



# MI Flu Focus

## Influenza Surveillance Updates

### Bureaus of Epidemiology and Laboratories



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### Influenza Surveillance Report for the Week Ending October 7, 2017

**MI's Influenza Activity Level:**  
Sporadic

**Updates of Interest:** This is the first MI Flu Focus of the 2017-2018 flu season, so we will return to publishing the full edition of the report on a weekly basis. Archived MI Flu Focus reports are available on the Michigan Department of Health and Human Services [website](#).

#### Sentinel Provider Surveillance

[ILINet Data from Week Ending 9/30] The proportion of visits due to influenza-like illness (ILI) decreased to 1.2% overall, which is below the regional baseline of 1.9%. A total of 143 patient visits due to ILI were reported out of 11,604 office visits. Please note: These rates may change as additional reports are received.

#### Number of Reports by Region

(34 total):

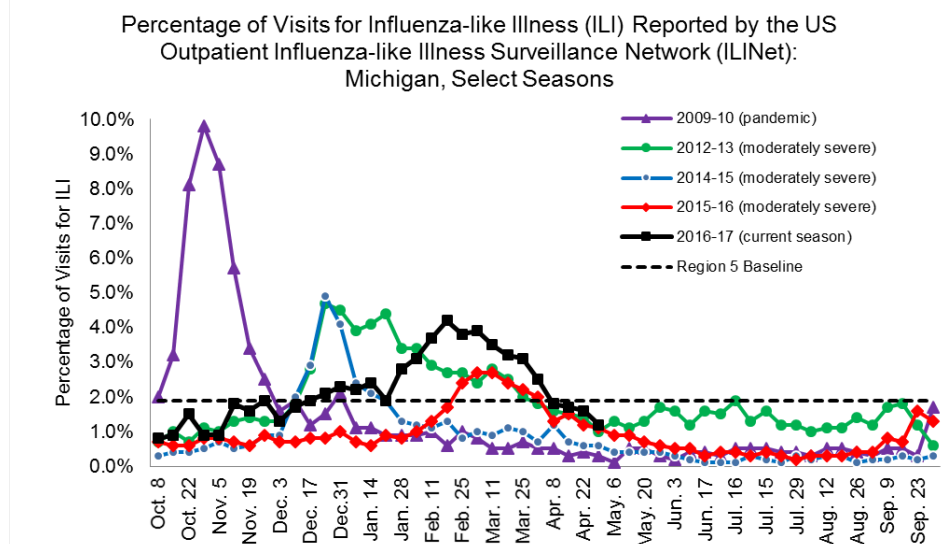
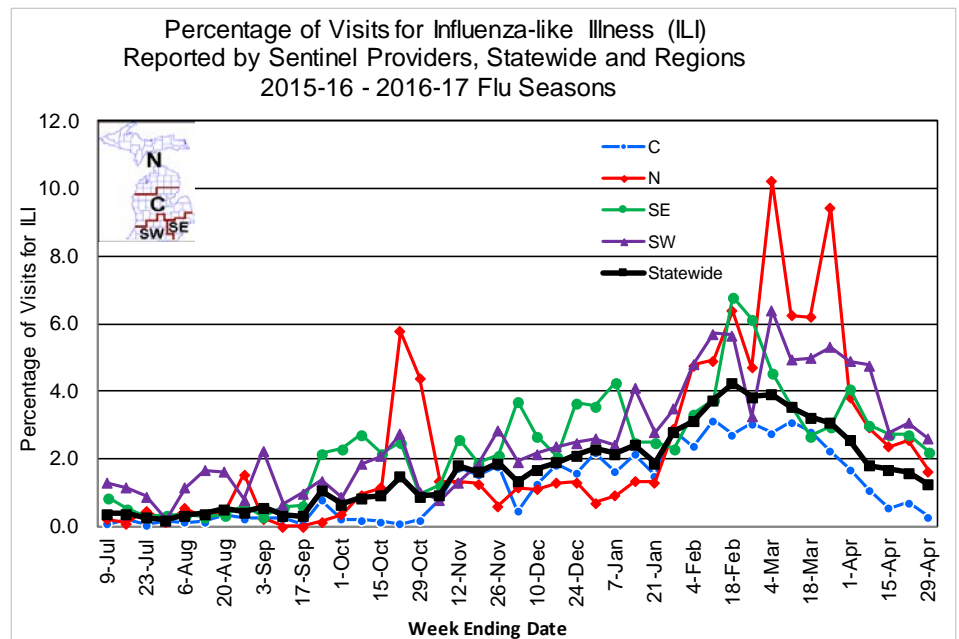
- C (12)
- N (3)
- SE (14)
- SW (5)

**National Surveillance:** In the United States, 1.4% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.2%.

#### Become a Sentinel Provider!

As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls ([IngallsJ@michigan.gov](mailto:IngallsJ@michigan.gov)) for more information.

Additional information is in the weekly FluView reports available at: [www.cdc.gov/flu/weekly](http://www.cdc.gov/flu/weekly).



## Hospital Surveillance

The CDC Influenza Hospitalization Surveillance Project provides population-based rates of hospitalization due to severe influenza-related illness through active surveillance and chart review of lab-confirmed cases from Oct. 1, 2017 until Apr. 30, 2018, for Clinton, Eaton, Ingham, Genesee, and Washtenaw counties. Since Oct. 1, there has been **1 pediatric and 1 adult** influenza-related hospitalizations reported in the catchment area for the 2017-2018 season. Note: Cumulative totals may change from week to week as cases are reviewed to determine if they meet the case definition.

The MDHHS Influenza Sentinel Hospital Network monitors influenza-related admissions reported voluntarily by hospitals statewide, with 7 facilities (N, C, SE) reporting during this time period. Results for the 2017-18 flu season are listed in the table below. Additional hospitals are encouraged to join; please contact Seth Eckel at [eckels1@michigan.gov](mailto:eckels1@michigan.gov).

Age Group	New Flu Hospitalizations Reported	Total 2017-18 Flu Hospitalizations Reported to Date
0-4 years	0	0
5-17 years	0	0
18-49 years	1 (SE)	1 (SE)
50-64 years	0	0
65 years & older	2 (1N, 1SE)	2 (1N, 1SE)
<b>Total</b>	<b>3 (1N, 2SE)</b>	<b>3 (1N, 2SE)</b>

## Influenza-associated Pediatric Mortality

No pediatric deaths have been reported to MDHHS during the 2017-2018 flu season. Nationally, 0 influenza-associated pediatric deaths have been reported thus far for the 2017-2018 flu season.

## Laboratory Surveillance

MDHHS Bureau of Laboratories reported 8 new positive influenza results (7 A/H3 and 1 A/H1) during this time period. A total of 2 positive influenza results have been reported for the 2017-18 season. Influenza results for the 2017-18 season are in the table below.

Respiratory Virus	# Positive Respiratory Virus Results by Region				Total	# Specimens Antigenically Characterized	# Tested for Antiviral Resistance
	C	N	SE	SW			# Resistant / Total # Tested
2009 A/H1N1pdm			1		1		
Influenza A/H3	3		3	1	7		
Influenza B							
A / unsubtypeable							
LAIV recovery							

In addition, 10 sentinel clinical labs (2SE, 2SW, 6C, 0N) reported influenza testing results. Four (4) labs (SE, SW, C) reported sporadic influenza A activity. Two (2) labs (SE, C) reported sporadic influenza B activity. Four (4) labs (SE, SW, C) reported low or slightly increased Parainfluenza activity. Two (2) labs (SE, C) reported sporadic RSV activity. Two (2) labs (SE, C) reported sporadic Adenovirus activity. One (1) lab (SW) reported sporadic hMPV activity. Testing volumes are generally steady in the low range.

### Congregate Setting Outbreaks of Viral Respiratory Illness

There were no new respiratory facility outbreaks reported to MDHHS during this time period, respiratory facility outbreaks for the 2017-2018 season are listed in the table below.

Facility Type	C	N	SE	SW	Total
K-12 School					
Long-term Care / Assisted Living Facility					
Healthcare Facility					
Daycare					
Homeless Shelter					
<b>Total</b>					

### Novel Influenza A Viruses

Due to cases of human H3N2v and other variant influenza viruses recently being reported, MDHHS has added a section to MIFF to share the most recent updates regarding H3N2v activity in the United States. As of week ending September 30, there has been one H3N2v case reported to MDHHS during 2017.

To date, a total of 61 variant virus infections have been reported in the United States during 2017. This most recent human infection was publicly reported in the September 30 [FluView](#) report (Week 39: September 24- September 30, 2017).

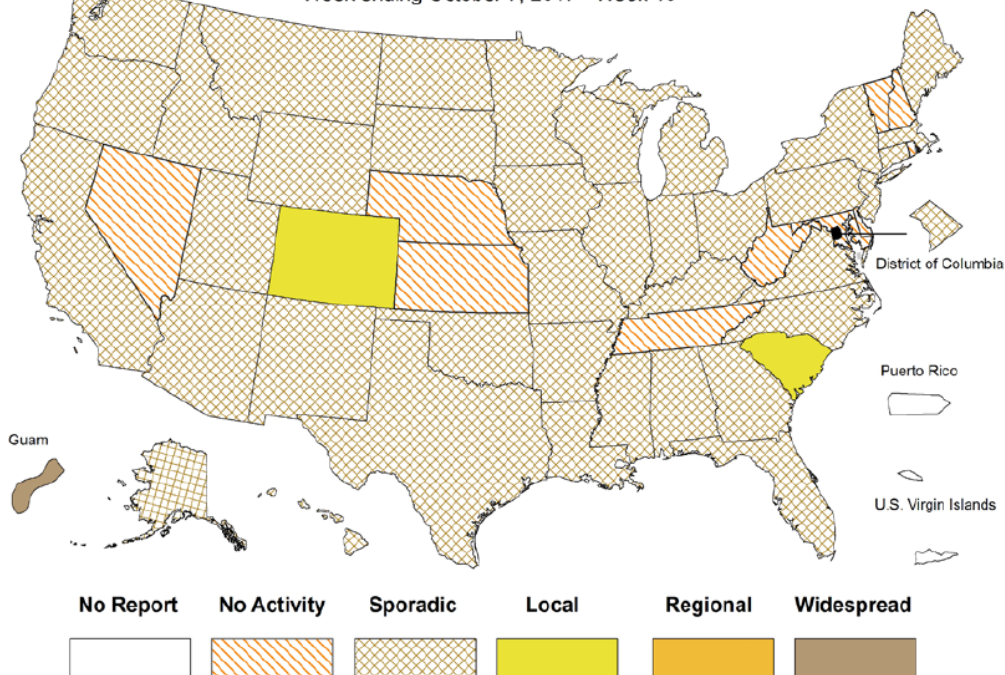
The Michigan Department of Health and Human Services has provided [guidance](#) for Healthcare & Public Health Providers who are evaluating patients for influenza-like illness to ask about possible exposure to swine, such as attendance at county fairs or livestock exhibits. To report suspect cases and arrange testing, contact your local health department immediately or contact MDHHS at 517-335-8165 or after hours at 517-335-9030.

CDC has long-standing [guidance](#) for people attending agricultural fairs or other settings where swine might be present, including a recommendation that people who are at high risk of serious flu complications avoid pigs and swine barns. For more information about H3N2v, visit: <https://www.cdc.gov/flu/swineflu/h3n2v-basics.htm>

Similarly, a Morbidity and Mortality Week [Report](#) was issued in October 2016 detailing the outbreak of influenza A(H3N2) variant virus infections among persons in Michigan and Ohio.

### Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists\*

Week ending October 7, 2017 - Week 40





## 2016-17 SEASON INFLUENZA VACCINATION COVERAGE ESTIMATES – CDC

The CDC has [released](#) the 2016-17 season influenza vaccination coverage estimates. Nationally, 46.8% of persons aged 6 months and older were vaccinated with 1+ dose of flu vaccine. Here are a couple of highlights from Michigan's data:

- Overall coverage in Michigan increased 2% to 44.2%
- Children aged 6 months through 12 years of age decreased in coverage
- Michigan saw an increase among adults aged 18 through 49 years of age with high-risk conditions, a 6.5% increase from the 2015-16 season

National [flu vaccination coverage](#) among healthcare personnel and pregnant women are also available. Please note, only national data is available for these special populations.

## UNITED AGAINST THE FLU CAMPAIGN

United Against the Flu is a collaborative campaign between multiple professional organizations and the CDC. The goal is to increase flu vaccination rates, and spread awareness about the importance of getting the flu vaccine. The collaborative provides multiple [resources](#), including a long-term care employer toolkit, articles and papers about preventing influenza, influenza prevention e-cards that can be sent, resources for faith-based and community organizations, and media toolkits.

## SOUTHERN HEMISPHERE FLU VACCINE COMPOSITION

The World Health Organization has announced the [recommended composition](#) of influenza virus vaccines for use in the 2018 southern hemisphere influenza season. There is a new H3N2 strain, and a switch from the Victoria B lineage virus back to a Yamagata B lineage virus for trivalent vaccines. It is recommended that trivalent vaccines contain the following:

- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus (NEW)
- B/Phuket/3073/2013-like virus

Quadrivalent vaccines will also include a B/Brisbane/30/2008-like virus.

## INFLUENZA-RELATED JOURNAL ARTICLES

- [Beyond antigenic match: Possible agent-host and immuno-epidemiological influences on influenza vaccine effectiveness during the 2015-16 season in Canada \(abstract\)](#)
- [Comparison of the outcomes of individuals with medically-attended influenza A and B virus infections enrolled in two international cohort studies over a six-year period: 2009-2015](#)
- [Changes in influenza vaccination rates after withdrawal of live vaccine](#)
  - The recommendation to not use LAIV during the 2016-17 season did not effect overall child flu vaccination rates
  - Children who received IIV during the 2015-16 season were slightly more likely to return for a vaccine than those who received LAIV during the 2015-16 season
- [Impact of maternal vaccination timing and influenza virus circulation on birth outcomes in rural Nepal](#)

## OTHER INFLUENZA-RELATED NEWS

- [Scientists learn how flu virus changes so quickly](#)
- [Oxford team to test universal flu vaccine in world first](#)
- [Influenza vaccine good match for circulating strains](#)
- [High-dose influenza vaccine better for solid organ transplant recipients](#)
- [Here are 7 reasons to stop putting off your flu shot](#)
- [Michigan reports 1<sup>st</sup> influenza A H3N2 variant case of 2017](#)
- [Why can't we make a better flu vaccine?](#)

## AVIAN INFLUENZA INTERNATIONAL NEWS

- [Clusters of human infections with avian influenza A \(H7N9\) virus in China, March 2013 to June 2015](#)
- [Airborne transmissions of highly pathogenic influenza virus during processing of infected poultry](#)

## FLU WEBSITES

[www.michigan.gov/flu](http://www.michigan.gov/flu)  
[www.cdc.gov/flu](http://www.cdc.gov/flu)  
[www.flu.gov](http://www.flu.gov)  
<http://vaccine.healthmap.org/>

Archived editions of FluBytes are available [here](#) and MI FluFocus archives are [here](#).

For questions or to be added to the distribution list, please contact Jalyn Ingalls at [ingallsj@michigan.gov](mailto:ingallsj@michigan.gov).

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