

## MI Flu Focus

## Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories



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#### Influenza Surveillance Report for the Week Ending July 2, 2016

#### **Updates of Interest:**

The Advisory Committee on Immunization Practices has voted that live attenuated influenza vaccine (LAIV), also known as the nasal mist, should **not** be used during the 2016-2017 flu season.

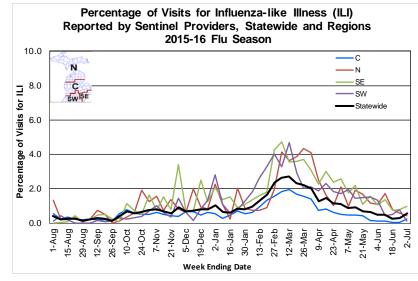
#### Michigan Disease Surveillance System

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

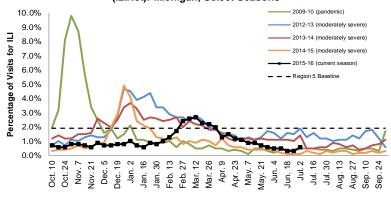
#### **Emergency Department Surveillance**

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

- 6 constitutional alert (1N, 3C, 2SW)
- 3 respiratory alerts (1N, 2C)



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



#### Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) was determined to be 0.6% overall, which is below the regional baseline of 1.9%. A total of 40 patient visits due to ILI were reported out of 6,810 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (28 total):

- C (6)
- N (3)
- SE (16)
- SW (3)

#### 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.

#### **Table of Contents:**

Michigan Surveillance.....1-3
National Surveillance.....3
International Surveillance....3
FluBytes .....4

#### **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, 2015 until Apr. 30, 2016, for Clinton, Eaton, Genesee, and Ingham counties. During the surveillance period, there were 75 pediatric (39.3 per 100,000 population) and 217 adult (31.6 per 100,000 population) hospitalizations reported within the catchment area. Note: The catchment period for the IHSP has ended for the 2015-2016 influenza season.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide. During the summer months, hospitalizations are reported on a case-by-case basis. 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	40 (22N, 1C, 8SW, 9SE)
5-17 years	0	28 (13N, 1C, 4SW, 10SE)
18-49 years	0	166 (30N, 3C, 34SW, 99SE)
50-64 years	0	225 (30N, 9C, 40SW, 146SE)
65 years & older	0	262 (30N, 9C, 43SW, 180SE)
Total	0	721 (125N, 23C, 129SW, 444SE)

#### **Laboratory Surveillance**

MDHHS Bureau of Laboratories reported no new positive influenza results. A total of 381 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	# Tested for Antiviral Resistance	
	С	N	SE	SW	Total	Characterized	# Resistant / Total # Tested	
2009 A/H1N1pdm	62	23	72	113	270	21* (21 A/California/07/2009-like (H1N1)pdm09**)	2 / 96	
Influenza A/H3	15	7	12	17	51	8* (6 A/Switzerland/9715293/2013-like†)	0 / 20	
Influenza B	8	6	17	24	55	43 (18 B/Yamagata lineage [5 B/Phuket/3073/2013-like <sup>††</sup> ], 21 B/Victoria lineage [3 B/Brisbane/60/2008-like])		
A / unsubtypeable				5	5			
LAIV recovery				1	1			
RSV			2		2			
Adenovirus	2		1		3			
Parainfluenza type 1			1		1			

<sup>\*</sup>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, 10 sentinel clinical labs (3SE, 1SW, 6C) reported influenza results. No labs reported influenza A or influenza B activity. Four labs (SE, SW, C) reported ongoing low or sporadic Parainfluenza activity. No labs reported RSV activity. Two labs (SE, C) reported low Adenovirus activity. No labs reported hMPV activity. Testing volumes overall remain low or very low.

#### **Influenza Congregate Settings Outbreaks**

There were no new respiratory facility outbreaks reported. There have been a total of 33 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	С	N	SE	SW	Total
K-12 School	1	2		4	7
Long-term Care / Assisted Living Facility	8	2	5	8	23
Healthcare Facility		1	1		2
Daycare				1	1
Correctional Facility		1			1
Total	9	6	6	13	33

#### **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.

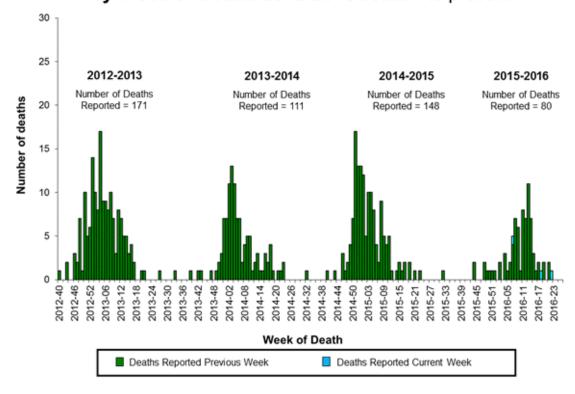
**National:** In the United States, 0.9% of outpatient visits due to influenza-like illness, which is below the national baseline of 2.1%. Three new influenza-associated pediatric deaths was reported, for a total of 80 pediatric deaths for the 2015-16 flu season. Additional information is in the weekly FluView reports available at: <a href="https://www.cdc.gov/flu/weekly/">www.cdc.gov/flu/weekly/</a>.

<u>NOTE</u>: Influenza surveillance in the U.S. will continue through the summer months with condensed reports available at <u>www.cdc.gov/flu/weekly/</u>; the full FluView resumes on October 16, 2015. <u>FluView interactive</u> will be updated over the summer months.

**International:** In North America and Europe, influenza activity was low with influenza B predominant. ILI levels were below seasonal thresholds. In the Southern Hemisphere, influenza activity has increased steadily in South America and South Africa, but still remained low overall in most of Oceania. More information is available at:

www.who.int/influenza/surveillance\_monitoring/updates/latest\_update\_GIP\_surveillance/en/.

# Number of Influenza-Associated Pediatric Deaths by Week of Death: 2012-2013 season to present



## **FluBytes**



#### **ACIP MEETING RECAP, 2016-17 FLU RECS**

The Rise and Fall of FluMist- Can the Nasal Spray Flu Vaccine be Redeemed?

In this <u>video</u>, Dr. Paul Offit describes the Advisory Committee for Immunization Practices (ACIP) interim recommendation that FluMist, also known as the "nasal spray", should not be used during the upcoming flu 2016-2017 season. He discusses how the FluMist went from a preferred recommendation to no recommendation, and answers questions about the research and data.

Recap of the ACIP recommendation: Based on data provided at the ACIP meeting, the committee has voted that live attenuated influenza vaccine (LAIV), also known as the nasal mist, should **not** be used during the 2016-2017 flu season. Studies showed that LAIV was only 3% effective in flu prevention. In comparison, the inactivated influenza vaccine (IIV), was 63% effective.

#### Key Points:

- The ACIP still recommends that everyone 6 months and older receive a flu shot this season.
- This change in recommendation is an example of scientific research influencing new policies that improve public health responses and overall population health.

#### INFLUENZA-RELATED JOURNAL ARTICLES

- O Influenza Activity- United States, 2015-2016 Season and Composition of the 2016-2017 Influenza Vaccine
  - Published in Morbidity and Mortality Weekly Report, CDC
- O Persistent Racial and Ethnic Disparities in Flu Vaccination Coverage: Results from a Population-based Study
  - Blacks are significantly less likely to get vaccinated than whites.
- O Influenza in Infants Born to Women Vaccinated During Pregnancy
  - Infants had a 81% risk reduction for influenza hospitalizations
  - Infants had a 70% risk reduction for laboratory-confirmed influenza

#### **INFLUENZA TRAINING OPPORTUNITIES**

The Centers for Disease Control and Prevention has influenza training options for those who need CE or CME credits, and want to learn more about influenza. Courses include: "Strategies for Improving Rapid Influenza Testing in Ambulatory Settings", "Real Talk about Influenza Vaccine- Be Informed and Be Prepared" and "National Inventory of Core Capabilities for Pandemic Influenza Preparedness and Response". To access these courses, go to

http://www.cdc.gov/flu/professionals/training/index.htm.

## INFLUENZA DIVISION INTERNATIONAL PROGRAM: 2014-2015 REPORT

The Centers for Disease Control has released their 2014-2015 report for International Influenza Activities. The goal of the international program is to build capacity to respond to pandemic influenza and to prevent and control seasonal influenza. All sections of the report can be found here: <a href="http://www.cdc.gov/flu/international/program/index.htm">http://www.cdc.gov/flu/international/program/index.htm</a>.

#### **AVIAN INFLUENZA INTERNATIONAL NEWS**

- Epidemiologic Study of Highly Pathogenic <u>Avian Influenza H5N2 among Turkey</u> Farms
- Low Pathogenic Avian Influenza Confirmed on Southern Ontario Duck Farm
- Questions Linger After Avian Flu Outbreak

#### OTHER INFLUENZA-RELATED NEWS

- o NIH-supported Study Pinpoints Origin of 2009 H1N1 Influenza Pandemic
- H1N1 Influenza Kills More than 1200 in Brazil to Date, 40 Percent in Sao Paulo
- o Panama H1N1 Influenza Death Toll Now 42

#### **FLU WEBSITES**

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

Archived editions of FluBytes are available <u>here</u> and MI FluFocus archives are here.

For questions or to be added to the distribution list, please contact Seth Eckel at eckels1@michigan.gov.

#### **MDHHS Contributors**

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