



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



Editor: Stefanie Cole, RN, MPH ColeS4@michigan.gov March 16, 2016 Vol. 13; No. 9

Influenza Surveillance Report for the Week Ending March 5, 2016

MI's Influenza Activity Level:
Widespread

Updates of Interest:
According to the [CDC](#), most influenza indicators for the US are still climbing.

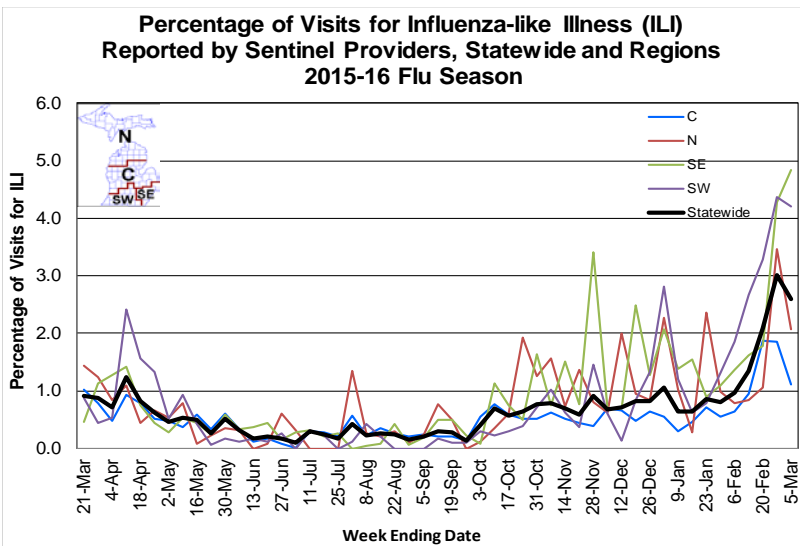
Michigan Disease Surveillance System

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

- 5 constitutional alerts (2SW, 2C, 1N)
- 3 respiratory alerts (1C, 2N)
- Last MIFF report: 7 constitutional alerts (1SW, 6C), 2 respiratory alerts (2SW)



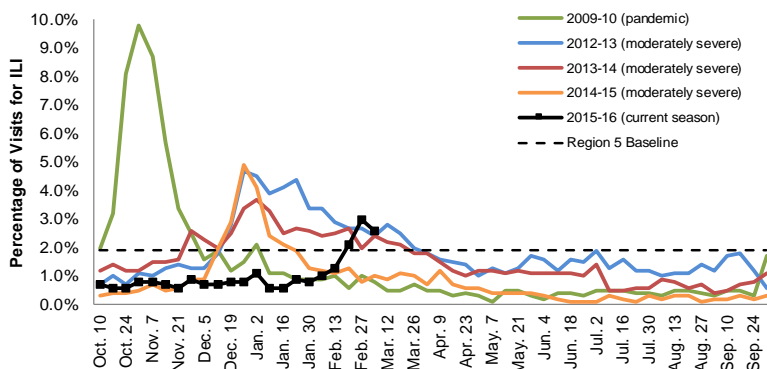
Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 2.6% overall; this is above the regional baseline (1.9%). A total of 335 patient visits due to ILI were reported out of 12,911 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (36 total):

- C (13)
- N (3)
- SE (12)
- SW (8)

Percentage of Visits for Influenza-like Illness (ILI) Reported by the US Outpatient Influenza-like Illness Surveillance Network (ILINet): Michigan, Select Seasons



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 Stefanie Cole (ColeS4@michigan.gov) for more information.

Table of Contents:

Michigan Surveillance.....1-3
National Surveillance.....3
International Surveillance....3
FluBytes4

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 beginning on Oct. 1, 2015, for Clinton, Eaton, Genesee, and Ingham counties. Since Oct. 1, there have been 18 pediatric (7.4 per 100,000 population) and 80 adult (12.4 per 100,000 population) hospitalizations reported within the catchment area. Note: Some hospitalizations are ruled out after they are reported so the cumulative totals may change from week to week.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 14 hospitals (C, N, SE, & SW) reported. Results for the 2015-16 flu season are listed in the table below. Additional hospitals are welcome to join; please contact Seth Eckel at eckels1@michigan.gov.

Age Group	New Flu Hospitalizations Reported	Total 2015-16 Flu Hospitalizations Reported to Date
0-4 years	3 (1N, 2SW)	21 (6N, 7SE, 8SW)
5-17 years	4 (2N, 2SE)	11 (5N, 6SE)
18-49 years	25 (7N, 10SE, 8SW)	90 (10N, 1C, 57SE, 22SW)
50-64 years	36 (3N, 2C, 26SE, 5SW)	109 (8N, 3C, 72SE, 26SW)
65 years & older	39 (7N, 29SE, 3SW)	126 (10N, 2C, 92SE, 22SW)
Total	107 (20N, 2C, 67SE, 18SW)	357 (39N, 6C, 234SE, 78SW)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 1 adenovirus and 45 new positive influenza results: 37 2009 A/H1N1pdm, 5 influenza B, 2 influenza A/H3, and 1 unsubtypeable influenza A. A total of 223 positive influenza results have been reported for the 2015-16 season. Influenza results for the 2015-16 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	41	14	59	63	177	15* (15 A/California/07/2009-like (H1N1)pdm09**)	1 / 43
Influenza A/H3	8	1	9	8	26	4* (4 A/Switzerland/9715293/2013-like [†])	0 / 6
Influenza B	2	2	7	5	16	13 (9 B/Yamagata lineage [2 B/Phuket/3073/2013-like ^{††}], 4 B/Victoria lineage)	
A / unsubtypeable				4	4		
LAIV recovery				1	1		
RSV			2		2		
Adenovirus	2				2		
Parainfluenza type 1			1		1		

*Specimens antigenically characterized by CDC; **A/California/07/2009-like (H1N1)pdm09 is the H1N1 component of the 2015-16 Northern Hemisphere flu vaccines; [†]A/Switzerland/9715293/2013-like (H3N2) is the H3N2 component of the 2015-16 Northern Hemisphere flu vaccines; ^{††}B/Phuket/3073/2013-like virus is the B/Yamagata component of the 2015-16 Northern Hemisphere trivalent and quadrivalent flu vaccines.

In addition, 13 sentinel clinical labs (4SE, 2SW, 6C, 1N) reported influenza results. All thirteen labs reported influenza A activity with all regions showing sustained elevated levels. Eleven labs (SE, SW, C, N) reported influenza B activity ranging from low or gradually increasing levels at most sites, to moderately increased levels in the SE region. Twelve labs (SE, SW, C, N) reported low to upper moderate RSV activity, mostly at steady or slightly decreasing levels. Five labs (SE, SW, C) reported low or increasing Adenovirus activity. Five labs (SE, SW, C) reported low to upper-moderate hMPV activity. Nearly all testing volumes showed further increases with most sites continuing in the high range and several sites in the very high range.

Influenza Congregate Settings Outbreaks

There were 4 new respiratory facility outbreaks (2 influenza A, 1 RSV, 1 no testing done) reported. There have been a total of 20 respiratory facility outbreaks reported to MDHHS for the 2015-16 season. Respiratory facility outbreaks are listed in the table below by facility type and surveillance region.

Facility Type	C	N	SE	SW	Total
K-12 School		1		3	4
Long-term Care / Assisted Living Facility	6	1	4	3	14
Healthcare Facility			1		1
Daycare				1	1
Total	6	2	5	7	20

Influenza-associated Pediatric Mortality

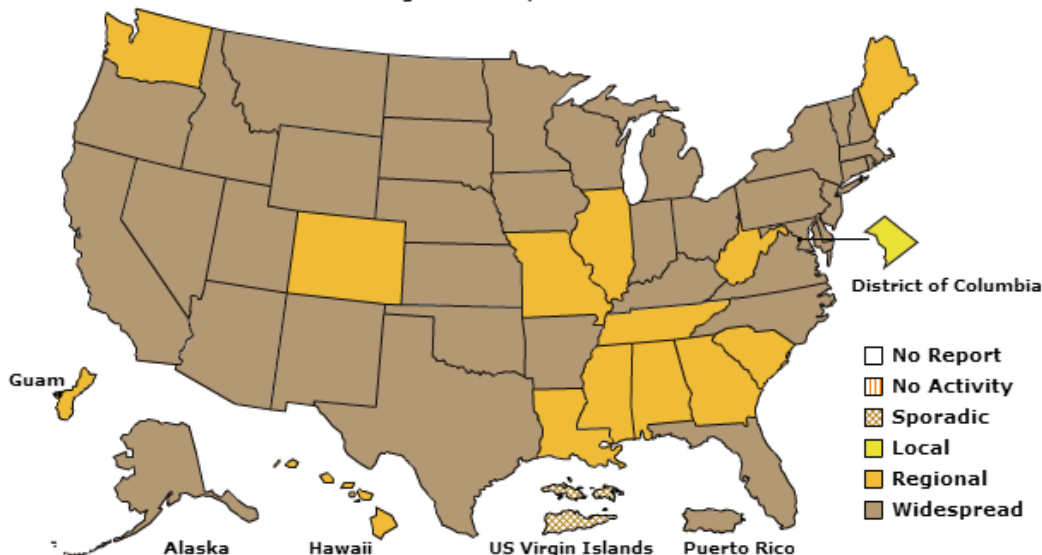
No new influenza-associated pediatric deaths were reported to MDHHS. One influenza-associated pediatric death (SE) has been reported to MDHHS for the 2015-16 season.

National: In the United States, flu activity remained elevated with 3.5% of outpatient visits due to influenza-like illness, which was above the national baseline of 2.1%. All 10 regions reported ILI at or above region-specific baselines. Two new influenza-associated pediatric deaths were reported, for a total of 20 pediatric deaths for the 2015-16 flu season. Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly/.

International: In the Northern Hemisphere, high levels of flu activity continued with A(H1N1)pdm09 predominating and an increase in the proportion of flu B viruses detected. Flu activity was generally low in the Southern Hemisphere and in tropical countries. In North America, A(H1N1)pdm09 predominated in Canada and the U.S., while A(H3N2) predominated in Mexico. More information is available at: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/.

A Weekly Influenza Surveillance Report Prepared by the Influenza Division Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending March 05, 2016- Week 9



FluBytes



U.S. SEASONAL INFLUENZA NEWS

- [Flu has become widespread in Ohio](#)
- [Flu cases keep rising, in Berks County and across Pennsylvania](#)
- [11 people die of influenza in San Diego County](#)

INFLUENZA-RELATED JOURNAL ARTICLES

- *Health Services Research*: [Profiling the U.S. sick leave landscape: presenteeism among females](#)
 - Each week, up to 3 million U.S. employees go to work sick
 - Females, low-income earners, and those 25-34 years had significantly elevated risk of presenteeism behavior (i.e. needing to take sick leave because of one's own or relative's sickness but not taking it)
- *Canadian Medical Association Journal*: [Effectiveness of N95 respirators versus surgical masks in protecting health care workers from acute respiratory infection: a systematic review and meta-analysis](#)
 - Authors found no significant difference between N95 respirators and surgical masks in associated risk of lab-confirmed respiratory infection, influenza-like illness, or reported workplace absenteeism

IMMUNIZATION ACTION COALITION NEWSLETTER

The [March 2016 issue](#) of Needle Tips, the Immunization Action Coalition's (IAC) newsletter has been posted online. This issue features a review of pneumococcal recommendations for adults 65 years and older, new and updated vaccination resources, and more!

AVIAN INFLUENZA INTERNATIONAL NEWS

- [CHP notified of additional human case of avian influenza A\(H7N9\) in Guangdong](#)
- [Taiwan farm culls thousands of chickens as avian flu strikes](#)
- [Fifteen more bird flu outbreaks found in Nigeria](#)
- [China \(H5N6\) and France \(H5N9\) report ongoing high-path avian flu outbreaks](#)
- [China reports 10 H7N9 cases](#)

OTHER INFLUENZA-RELATED NEWS

- [New York State Department of Health achieves national recognition for high childhood flu vaccination rates](#)
- [MedImmune receives fast track designation in the US for MEDI8852 for treatment of patients hospitalized with influenza A](#)
- [Tobacco-based influenza vaccine hailed a promising alternative to egg-based methods](#)
- [Jamaica's Ministry of Health to receive an additional 5000 doses of influenza vaccine](#)
- [Alberta Health Services records 27 influenza-related deaths for 2015-2016 flu season](#)
- [CHP investigates influenza B outbreak in primary school in Sha Tin](#)
- [CHP investigates case of severe pediatric influenza B infection](#)
- [CDC: 146.4 million doses of flu vaccine distributed in U.S.](#)

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 Stefanie Cole at ColeS4@michigan.gov.

MDHHS Contributors

Bureau of Epidemiology – S. Bidol, MPH, S. Cole, RN, MPH, S. Eckel, MPH
Bureau of Labs – B. Robeson, MT, V. Vavricka, MS