



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending January 14, 2017

MI's Influenza Activity Level:
Regional

Updates of Interest: The National Influenza Vaccination Disparities Partnership (NIVDP) offers multiple [resources](#) for healthcare providers to use to help encourage flu vaccination among underserved populations. See FluBytes on page 4 for more information.

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 222 patient visits due to ILI were reported out of 8,321 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (33 total):

- C (11)
- N (1)
- SE (15)
- SW (6)

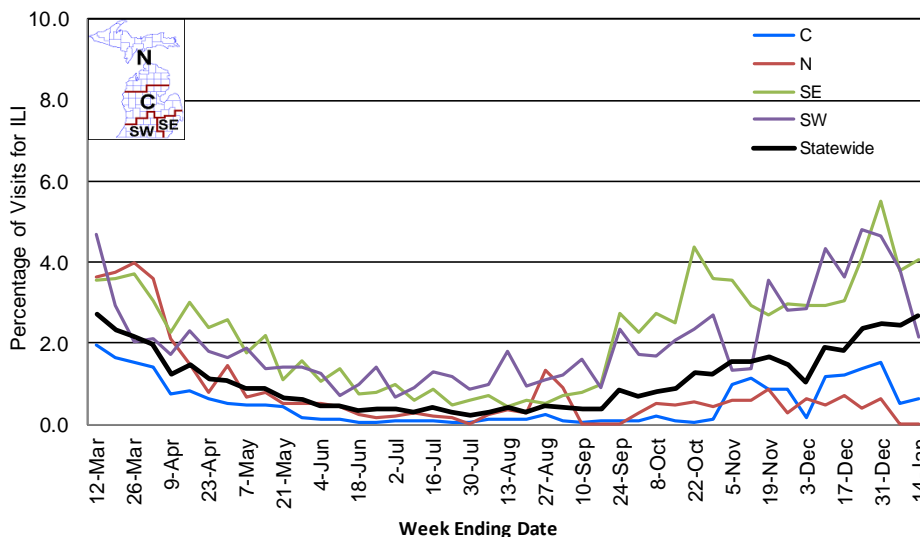
National Surveillance: In the United States, 3.3% of outpatient visits were due to influenza-like illness, which is above the national baseline of 2.2%.

Become a Sentinel Provider!

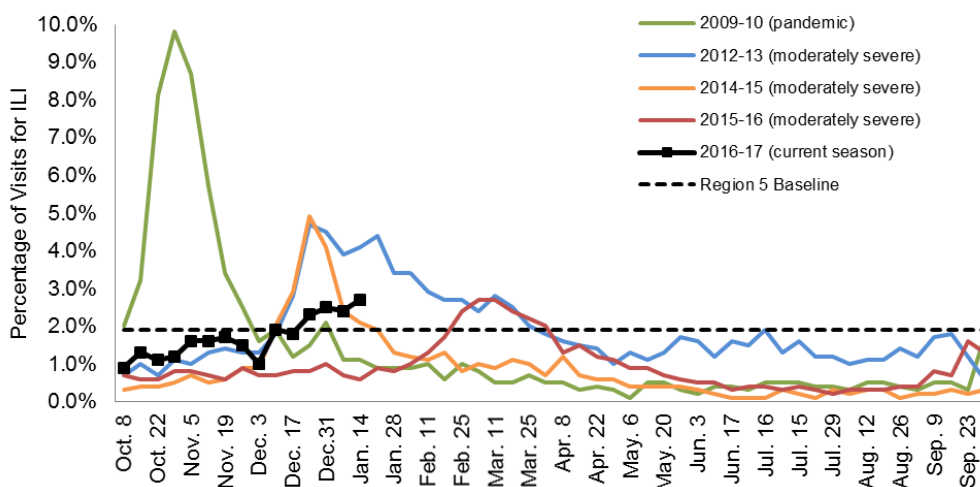
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

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 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 29 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	0	4 (1N, 1SE, 2SW)
5-17 years	1 (SE)	3 (2SE, 1SW)
18-49 years	5 (1N, 3SE, 1SW)	10 (1N, 7SE, 2SW)
50-64 years	4 (1N, 3SE)	18 (6N, 12SE)
65 years & older	16 (2N, 12SE, 2SW)	57 (10N, 42SE, 5SW)
Total	26 (4N, 19SE, 3SW)	92 (18N, 64SE, 10SW)

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, five influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 60 new positive influenza results (45 A/H3, 2 A/H1 and 13 flu B) during this time period. A total of 175 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	25	6	81	32	144	3 (A/HONG KONG/4801/2014-LIKE)	0 / 8
Influenza B			15	14	29	1 (B/PHUKET/3073/2013-LIKE)	
A / unsubtypeable							
LAIV recovery							

In addition, 11 sentinel clinical labs (2SE, 2SW, 6C, 1N) reported influenza testing results. All eleven labs reported influenza A activity ranging from sporadic to steadily increasing, with the most notable upticks continuing in the SE region. Six labs (SE, SW, C) reported sporadic or slightly increased influenza B activity. Three labs (C, SE, SW) reported slightly elevated Parainfluenza activity. Eleven labs (SE, SW, C, N) reported RSV activity with most sites at slightly elevated or steady levels. Four labs (SE, SW, C) reported sporadic or low Adenovirus activity. Four labs (SE, SW, C, N) reported low or slightly increasing hMPV activity. Testing volumes are steady or continue to gradually increase, with the majority of sites approaching the moderate range.

Congregate Setting Outbreaks of Viral Respiratory Illness

There were two new respiratory facility outbreak (1SE, 1SW) reported to MDHHS during this time period, both of which were confirmed as influenza A. 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	7	9
Healthcare Facility					
Daycare					
Homeless Shelter			1		1
Total			3	7	10

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.

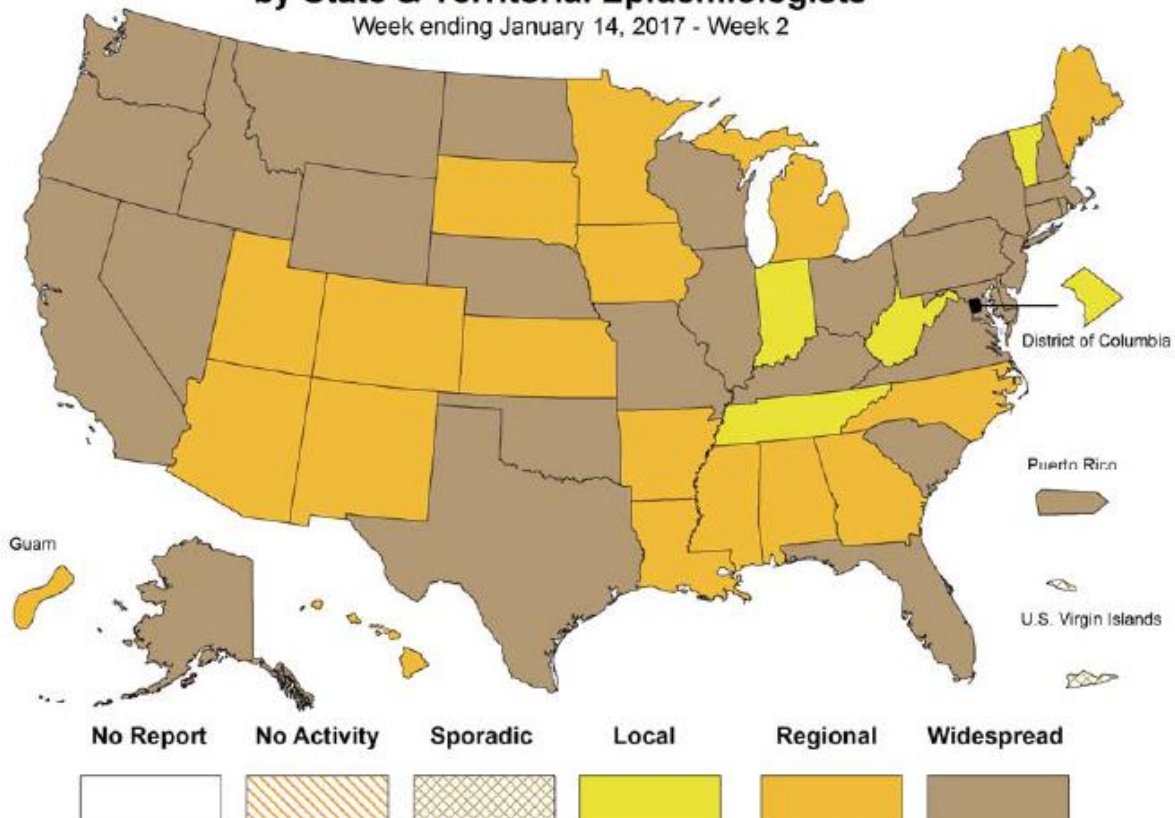
Emergency Department Surveillance

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.

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

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending January 14, 2017 - Week 2






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.

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

FLU PREVENTION PROMOTION FOR UNDERSERVED POPULATIONS

The National Influenza Vaccination Disparities Partnership (NIVDP) is a national multi-sector campaign to promote the importance of flu vaccination among underserved populations. The key strategy is to engage local messengers to promote the importance of flu vaccination. NIVDP offers [multiple resources](#) that can be used by healthcare professionals to promote flu vaccine to underserved populations, including a resource kit, postcard, social media, and targeted audience resources.






The National Influenza Vaccination Disparities Partnership (NIVDP)

CDC Grassroots Health Marketing Campaign to Eliminate Flu Vaccination Coverage Disparities

THE KEY STRATEGY
Flu vaccination coverage is lower among African American, Hispanic, and American Indian/Alaska Native adult populations. These groups are also more impacted by chronic health conditions such as asthma, diabetes, heart disease and obesity, which puts them at higher risk for serious flu-related health complications or even death.

The National Influenza Vaccination Disparities Partnership (NIVDP) was launched in 2011 by the Centers for Disease Control and Prevention (CDC) to promote flu vaccination. The NIVDP engages trusted local messengers, and employs several other strategies, including media and vaccination promotion events in the community, such as at work places, to promote the benefits of flu vaccination.

The Successes from 2011 to 2016:

-  **900+** multi-sector NIVDP members
-  **800+** flu vaccine promotion events in 95 cities
-  **700,000+** people vaccinated against the flu

Archived editions of FluBytes are available [here](#) and MI FluFocus archives are [here](#).

INFLUENZA-RELATED JOURNAL ARTICLES

- [Development of Oseltamivir and Zanamivir resistance in influenza A\(H1N1\)pdm09 virus, Denmark, 2014](#)
- [Sudden increase in human infection with avian influenza A\(H7N9\) virus in China, September – December 2016](#)
 - Though more cases were reported recently, most cases in fifth epidemic are sporadic and without any epidemiology links
- [Effect of live poultry market interventions on influenza A\(H7N9\) virus, Guangdong, China](#)
 - Geographic shift of the epicenter of human infections between waves suggest an epidemic is difficult to control solely by interfering in the epicenter of an outbreak
- [Influenza epidemic surveillance and prediction based on electronic health record data from an out-of-hours general practitioner cooperative: Model development and validation on 2003-2015 data](#)

OTHER INFLUENZA-RELATED NEWS

- [Michigan experiencing an increase in flu activity, flu vaccine recommended – MDHHS Press Release](#)
- [US flu numbers rise as 2 more pediatric deaths noted](#)
- [Flu cases nearly tripled in SC compared to last season](#)
- [Why don't team all get the flu shot?](#)
- [What is the public health preparedness of our nation?](#)
- [Cracking the code of influenza](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [First suspected H5N8 in Kazakhstan; more outbreaks in Europe](#)
- [Second case of bird flu found in Chile, turkeys culled](#)
- [NIAID flu experts examine evolution of avian influenza](#)
- [Outbreak of H7N2 flu virus in cats – American Society for Microbiology](#)

FLU WEBSITES

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

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

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