%	↓ 4	
Constitutional ED Visits (EpiCenter)	8.09%	-1.22%	↓ 4	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	17	6.25%	↑ 1	
Outpatient Medical Claims Data[4]	0.35%	-2.78%	↓ 1	

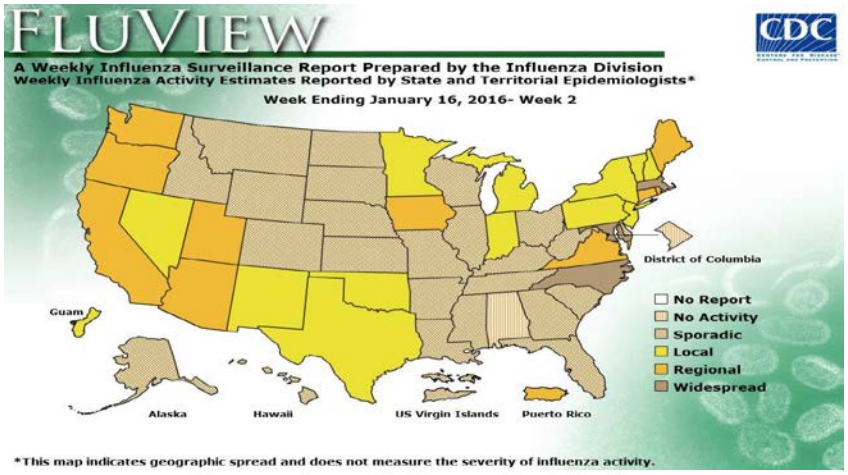
[1]Interpret percent changes with caution. Large variability may be exhibited in data sources with low weekly values.
[2]Number of weeks that the % change is increasing or decreasing.
[3]Black lines represent current week's data; red lines represent baseline averages.
[4]Medical Claims Data provided by athenahealth®

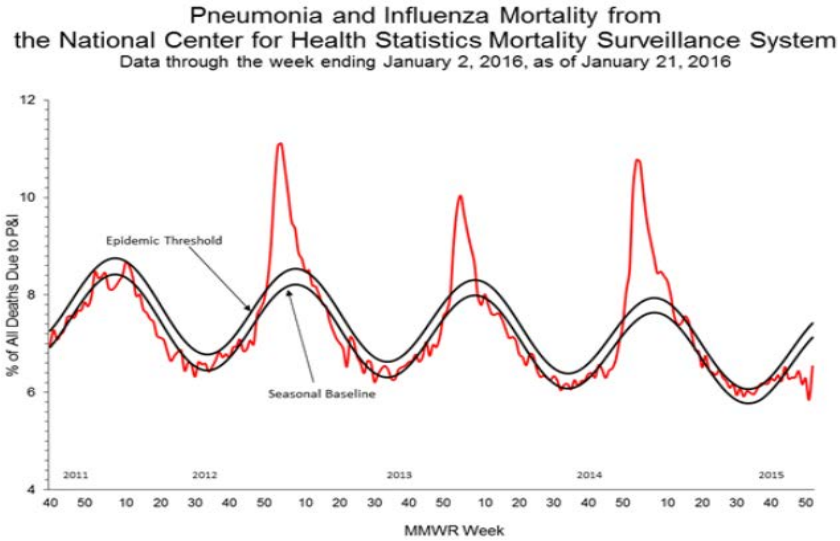
HHS Regional Data: During week 2 (January 10th– January 16th, 2015), the proportion of outpatient visits for ILI in Region 5 (Ohio is in Region 5) increased to 1.6%, which is below the regional baseline of 1.9%. Ohio, West Virginia, and Kentucky report Sporadic activity; Michigan, Pennsylvania and Indiana report local activity.

National Data:
During week 2 (January 10th– January 16th, 2015), most U.S. states reported Minimal to Low influenza activity. The proportion of outpatient visits for ILI increased to 2.1%, which is **at** the national baseline of 2.1%. Six 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 during week 1 was influenza A (H1N1)pdm09.

Influenza Virus Characterization:
CDC has characterized 259 influenza viruses [74 A (H1N1)pdm09, 135 A (H3N2), and 50 influenza B viruses] collected by U.S. laboratories since October 1, 2015.

To date, all but one of the viruses that have been characterized since October 1st, 2015 have been found to be genetically similar to the viruses included in the 2015-2016 influenza vaccine





State Surveillance Data:

- **ODH lab** has reported **97** influenza tests from specimens submitted from various submitters.
  2015-2016 influenza season results: **(6) A/pdmH1N1; (1) A/H3N2; (1) Influenza B; (89) Negative** (through 1/23/16).

- The **National Respiratory and Enteric Virus Surveillance System (NREVSS)** has reported **11,922** influenza tests performed at participating facilities.
  2015-2016 influenza season positive results: **(2) H1N1, (2) A/H3N2, (22) Flu A Not Subtyped, and (13) Flu B** (through 1/23/16).

- No **pediatric influenza-associated mortalities** have been reported during the 2015-2016 season (through 1/23/16).

- No **novel influenza A virus infections** have been reported during the 2015-2016 season (through 1/23/16).

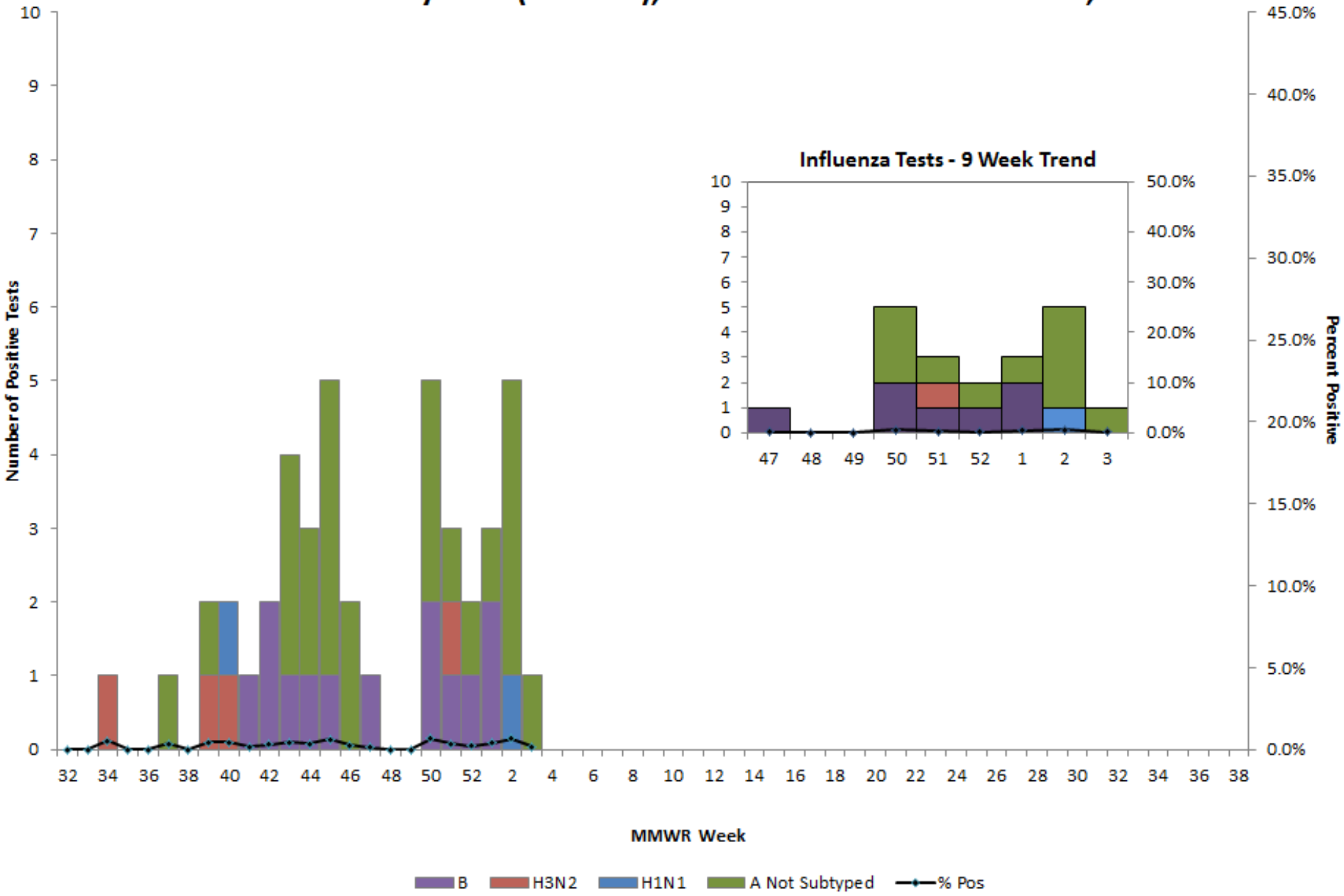
- Incidence of confirmed **influenza-associated hospitalizations** in 2015-2016 season = **229** (through 1/23/16).

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 Public Health Informatics and Vaccine Preventable Disease Epidemiology Unit at SMED@odh.ohio.gov or call (614) 995-5599.

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



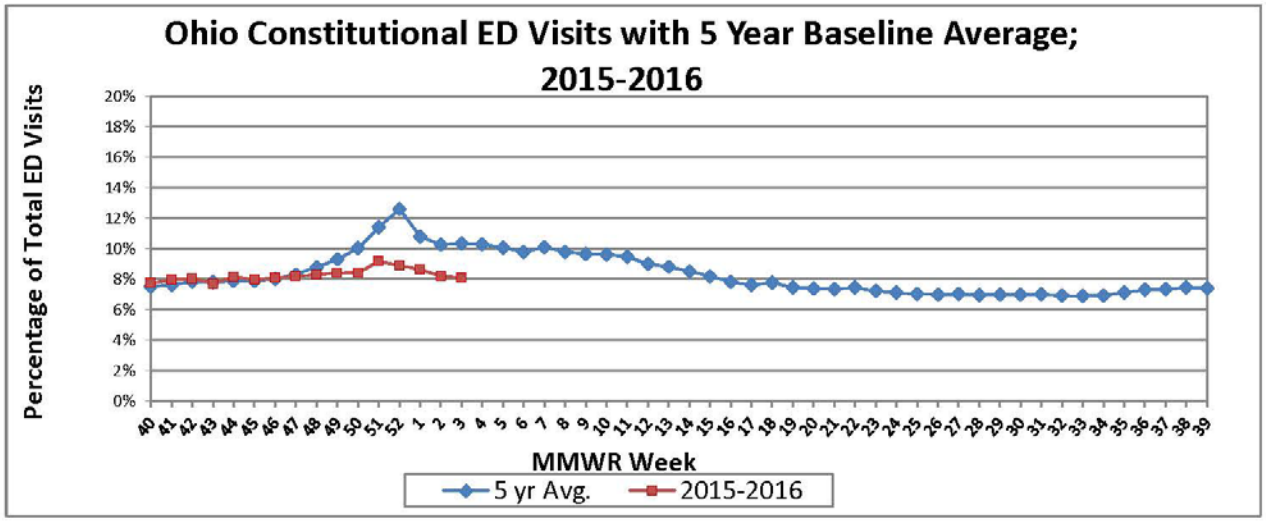
Influenza-Associated Hospitalizations, Ohio
2015-2016 Season*

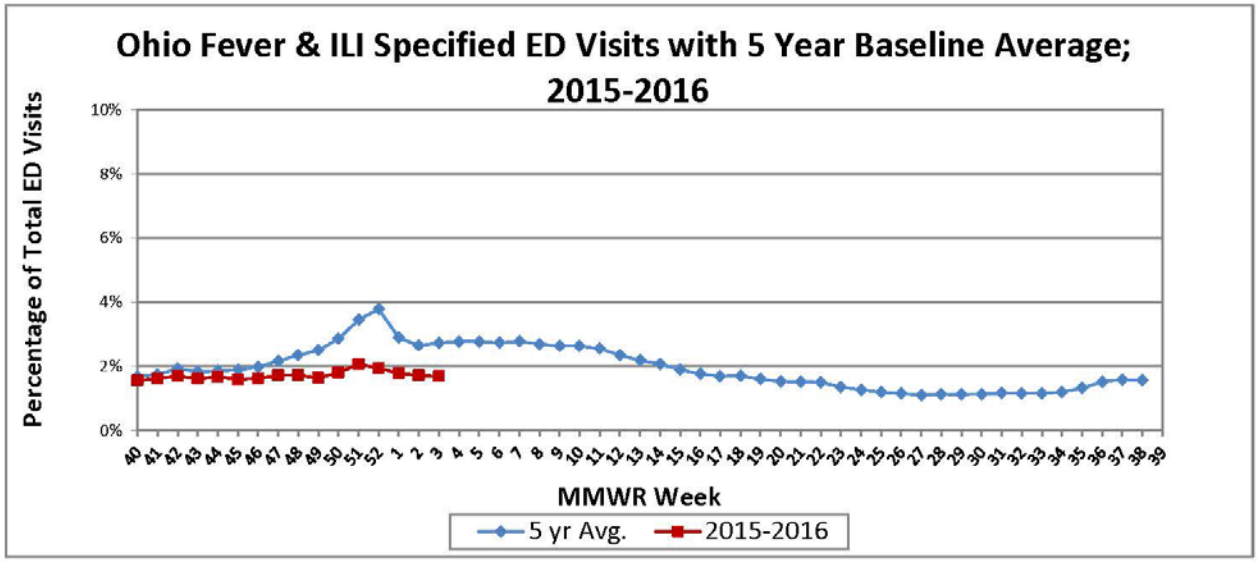
County	Influenza-Associated Hospitalizations	Percent of All Influenza-Associated Hospitalizations	Rate per 100,000 Population†
ADAMS	0	0.0%	0.00
ALLEN	21	9.2%	19.75
ASHLAND	1	0.4%	1.88
ASHTABULA	2	0.9%	1.97
ATHENS	2	0.9%	3.09
AUGLAIZE	4	1.7%	8.71
BELMONT	1	0.4%	1.42
BROWN	0	0.0%	0.00
BUTLER	7	3.1%	1.90
CARROLL	0	0.0%	0.00
CHAMPAIGN	1	0.4%	2.49
CLARK	4	1.7%	2.89
CLERMONT	3	1.3%	1.52
CLINTON	0	0.0%	0.00
COLUMBIANA	0	0.0%	0.00
COSHOCTON	2	0.9%	5.42
CRAWFORD	0	0.0%	0.00
CUYAHOGA	40	17.5%	3.12
DARKE	0	0.0%	0.00
DEFIANCE	0	0.0%	0.00
DELAWARE	0	0.0%	0.00
ERIE	0	0.0%	0.00
FAIRFIELD	2	0.9%	1.37
FAYETTE	0	0.0%	0.00
FRANKLIN	18	7.9%	1.55
FULTON	0	0.0%	0.00
GALLIA	0	0.0%	0.00
GEAUGA	2	0.9%	2.14
GREENE	2	0.9%	1.24
GUERNSEY	5	2.2%	12.47
HAMILTON	4	1.7%	0.50
HANCOCK	3	1.3%	4.01
HARDIN	1	0.4%	3.12
HARRISON	0	0.0%	0.00
HENRY	0	0.0%	0.00
HIGHLAND	1	0.4%	2.29
HOCKING	0	0.0%	0.00
HOLMES	1	0.4%	2.36
HURON	0	0.0%	0.00
JACKSON	0	0.0%	0.00
JEFFERSON	0	0.0%	0.00
KNOX	0	0.0%	0.00
LAKE	3	1.3%	1.30
LAWRENCE	0	0.0%	0.00
LICKING	2	0.9%	1.20
LOGAN	1	0.4%	2.18
LORAIN	2	0.9%	0.66
LUCAS	11	4.8%	2.49
MADISON	1	0.4%	2.30
MAHONING	4	1.7%	1.67
MARION	1	0.4%	1.50
MEDINA	4	1.7%	2.32
MEIGS	2	0.9%	8.41
MERCER	2	0.9%	4.90
MIAMI	1	0.4%	0.98
MONROE	0	0.0%	0.00
MONTGOMERY	14	6.1%	2.62
MORGAN	0	0.0%	0.00
MORROW	0	0.0%	0.00
MUSKINGUM	5	2.2%	5.81
NOBLE	0	0.0%	0.00
OTTAWA	0	0.0%	0.00
PAULDING	0	0.0%	0.00
PERRY	0	0.0%	0.00
PICKAWAY	1	0.4%	1.80
PIKE	1	0.4%	3.48
PORTAGE	3	1.3%	1.86
PREBLE	0	0.0%	0.00
PUTNAM	2	0.9%	5.80
RICHLAND	0	0.0%	0.00
ROSS	0	0.0%	0.00
SANDUSKY	1	0.4%	1.64
SCIOTO	0	0.0%	0.00
SENECA	0	0.0%	0.00
SHELBY	0	0.0%	0.00
STARK	6	2.6%	1.60
SUMMIT	8	3.5%	1.48
TRUMBULL	17	7.4%	8.08
TUSCARAWAS	1	0.4%	1.08
UNION	0	0.0%	0.00
VAN WERT	1	0.4%	3.48
VINTON	0	0.0%	0.00
WARREN	3	1.3%	1.41
WASHINGTON	1	0.4%	1.62
WAYNE	3	1.3%	2.62
WILLIAMS	0	0.0%	0.00
WOOD	1	0.4%	0.80
WYANDOT	0	0.0%	0.00
UNKNOWN	0	0.0%	*
TOTAL	**229**	**100%**	**1.99**

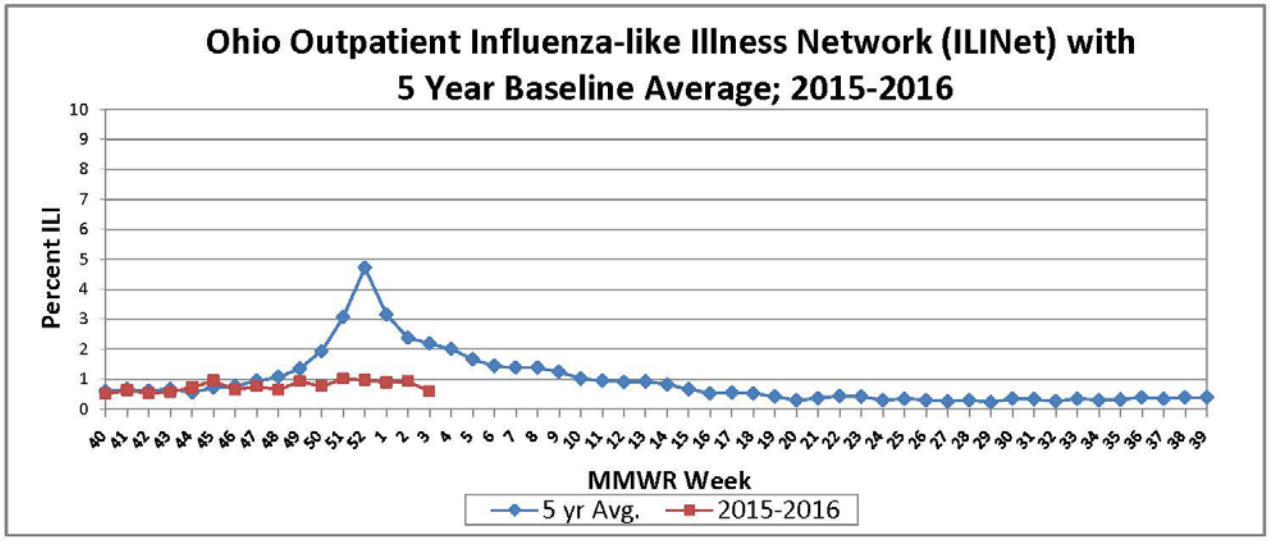
*2015-2016 Season 10/4/2015 thru 1/23/2016

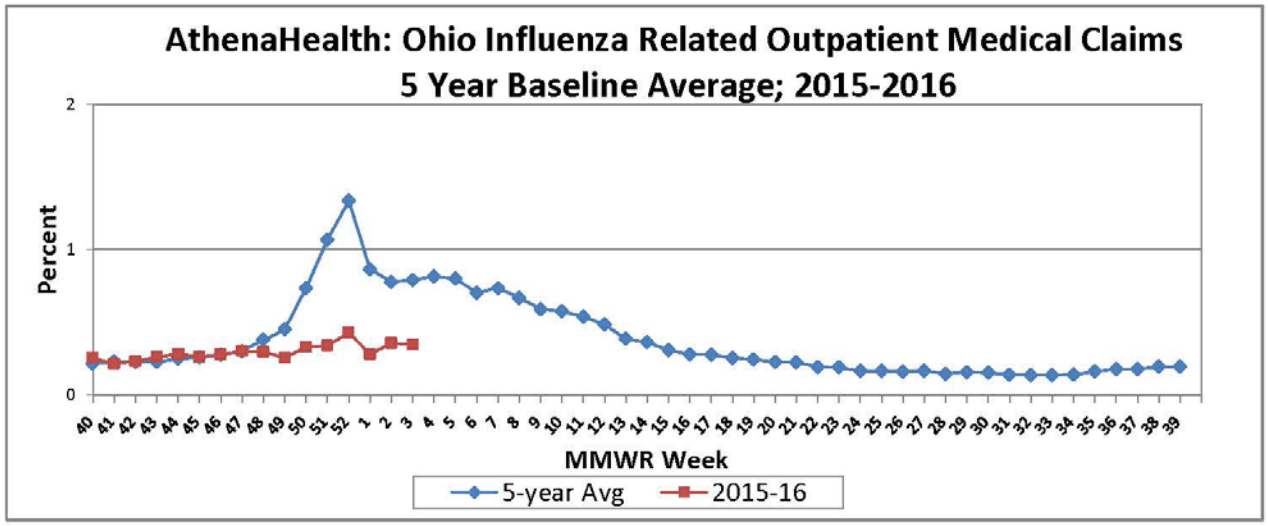
† Disease rates were calculated by number of cases per 100,000 residents using 2010 census data.

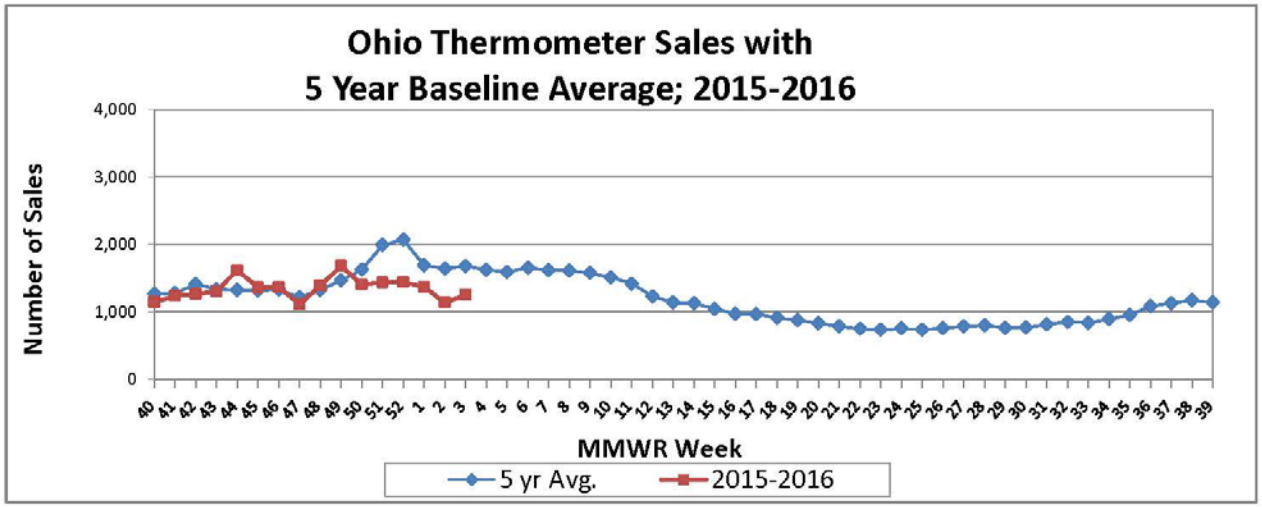
Source: Ohio Disease Reporting System

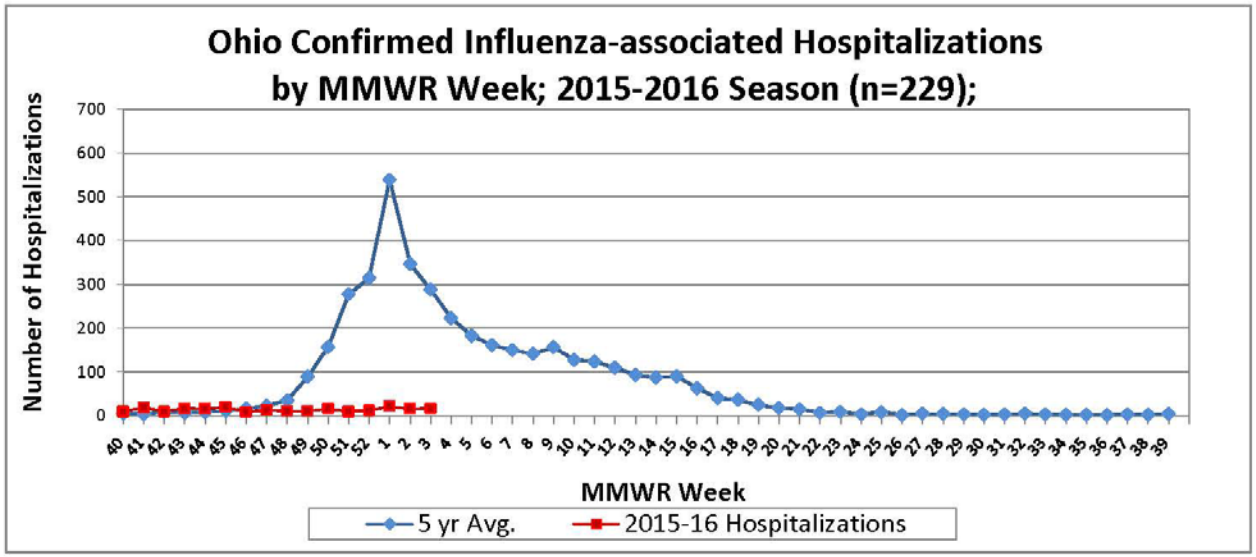

Ohio Constitutional ED Visits with 5 Year Baseline Average; 2015-2016
Percentage of Total ED Visits
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
MMWR Week
5 yr Avg.
2015-2016


Ohio Fever & ILI Specified ED Visits with 5 Year Baseline Average; 2015-2016
Percentage of Total ED Visits
10%
8%
6%
4%
2%
0%
MMWR Week
5 yr Avg.
2015-2016


Ohio Outpatient Influenza-like Illness Network (ILINet) with
5 Year Baseline Average; 2015-2016
Percent ILI
MMWR Week
5 yr Avg.
2015-2016


AthenaHealth: Ohio Influenza Related Outpatient Medical Claims
5 Year Baseline Average; 2015-2016
Percent
MMWR Week
5-year Avg
2015-16


Ohio Thermometer Sales with
5 Year Baseline Average; 2015-2016
Number of Sales
4,000
3,000
2,000
1,000
0
MMWR Week
5 yr Avg.
2015-2016


Ohio Confirmed Influenza-associated Hospitalizations
by MMWR Week; 2015-2016 Season (n=229);
Number of Hospitalizations
700
600
500
400
300
200
100
0
MMWR Week
5 yr Avg.
2015-16 Hospitalizations

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.