



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending October 22, 2016

MI's Influenza Activity Level:
Sporadic

Updates of Interest:

The first influenza-related hospitalizations have been reported in Michigan. More information can be found on page 2.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 1.9% overall, which is at the regional baseline of 1.9%. A total of 163 patient visits due to ILI were reported out of 8,465 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (23 total):

- C (7)
- N (1)
- SE (11)
- SW (4)

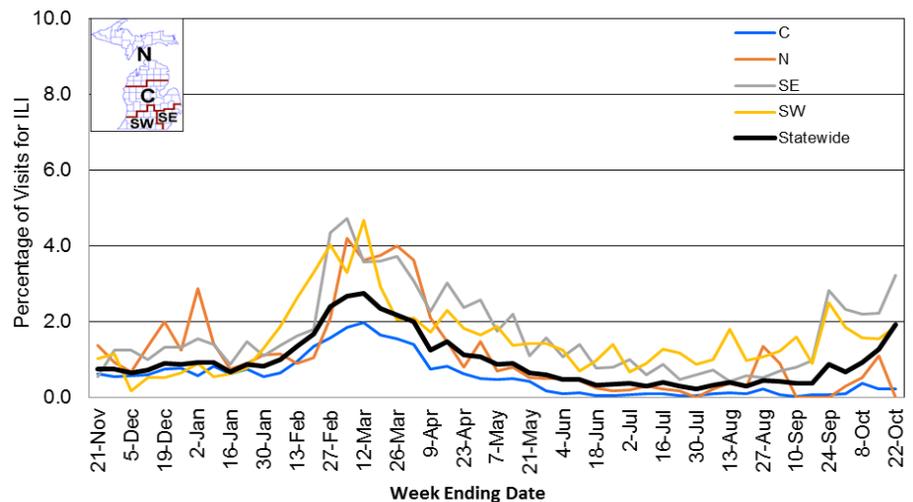
National Surveillance: In the United States, 1.3% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.2%.

Become a Sentinel Provider!

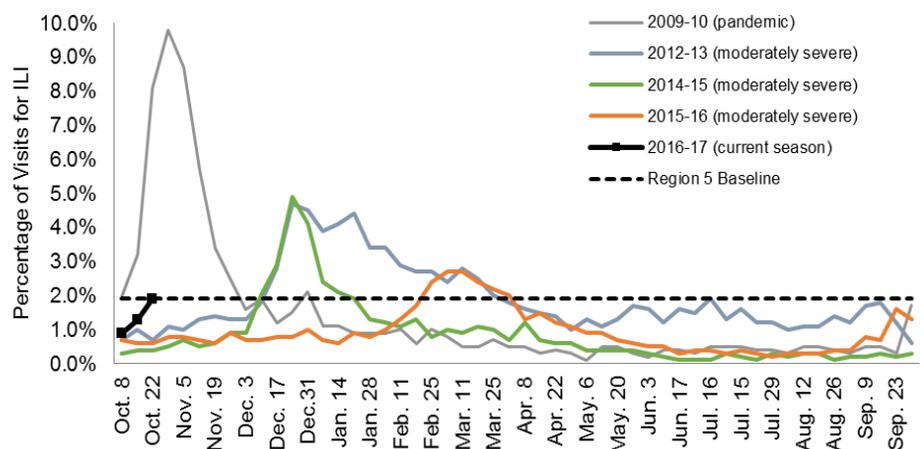
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

Additional information is in the weekly FluView reports available at: 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. There was one new influenza-related hospitalization (an influenza A positive adult) reported within the catchment area. 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 (C, N, 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.

Age Group	New Flu Hospitalizations Reported	Total 2016-17 Flu Hospitalizations Reported to Date
0-4 years	0	0
5-17 years	0	0
18-49 years	0	0
50-64 years	0	0
65 years & older	1 (N)	1 (N)
Total	1 (N)	1 (N)

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 7 new positive influenza results, all of which were influenza A/H3 (3C, 3SE, 1SW). A total of 13 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	3	0	7	3	13		
Influenza B							
A / unsubtypeable							
LAIV recovery							

In addition, 10 sentinel clinical labs (2SE, 2SW, 6C) reported influenza results. Two labs (SE, SW) reported sporadic influenza A activity. No labs reported influenza B activity. Five labs (SE, SW, C) reported low or slightly increasing Parainfluenza activity. Five labs (SE, SW, C) reported sporadic or low RSV activity. Two labs (SE, SW) reported sporadic Adenovirus activity. No labs reported hMPV activity. Testing volumes overall remain low but trending upward and some sites are now nearing moderate levels.

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	1
Healthcare Facility					
Daycare					
Correctional Facility					
Total				1	1

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 reports were lower than levels seen during the same time period last year, while individual reports were similar.

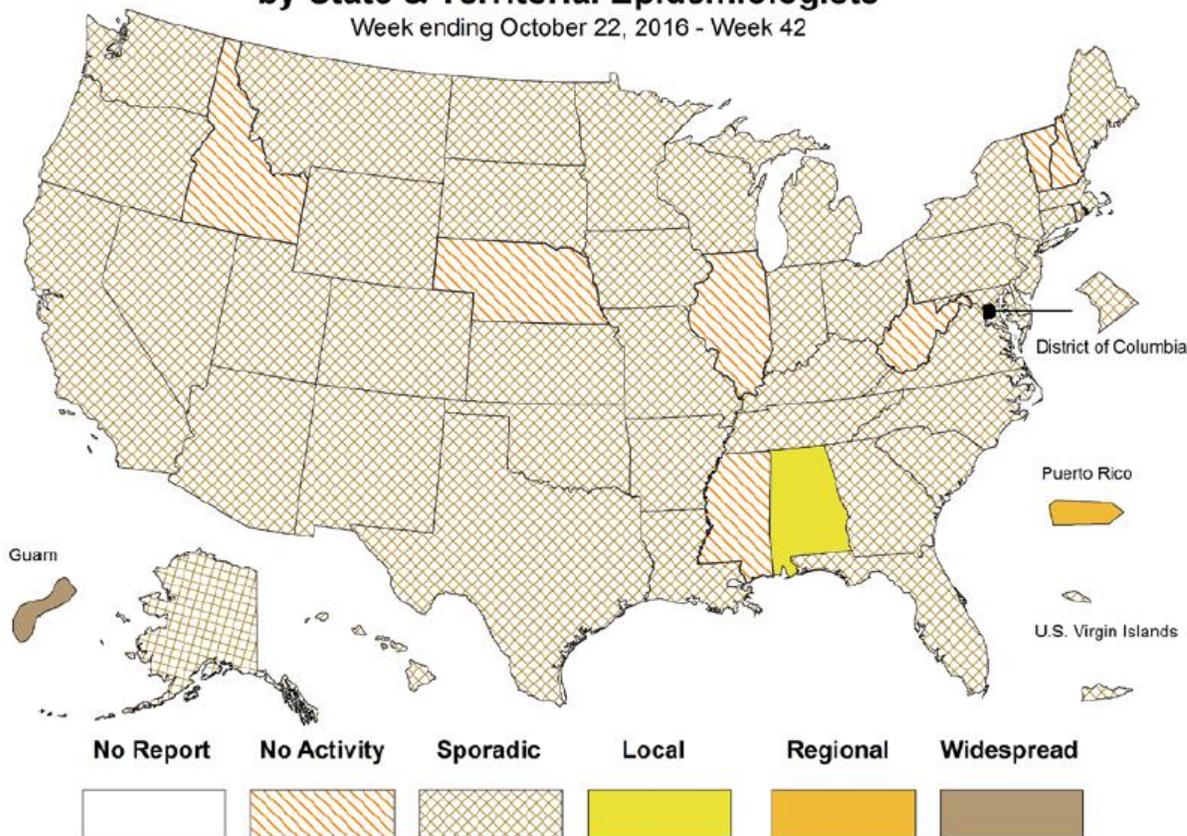
Emergency Department Surveillance

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

- 8 constitutional alerts (1N, 4C, 1SE, 2SW)
- 5 respiratory alerts (4C, 1SE)
- Last MIFF report: 5 constitutional alerts (1N, 3C, 1SW), 10 respiratory alerts (1N, 4C, 1SE, 4SW)

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending October 22, 2016 - Week 42





ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES MEETING UPDATE

An influenza surveillance update was given during the ACIP meeting on October 20. Here is a breakdown of influenza specimens sent to public health laboratories between May 22 and September 30, 2016:

A(H1N1)pdm09: All 8 specimens were antigenically characterized as A/California/7/2009-like

A(H3N2): Out of 53 specimens, 44 were antigenically characterized as A/Hong Kong/4801/2014-like, and 8 out of 9 other specimens were more closely related to A/Switzerland/9715293/2013

B/Victoria: All 26 viruses antigenically characterized as B/Brisbane/60/2008-like

B/Yamagata: All 33 viruses were antigenically characterized as B/Phuket/3073/2013-like

[Slides](#) from the meeting will be posted in the upcoming weeks.

NFID WEBINAR: UPDATES FROM OCTOBER 2016 ACIP MEETING

The National Foundation for Infectious Diseases will present a one-hour webinar at 12:00pm (ET) on November 16 recapping the ACIP meeting. The webinar will be moderated by William Schaffner, medical director, NFID and Patricia Stinchfield, MS, CPNP, CIC, senior director, infection prevention and control and pediatric nurse practitioner, infectious disease/immunology, Children's Hospitals of Minnesota. [Registration](#) is required.

VOICES FOR VACCINES CONFERENCE CALL

You are invited to join the Voices for Vaccines' speaker Melody Butler on the next Voices for Vaccines conference call on November 10 at 12:00pm (ET). Ms. Butler will explore how professionalism and advocacy intersect. The call is free and open to public, but you must [register](#) ahead of time.

INFLUENZA-RELATED JOURNAL ARTICLES

- [A data-driven model for influenza transmission incorporating media effects](#)
 - Studying relationship between mass media and influenza surveillance and tracking
- [Genotyping and detection of common avian and human origin-influenza viruses using a portable chemiluminescence imaging microarray](#)
- [Herd effect from influenza vaccination in non-healthcare settings: A systematic review of randomized controlled trials and observational studies](#)
 - Among RCTs, no statistically significant herd effect on the occurrence of influenza in contacts could be found
- [Opportunities to finance pandemic preparedness](#)
- [Outbreak of Influenza A\(H3N2\) variant virus infections among persons attending agricultural fairs housing infected swine – Michigan and Ohio, July-August 2016](#)
- [School-located influenza vaccinations: A randomized trial](#)

OTHER INFLUENZA-RELATED NEWS

- [Novel approach could help counter Influenza A virus in immune-compromised patients](#)
- [Europe Vaccines announces initiation of clinical study of the nasal influenza vaccine candidate Immunose™ FLU](#)
- [Adults who don't vaccinate cost \\$9B in 2015 from preventable diseases: 6 things to know](#)
- [Mask policies drive higher flu vax rates](#)
- [Seasonal influenza vaccines market will hit \\$4.3 billion by 2025](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Avian Influenza: Should the public be concerned?](#)

FLU WEBSITES

www.michigan.gov/flu
www.cdc.gov/flu
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.

MDHHS Contributors

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