



Dayton &
Montgomery
County

West Central Ohio (WCO) Regional Seasonal Influenza Activity Report MMWR Week 50 12/9/2018 – 12/15/2018

Weekly Influenza Activity Summary:

Montgomery County (Week 50): The number of influenza-associated hospitalizations increased from week 49 to week 50 but was below the 5-year baseline average. There were slight increases in the percentage of emergency department (ED) visits for *constitutional syndrome* (4.3% increase) and *fever & ILI symptoms* (6.7% increase). Both indicators were above the 5-year baseline average for week 50. Overall, influenza activity in Montgomery County is trending up.

West Central Ohio Region (Week 50): Regional influenza-associated hospitalizations have remained constant over the past three weeks (10 hospitalizations). However, the number of outpatient influenza cases more than doubled from week 49 (20 cases) to week 50 (45 cases). Overall, regional influenza activity is trending up.

Ohio (Week 50): Current Activity Level - Regional

Increased ILI in ≥ 2 but less than half of the regions AND recent (within the last 3 weeks) lab confirmed influenza in the affected regions, OR institutional outbreaks (ILI or lab confirmed) in ≥ 2 but less than half of regions AND recent (within the past 3 weeks) lab confirmed influenza in the affected regions.

The Ohio Department of Health (ODH) has reported the following positive results from flu specimens sent to the ODH laboratory (through 12/15/18): (34) Influenza A/pdmH1N1; (1) Influenza A/H3N2; (1) Influenza B

National (Week 50): Influenza activity in the United States is increasing. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate. Influenza A(H1N1)pdm09 viruses are predominating in most areas of the country. However, in the most recent three weeks, influenza A(H3) viruses were most commonly reported 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	40-47*	48*	49*	50*	Total since week ending 10/6/18
Week Ending	11/24/18	12/1/18	12/8/18	12/15/18	
Auglaize	1	0	0	0	1
Butler	4	1	5	1	11
Champaign	0	0	1	0	1
Clark	0	0	0	0	0
Darke	0	0	0	0	0
Greene	5	2	0	0	7
Miami	0	0	0	0	0
Montgomery	6	2	4	8	20
Preble	0	2	0	0	2
Shelby	0	0	0	0	0
Warren	1	3	0	1	5
Total	17	10	10	10	47

*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
40-47	11/24/18	18	5	14	37
48	12/1/18	10	0	2	12
49	12/8/18	14	0	6	20
50	12/15/18	45	0	0	45
Season Total	NA	87	5	22	114

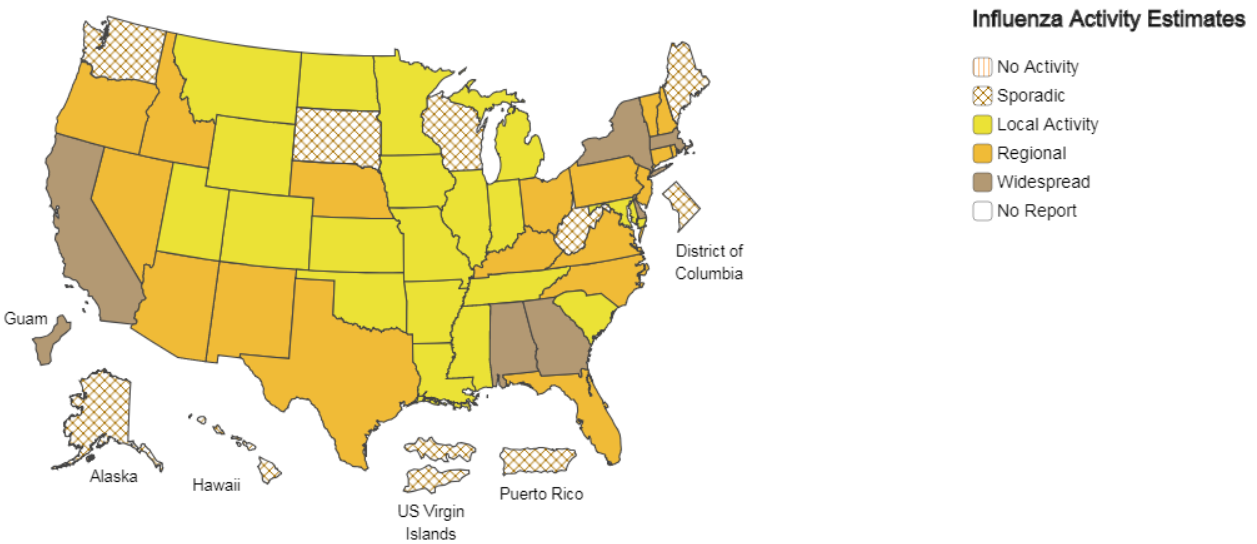
*Influenza-like Illness (ILI)



A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending Dec 15, 2018 - Week 50



*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>



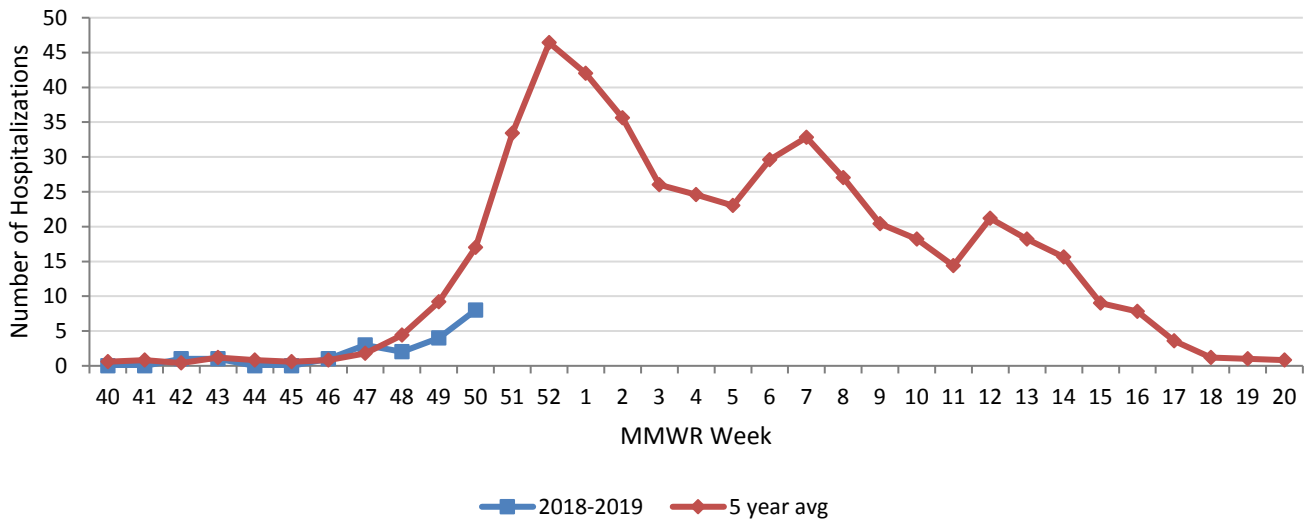
Montgomery County Seasonal Influenza Activity Report MMWR Week 50 12/9/2018 – 12/15/2018

Montgomery County Weekly Surveillance Data

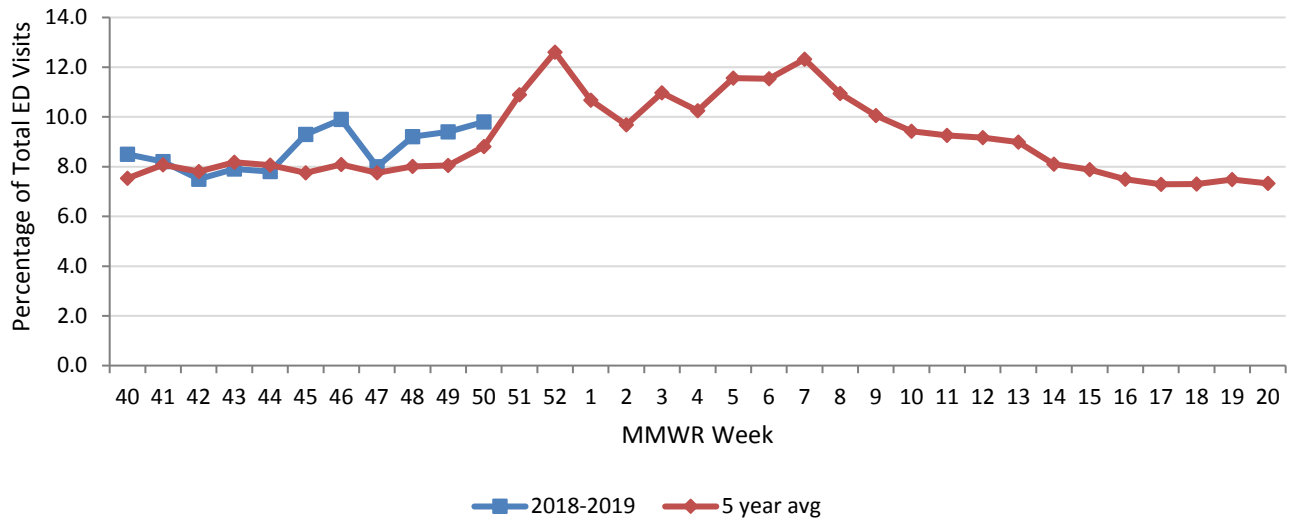
Surveillance Data	Current Week	% Change	Trend
Influenza Hospitalizations	8	*	
% Constitutional ED visits	9.8%	4.3%	
% Fever & ILI ED visits	3.2%	6.7%	
Thermometer sales	71	18.4%	

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

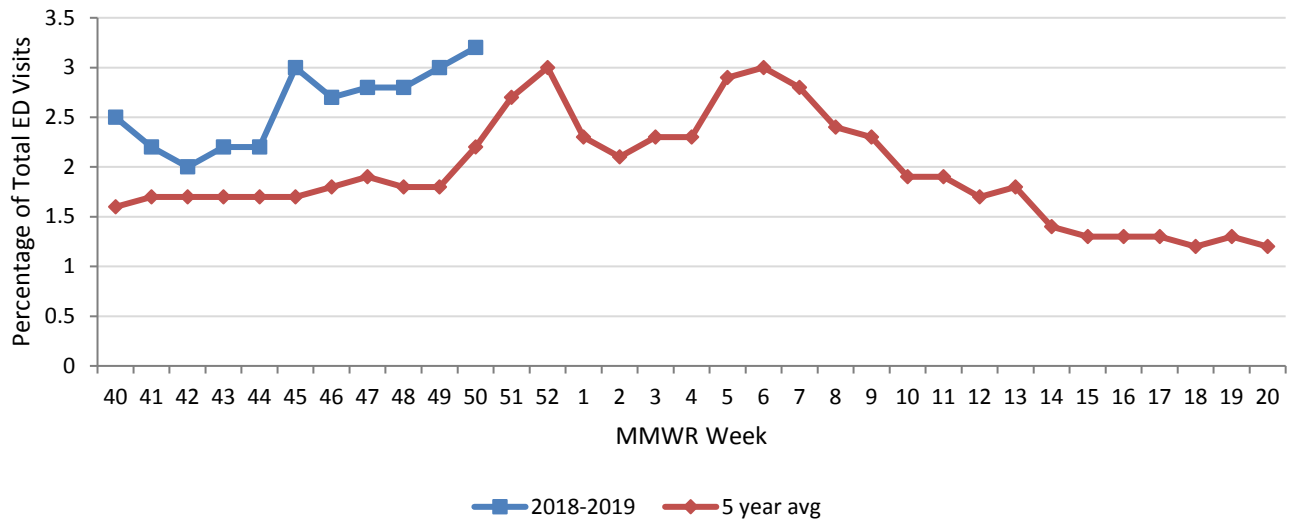
Montgomery County Confirmed Influenza-associated Hospitalizations by MMWR Week with 5-Year Baseline Average; 2018-2019



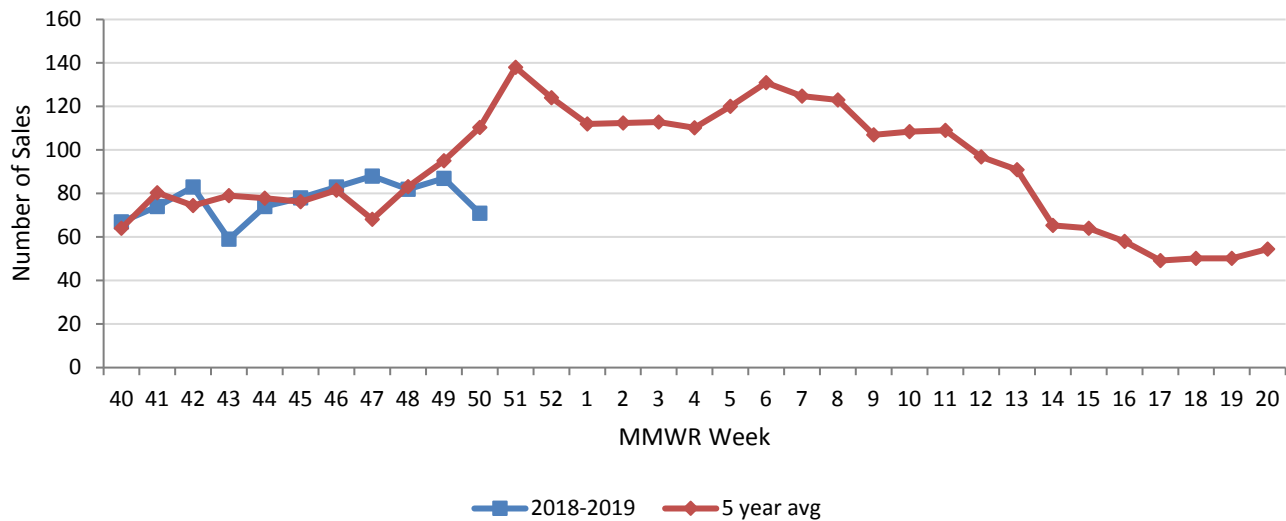
Montgomery County Constitutional ED Visits by MMWR Week with 5-Year Baseline Average; 2018-2019



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.