

MI Flu Focus

Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories



Editor: Jalyn Ingalls, MA lngallsJ@michigan.gov January 9, 2017 Vol. 14; No. 13

Influenza Surveillance Report for the Week Ending December 31, 2016

MI's Influenza
Activity Level:
Regional

Updates of Interest: Nominations for the Centers for Disease Control and Prevention Childhood Immunization Champion Award are due February 3, 2017. For more information about submitting a nomination, see FluBytes on page 4.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 2.7% overall, which is above the regional baseline of 1.9%. A total of 161 patient visits due to ILI were reported out of 5,866 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (27 total):

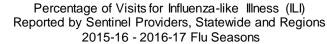
- C (9)
- N (2)
- SE (13)
- SW (3)

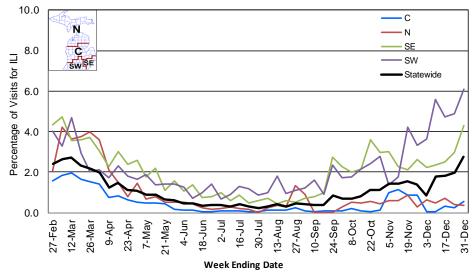
National Surveillance: In the United States, 3.4% of outpatient visits were due to influenza-like illness, which is above the national baseline of 2.2%.

Become a Sentinel Provider!

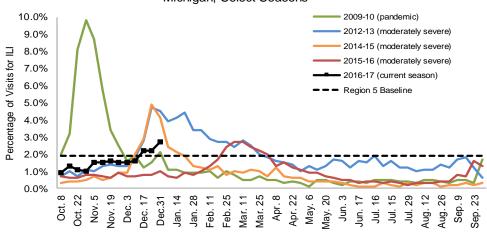
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

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 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 **3 pediatric and 13 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 12 facilities (N, C, 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	2 (1SE, 1SW)	3 (1N, 1SE, 1SW)			
5-17 years	1 (SE)	2 (1SE, 1SW)			
18-49 years	1 (SE)	3 (2SE, 1SW)			
50-64 years	2 (SE)	6 (4N, 2SE)			
65 years & older	7 (1N, 5SE, 1SW)	23 (7N, 15SE, 1SW)			
Total	13 (1N, 10SE, 2SW)	37 (12N, 21SE, 4SW)			

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 20 new positive influenza results (15 A/H3 and 5 flu B) during this time period. A total of 94 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	# Tested for Antiviral Resistance	
	С	N	SE	SW	Total	Characterized	# Resistant / Total # Tested	
2009 A/H1N1pdm								
Influenza A/H3	13	2	58	9	82	1 (A/HONG KONG/4801/2014-LIKE)	0/8	
Influenza B			7	5	12	1 (B/PHUKET/3073/2013-LIKE)		
A / unsubtypeable								
LAIV recovery								

In addition, 11 sentinel clinical labs (2SE, 2SW, 6C, 1N) reported influenza testing results. Ten labs (SE, SW, C, N) reported influenza A activity, with further increases noted in the SE region and new increases noted in the SW region. Five labs (SE, SW, N) reported sporadic or low influenza B activity. Four labs (C, SE, SW) reported low or stable Parainfluenza activity. Nine labs (SE, SW, C) reported ongoing RSV activity with further increases seen at several sites. Five labs (SE, SW, C, N) reported sporadic or low Adenovirus activity. Three labs (SE, SW, C) reported low or slightly increasing hMPV activity. Testing volumes continue to rise at most sites with many now reaching or nearing the moderate range.

Congregate Setting Outbreaks of Viral Respiratory Illness

There was one new respiratory facility outbreak (SW) reported to MDHHS during this time period. Respiratory facility outbreaks for the 2016-2017 season are listed in the table below.

Facility Type	С	N	SE	SW	Total
K-12 School					
Long-term Care / Assisted Living Facility			1	3	4
Healthcare Facility					
Daycare					
Correctional Facility					
Total			1	3	4

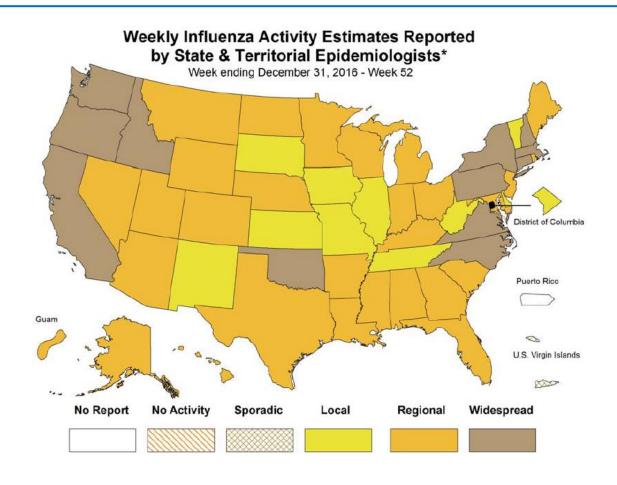
Michigan Disease Surveillance System

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 and respiratory complaints had both increased. Levels of constitutional and respiratory complaints were both higher than those recorded during the same time period last year.

- 13 constitutional alerts (6C, 3SE, 2SW, 2 statewide)
- 19 respiratory alerts (2N, 6C, 3SE, 7SW, 1 statewide)
- Last MIFF report: 8 constitutional alerts (2N, 3C, 3SW), 4 respiratory alerts (1N, 1C, 2SW)



FluBytes



CDC 2017 CHILDHOOD IMMUNIZATION CHAMPION AWARD

The Centers for Disease Control and Prevention (CDC) Childhood Immunization Champion Award is an annual award to recognize individuals who make a significant contribution toward improving public health through their work in childhood immunizations. This award is given jointly by the CDC Foundation and the CDC. Champions can include coalition members, parents, healthcare professionals, and other immunization leaders. You can find more information online about the criteria for becoming a Champion, and the nomination process. Nominations are due February 3, 2017.

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.

FLU WEBSITES

www.michigan.gov/flu www.cdc.gov/flu www.flu.gov http://vaccine.healthmap.org/

INFLUENZA-RELATED JOURNAL ARTICLES

- The annual burden of seasonal influenza in the US Veterans affairs population
 - Estimates that the annual burden of disease for influenza is \$1.2 billion for American veterans
- Intranasal immunization using mannatide as a novel adjuvant for an inactivated influenza vaccine and its adjuvant effect compared with MF59
- O <u>Co-infection in severe influenza: A new</u> epidemiology?
- Coherence of influenza surveillance data across different sources and age groups, Beijing, China, 2008-2015
- Multi-antigen avian influenza A(H7N9) viruslike particles: Particulate characterizations and immunogenicity evaluation in murine and avian models

OTHER INFLUENZA-RELATED NEWS

- Kitchen staple turns surgical masks into virus blasters
- Meijer sees significant increase in cold/flu remedy sales, urges customers to get flu shots
- Flu season starting to peak
- O Slow start to flu season in Michigan

AVIAN INFLUENZA INTERNATIONAL NEWS

- O China confirms latest human death from H7N9 bird flu
- France is trying to gas 800,000 ducks to death to prevent bird flu from spreading
- Genetic characterization of novel, highly pathogenic avian influenza (HPAI) H5N6 viruses isolated in birds, South Korea, November 2016
- Chile detects bird flu at poultry producer Agrosuper's plant
- PHL slaps ban on poultry meat from 4 countries

Archived editions of FluBytes are available <u>here</u> and MI FluFocus archives are <u>here</u>.

For questions or to be added to the distribution list, please contact Jalyn Ingalls at ingallsj@michigan.gov.

MDHHS Contributors

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