



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



Editor: Jalyn Ingalls, MA

IngallsJ@michigan.gov

November 7, 2016

Vol. 14; No. 4

Influenza Surveillance Report for the Week Ending October 29, 2016

MI's Influenza Activity Level:
Sporadic

Updates of Interest:

A recent [study](#) found that temperature and absolute humidity have more direct effects on global influenza than precipitation and relative humidity.

Sentinel Provider Surveillance

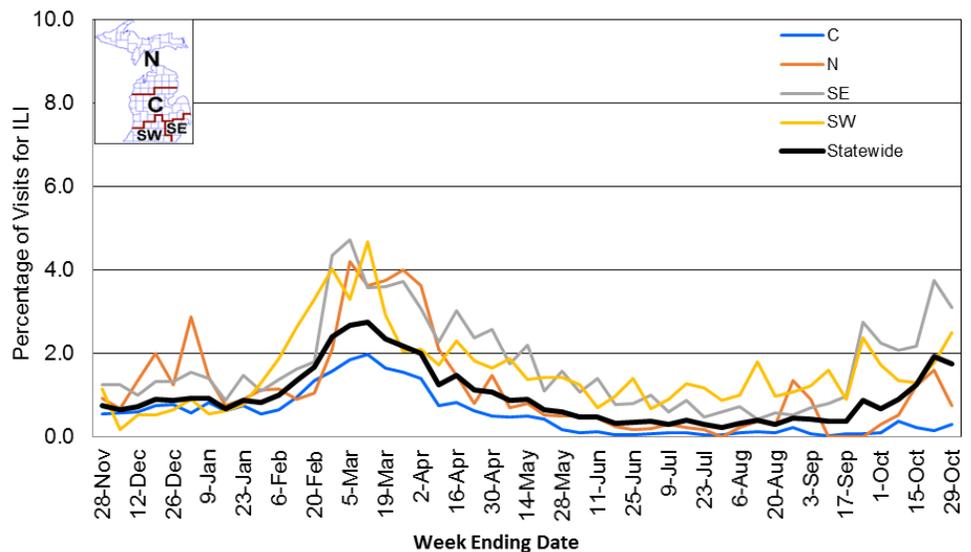
The proportion of visits due to influenza-like illness (ILI) decreased to 1.7% overall, which is at the regional baseline of 1.9%. A total of 190 patient visits due to ILI were reported out of 10,921 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (34 total):

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

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

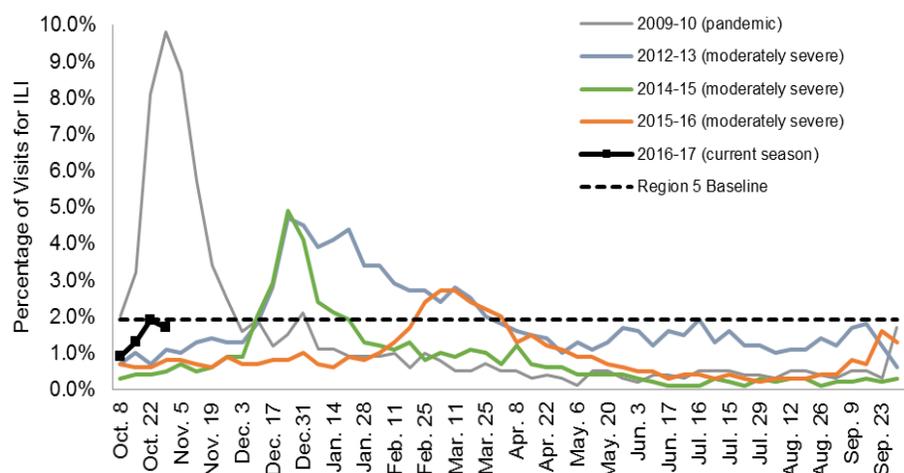
Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Statewide and Regions 2015-16 - 2016-17 Flu Seasons



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.

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



Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly.

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 were **no** new influenza-related hospitalizations reported in the catchment area, with a total of one (adult) reported 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 12 facilities (C, N, SE, SW) 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	2 (SE)	3 (1N, 2SE)
Total	2 (SE)	3 (1N, 2SE)

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 4 new positive influenza results, one influenza B (SE) & three A/H3 (1C, 2SE). A total of 17 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	4	0	9	3	16		0 / 8
Influenza B			1		1		
A / unsubtypeable							
LAIV recovery							

In addition, 9 sentinel clinical labs (3SE, 1SW, 5C) reported influenza testing results. Two labs (C, SE) reported sporadic influenza A activity. No labs reported influenza B activity. Four labs (C, SE, SW) reported low or slightly increasing Parainfluenza activity. Six labs (C, SE, SW) reported sporadic or low RSV activity. Three labs (C, SE) reported sporadic or low Adenovirus activity. No labs reported hMPV activity. Testing volumes continue to slowly trend upwards with some sites 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 were similar. Aggregate reports were lower than levels seen during the same time period last year, while individual reports were higher.

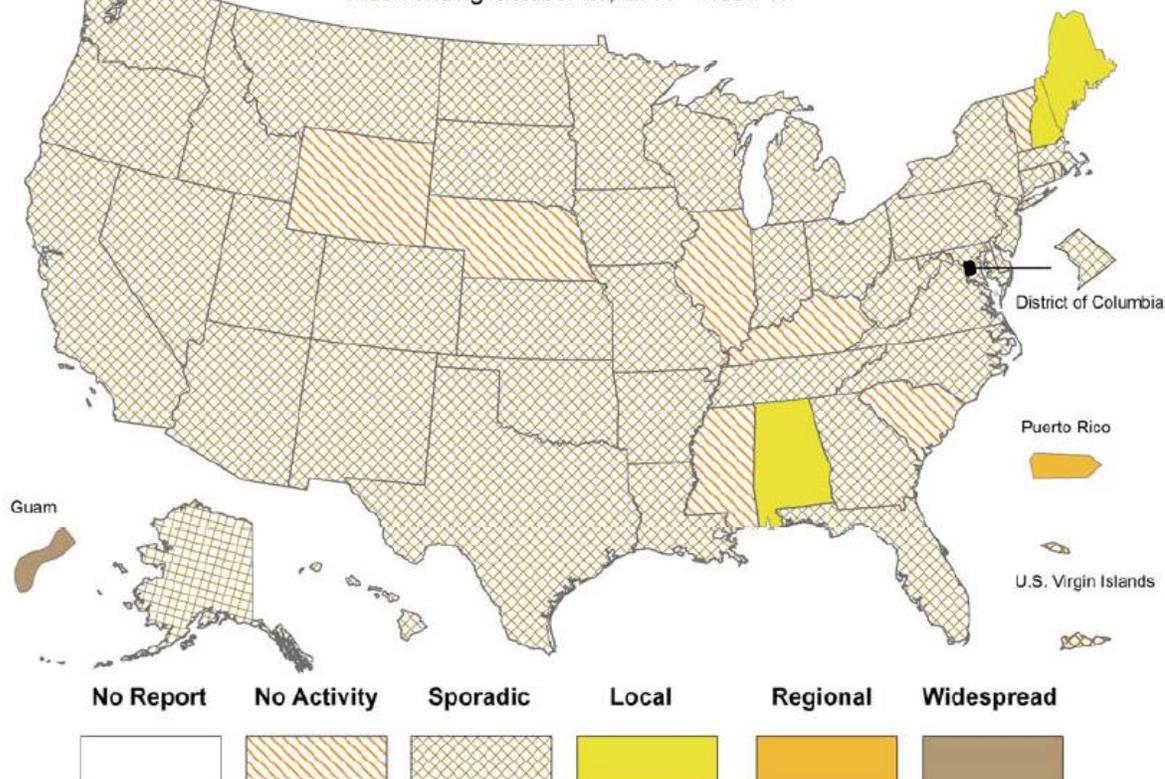
Emergency Department Surveillance

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

- 15 constitutional alerts (6N, 8C, 1SW)
- 6 respiratory alerts (2N, 2C, 2SW)
- Last MIFF report: 8 constitutional alerts (1N, 4C, 1SE, 2SW), 5 respiratory alerts (4C, 1SE)

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending October 29, 2016 - Week 43





TWO MORE PEDIATRIC FLU DEATHS REPORTED FOR THE 2015-16 SEASON

Two influenza-associated [pediatric deaths](#) that occurred during the 2015-16 season were reported to CDC during week 43. Both deaths were associated with an influenza A virus (no subtyping performed). These deaths bring the total number of reported influenza-associated pediatric deaths occurring during the 2015-16 season to 87.

SEASONAL AND PANDEMIC FLU CONTENT MOVES TO CDC

As of November 4th, the Flu.gov website is being redirected to [CDC's influenza website](#) as part of a transition to combine all flu related content. Additionally, CDC has created a designated website that houses content related to [influenza pandemics](#) and [pandemic preparedness and planning](#).

WATCH, LISTEN, AND LEARN: BOO! IT'S THE FLU!

Award winning Judith Light is joining with the National Council on Aging to teach adults 65 years and older about the importance of getting an annual flu vaccination through a [PSA](#). NOCA also has other flu resources that target older adults.

THE ALLIANCE FOR IMMUNIZATION IN MICHIGAN SEASONAL FLU POSTERS

The Alliance for Immunization in Michigan (AIM) has updated their seasonal flu posters! These [posters](#) are available online, and great resources for posting around offices, waiting rooms, bulletin boards, and other public spaces to encourage people to get their flu vaccine! You can also find other great flu resources on the AIM [website](#).



INFLUENZA-RELATED JOURNAL ARTICLES

- [Measuring populations to improve vaccination coverage](#)
- [Global environment drivers of influenza](#)
 - Absolute humidity, and to a lesser extent temperature, drive influenza outbreaks
 - U- shaped relationship between absolute humidity and influenza
- [Inhaled laninamivir octanoate as prophylaxis for influenza in children](#)
 - 11% of subjects developed clinical influenza in the laninamivir octanoate group
 - 19% of subjects developed clinical influenza in placebo group
- [Using the 4 pillars™ practice transformation program to increase adult influenza vaccination and reduce missed opportunities in a randomized cluster trial](#)

OTHER INFLUENZA-RELATED NEWS

- [2016 Influenza vaccine production & distribution market brief – Research and markets](#)
- [Study finds long-expired Tamiflu still potent](#)
 - Found Tamiflu that expired 4 years ago still contained sufficient levels of the active ingredient
 - [Full article](#) in the American Journal of Infection Control

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Three national report avian flu in wild birds, poultry](#)
- [Low pathogenic avian influenza confirmed on southern Ontario duck farm](#)
- [Second H5N1 outbreak in Nigeria in 1 month](#)

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

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