



Dayton &
Montgomery
County

West Central Ohio (WCO) Regional Seasonal Influenza Activity Report MMWR Week 10 3/3/2019 – 3/9/2019

Weekly Influenza Activity Summary:

Montgomery County (Week 10): The number of influenza-associated hospitalizations reported during week 10 (61) is the highest number reported so far this season and is well above the 5-year baseline average. Three-hundred and eighty-two (382) influenza-associated hospitalizations have been reported this flu season; 48% of hospitalizations occurred in individuals < 5 years or > 65 years. Influenza-related emergency department (ED) activity increased during week 10; the percentage of ED visits for *constitutional syndrome* and *fever & ILI symptoms* both increased. Thermometer sales increased during week 10. Overall, influenza activity in Montgomery County has been elevated in recent weeks and remains variable.

West Central Ohio Region (Week 10): The highest number of outpatient cases (403) and hospitalizations (153) so far this season were reported during week 10. More than half (51.4%) of regional influenza-associated hospitalizations occurred in individuals < 5 years of age or > 65 years of age this flu season. Overall, regional influenza activity has been variable in recent weeks and will likely remain inconsistent over the next several weeks.

Ohio (Week 10): 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 3/9/19): (910) Total [subtyped] positives; (505) A/pdmH1N1; (403) A/H3N2; (2) Influenza B. ODH reported 879 influenza-associated hospitalizations during week 10 – the highest number reported so far this season.

National (Week 10): Nationally, influenza activity decreased slightly during week 10, but it remains elevated. Fifty-one of 54 jurisdictions (all 50 states, the District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands) reported regional or widespread influenza activity. Influenza A(H1N1), influenza A(H3N2), and influenza B viruses continue to co-circulate. During week 10, influenza A(H3) viruses were reported more frequently than influenza A(H1N1)pdm09 viruses.

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	40-7*	8*	9*	10*	2018-2019 Flu Season Total as of 3/15/19
Week Ending	2/16/19	2/23/19	3/2/19	3/9/19	
Auglaize	14	1	4	8	27
Butler	103	35	33	25	196
Champaign	3	3	2	2	10
Clark	73	16	5	18	112
Darke	14	5	2	1	22
Greene	65	14	13	13	105
Miami	23	1	1	6	31
Montgomery	241	41	39	61	382
Preble	5	1	0	3	9
Shelby	9	4	4	2	19
Warren	57	15	15	14	101
Total	607	136	118	153	1,014

*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
40-7	2/16/19	1,247	59	151	1,457
8	2/23/19	275	2	36	313
9	3/2/19	222	1	31	254
10	3/9/19	357	1	45	403
Season Total	NA	2,101	63	263	2,427

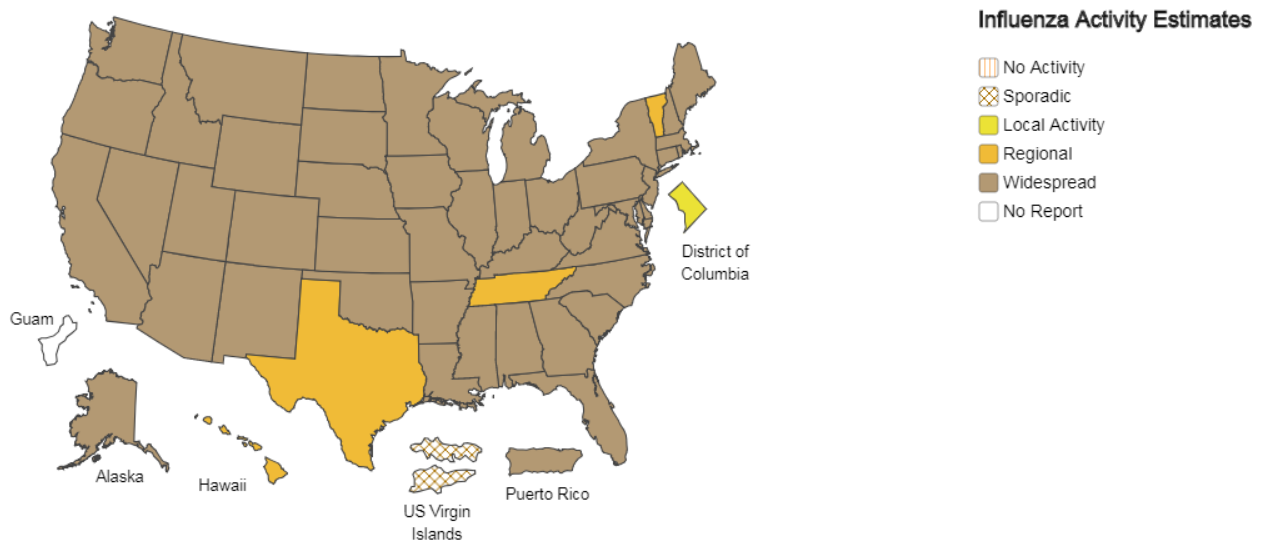
*Influenza-like Illness (ILI)



A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending Mar 09, 2019 - Week 10



*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>



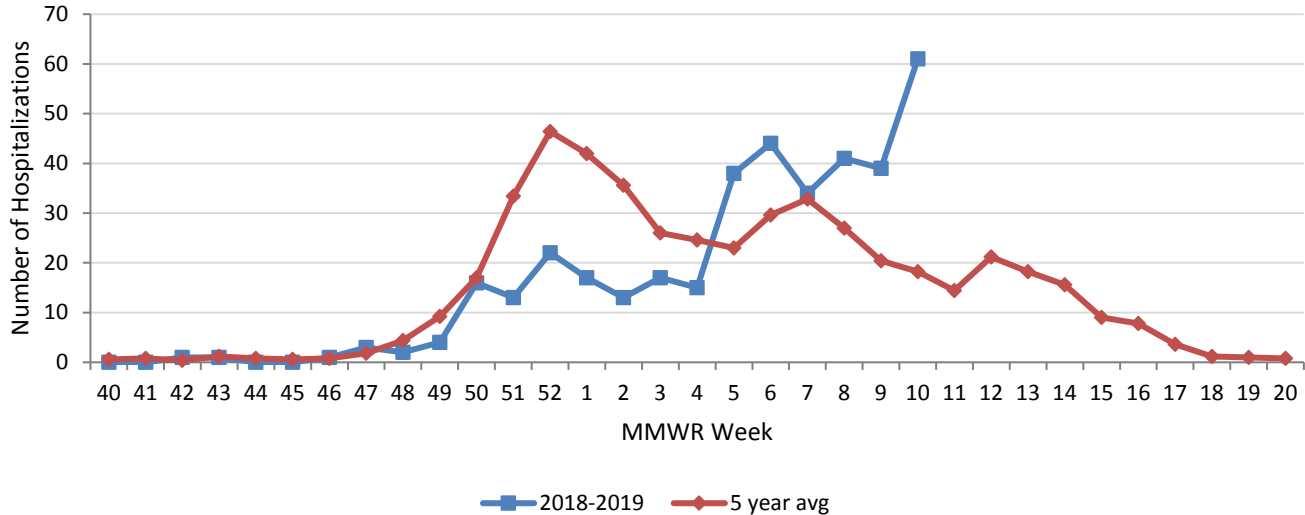
Montgomery County Seasonal Influenza Activity Report MMWR Week 10 3/3/2019 – 3/9/2019

Montgomery County Weekly Surveillance Data

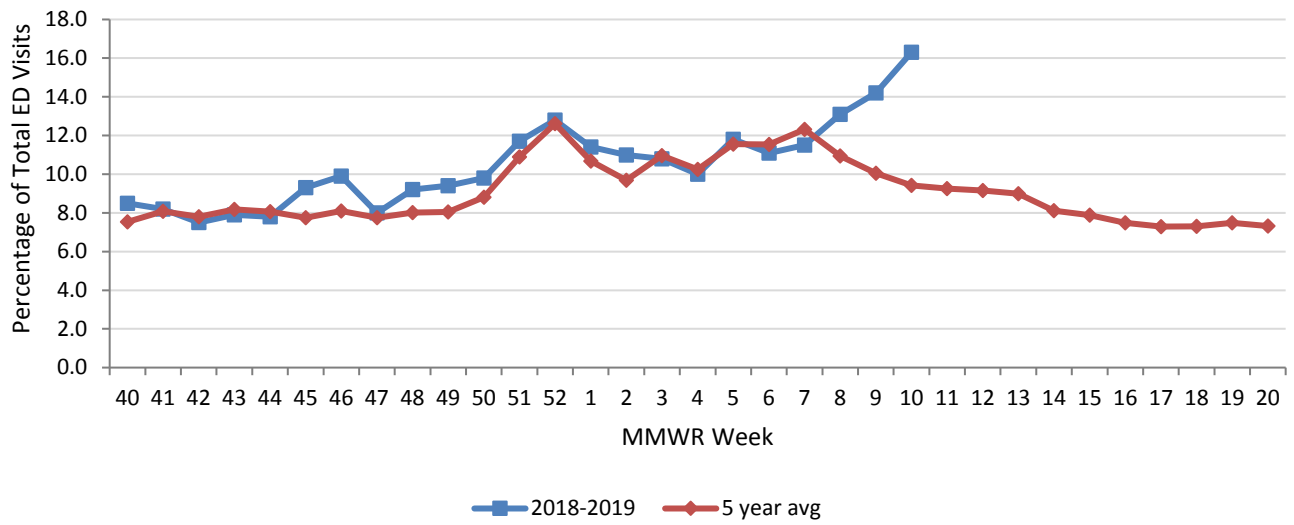
Surveillance Data	Current Week	% Change	Trend
Influenza Hospitalizations	61	56.4%	
% Constitutional ED visits	16.3%	14.8%	
% Fever & ILI ED visits	5.4%	20.0%	
Thermometer sales	184	21.1%	

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

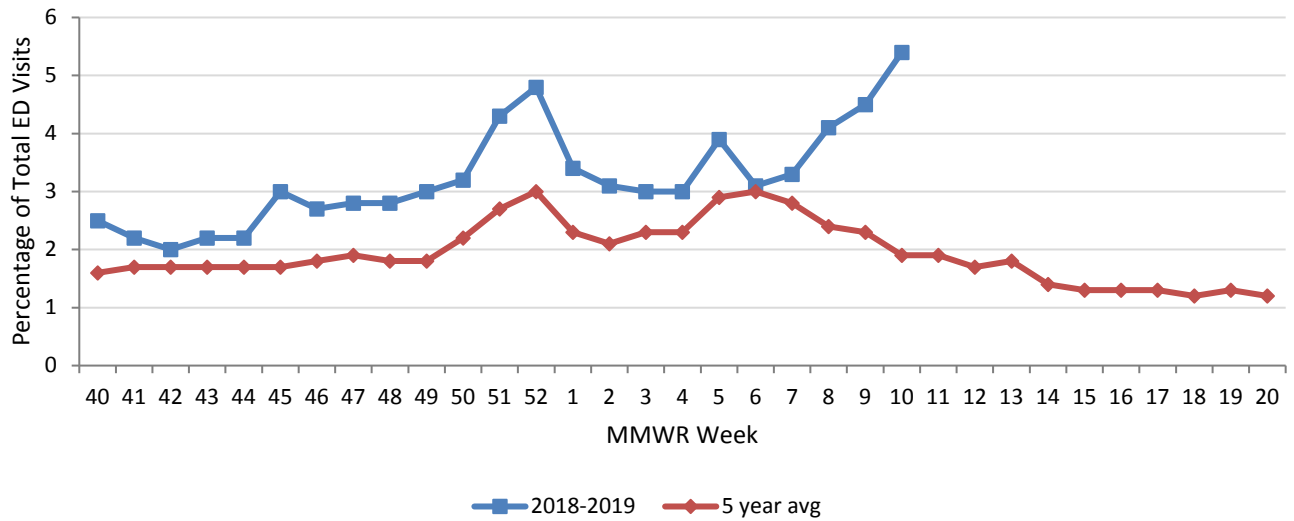
Montgomery County Confirmed Influenza-associated Hospitalizations by MMWR Week with 5-Year Baseline Average; 2018-2019



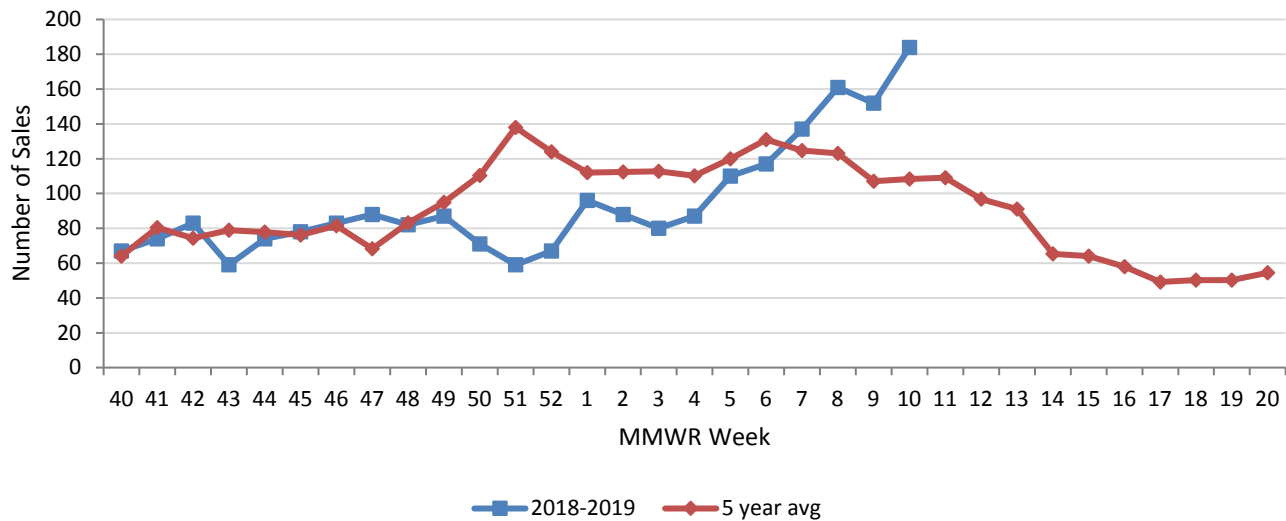
Montgomery County Constitutional ED Visits by MMWR Week with 5-Year Baseline Average; 2018-2019



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 March 15, 2019