



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending December 2, 2017

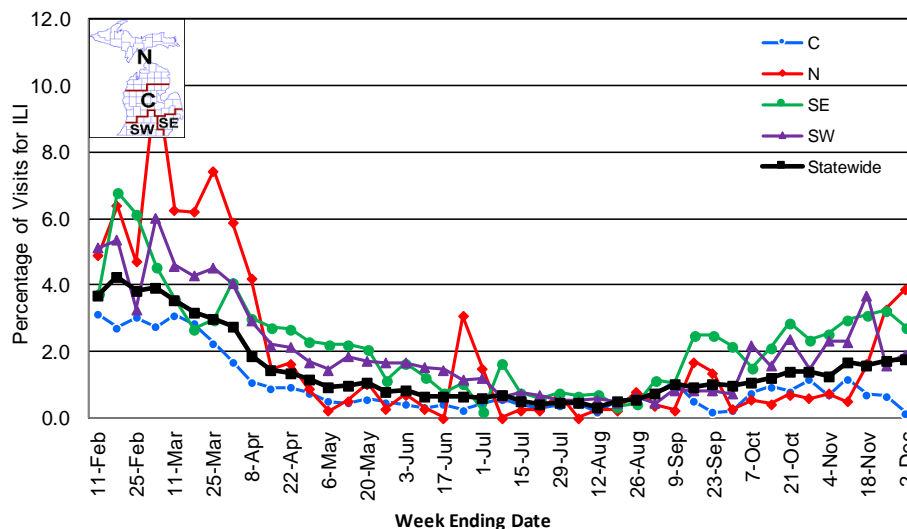
MI's Influenza Activity Level:
Local

Updates of Interest: The Centers for Disease Control and Prevention (CDC) has released early season flu vaccination coverage estimates for the 2017-2018 flu season. More information is available in FluBytes on page 3.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 1.7% overall, which is below the regional baseline of 1.8%. A total of 171 patient visits due to ILI were reported out of 9,817 office visits. Please note: These rates may change as additional reports are received.

Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Statewide and Regions 2016-17 and 2017-18 Flu Seasons



Number of Reports by Region

(29 total):

- C (7)
- N (2)
- SE (14)
- SW (6)

National Surveillance: In the United States, 2.3% of outpatient visits were due to influenza-like illness, which is above the national baseline of 2.2%.

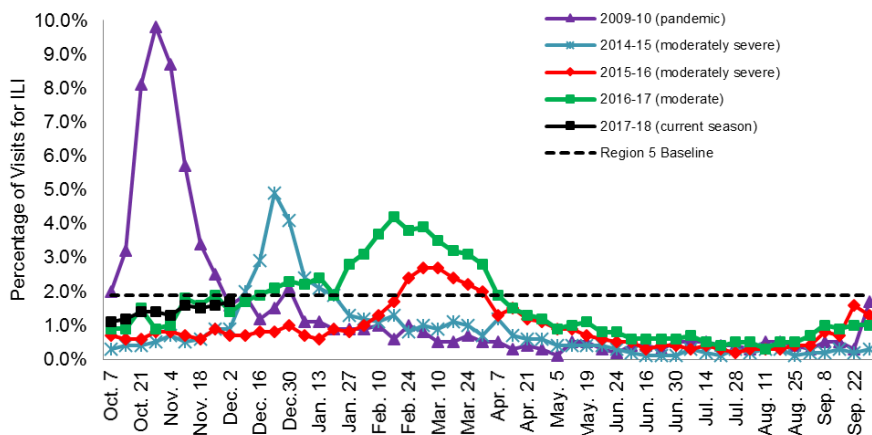
Become a Sentinel Provider!

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



Influenza-associated Pediatric Mortality

No pediatric influenza deaths have been reported to MDHHS during the 2017-2018 flu season. Nationally, seven (7) influenza-associated pediatric deaths have been reported thus far for the 2017-2018 flu season.

Hospital Surveillance

The CDC Influenza Hospitalization Surveillance Project provides population-based rates of hospitalization due to severe influenza-related illness through active surveillance and chart review of lab-confirmed cases from Oct. 1, 2017 until Apr. 30, 2018, for Clinton, Eaton, Ingham, Genesee, and Washtenaw counties. Since Oct. 1, there has been **4 pediatric and 18 adult** influenza-related hospitalizations reported in the catchment area for the 2017-2018 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 6 facilities (N, C, SE & SW) reporting during this time period. Results for the 2017-18 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 2017-18 Flu Hospitalizations Reported to Date
0-4 years	0	0
5-17 years	0	1 (N)
18-49 years	0	2 (SE)
50-64 years	1 (N)	7 (4N, 3SE)
65 years & older	3 (1N, 2C)	13 (5N, 2C, 6SE)
Total	4 (2N, 2C)	23 (10N, 2C, 11SE)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 42 new positive influenza results (33 A/H3, 2 A/H1 & 7 flu B) during this time period. A total of 90 positive influenza results have been reported for the 2017-18 season. Influenza results for the 2017-18 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			3	1	4		
Influenza A/H3	24	8	36	6	74		
Influenza B		4	8		12		
A / unsubtypeable							
LAIV recovery							

In addition, 10 sentinel clinical labs (2SE, 2SW, 6C, 0N) reported influenza testing results. Nine (9) labs (SE, SW, C) reported low or newly increasing influenza A activity. Three (3) labs (SE, SW) reported sporadic or low influenza B activity. Three labs (SE, SW, C) reported low or slightly increased Parainfluenza activity. Six (6) labs (SE, SW, C) reported low or further increasing RSV activity. Three (3) labs (SE, SW, C) reported sporadic or low Adenovirus activity. One (1) lab reported sporadic hMPV activity. Testing volumes continue to trend upwards with most sites now at or near the moderate range.

Congregate Setting Outbreaks of Viral Respiratory Illness

There were 2 new respiratory outbreaks reported to MDHHS during this time period. Respiratory facility outbreaks for the 2017-2018 season are listed in the table below.

Facility Type	C	N	SE	SW	Total
K-12 School	2				2
Long-term Care / Assisted Living Facility	4	1	1		6
Healthcare Facility					
Daycare	1				1
Homeless Shelter					
Total	7	1	1		9



NFID: PREVENTING INFLUENZA IN PATIENTS AGED 65 YEARS AND OLDER

The National Foundation for Infectious Diseases (NFID) has partnered with mdBriefCase Group Inc. to offer a complimentary online Continuing Medical Education (CME) activity offering strategies to help prevent influenza in patients aged 65 years and older, a population at high risk of flu-related complications and hospitalization.

This on-demand program provides a framework for counseling adults age 65 years and older on the importance of annual influenza vaccination through case-based scenarios. The online portal also contains video resources from subject matter experts, tools and resources, and guidelines. You can begin the program [here](#).

EARLY SEASON FLU VACCINATION COVERAGE ESTIMATES: 2017-2018 FLU SEASON

Last week was National Influenza Vaccination Week (NIVW). In observance of NIVW, CDC released [early season flu vaccination coverage estimates](#) for the U.S. for the 2017-2018 flu season, which are summarized below:

- Estimated 38.6% of people aged 6 months and older reported being vaccinated as of November 2017.
 - Early season coverage for children 6 months – 17 years was 38.8%.
 - Early season coverage for adults aged 18 years and older was 38.5%.
- Early season estimates show that 67.6% of healthcare personnel have received their flu vaccine
- Early season estimates show that 35.6% of pregnant women have received their flu vaccine.
 - Survey methodology changed for pregnant women, which changed the characteristics of the survey sample. Comparisons of vaccination coverage from November 2017 to previous years cannot be made.
- Final 2017-2018 flu season vaccination coverage estimates will be available in September 2018.

More details about the early season vaccination coverage estimates for the 2017-2018 flu season are available online, including detailed coverage estimates for the [general population](#), [healthcare personnel](#), and [pregnant women](#).

FLU WEBSITES

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

INFLUENZA-RELATED JOURNAL ARTICLES

- [Risk factors for serious outcomes associated with influenza illness in high- versus low- and middle-income countries: Systematic literature review and meta-analysis](#)
 - Summary available on [CIDRAP](#)
- [Update: Influenza Activity — United States, October 1–November 25, 2017](#)
- [Long term outcomes in survivors of epidemic Influenza A \(H7N9\) virus infection](#)
- [Comparison of anti-influenza virus activity and pharmacokinetics of oseltamivir free base and oseltamivir phosphate](#)
- [The impact of regular school closure on seasonal influenza epidemics: a data-driven spatial transmission model for Belgium](#)
- [Effect of influenza vaccination against postoperative pneumonia and mortality for geriatric patients receiving major surgery: A nationwide matched study](#)
- [Effectiveness of live attenuated influenza vaccine in preventing amoxicillin prescribing in preschool children: a self-controlled case series study](#)

OTHER INFLUENZA-RELATED NEWS

- [WHO guidance for surveillance during an influenza pandemic](#)
- [Too early to tell if flu shots work thirty cases already reported](#)
- [Flu season hits Massachusetts early](#)
- [It's flu shot week and there's 'no shortage' of vaccines in Kalamazoo](#)
- [Avian influenza and human health](#)
- [Make a difference by being a vaccine insistor!](#)
- [Influenza vaccine prevents pediatric influenza-related hospitalizations](#)
- [A mother got flu from her children – and was dead two days later](#)
- [Protective effect of maternal influenza vaccination on influenza in their infants: a prospective cohort study](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [CHP notified of human case of avian influenza A\(H7N9\) in Yunnan](#)
- [Korean researchers discover new drug candidate targeting avian flu](#)

Archived editions of FluBytes are available [here](#) and MI Flu Focus 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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