



Ohio Department of Health Seasonal Influenza Activity Summary

MMWR Week 20

May 14th – May 20th, 2017

**** THIS WILL BE THE LAST INFLUENZA SURVEILLANCE WEEKLY REPORT OF THE 2016-2017 **
INFLUENZA SEASON. ODH WILL CONTINUE PERFORMING WEEKLY SURVEILLANCE BUT WILL
DISCONTINUE POSTING THE REPORT UNTIL THE START OF THE 2017-2018 INFLUENZA SEASON**

Current Influenza Activity:

Current Ohio Activity Level (Geographic Spread) – *Local*

Definition: Increased ILI in 1 region; ILI activity in other regions is not increased AND recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI, OR 2 or more institutional outbreaks (ILI or lab confirmed) in 1 region; ILI activity in other regions is not increased AND recent (within the past 3 weeks) lab evidence of influenza in region with the outbreaks; virus activity is no greater than sporadic in other regions.

During MMWR Week 20, Ohio public health surveillance data sources indicate decreased activity for influenza-like illness (ILI) in outpatient settings reported by Ohio's Sentinel ILINet providers, Athenahealth medical claims data and most other data sources. The percentage of emergency department (ED) visits with patients exhibiting constitutional symptoms and fever/ILI specified ED visits decreased and are below baseline levels overall. Weekly Influenza-associated hospitalization numbers decreased and are below the *seasonal threshold. There were 19 influenza-associated hospitalizations and during MMWR Week 20.

Ohio Weekly Influenza-associated Hospitalizations by Ohio Public Health Region

Central	3
East Central	3
Northeast	3
Northwest	3
Southeast	0
Southwest	2
West Central	5
Total	19

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)	0.42%	-45.45%	↓ 7	
Thermometer Sales (National Retail Data Monitor)	961	-11.59%	↓ 1	
Fever and ILI Specified ED Visits (EpiCenter)	1.18%	-5.60%	↓ 1	
Constitutional ED Visits (EpiCenter)	7.50%	0.00%	—	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	19	18.75%	↑ 1	
Outpatient Medical Claims Data ⁴	0.25%	-16.67%	↓ 7	

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

²Number of weeks that the % change is increasing or decreasing.

³Black lines represent current week's data; red lines represent baseline averages.

⁴Medical Claims Data provided by athenahealth®

*The seasonal threshold is 25 cases of influenza-associated hospitalizations; historical data demonstrate that once the weekly count exceeds 25 cases, the number of weekly cases thereafter will likely not decrease until after the peak of influenza activity for the season.

Ohio Surveillance Data:

- HHS Regional Surveillance Data***: During week 19 (May 7th - May 13th, 2017), the proportion of outpatient visits for ILI in Region 5 (Ohio is in Region 5) was 1.2%, which is below the regional baseline of 1.9%. Ohio reported Local Activity; Michigan, Pennsylvania, West Virginia, Kentucky, and Indiana reported Sporadic Activity.

Influenza Virus Characterization:

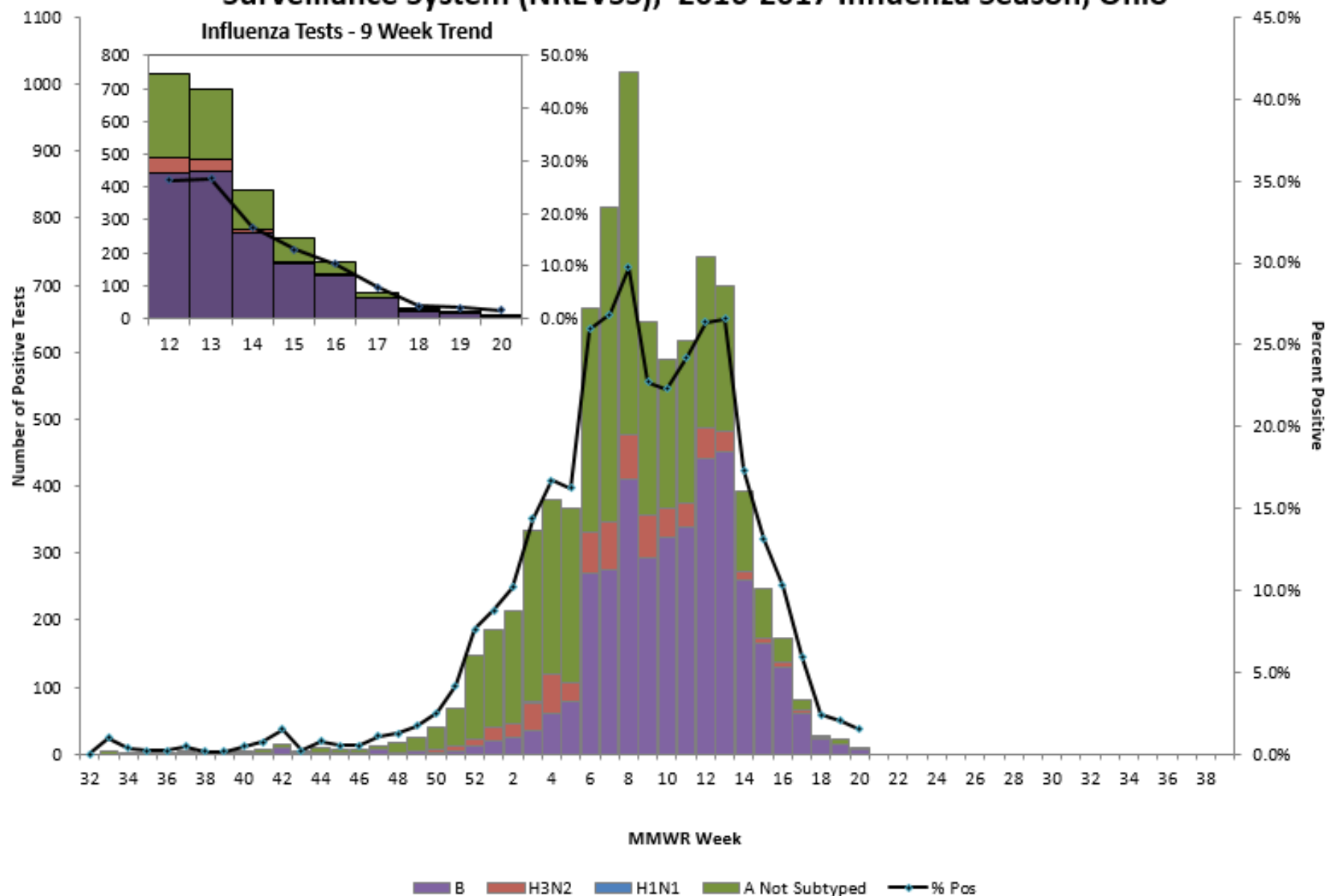
94% of the Influenza B viruses that have been antigenically characterized by CDC were similar to viruses included in either the trivalent or quadrivalent 2016-17 influenza vaccine. 96% of the influenza A viruses characterized matched the viruses included in the 2016-17 influenza vaccine.

More information from CDC can be found at: <http://www.cdc.gov/flu/>

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



Positive Influenza Tests (PCR), National Respiratory and Enteric Virus Surveillance System (NREVSS), 2016-2017 Influenza Season, Ohio



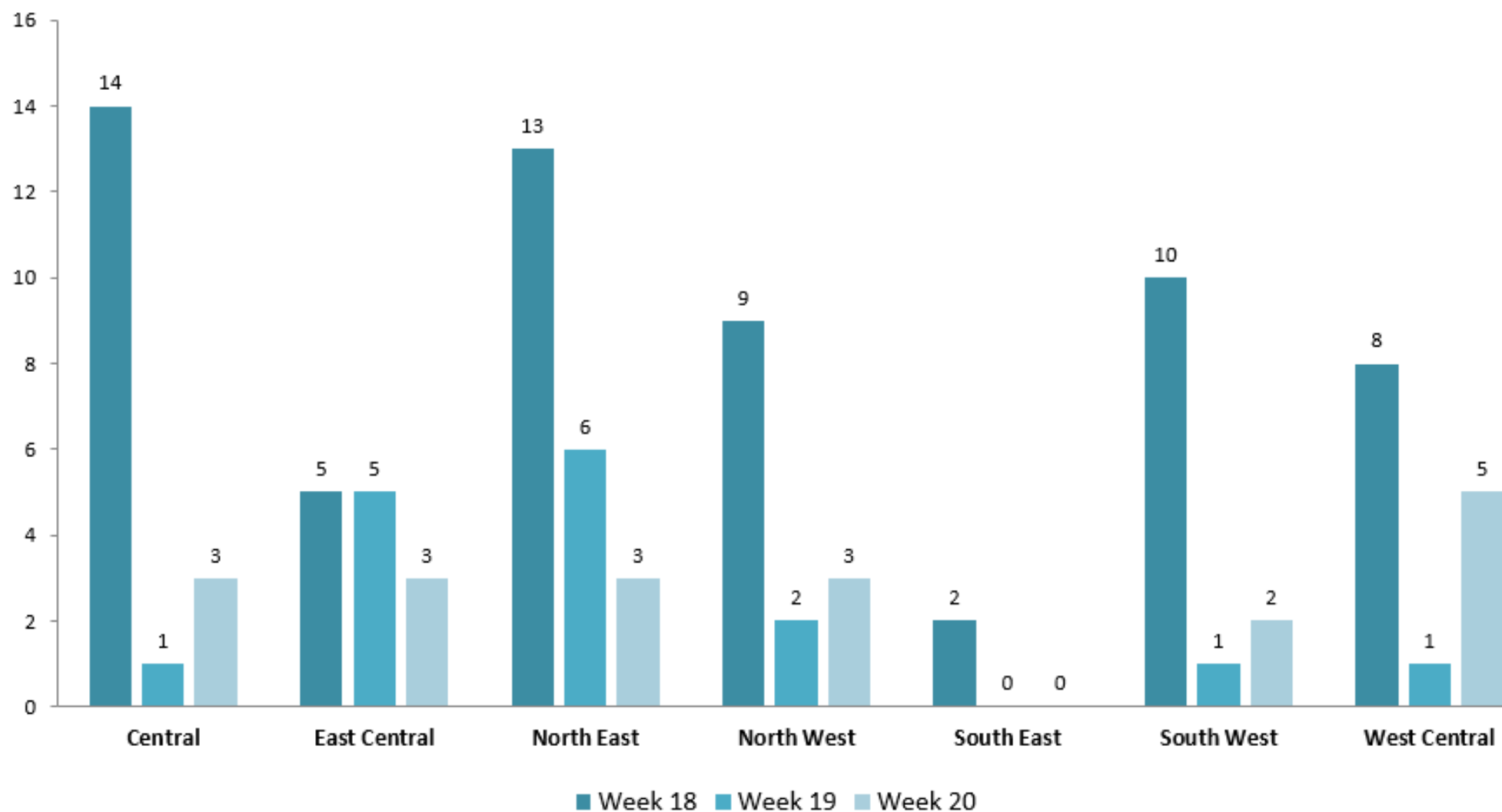
Influenza-Associated Hospitalizations, Ohio 2016-2017 Season*								
County	Influenza-Associated Hospitalizations	Percent of All Influenza-Associated Hospitalizations	Rate per 100,000 Population†		County	Influenza-Associated Hospitalizations	Percent of All Influenza-Associated Hospitalizations	Rate per 100,000 Population†
ADAMS	4	0.0%	14.01		LOGAN	25	0.3%	54.52
ALLEN	160	1.8%	150.47		LORAIN	136	1.6%	45.13
ASHLAND	33	0.4%	62.10		LUCAS	341	3.9%	77.18
ASHTABULA	72	0.8%	70.94		MADISON	36	0.4%	82.88
ATHENS	37	0.4%	57.14		MAHONING	421	4.9%	176.28
AUGLAIZE	37	0.4%	80.52		MARION	111	1.3%	166.91
BELMONT	15	0.2%	21.31		MEDINA	97	1.1%	56.29
BROWN	8	0.1%	17.84		MEIGS	16	0.2%	67.31
BUTLER	238	2.7%	64.65		MERCER	49	0.6%	120.06
CARROLL	30	0.3%	104.04		MIAMI	68	0.8%	66.34
CHAMPAIGN	38	0.4%	94.77		MONROE	7	0.1%	47.81
CLARK	86	1.0%	62.17		MONTGOMERY	618	7.1%	115.48
CLERMONT	104	1.2%	52.69		MORGAN	8	0.1%	53.14
CLINTON	18	0.2%	42.82		MORROW	15	0.2%	43.07
COLUMBIANA	111	1.3%	102.93		MUSKINGUM	42	0.5%	48.80
COSHOCTON	9	0.1%	24.39		NOBLE	9	0.1%	61.45
CRAWFORD	39	0.5%	89.07		OTTAWA	30	0.3%	72.41
CUYAHOGA	1328	15.3%	103.74		PAULDING	17	0.2%	86.67
DARKE	44	0.5%	83.08		PERRY	12	0.1%	33.28
DEFIANCE	16	0.2%	40.99		PICKAWAY	31	0.4%	55.66
DELAWARE	68	0.8%	39.03		PIKE	17	0.2%	59.21
ERIE	42	0.5%	54.49		PORTAGE	118	1.4%	73.10
FAIRFIELD	53	0.6%	36.26		PREBLE	16	0.2%	37.85
FAYETTE	0	0.0%	0.00		PUTNAM	31	0.4%	89.86
FRANKLIN	697	8.0%	59.91		RICHLAND	94	1.1%	75.52
FULTON	29	0.3%	67.92		ROSS	53	0.6%	67.89
GALLIA	28	0.3%	90.52		SANDUSKY	35	0.4%	57.43
GEAUGA	42	0.5%	44.97		SCIOTO	47	0.5%	59.12
GREENE	156	1.8%	96.55		SENECA	31	0.4%	54.63
GUERNSEY	16	0.2%	39.91		SHELBY	21	0.2%	42.49
HAMILTON	407	4.7%	50.72		STARK	319	3.7%	84.93
HANCOCK	35	0.4%	46.80		SUMMIT	430	5.0%	79.37
HARDIN	27	0.3%	84.22		TRUMBULL	287	3.3%	136.46
HARRISON	13	0.2%	81.95		TUSCARAWAS	39	0.5%	42.12
HENRY	26	0.3%	92.15		UNION	31	0.4%	59.27
HIGHLAND	22	0.3%	50.47		VAN WERT	16	0.2%	55.66
HOCKING	13	0.2%	44.25		VINTON	5	0.1%	37.22
HOLMES	17	0.2%	40.13		WARREN	95	1.1%	44.67
HURON	75	0.9%	125.78		WASHINGTON	63	0.7%	101.98
JACKSON	30	0.3%	90.29		WAYNE	119	1.4%	103.91
JEFFERSON	90	1.0%	129.11		WILLIAMS	20	0.2%	53.13
KNOX	34	0.4%	55.81		WOOD	73	0.8%	58.17
LAKE	114	1.3%	49.56		WYANDOT	26	0.3%	114.97
LAWRENCE	39	0.5%	62.45		UNKNOWN	0	0.0%	*
LICKING	86	1.0%	51.65		TOTAL	8661	100%	75.07

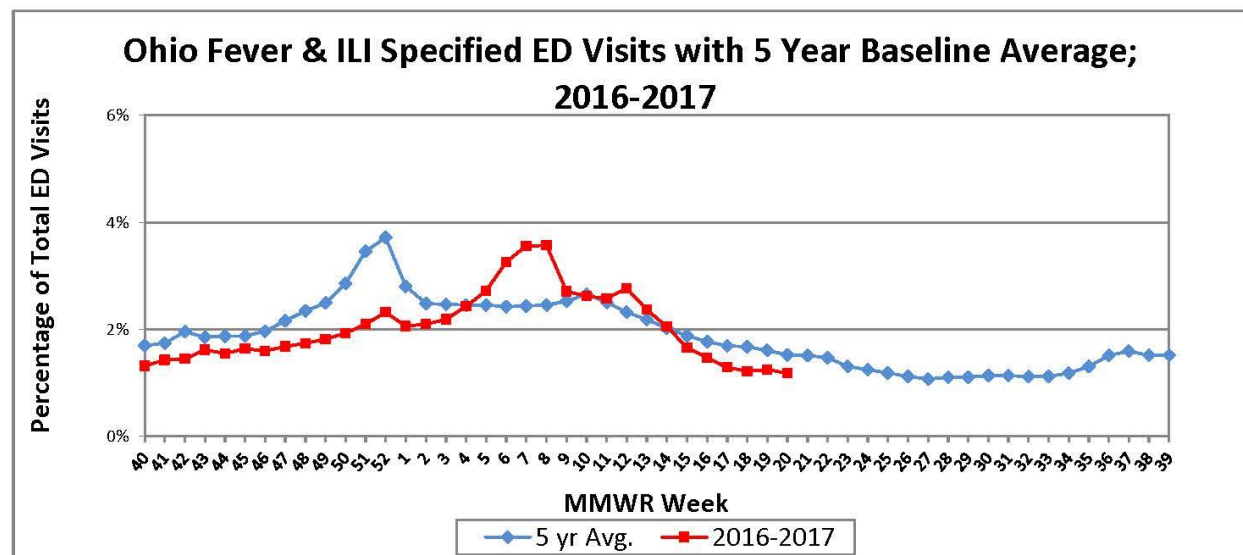
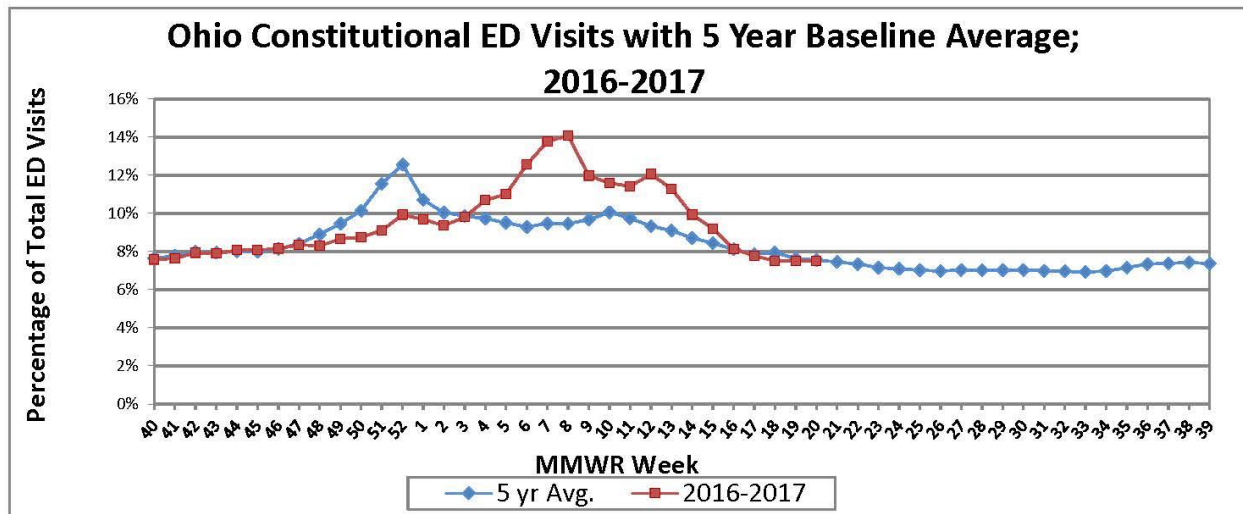
*2016-2017 Season 10/2/2016 thru 5/20/2017

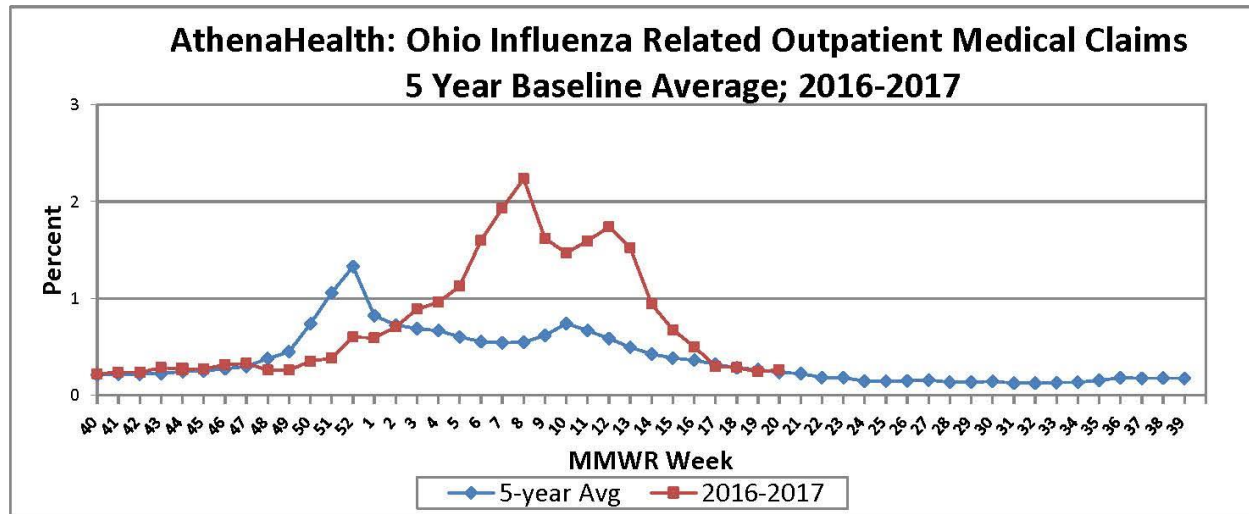
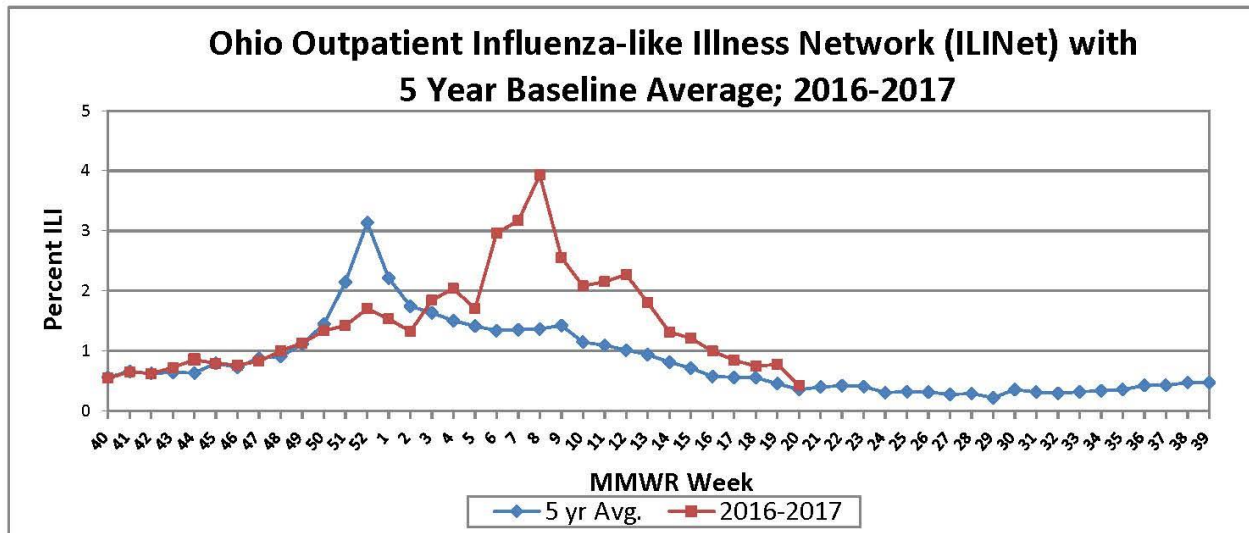
† Disease rates were calculated by number of cases per 100,000 residents using 2010 census data.

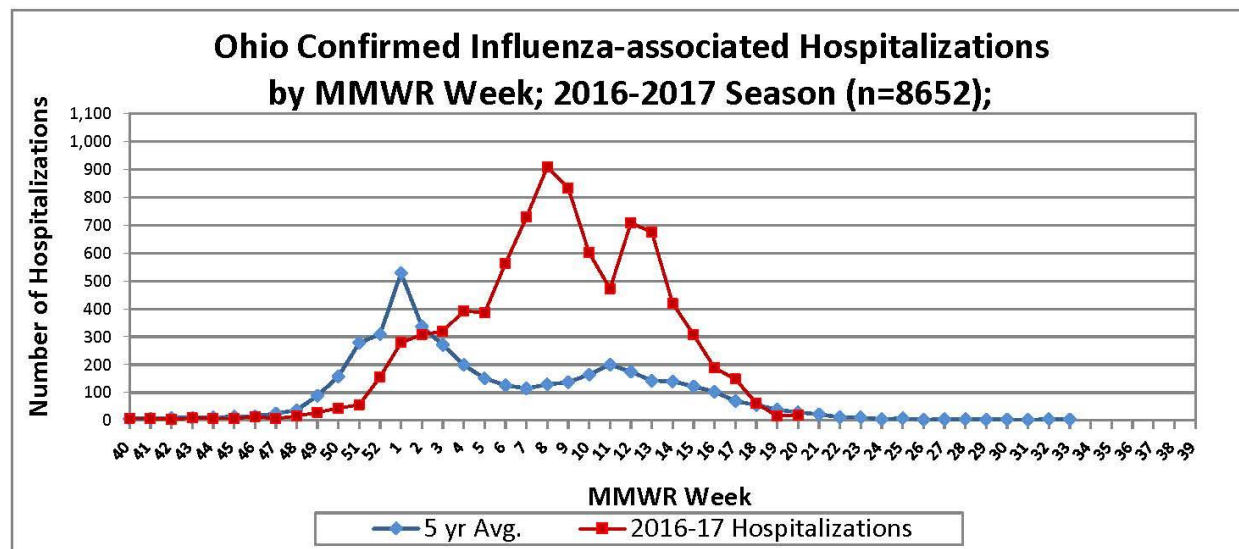
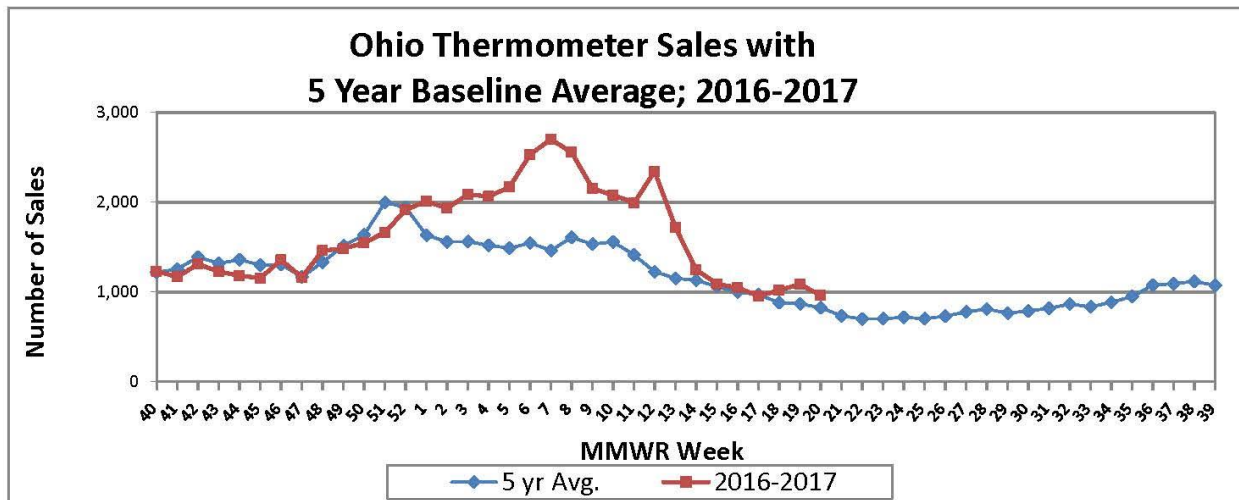
Source: Ohio Disease Reporting System

Influenza-associated Hospitalizations by Public Health Region and MMWR Week, Ohio, 2016-2017 Influenza Season









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 (≥ 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 83 sentinel providers enrolled in Ohio for the 2016-2017 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.
- **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.

Ohio Public Health Regions: These counties comprise the Ohio Public Health Regions described in the figures shown on pages 1 and 5.

Central		East Central		Noth East	North West		South East		South West	West Central
CRAWFORD	LOGAN	ASHLAND	RICHLAND	ASHTABULA	ALLEN	MERCER	ATHENS	MONROE	ADAMS	CHAMPAIGN
DELAWARE	MADISON	CARROLL	STARK	CUYAHOGA	AUGLAIZE	OTTAWA	BELMONT	MORGAN	BROWN	CLARK
FAIRFIELD	MARION	COLUMBIANA	SUMMIT	GEAUGA	DEFIANCE	PAULDING	COSHOCTON	MUSKINGUM	BUTLER	DARKE
FAYETTE	MORROW	HOLMES	TRUMBULL	LAKE	ERIE	PUTNAM	GALLIA	NOBLE	CLERMONT	GREENE
FRANKLIN	PICKAWAY	MAHONING	TUSCARAWAS	LORAIN	FULTON	SANDUSKY	GUERNSEY	PERRY	CLINTON	MIAMI
HARDIN	UNION	MEDINA	WAYNE		HANCOCK	SENECA	HARRISON	PIKE	HAMILTON	MONTGOMERY
KNOX	WYANDOT	PORTAGE			HENRY	VAN WERT	HOCKING	ROSS	HIGHLAND	PREBLE
LICKING					HURON	WILLIAMS	JACKSON	SCIOTO	WARREN	SHELBY
					LUCAS	WOOD	JEFFERSON	VINTON		
							LAWRENCE	WASHINGTON		
							MEIGS			

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