



# MI Flu Focus

## Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories



Editor: Jalyn Ingalls, MA

[IngallsJ@michigan.gov](mailto:IngallsJ@michigan.gov)

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### Influenza Surveillance Report for the Week Ending December 24, 2016

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

**Updates of Interest:** Two human cases of avian influenza A(H7N9) have been reported in China, and one case in Hong Kong. China is currently going through the fifth wave of H7N9. To read more, please see FluBytes on page 4.

#### Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) remained at 2.2% overall, which is above the regional baseline of 1.9%. A total of 146 patient visits due to ILI were reported out of 6,726 office visits. Please note: These rates may change as additional reports are received.

#### Number of Reports by Region (27 total):

- C (8)
- N (0)
- SE (14)
- SW (5)

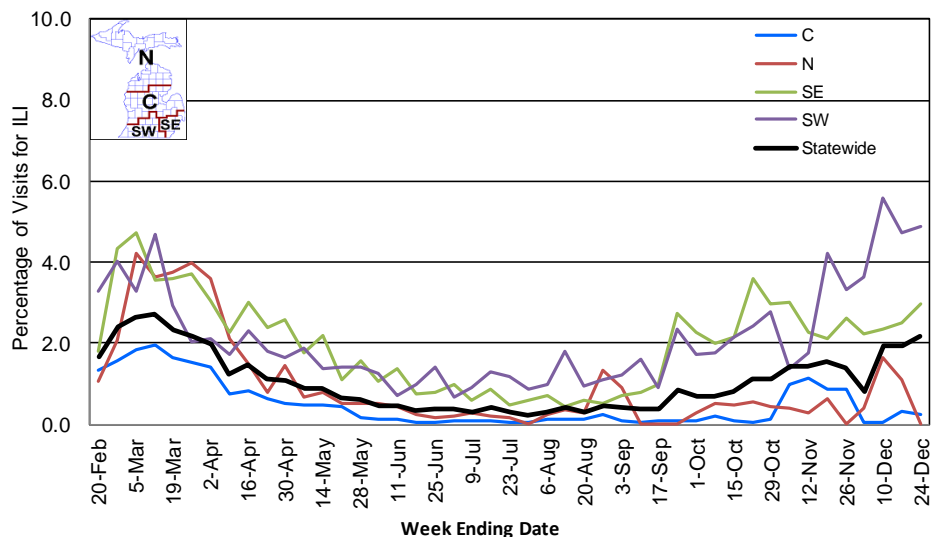
**National Surveillance:** In the United States, 2.9% of outpatient visits were due to influenza-like illness, which is above the national baseline of 2.2%.

#### Become a Sentinel Provider!

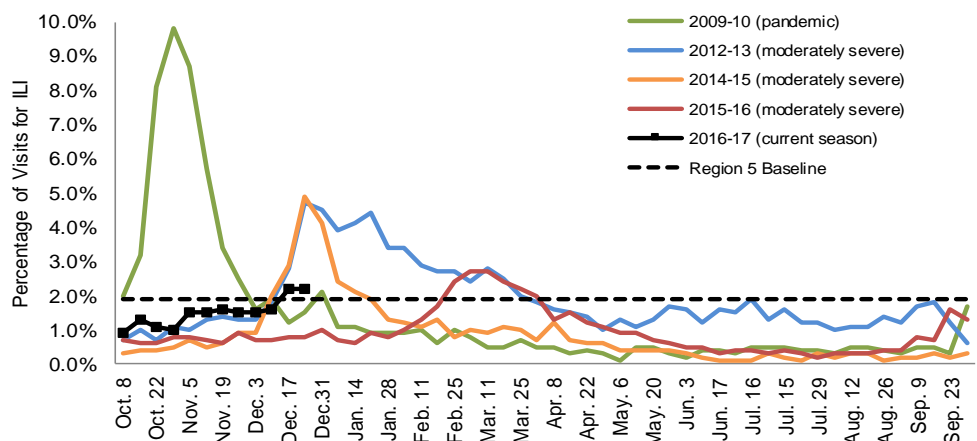
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls ([IngallsJ@michigan.gov](mailto:IngallsJ@michigan.gov)) for more information.

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 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 **1 pediatric and 9 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 8 facilities (N, C, SE) 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	1 (N)
5-17 years	0	1 (SW)
18-49 years	0	2 (1SE, 1SW)
50-64 years	0	4 (N)
65 years & older	3 (SE)	16 (6N, 10SE)
<b>Total</b>	<b>3 (SE)</b>	<b>24 (11N, 11SE, 2SW)</b>

## Influenza-associated Pediatric Mortality

No new influenza-associated pediatric deaths were reported to MDHHS. In Michigan, there have been no influenza-associated pediatric deaths reported for the 2016-17 season. Nationally, no influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

## Laboratory Surveillance

MDHHS Bureau of Laboratories reported 21 new positive influenza results (all A/H3) during this time period. A total of 74 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							
Influenza A/H3	11	2	45	9	67		0 / 8
Influenza B			3	4	7	1 (B/PHUKET/3073/2013-LIKE)	
A / unsubtypeable							
LAIV recovery							

In addition, 12 sentinel clinical labs (3SE, 2SW, 6C, 1N) reported influenza testing results. Seven labs (SE, SW, C, N) reported influenza A activity, with all regions showing sporadic or low levels except for the SE region where ongoing increases are seen. Five labs (SE, SW) reported sporadic or low influenza B activity. Six labs (C, SE, SW) reported low or slightly increasing Parainfluenza activity. Eight labs (SE, SW, C) reported ongoing RSV activity with several sites showing moderate increases. Six labs (SE, SW, C) reported sporadic or low Adenovirus activity. Five labs (SE, SW, C) reported low or slightly increasing hMPV activity. Testing volumes continue to rise at most sites with many nearing the moderate 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 2016-2017 season are listed in the table below.

Facility Type	C	N	SE	SW	Total
K-12 School					
Long-term Care / Assisted Living Facility			1	2	3
Healthcare Facility					
Daycare					
Correctional Facility					
<b>Total</b>			<b>1</b>	<b>2</b>	<b>3</b>

### Michigan Disease Surveillance System

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

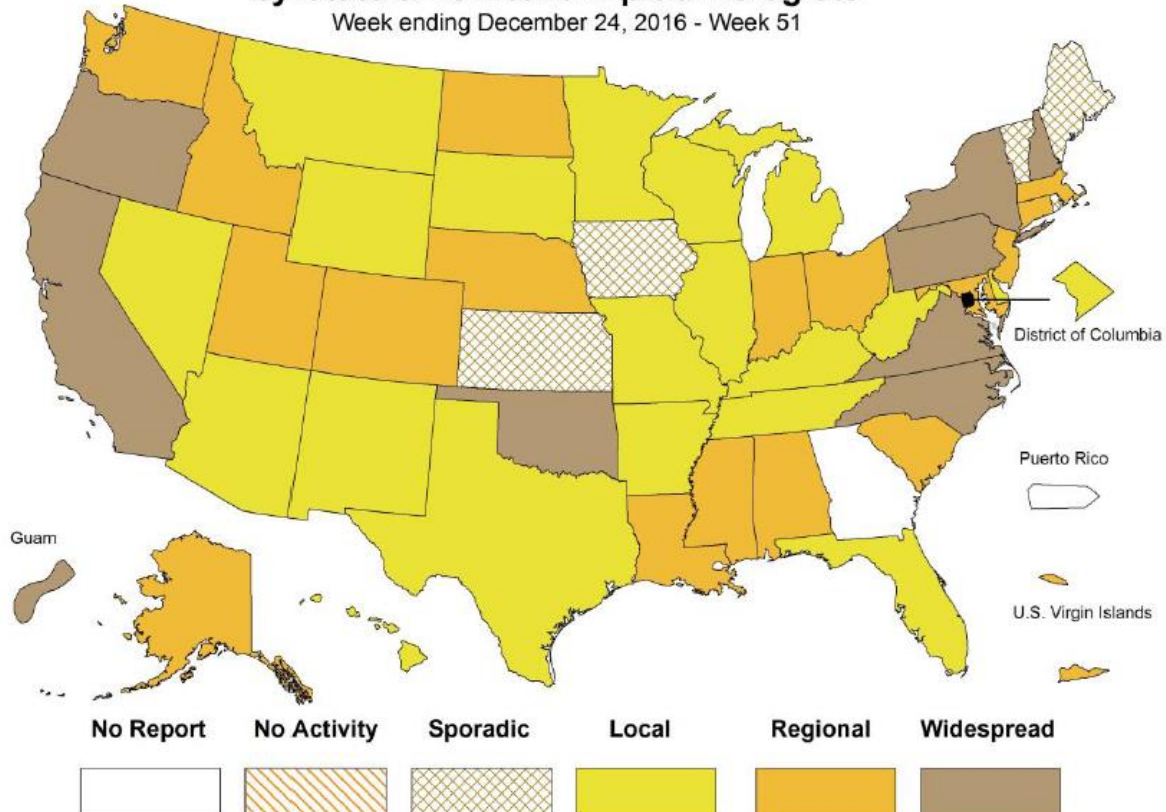
### Emergency Department Surveillance

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

- 8 constitutional alerts (2N, 3C, 3SW)
- 4 respiratory alerts (1N, 1C, 2SW)
- Last MIFF report: 3 constitutional alerts (2N, 1SE), 7 respiratory alerts (4C, 3SW)

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

Week ending December 24, 2016 - Week 51





## IMMUNIZATION ACTION COALITION NEEDLE TIPS NEWSLETTER – ASK THE EXPERTS

The Immunization Action Coalition has released the December issue of Needle Tips. In the Ask the Experts section of this newsletter, experts answer questions about the flu vaccine. Questions include:

- Please provide details about the use of FluLaval influenza vaccine (GSK) in children younger than 3 years.
- Can a child 6 through 35 months of age who needs 2 doses of influenza vaccine this season receive one each of Fluzone Pediatric and FluLaval vaccine?
- A 2-year-old was inadvertently given a 0.25 mL dose of FluLaval rather than the recommended 0.5 mL dose. What should we do?
- Can a clinic vaccinate children younger than 3 years with influenza vaccine taken from a multidose vial of Fluzone or FluLaval? The multi-dose vials contain thimerosal as a preservative.

The answers to these questions can be found on page 4 of [Needle Tips](#).

## AAP FLU PREVENTION COURSE FOR EARLY EDUCATION AND CHILD CARE PROVIDERS

The American Academy of Pediatrics has a free online [course](#) that was created to educate on influenza policies and strategies that help keep children healthy. This course is specifically designed for staff who work in early education or are child care providers.

## H7N9 AVIAN FLU INFECTS 2 IN CHINA, 1 IN HONG KONG

Avian Flu Diary, an infectious disease news blog, reports two more human cases of avian influenza in China, and one in Hong Kong. China is experiencing a fifth wave of H7N9, and so far 19 cases have been reported during this season. To read more about the most recent cases, go to the [Flu Trackers website](#), and scroll down to cases 827, 828, and 829. CDC also released an [MMWR](#) about avian influenza, “Assessing change in avian influenza A(H7N9) virus infections during the fourth epidemic- China, September 2015- August 2016.”

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

## INFLUENZA-RELATED JOURNAL ARTICLES

- [Influenza vaccine: Most US children not fully vaccinated](#)
- [Contact, travel, and transmission: The impact of winter holidays on influenza dynamics in the United States](#)
  - Winter holidays delay seasonal influenza epidemic peaks due to changes in contact patterns
- [Temporal cross-correlation between influenza-like illnesses and invasive pneumococcal disease in the Netherlands](#)
- [Nurses' attitudes towards enforced measures to increase influenza vaccination: A qualitative study](#)
- [Disparities in influenza mortality and transmission related to sociodemographic factors within Chicago in the pandemic of 1918](#)
- [Assessing change in avian influenza A\(H7N9\) virus infections during the fourth epidemic – China, September 2015 – August 2016](#)

## OTHER INFLUENZA-RELATED NEWS

- [For pregnant women with flu, the earlier the better for antiviral treatment](#)
- [PA Agriculture Department tests, monitors cats possibly exposed to influenza in NYC shelters](#)
- [Walgreens launches 2016-17 Flu Index™ to show top markets and states for flu activity each week](#)
- [Risk assessment of seasonal influenza, EU/EEA, 2016/2017](#)
- [CDC reports accelerated flu activity as year winds down](#)

## AVIAN INFLUENZA INTERNATIONAL NEWS

- [Greece and Bulgaria latest countries to report avian flu outbreaks](#)
- [Influenza at the human-animal interface, WHO report](#)
- [CHP investigates confirmed human case of avian influenza A\(H7N9\)](#)
- [Avian flu outbreaks expand to Slovakia](#)
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## 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/>

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

### MDHHS Contributors

Bureau of Epidemiology – S. Bidol, MPH, J. Ingalls, MA, S. Eckel, MPH  
Bureau of Labs – B. Robeson, MT, V. Vavricka, MS