



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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MI's Current Influenza Activity Level:
Sporadic

Updates of Interest:
 MDHHS has updated documents related to highly pathogenic avian influenza A/H5 viruses on its [Communicable Disease](#) and [Emerging Disease](#) websites.

Influenza Surveillance Report for the Week Ending May 16, 2015

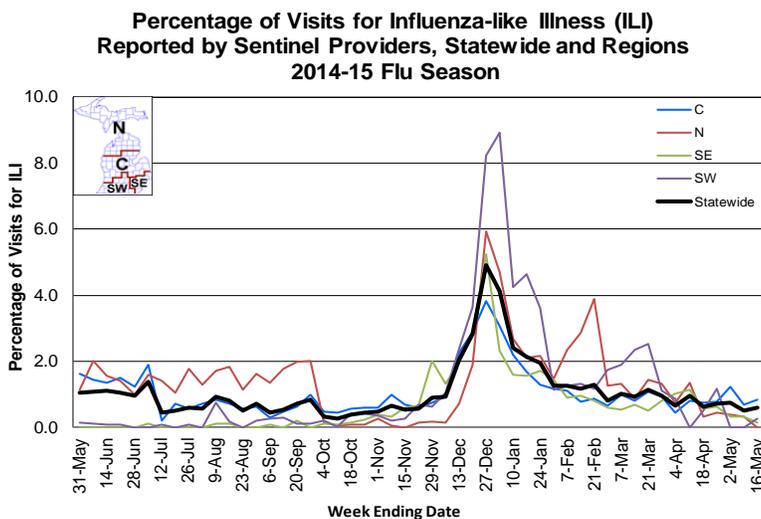
Michigan Disease Surveillance System

MDSS influenza data indicated that compared to levels from the previous week, aggregate and individual reports decreased. Aggregate reports are lower while individual reports are higher 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 decreased. Levels of respiratory complaints are lower while levels of constitutional complaints are similar to levels seen during the same time period last year.

- 5 constitutional alerts (5C)
- 3 respiratory alerts (1SE, 2SW)

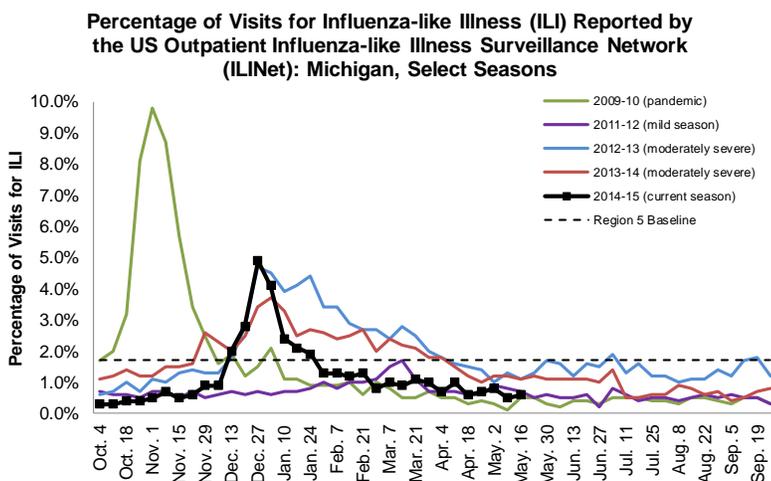


Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 0.6% overall; this is below the regional baseline (1.7%). A total of 44 patient visits due to ILI were reported out of 7,304 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (22 total):

- C (11)
- N (1)
- SE (8)
- SW (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 Stefanie DeVita at devitas1@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, starting on October 1, 2014 and ending April 30, 2015, for Clinton, Eaton, Genesee, and Ingham counties. The cumulative total during the reporting period was 88 pediatric hospitalizations and 374 adult hospitalizations. Based on these counts, there were 45.6 pediatric influenza hospitalizations per 100,000 population and 54.6 adult influenza hospitalizations per 100,000 population within the catchment area.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 7 hospitals (SE,SW) reported. Results 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 2014-15 Flu Hospitalizations to Date
0-4 years	0	31 (1N, 21C, 4SE, 5SW)
5-17 years	0	33 (28C, 5SE)
18-49 years	0	68 (2N, 12C, 49SE, 5SW)
50-64 years	1 (SE)	130 (3N, 14C, 99SE, 14SW)
65 years & older	2 (SE)	528 (20N, 19C, 434SE, 55SW)
Total	3 (SE)	790 (26N, 94C, 591SE, 79SW)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 2 new positive influenza results: 2 influenza B. A total of 556 positive influenza results have been reported for the 2014-15 season. Influenza results for the 2014-15 season are reported 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		
Influenza A/H3	113	33	97	247	490	15* (3 A/Texas/50/2012-like**, 12 A/Switzerland/9715293/2013-like)	0 / 146
Influenza B	20	6	19	18	63	63 (44 B/Yamagata lineage [3* B/Massachusetts/02/2012-like [†]], 16 B/Victoria lineage, 3 inconclusive)	
Influenza A, unsubtypeable	1			1	2		

*Specimens antigenically characterized by CDC; **A/Texas/50/2012 (H3N2) virus is the H3N2 component of the 2014-15 Northern Hemisphere flu vaccine, A/Switzerland/9715293/2013-like is an antigenic variant of the current vaccine virus; [†]B/Massachusetts/02/2012 virus is the B/Yamagata component of the 2014-15 Northern Hemisphere trivalent and quadrivalent flu vaccines.

In addition, 10 sentinel clinical labs (3SE,2SW,5C) reported influenza results. Six labs (SE,SW,C) reported low influenza B activity. No labs reported influenza A activity. Three labs (SE,SW,C) reported ongoing Parainfluenza activity. Four labs (SE,C) reported sporadic RSV activity. Three labs (SE,SW,C) reported ongoing Adenovirus activity. Two labs (SE,C) reported sporadic hMPV activity. Most testing volumes have now dropped to the moderate or low range.

Influenza Congregate Settings Outbreaks

There were no new respiratory facility outbreaks reported. There have been a total of 150 respiratory facility outbreaks reported to MDHHS for the 2014-15 season. Respiratory facility outbreaks are listed in the table below by facility type and surveillance region.

Facility Type	C	N	SE	SW	Total
Adult Care Facility		1	2		3
Long-Term Care / Assisted Living Facility	28	12	34	36	110
K-12 School	1		2		3
Daycare				1	1
Unknown / Investigation Pending	16		4	9	29
Healthcare Facility				3	3
Correctional Facility				1	1
Total	45	13	42	50	150

Influenza-associated Pediatric Mortality

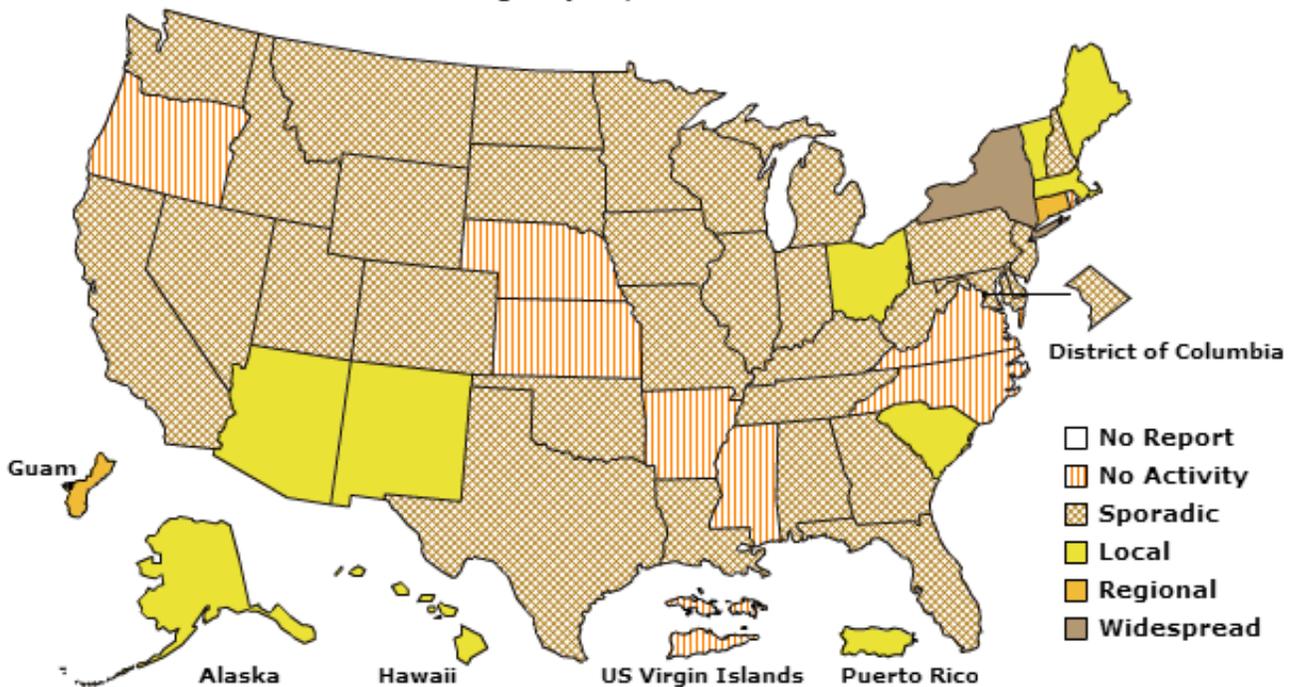
No new influenza-associated pediatric deaths were reported to MDHHS. Two influenza-associated pediatric deaths (1SE, 1SW) have been reported to MDHHS for the 2014-15 season.

National: Influenza activity continued to decrease in the United States, with 1.3% of outpatient visits due to influenza-like illness. Influenza B viruses were 88% of all positive flu specimens reported. Three influenza-associated pediatric deaths were reported, two of which occurred during the 2013-14 season which brought that season's total up to 112. The 2014-15 season total is up to 139. Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly/.

International: Globally, influenza activity was low. In the Northern Hemisphere, flu activity was nearing inter-seasonal levels. In the Southern Hemisphere, influenza activity remained low. Countries in the tropical zones reported low flu activity with the exception of some countries in tropical Asia and west Africa. Summary information is available online 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 May 16, 2015- Week 19





AVIAN INFLUENZA NEWS IN NORTH AMERICA

- USDA: Birds affected more than [41 million](#)
- [Minnesota, Nebraska, Iowa flocks continue to be hit with avian flu](#)
- [Iowa bans bird shows as avian flu outbreaks persist](#)
- CDC: [Avian influenza information for health professionals and laboratorians](#)

NATIONAL FLU SUMMIT PRESENTATIONS

The National Adult and Influenza Immunization Summit ([NAIIS](#)) has posted [presentation slides](#) from their 2015 annual meeting. The influenza topics included general updates, communications, strategies to address pockets of vaccine resistance, and vaccine manufacturer updates.

Don't forget to also read about MDHHS & Alana's Foundation receiving Honorable Mention in the Laura Scott 2014-15 Outstanding Influenza Season Activities category for NAIIS' [2015 Immunization Excellence Awards!](#)

AVIAN INFLUENZA A(H5N1) NEWS ARTICLES

- [Pathogenicity of highly pathogenic avian influenza virus H5N1 in naturally infected poultry in Egypt](#)
- [Nomenclature updates resulting from the evolution of avian influenza A\(H5\) virus clades 2.1.3.2a, 2.2.1, and 2.3.4 during 2013-2014](#)
- [Vietnam reports another H5N1 outbreak](#)

ACIP MEETING UPDATES

Minutes from the February 2015 Advisory Committee on Immunization Practices (ACIP) meeting are now available [online](#). The draft agenda for the upcoming June 24-25, 2015 ACIP meeting is also [posted](#). Influenza A(H5N1) and seasonal influenza vaccines are scheduled to be discussed June 24 and will include votes on proposed recommendations for both.

INFLUENZA-RELATED JOURNAL ARTICLES

- [Environmental conditions affect exhalation of H3N2 seasonal and variant influenza viruses and respiratory droplet transmission in ferrets](#)
 - Transmission occurred most frequently at 23°C/30% relative humidity
- [Genetic diversity of highly pathogenic H5N8 avian influenza viruses at a single overwintering site of migratory birds in Japan, 2014-15](#)
- [Genetic characterization of highly pathogenic avian influenza \(H5N8\) virus from domestic ducks, England, November 2014](#)
- [Geocoding can help spot influenza outbreaks](#)

CANINE INFLUENZA NEWS IN THE U.S.

- [New canine flu detected in several more states](#)
- [First case of dog flu in Massachusetts in 2015 reported](#)

OTHER INFLUENZA-RELATED NEWS

- [H9N2 infects Egyptian boy](#)
 - Egypt's 3rd case of H9N2 this year
 - Co-infected with influenza B

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 DeVita at devitas1@michigan.gov.

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