



Dayton &
Montgomery
County

West Central Ohio (WCO) Regional Seasonal Influenza Activity Report MMWR Week 1 12/30/2018 – 1/5/2019

Weekly Influenza Activity Summary:

Montgomery County (Week 1): The number of influenza-associated hospitalizations dropped from week 52 to week 1 and remains below the 5-year baseline average. Of the 80 influenza-associated hospitalizations thus far in the 2018-2019 flu season, nearly half have occurred in individuals < 5 years of age or > 65 years of age. Influenza-related emergency department (ED) activity decreased during week 1; the percentage of ED visits for *constitutional syndrome* decreased by 10.9%, and the percentage of ED visits attributable to *fever & ILI symptoms* decreased by 29.2%. Both indicators were above the 5-year baseline average for week 1. Thermometer sales in Montgomery County increased by 43.3% during week 1. Overall, influenza activity in Montgomery County leveled off during week 1 but is likely to continue to increase over the next several weeks.

West Central Ohio Region (Week 1): Regional influenza-associated hospitalizations decreased from week 52 to week 1. The number of outpatient influenza cases has dramatically increased over the past three weeks. Overall, regional influenza activity leveled off during week 1 but is likely to continue to increase over the next several weeks.

Ohio (Week 1): Current Activity Level - Widespread

Increased ILI in at least half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the state. The Ohio Department of Health (ODH) has reported the following positive results from flu specimens sent to the ODH laboratory (through 1/5/19): (78) Influenza A/pdmH1N1; (22) Influenza A/H3N2; (1) Influenza B.

National (Week 1): Nationally, influenza activity is elevated and continues to increase. Forty-eight of 54 jurisdictions (all 50 states, the District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands) in the United States are reporting regional or widespread influenza activity. Influenza A(H1N1), influenza A(H3N2), and influenza B viruses continue to co-circulate. Influenza A(H1N1)pdm09 viruses have been most prevalent this flu season. However, influenza A(H3) viruses have predominated in the southeastern United States (HHS Region 4) [Ohio is in HHS Region 5].

For hospitals and other regional healthcare facilities to more accurately monitor influenza in the area, this report will include regional and Montgomery County specific influenza activity. The regional influenza report will include positive influenza cases from healthcare facilities in Auglaize, Butler, Champaign, Clark, Darke, Greene, Miami, Montgomery, Preble, Shelby, and Warren counties (<http://www.gdaha.org/regional-hospital-locator>).

Confirmed Influenza-associated Hospitalizations

MMWR Week	40-50*	51*	52*	1*	2018-2019 Flu Season Total as of 1/11/19
Week Ending	12/15/18	12/22/18	12/29/18	1/5/19	
Auglaize	1	1	1	1	4
Butler	11	2	3	6	22
Champaign	1	0	0	0	1
Clark	1	3	4	3	11
Darke	0	0	4	1	5
Greene	6	3	4	10	23
Miami	0	2	4	0	6
Montgomery	28	13	22	17	80
Preble	2	0	0	0	2
Shelby	0	0	1	0	1
Warren	7	4	3	2	16
Total	57	28	46	40	171

*Numbers may change based on updated ODRS data.

Weekly Regional Outpatient Influenza Cases

MMWR Week	Week Ending	Influenza A	Influenza B	ILI* Reports (Sentinel Providers)	Weekly Total
40-50	12/15/18	87	5	22	114
51	12/22/18	131	0	0	131
52	12/29/18	224	2	19	245
1	1/5/19	77	13	10	100
Season Total	NA	519	20	51	590

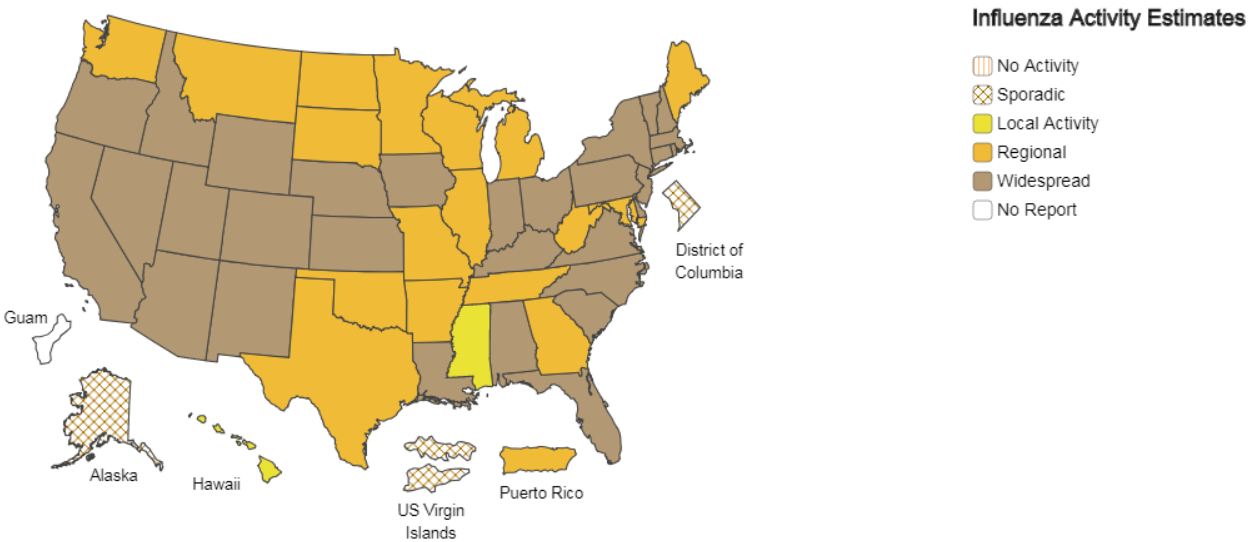
*Influenza-like Illness (ILI)



A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending Jan 05, 2019 - Week 1



*This map indicates geographic spread and does not measure the severity of influenza activity.

National Influenza Activity Summary <http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>

Additional Surveillance Data & Flu Facts

Flu Facts <http://www.flu.gov/>

Ohio Department of Health Seasonal Influenza Activity Summary <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/seasonal-influenza/ohio-flu-activity/>

Montgomery County Seasonal Influenza Activity Summary <http://www.phdmc.org/report/montgomery-county-flu-activity-level>



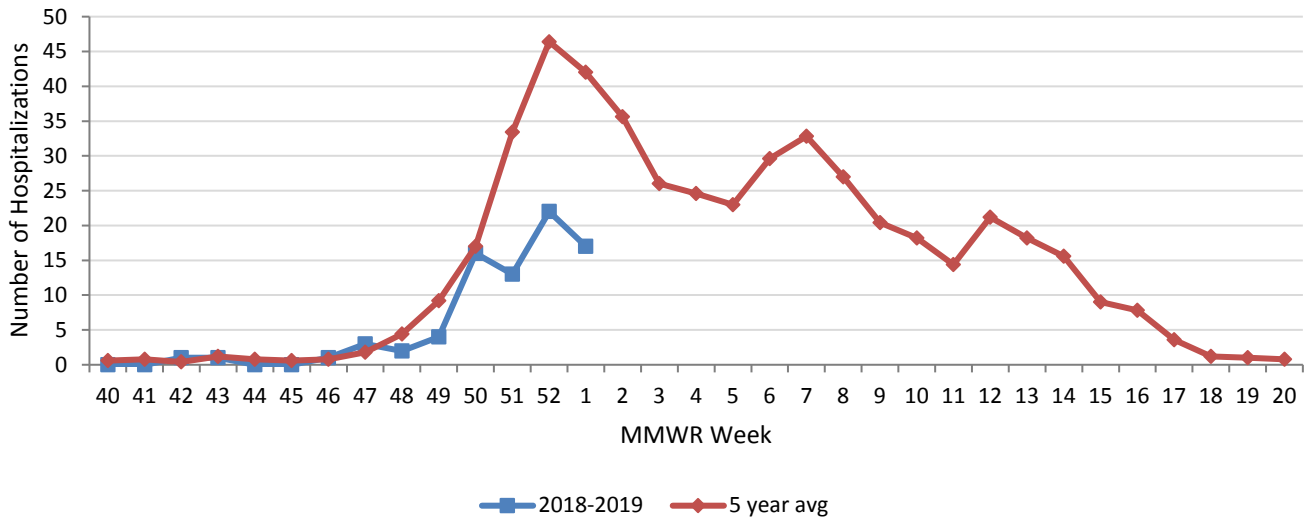
Montgomery County Seasonal Influenza Activity Report MMWR Week 1 12/30/2018 – 1/5/2019

Montgomery County Weekly Surveillance Data

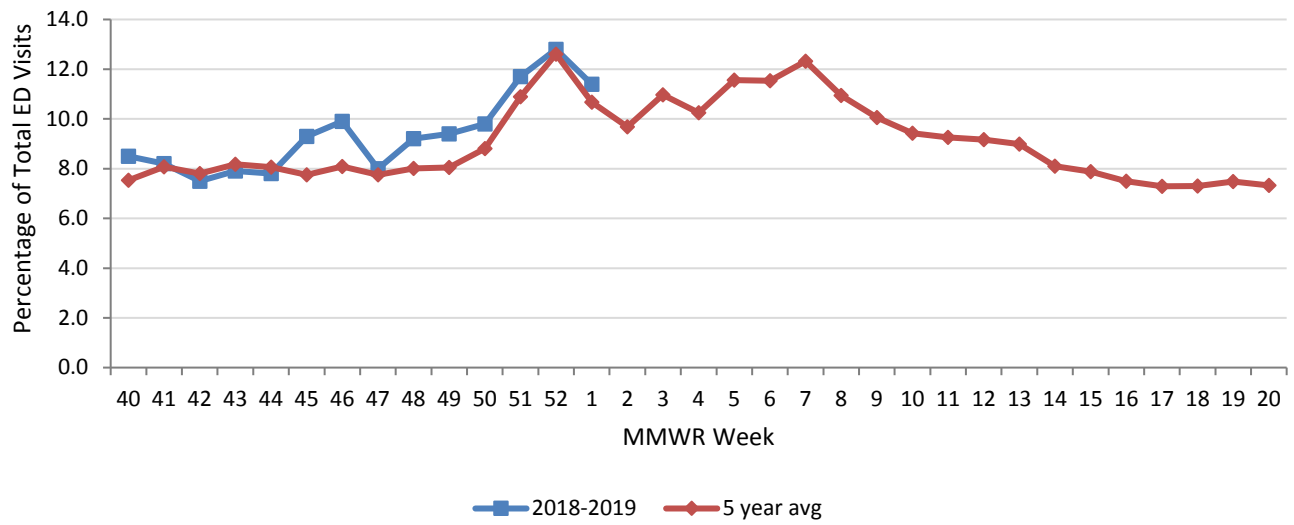
Surveillance Data	Current Week	% Change	Trend
Influenza Hospitalizations	17	22.7%	
% Constitutional ED visits	11.4%	10.9%	
% Fever & ILI ED visits	3.4%	29.2%	
Thermometer sales	96	43.3%	

* Percent change not calculated for small numbers
Dash (-) indicates no change

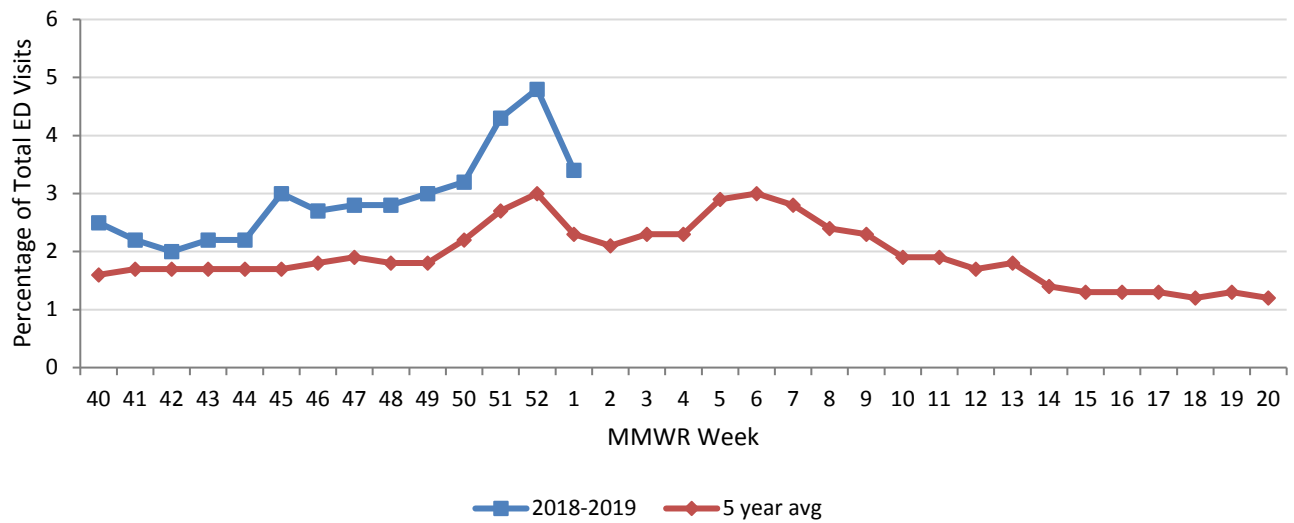
Montgomery County Confirmed Influenza-associated Hospitalizations by MMWR Week with 5-Year Baseline Average; 2018-2019



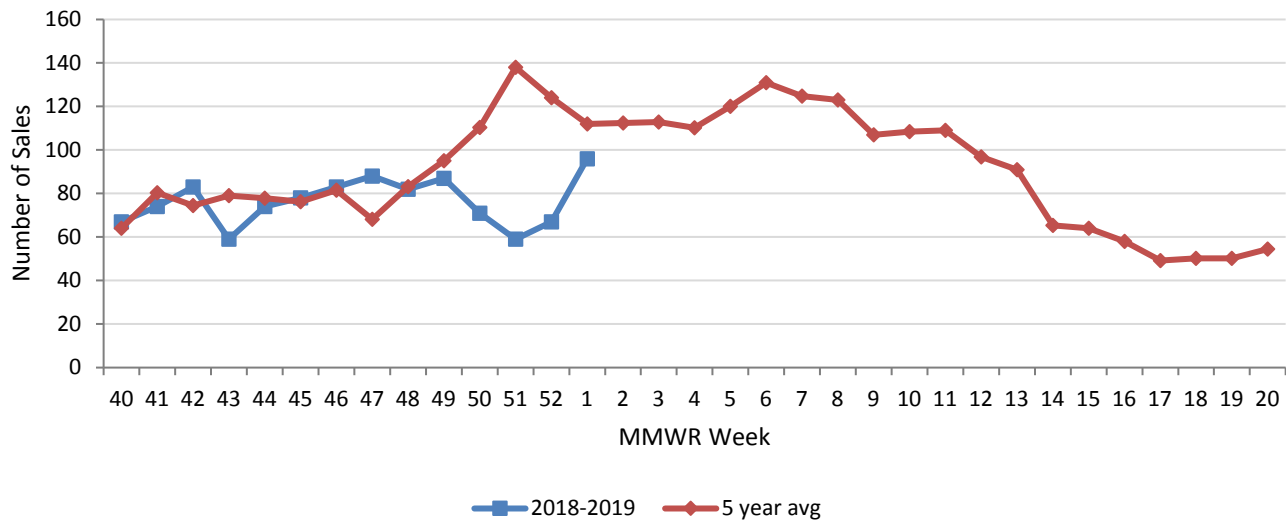
Montgomery County Constitutional ED Visits by MMWR Week with 5-Year Baseline Average; 2018-2019



Montgomery County Fever & ILI Specified ED Visits by MMWR Week with 5-Year Baseline Average; 2018-2019



Montgomery County Thermometer Sales by MMWR Week with 5-Year Baseline Average; 2018-2019



Sources of Influenza Surveillance Data

Six types of data sources are examined on a weekly basis to help determine the influenza activity level for Montgomery County:

National Retail Data Monitor (NRDM)-OTC Drug Purchases: The NRDM collects over-the-counter (OTC) drug sales information from approximately 80 Montgomery County chain drug stores and grocery stores. For influenza surveillance, thermometer sales are monitored on a weekly basis.

Emergency Department Visits (EpiCenter): EpiCenter collects emergency department chief complaint data from hospitals and urgent care facilities across Ohio counties in real time and classifies them into symptom and syndrome categories. Chief complaints from the constitutional syndrome category and the ILI + Fever symptoms classifier are analyzed for influenza surveillance.

Sentinel Providers (ILINet): Sentinel providers, through the US Influenza-like Illness Surveillance Network (ILINet), collect outpatient 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.

Laboratory Surveillance: Positive laboratory reports are forwarded to local health departments. Generally, specimens are submitted by health care providers or hospitals.

Influenza-associated Hospitalizations (ODRS): Influenza-associated hospitalizations are reported to local health departments for 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 to local health departments for entry into ODRS. Pediatric deaths can be an indicator of the severity of illness during the influenza season. This condition became reportable in 2005.

For further information or questions, please contact Public Health – Dayton & Montgomery County, Epidemiology Department at epi@phdmc.org or 937-224-3691.

Completed by PHDMC Epidemiology Department, on January 11, 2019