



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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January 30, 2017

Vol. 14; No. 16

Influenza Surveillance Report for the Week Ending January 21, 2017

MI's Influenza Activity Level:
Regional

Updates of Interest: The National Influenza Vaccination Disparities Partnership is hosting a webinar titled "Lessons from the Field: Immunization Coalition Leaders Sharing Their Wisdom." For more information, see FluBytes on page 4.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) remained at 2.7% overall, which is above the regional baseline of 1.9%. A total of 259 patient visits due to ILI were reported out of 9,712 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (34 total):

- C (11)
- N (2)
- SE (17)
- SW (4)

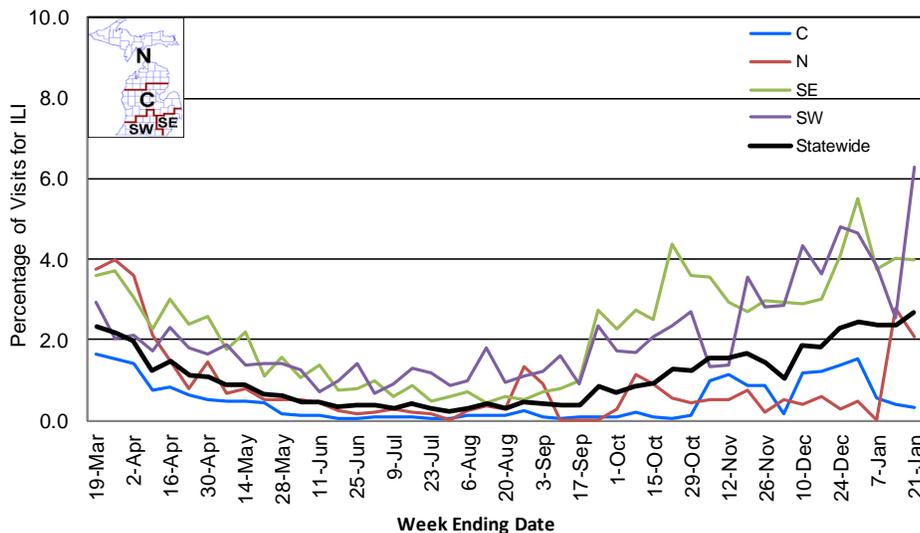
National Surveillance: In the United States, 3.4% of outpatient visits were due to influenza-like illness, which is above the national baseline of 2.2%.

Become a Sentinel Provider!

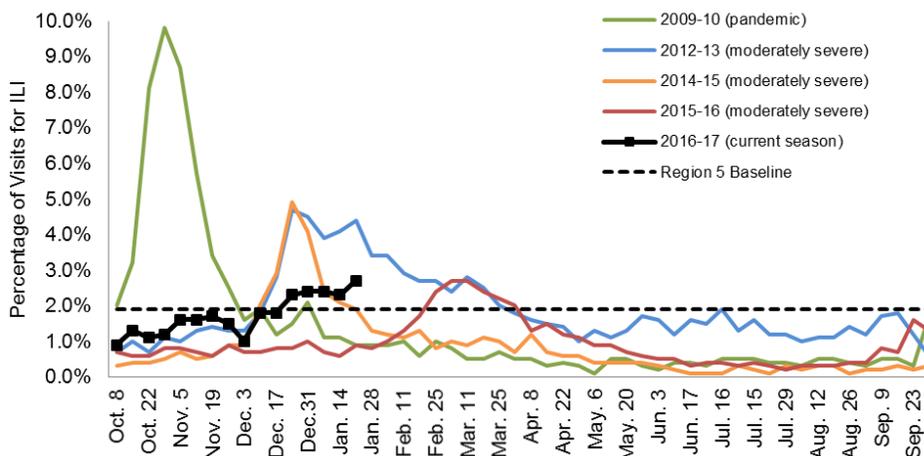
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

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 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. Since Oct. 1, there have been **3 pediatric and 48 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 13 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)	6 (1N, 2SE, 3SW)
5-17 years	1 (SW)	4 (2SE, 2SW)
18-49 years	5 (3SE, 2SW)	15 (1N, 10SE, 4SW)
50-64 years	2 (SE)	20 (6N, 14SE)
65 years & older	13 (1N, 9SE, 3SW)	70 (11N, 51SE, 8SW)
Total	23 (1N, 15SE, 7SW)	115 (19N, 79SE, 17SW)

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, eight 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 195 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	1		1		2		
Influenza A/H3	34	8	85	32	159	3 (A/HONG KONG/4801/2014-LIKE)	0 / 8
Influenza B	1		19	14	34	3 (B/PHUKET/3073/2013-LIKE)	
A / unsubtypeable							
LAIV recovery							

In addition, 10 sentinel clinical labs (2SE, 2SW, 5C, 1N) reported influenza testing results. All ten labs reported influenza A activity ranging from sporadic to moderately increasing, with the most notable upticks continuing in the SE region. Five labs (SE, SW, C) reported sporadic or somewhat increasing influenza B activity. Three labs (C, SE, SW) reported low or slightly increased Parainfluenza activity. Nine labs (SE, SW, C, N) reported RSV activity with most sites at steady or gradually increasing levels. Two labs (SE, C) reported sporadic or low Adenovirus activity. Five labs (SE, SW, C, N) reported low hMPV activity. Testing volumes are steady or continue to gradually increase, with the majority of sites staying near the moderate range.

Congregate Setting Outbreaks of Viral Respiratory Illness

There were two new respiratory facility outbreaks (SW) reported to MDHHS during this time period, one confirmed influenza A and the other influenza B. 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			2	9	11
Healthcare Facility					
Daycare					
Homeless Shelter			1		1
Total			3	9	12

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 higher.

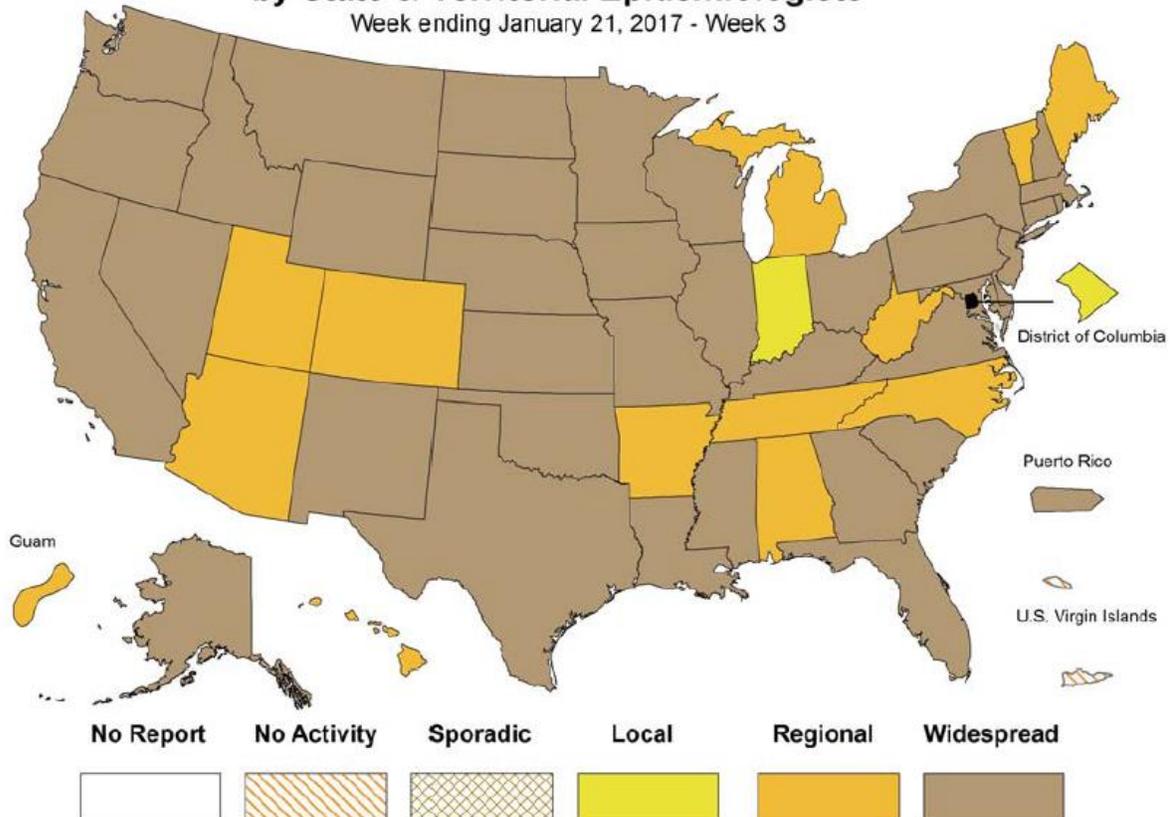
Emergency Department Surveillance

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

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

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending January 21, 2017 - Week 3





FLU PREVENTION PROMOTION FOR UNDERSERVED POPULATIONS WEBINAR

The National Influenza Vaccination Disparities Partnership (NIVDP) is hosting a webinar, “Lessons from the Field: Immunization Coalition Leaders Sharing Their Wisdom” on Thursday, February 9 from 2:00-3:00pm. Hear from immunization coalition leaders throughout the United States who will share lessons learned and challenges in promoting flu vaccination within underserved communities. The webinar is free, but you must [register](#).

TESTING TRAVELERS RETURNING FROM CHINA FOR AVIAN INFLUENZA A (H7N9) VIRUS

China is currently experiencing the fifth annual epidemic of human infections with avian influenza A (H7N9) virus. The Centers for Disease Control and Prevention (CDC) is recommending that public health officials consider [H7N9 virus infection](#) as a possible etiology among travelers returning from China with severe respiratory illness, especially if they have had exposure to poultry. Unlike individual cases of seasonal influenza, reporting of novel influenza infections (like H7N9) is mandatory. The CDC is updating their guidance for clinicians evaluating and managing patients exposed to avian influenza. Updated guidance will be posted on the CDC’s Avian Influenza: Information for Health Professionals and Laboratorians [webpage](#). Please contact your local health department or MDHHS (517-335-8165) with questions.

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. Champions can include coalition members, parents, healthcare professionals, and other immunization leaders.

All [nominations](#) need to be submitted to MDHHS Division of Immunizations, Attention: Stephanie Sanchez (SanchezS@michigan.gov) no later than February 17, 2017.

INFLUENZA-RELATED JOURNAL ARTICLES

- [Influenza vaccination of healthcare workers: Critical analysis of the evidence for patient benefit underpinning policies of enforcement](#)
- [Live-attenuated influenza vaccine effectiveness against hospitalization due to laboratory-confirmed influenza in children two to six years of age in England in the 2015/16 season](#)
- [Barriers of influenza vaccination intention and behavior – A systematic review of influenza vaccine hesitancy, 2005-2016](#)
 - Lack of confidence, inconvenience, calculation, and complacency were identified as barriers in risk groups
- [Limited and variable use of antivirals for children hospitalized with influenza](#)
 - Children with high risk condition only slightly more likely to receive antivirals than those without a high-risk condition
- [Cell cycle independent role of Cyclin D3 in host restriction of influenza virus infection](#)

OTHER INFLUENZA-RELATED NEWS

- [Situation update: Summary of weekly FluView report](#)
- [Flu vaccine may reduce risk of stroke and heart failure for type 2 diabetes patients](#)
- [Scientists develop new flu vaccines for dogs](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [WHO calls for heightened vigilance as avian influenza continues to spread in Europe](#)
- [Central China province reports new H7N9 case](#)
- [Five nations report more, varied avian flu outbreaks](#)
- [Influenza at the human-animal interface: Summary and assessment, 20 December to 16 January 2017](#)
 - H9N2 avian influenza infection involving 7 month old girl

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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