



# MI Flu Focus

## Influenza Surveillance Updates

### Bureaus of Epidemiology and Laboratories



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

**Updates of Interest:**

- Studies indicate [statins](#) could dampen flu vaccine effect

### Influenza Surveillance Report for the Week Ending October 24, 2015

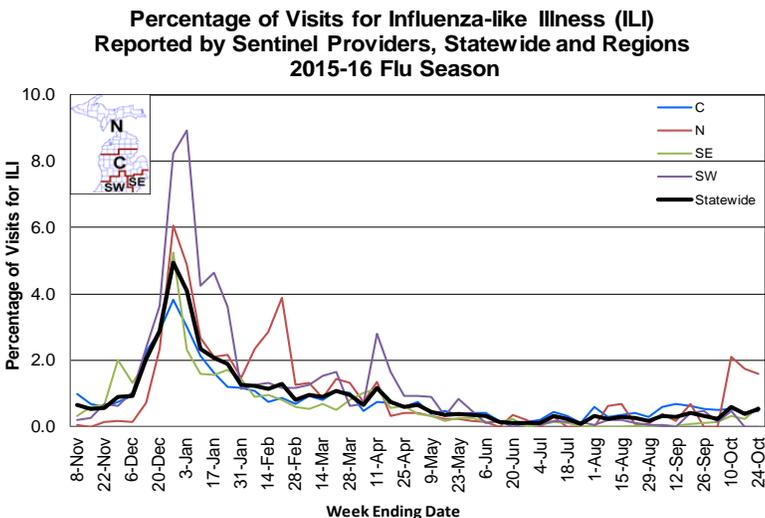
#### Michigan Disease Surveillance System

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

#### Emergency Department Surveillance

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

- 7 constitutional alerts (1SE, 2SW, 3C, 1N)
- 3 respiratory alerts (2C, 1N)

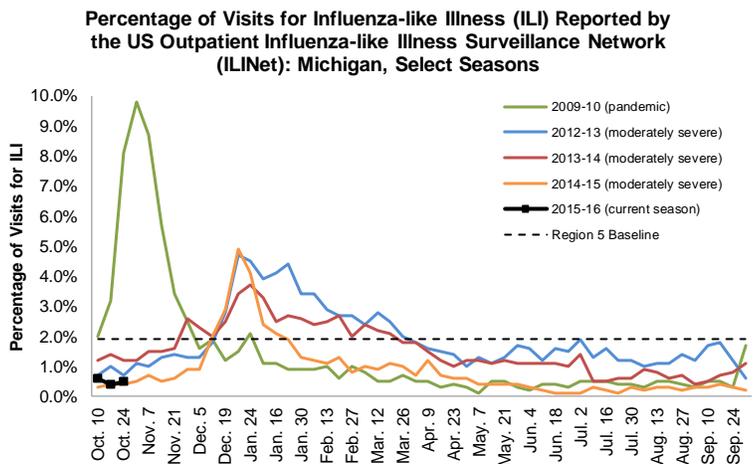


#### Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 0.5% overall; this is below the regional baseline (1.9%). A total of 66 patient visits due to ILI were reported out of 12,499 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (30 total):

- C (13)
- N (3)
- SE (11)
- SW (3)



#### 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 Stefanie Cole ([ColeS4@michigan.gov](mailto:ColeS4@michigan.gov)) for more information.

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### 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 beginning on Oct. 1, 2015, for Clinton, Eaton, Genesee, and Ingham counties. Since Oct. 1, there has been 1 adult hospitalization reported within the catchment area.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 11 hospitals (N, C, SE & SW) reported. Results for the 2015-16 flu season are listed in the table below. Additional hospitals are welcome to join; please contact Seth Eckel at [eckels1@michigan.gov](mailto:eckels1@michigan.gov).

Age Group	New Flu Hospitalizations Reported	Total 2015-16 Flu Hospitalizations Reported to Date
0-4 years	0	0
5-17 years	0	0
18-49 years	0	0
50-64 years	0	1 (SE)
65 years & older	0	1 (SE)
<b>Total</b>	<b>0</b>	<b>2 (SE)</b>

### Laboratory Surveillance

MDHHS Bureau of Laboratories reported 2 new positive influenza results: 1 A/H3 and 1 2009 A/H1N1pdm. A total of 8 positive influenza results have been reported for the 2015-16 season. Influenza results for the 2015-16 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			2		2		
Influenza A/H3			5	1	6		

In addition, 11 sentinel clinical labs (3SE, 2SW, 6C) reported influenza results. Two labs (SE,C) reported sporadic influenza A activity. No labs reported influenza B activity. Four labs (SE,SW,C) reported sporadic or low Parainfluenza activity. No labs reported RSV activity. Three labs (SE,SW,C) reported sporadic Adenovirus activity. One lab (SE) reported sporadic hMPV activity. Most testing volumes remain near the moderate range.

### Influenza Congregate Settings Outbreaks

There was 1 respiratory facility outbreak reported (unknown etiology). There has been a total of 1 respiratory facility outbreak reported to MDHHS for the 2015-16 season. Respiratory facility outbreaks are listed in the table below by facility type and surveillance region.

Facility Type	C	N	SE	SW	Total
K-12 School	0	0	0	1	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

### Influenza-associated Pediatric Mortality

No influenza-associated pediatric deaths have been reported to MDHHS for the 2015-16 season.

**National:** In the United States, flu activity was low with 1.3% of outpatient visits due to influenza-like illness, which is below the national baseline of 2.1%. One influenza-associated pediatric death was reported that occurred during the 2014-15 season. Additional information is in the weekly FluView reports available at: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/).

**International:** Globally, influenza activity generally decreased or remained low, with only a few countries reporting elevated respiratory illness levels. In New Zealand, flu activity was just above the seasonal threshold. In South Africa, there were sporadic detections of influenza B viruses in recent weeks. More information is available at: [www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/).



## 2015-16 SEASONAL FLU ACTIVITY

- [State health officials announce first Indiana influenza death of 2015-16 season](#)

## INFLUENZA-RELATED JOURNAL ARTICLES

- *Clinical Infectious Diseases*: [The dynamic relationship between clinical symptomatology and viral shedding in naturally acquired seasonal and pandemic influenza virus infections](#)
  - Viral shedding in flu A infections peaked on the first 1-2 days clinical illness, undetectable by day 6-7
  - Viral shedding in flu B infections rose up to 2 days prior to symptom onset, persisted for 6-7 days after onset (even after clinical improvement)
- *Vaccine*: [Influenza vaccine effectiveness against hospitalization with influenza in adults in Australia in 2014](#)
  - Flu vaccine reduced risk of hospitalization for flu by 52%
- CIDRAP: [Studies indicate statins could dampen flu vaccine effect](#)
  - [Influence of statins on influenza vaccine response in elderly individuals](#)
  - Flu titers were lower in subjects receiving chronic statin therapy compared with those not receiving chronic statin therapy
  - Apparent immunosuppressive effect most dramatic in individuals receiving synthetic statins
- *Vaccine*: [Surveillance of adverse events after Flucelvax® reported to the Vaccine Adverse Event Reporting System \(VAERS\), U.S., 2013-2015](#)
  - Injection site and systemic reactions most commonly reported adverse events

## MDHHS FALL IMMUNIZATION CONFERENCES

[Register now](#) for the MDHHS Fall Regional Immunization Conferences! The following conference still has open spots available:

- Nov. 20: Troy

## AVIAN INFLUENZA INTERNATIONAL NEWS

- [H5N2 affects chickens and ducks in Taiwan, ostriches in South Africa](#)

## AVIAN INFLUENZA NEWS IN NORTH AMERICA

- Any reports of sick or dead birds should be forwarded immediately to the proper agency:
  - For domestic poultry, contact MDARD:
    - M-F 8AM-5PM, 1-800-292-3939
    - After hours/weekends, 517-373-0440
  - For wildlife (die-off of waterfowl, gulls, or shorebirds), contact DNR:
    - M-F 8AM-5PM, 517-336-5030
    - After hours/weekends, 1-800-292-7800

## OTHER INFLUENZA-RELATED NEWS

- CDC: [118.2 million doses of flu vaccine distributed in U.S.](#)
- CDC: [Seasonal influenza vaccination resources for health professionals](#)
- [Influenza vaccine antibody response in type 2 diabetes mellitus patients](#)
- California Medical Association: [Protect your asthma patients from influenza](#)
- MDHHS 2015-16 flu season guidance for [Local Health Departments](#) and [Healthcare Providers](#)

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

## 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 Stefanie Cole at [ColeS4@michigan.gov](mailto:ColeS4@michigan.gov).

### **MDHHS Contributors**

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