



# MI Flu Focus

## Influenza Surveillance Updates

### Bureaus of Epidemiology and Laboratories



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### Influenza Surveillance Report for the Week Ending May 6, 2017

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

**Updates of Interest:** On May 5, 2017, CDC reported a human infection with a novel (non-human) influenza virus in a child in Texas who had previous exposure to swine. This is the first H3N2v infection reported in 2017. For more information, see FluBytes on page 4.

#### Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 1.1% overall, which is below the regional baseline of 1.9%. A total of 120 patient visits due to ILI were reported out of 11,041 office visits. Please note: These rates may change as additional reports are received.

#### Number of Reports by Region

(34 total):

- C (12)
- N (2)
- SE (14)
- SW (6)

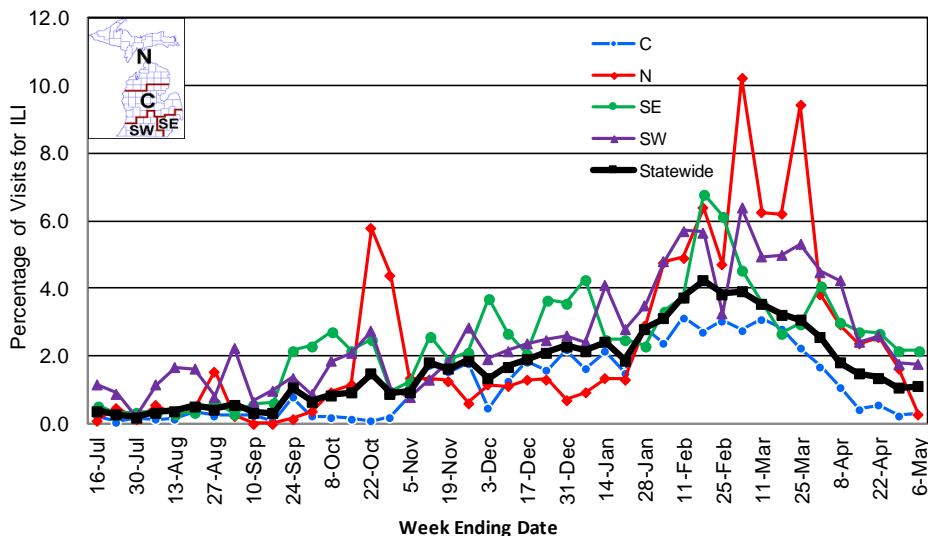
**National Surveillance:** In the United States, 1.6% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.2%.

#### Become a Sentinel Provider!

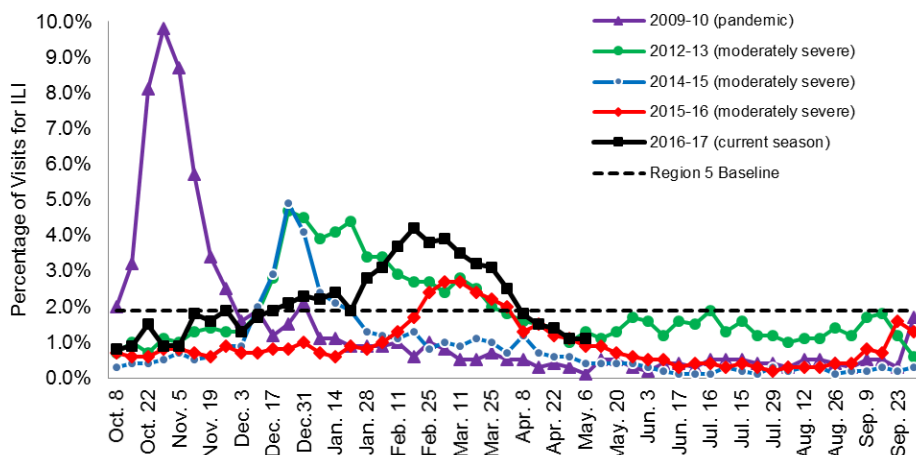
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls ([IngallsJ@michigan.gov](mailto:IngallsJ@michigan.gov)) for more information.

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

Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Statewide and Regions 2015-16 - 2016-17 Flu Seasons



Percentage of Visits for Influenza-like Illness (ILI) Reported by the US Outpatient Influenza-like Illness Surveillance Network (ILINet): Michigan, Select Seasons



## 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, 2016 until Apr. 30, 2017, for Clinton, Eaton, Genesee, and Ingham counties. Since Oct. 1, there have been **66 pediatric and 570 adult** influenza-related hospitalizations reported in the catchment area for the 2016-2017 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 **no** facilities reporting during this time period. Results for the 2016-17 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 2016-17 Flu Hospitalizations Reported to Date
0-4 years	0	39 (23N, 1C, 8SE, 7SW)
5-17 years	0	52 (33N, 1C, 10SE, 8SW)
18-49 years	0	129 (40N, 1C, 74SE, 14SW)
50-64 years	0	218 (53N, 1C, 135SE, 29SW)
65 years & older	0	729 (147N, 10C, 495SE, 77SW)
<b>Total</b>	<b>0</b>	<b>1167 (296N, 14C, 722SE, 135SW)</b>

## Influenza-associated Pediatric Mortality

No new deaths were reported to MDHHS for the week ending May 6, 2017. A total of 5 influenza-associated pediatric deaths in Michigan have been reported thus far for the 2016-17 season. Four of the children tested positive for Influenza B, and one tested positive for Influenza A/H3. Nationally, 91 influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

## Laboratory Surveillance

MDHHS Bureau of Laboratories reported 4 new positive influenza results (2 A/H3 and 2 flu B) during this time period. A total of 641 positive influenza results have been reported for the 2016-17 season. Influenza results for the 2016-17 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	1	2	5	2 (A/CALIFORNIA/07/2009-LIKE (H1N1)pdm09)	
Influenza A/H3	118	26	119	181	444	11 (A/HONG KONG/4801/2014-LIKE)	0 / 95
Influenza B	62	11	48	71	192	4 (B/PHUKET/3073/2013-LIKE) 7 (B/BRISBANE/60/2008-LIKE)	
A / unsubtypeable							
LAIV recovery							

In addition, 9 sentinel clinical labs (1SE, 2SW, 5C, 1N) reported influenza testing results. Two labs (2) labs (SE, C) reported influenza A activity in the low or very low range with a continued declining trend. Six (6) labs (SE, SW, C, N) reported ongoing influenza B activity, with most sites at low levels and all continuing a downward trend. Influenza B continues to be the dominant or co-dominant viral type at all sites. Three (3) labs (SE, SW) reported low Parainfluenza activity. Two (2) labs (SW, C) reported RSV activity at low or sporadic levels. Two labs (SW, C) reported low Adenovirus activity. Two labs (SW, N) reported low or slightly elevated hMPV activity. Testing volumes continue to drop further with most sites in the moderate to low range.

### Congregate Setting Outbreaks of Viral Respiratory Illness

There were 2 new respiratory facility outbreaks (SW) reported to MDHHS during this time period, both of which were confirmed influenza. Respiratory facility outbreaks for the 2016-2017 season are listed in the table below.

Facility Type	C	N	SE	SW	Total
K-12 School	3	4		3	10
Long-term Care / Assisted Living Facility	30	1	26	42	99
Healthcare Facility	3		4	1	8
Daycare			1	2	3
Homeless Shelter			1		1
<b>Total</b>	<b>36</b>	<b>5</b>	<b>32</b>	<b>48</b>	<b>121</b>

### Michigan Disease Surveillance System

MDSS influenza data indicated that compared to levels from the previous week, aggregate reports had increased, while individual reports had decreased. Aggregate and individual reports were both lower than levels seen during the same time period last year.

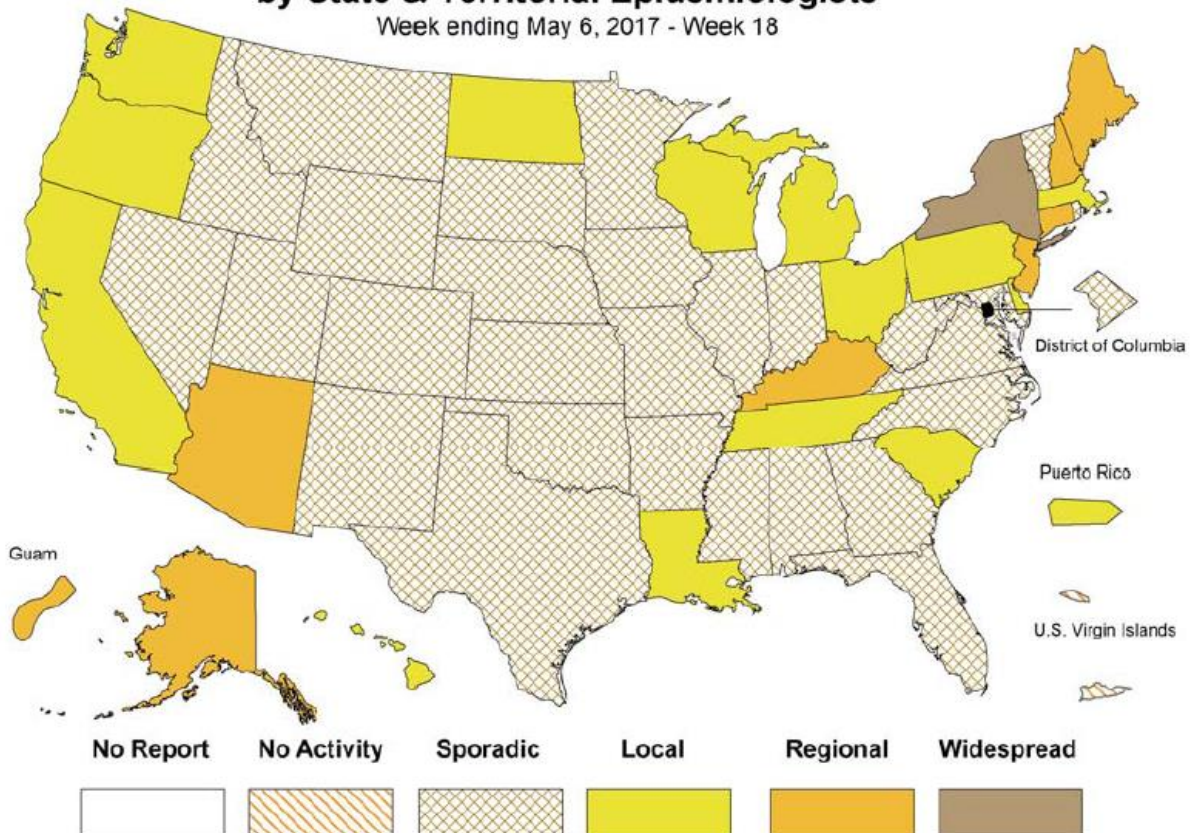
### Emergency Department Surveillance

Compared to levels from the week prior, emergency department visits from constitutional complaints were similar, while respiratory complaints had increased. Levels of constitutional complaints were similar to those recorded during the same time period last year, while respiratory complaints were higher.

- 4 constitutional alerts (2C, 2SW)
- 1 respiratory alert (N)
- 5 constitutional alerts (3N, 1C, 1SE), No respiratory alerts

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

Week ending May 6, 2017 - Week 18





## CDC RELEASES GENERAL BEST PRACTICE GUIDELINES FOR IMMUNIZATION

CDC has released the [General Best Practice Guidelines for Immunization](#) as an online report that is available on the Advisory Committee on Immunization Practices (ACIP) [web page](#). The document goes beyond vaccine recommendations to give providers the most up-to-date guidance to vaccination practice.

## EVIDENCE TO ACTION BRIEF: ADDRESSING VACCINE HESITANCY

The PolicyLab and the Vaccine Education Center (VEC) at Children's Hospital of Philadelphia recently released an [Evidence to Action Brief](#) titled, "Addressing Vaccine Hesitancy to Protect Children and Communities Against Preventable Diseases." The brief included a review of vaccine hesitancy, identification of three areas of concern, and a series of recommendations to address the concerns. The concerns are diminished prioritization, lack of confidence in vaccine safety and efficacy, and inadequate state policies.

## WEBINAR: IMMUNIZATIONS AND SCHOOL ADMISSION

The California Immunization Coalition is hosting a webinar titled, "Immunizations and School Admission: The Role of Schools in Assessing Vaccination Status", which will focus on understanding immunization requirements for school admission and the important role of schools in assessing vaccination status. The webinar is scheduled for Tuesday, May 23, from 3:00-4:00pm ET. The webinar is free, but you will need to [register](#) before the event.

## FLU VACCINATION PROMOTION MATERIALS

The National Influenza Vaccination Disparities Partnership has created a [tip sheet](#) that provides step-by-step instructions for planning a flu vaccination promotion event, as well as a list of numerous resources that can be used during the event, such as sample social media posts and print materials. Also, the CDC has created a "[Frequently Asked Flu Questions for the 2017-2018 Influenza Season](#)" webpage that can be used to start preparing flu vaccination promotional events for the 2017-2018 flu season!

## INFLUENZA-RELATED JOURNAL ARTICLES

- [The pathogenesis of H7N8 low and highly pathogenic avian influenza viruses from the United States 2016 outbreak in chickens, turkeys and mallards](#)
- [Systematic review and meta-analysis of indirect protection afforded by vaccinating children against seasonal influenza: implications for policy](#)
- [Combined interventions for mitigation of a Influenza A \(H1N1\) 2009 outbreak in a physical training camp in Beijing, China](#)
- [Relative incidence and individual-level severity of seasonal influenza A\(H3N2\) compared with 2009 pandemic H1N1](#)
- [Attributable fraction of influenza virus detection to mild and severe respiratory illnesses in HIV-infected and HIV-uninfected patients, South Africa, 2012-2016](#)

## OTHER INFLUENZA-RELATED NEWS

- [H3N2v sickens Texas resident who had contact with pigs; US flu ebbs](#)
- [The world is not ready for the next pandemic](#)
- [How flu viruses hijack human cells](#)
- [As bird flu strengthens in China, midwest farmers prepare by looking for past lessons](#)
- [With bird flu surging, U.S. needs to do more to prevent possible pandemic, GAO says](#)
- [As flu season winds down, health officials prepare for next year](#)
- [JAPhA study: Pharmacists' presence in neighborhoods boosts influenza vaccination rates](#)

## AVIAN INFLUENZA INTERNATIONAL NEWS

- [A suspected person-to-person transmission of avian influenza A\(H7N9\) case in ward](#)
- [China reports 24 more H7N9 avian flu cases, 9 fatal](#)
- [H7N9 activity expands in China](#)

## 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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