



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



Editor: Stefanie Cole, RN, MPH ColeS4@michigan.gov February 10, 2016 Vol. 13; No. 4

Influenza Surveillance Report for the Week Ending January 30, 2016

MI's Influenza Activity Level:
Local

Updates of Interest:

- A [study](#) was published showing how flu antivirals decreased hospital lengths of stay among pregnant women with flu, especially those with severe infections.

Michigan Disease Surveillance System

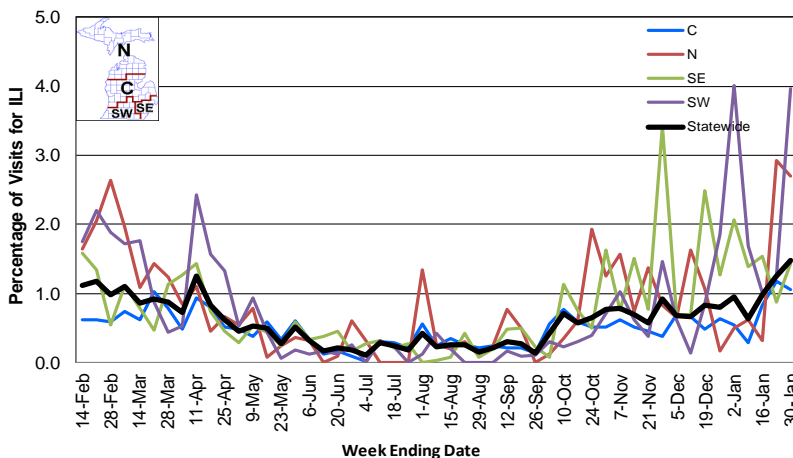
MDSS influenza data indicated that compared to levels from the previous week, aggregate and individual reports had both increased. Aggregate and individual reports were both lower than levels seen during the same time period last year.

Emergency Department Surveillance

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

- 9 constitutional alerts (1SE, 3SW, 3C, 1N, 1 Statewide)
- 4 respiratory alerts (1SW, 1C, 2N)
- Last MIFF report: 7 constitutional alerts (2SW, 4C, 1N), 9 respiratory alerts (3SW, 6C)

Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Statewide and Regions 2015-16 Flu Season



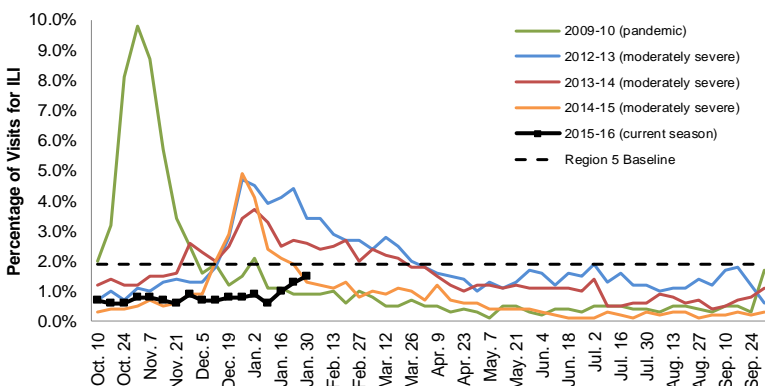
Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 1.5% overall; this is below the regional baseline (1.9%). A total of 157 patient visits due to ILI were reported out of 10,609 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (28 total):

- C (11)
- N (3)
- SE (10)
- SW (4)

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.

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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 3 pediatric (1.6 per 100,000 population) and 8 adult (1.2 per 100,000 population) hospitalizations reported within the catchment area.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 15 hospitals (N, C, 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	0	3 (SE)
5-17 years	0	0
18-49 years	4 (SE)	19 (1N, 1C, 17SE)
50-64 years	3 (SE)	7 (SE)
65 years & older	6 (SE)	18 (17SE, 1SW)
Total	13 (SE)	47 (1N, 1C, 44SE, 1SW)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 22 new positive influenza results: 17 2009 A/H1N1pdm, 3 A/H3, and 2 influenza B. A total of 97 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	6	2	51	12	71	10* (10 A/California/07/2009-like (H1N1)pdm09**)	1 / 43
Influenza A/H3	5		8	6	19	2* (2 A/Switzerland/9715293/2013-like†)	0 / 6
Influenza B	1		4		5	2 (2 B/Yamagata lineage [2 B/Phuket/3073/2013-like††])	
A / unsubtypeable				2	2		
RSV			2		2		

*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, 11 sentinel clinical labs (3SE,2SW,5C,1N) reported influenza results. Eight labs (SE,SW,C) reported influenza A activity with most sites remaining at low levels, except for substantial increases in the SE region. Two labs (SE) reported sporadic influenza B activity. Three labs (SE,SW,C) reported low or slightly increased Parainfluenza activity. Ten labs (SE,SW,C,N) reported low to moderate RSV activity mostly at steady levels, but a few sites (SE,C) showed further gradual increases. Five labs (SE,SW,C) reported low or slightly elevated Adenovirus activity. Two labs (SE,SW) reported low hMPV activity. Most testing volumes remained in the moderate to upper-moderate range.

Influenza Congregate Settings Outbreaks

There was 1 new respiratory facility outbreak (no lab testing done) reported. There have been a total of 6 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		1	2
Long-term Care / Assisted Living Facility	3				3
Healthcare Facility			1		1
Total	3	1	1	1	6

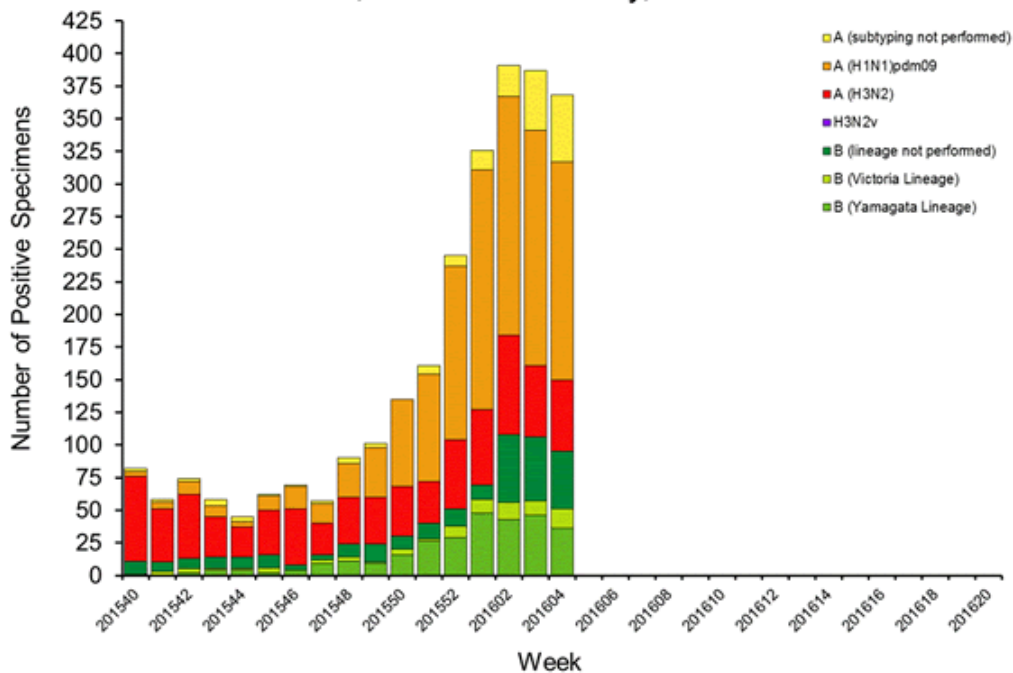
Influenza-associated Pediatric Mortality

No influenza-associated pediatric deaths have been reported to MDHHS for the 2015-16 season.

National: In the United States, flu activity increased slightly with 2.2% of outpatient visits due to influenza-like illness, which was above the national baseline of 2.1%. Six of 10 regions reported ILI at or above region-specific baselines. Two new influenza-associated pediatric deaths were reported, for a total of 9 pediatric deaths for the 2015-16 flu season. Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly/.

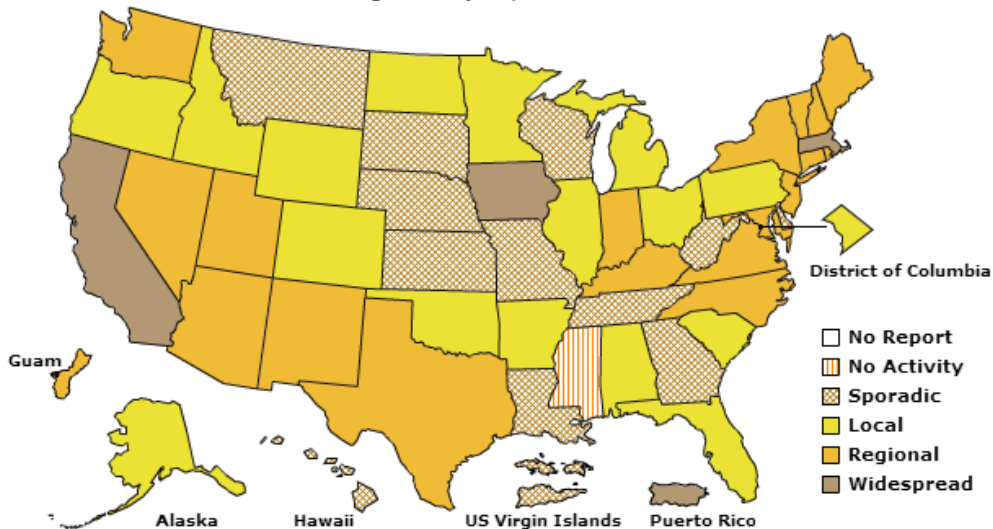
International: Globally, increasing flu activity continued to be reported in the temperate zones of the Northern Hemisphere with influenza A(H1N1)pdm09 as the most detected virus. A few countries in Europe reported an increase in activity predominantly due to influenza B virus. More information is available at: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/.

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2015-2016 Season



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

Week Ending January 30, 2016- Week 4



FluBytes



U.S. SEASONAL INFLUENZA NEWS

- CDC HAN: [Flu season begins: severe influenza illness reported](#) (Feb. 1)
- [Late start to Northern Hemisphere flu season feels strong H1N1 impact](#)
- [Flu season mild in North Carolina – so far](#)
- [First confirmed flu cases of 2015-16 season identified in Kansas](#)

AVIAN INFLUENZA NEWS IN NORTH AMERICA

- [Indiana to lift most bird flu-related restrictions soon](#)
- Indiana State Board of Animal Health: [Avian influenza situation update 2/4/16](#)
- [APHIS announces interim rule on indemnity for highly pathogenic avian influenza](#)
- [How does a farm become infected with avian influenza?](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Nigeria reports more H5N1 outbreaks](#)
- [Chinese surveillance reports reveal 17 more H7N9 cases](#)
- [Global H7N9 case count since 2013 up to 735 cases](#)
- [Nigeria, Cote d'Ivoire, South Africa confirm H5 outbreaks](#)
- [Avian flu outbreaks reported in Taiwan, South Africa, and Macao](#)

OTHER IMMUNIZATION NEWS

- [The Emily Stillman Foundation](#) has posted a new meningitis B [public service announcement](#)
- CDC has published the 2016 [childhood](#) and [adult](#) immunization schedules
- [Nominate](#) an individual or organization for the National Adult and Influenza Immunization Summit 2016 Immunization Excellence Awards by February 15
- The February 24 ACIP meeting [draft agenda](#) has been posted
- WHO meets Feb. 22-25 to determine strains for 2016-17 Northern Hemisphere flu vaccines
- This year, [National Infant Immunization Week](#) is April 16-23, [let CDC know](#) your NIIW activities

FLU WEBSITES

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

UPCOMING FLU COCA CALL – FEB. 16

CDC's Clinician Outreach and Communication Activity (COCA) is holding a call titled, "2015-2016 Influenza Activity and Clinical Recommendations" on February 16 from 2-3 PM (ET). For additional information including the dial-in info, visit [here](#).

INFLUENZA-RELATED JOURNAL ARTICLES

- *The Journal of Infectious Diseases*: [The benefit of early influenza antiviral treatment of pregnant women hospitalized with laboratory-confirmed influenza](#)
 - Antivirals decreased length of stay, especially in severe cases
 - Only 26% of hospitalized pregnant women in the study had received seasonal flu vaccine
- *Pediatrics*: [Complete influenza vaccination trends for children 6-23 months](#)
 - Less than half of children 6-23 months in the U.S. were fully vaccinated against flu
 - More implementation of evidence-based strategies that increase percentage of children fully vaccinated is needed
- [Efficacy of oseltamivir-peramivir combination therapy compared to oseltamivir monotherapy for influenza A\(H7N9\) infection: a retrospective study](#)
 - Study found in adults, use of combination therapy was not superior to oseltamivir monotherapy
- [Quantification of influenza virus RNA in aerosols in patient rooms](#)
 - Recovered influenza A virus RNA from 5 of 10 collected air samples

OTHER INFLUENZA-RELATED NEWS

- CDC: [146.0 million doses of flu vaccine distributed in U.S.](#)
- [Deaths from flu in Ukraine reach 192 this epidemiological season](#)
- [A\(H1N1\)pdm09 dominant influenza strain in Europe: mid-season risk assessment](#)
 - But B viruses predominated in 4 countries, and 3 countries had even distribution of A and B viruses
- WHO: [Risk assessment - seasonal influenza A\(H1N1\)pdm09](#)
- [New compound may fight various influenza strains](#)

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

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