

MI Flu Focus

Influenza Surveillance Updates **Bureaus of Epidemiology and Laboratories**



Editor: Jalyn Ingalls, MA

IngallsJ@michigan.gov

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Influenza Surveillance Report for the Week Ending November 4, 2017

MI's Influenza	Updates of Interest: A recent study published in the American Journal of Infection
Activity Level:	Control highlights the number of healthcare personnel who report going to work while
Sporadic	experiencing flu-like symptoms. Please see Flubytes on page 3 for more details.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 1.1% overall, which is below the regional baseline of 1.8%. A total of 266 patient visits due to ILI were reported out of 23,902 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (73 total):

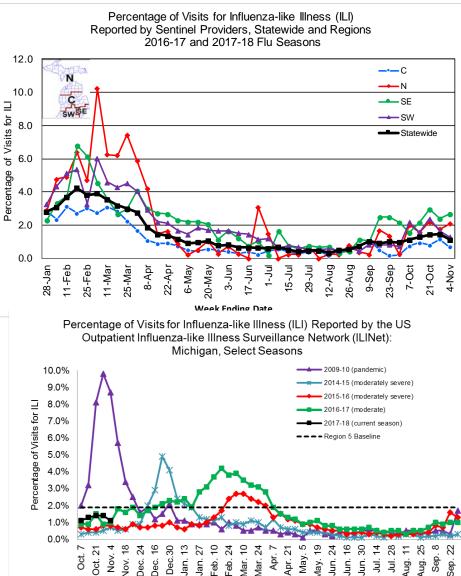
- C (49)
- N (2)
- SE (13)
- SW (9)

National Surveillance: In the United States, 1.8% 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.



Influenza-associated Pediatric Mortality

No pediatric deaths have been reported to MDHHS during the 2017-2018 flu season. Nationally, 1 influenza-associated pediatric death has 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 **1 pediatric and 2** adult influenza-related hospitalizations reported in the catchment area for the 2017-2018 season. <u>Note</u>: 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 7 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 <u>eckels1@michigan.gov</u>.

Age Group	New Flu Hospitalizations Reported	Total 2017-18 Flu Hospitalizations Reported to Date			
0-4 years	0	0			
5-17 years	1 (N)	1 (N)			
18-49 years	0	1 (SE)			
50-64 years	0	0			
65 years & older	0	4 (3N, 1SE)			
Total	1 (N)	6 (4N, 2SE)			

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 4 new positive influenza results (all A/H3) during this time period. A total of 34 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	# Tested for Antiviral Resistance		
	С	N	SE	SW	i otai	Characterized	# Resistant / Total # Tested		
2009 A/H1N1pdm			2		2				
Influenza A/H3	7	4	16	2	29				
Influenza B		1	2		3				
A / unsubtypeable									
LAIV recovery									

In addition, 10 sentinel clinical labs (2SE, 2SW, 6C, 0N) reported influenza testing results. Four (4) labs (SE, SW, C) reported sporadic influenza A activity. No labs reported influenza B activity. Four (4) labs (SE, SW, C) reported low or slightly increased Parainfluenza activity. Four (4) labs (SE, C) reported low RSV activity. Two (2) labs (SE, C) reported sporadic or low Adenovirus activity. One lab (SE) reported sporadic hMPV activity. Testing volumes are generally in the low range although multiple sites continue to slowly trend upwards.

Congregate Setting Outbreaks of Viral Respiratory Illness

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

Facility Type	С	Ν	SE	SW	Total
K-12 School	1				1
Long-term Care / Assisted Living Facility		1			1
Healthcare Facility					
Daycare					
Homeless Shelter					
Total	1	1			2

FluBytes

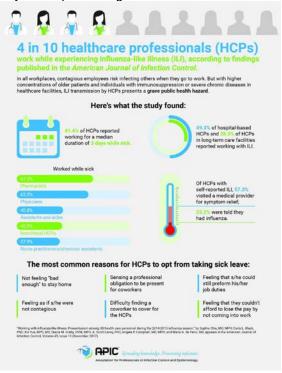


40% OF PHYSICIANS, NURSES GO TO WORK WITH FLU LIKE ILLNESS

A recent <u>study</u> published in the American Journal of Infection Control highlights the number of healthcare personnel who report going to work while experiencing flu-like symptoms. In a Science Magazine article, the lead researcher of the study says, "The statistics are alarming. At least one earlier <u>study</u> has shown that patients who are exposed to a healthcare worker who is sick are five times more likely to get a healthcareassociated infection."

Healthcare personnel who come to work sick risk spreading illness to patients, some of whom are already ill and may be at a higher risk of developing severe complications.

Below is an infographic summarizing the results of the American Journal of Infection Control study. Please share this information with your staff and student workers to let them know it is important to stay home if they are experiencing flu-like illness.



FLU WEBSITES

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

INFLUENZA-RELATED JOURNAL ARTICLES

- Contemporary H3N2 influenza viruses have a glycosylation site that alters binding of antibodies elicited by egg-adapted vaccine strains
- <u>A structural explanation for the low</u> <u>effectiveness of the seasonal influenza H3N2</u> <u>vaccine</u>
- o <u>Cost effectiveness of strategies for offering</u> <u>influenza vaccine in the pediatric emergency</u> <u>department</u>
- o AAP: Recommendations for prevention and control of influenza in children, 2017-2018 season
 - UPDATE: Peramivir (RAPIVAB®), a new antiviral medication given intravenously to treat influenza, was recently licensed for children by the FDA.
 - Peramivir is now 1 of 3 antiviral medication options for children: (1) Oral Oseltamivir, (2) Inhaled Zanamivir, and (3) IV Peramivir.

OTHER INFLUENZA-RELATED NEWS

- o How flu shot manufacturing forces influenza to mutate
- o <u>13 facts about the flu shot everyone should</u> <u>know</u>
- o Antibiotic course often too long in pneumonia patients
- o <u>A healthcare company comes under fire for</u> mandating its employees to get flu shots
- o <u>Getting the flu can wreak havoc on your</u> <u>finances</u>
- o <u>Gesundheit: Employer Guidance on Flu Shot</u> <u>Policies</u>
- Why are Americans still so afraid of the flu vaccine?
- o Online Interventions Improve Vaccination Rates

AVIAN INFLUENZA INTERNATIONAL NEWS

 Deaths among Wild Birds during Highly Pathogenic Avian Influenza A(H5N8) Virus Outbreak, the Netherlands

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