



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:
 Michigan had a 3rd influenza-associated pediatric death reported for 2014-15 (see page 3).

Influenza Surveillance Report for the Week Ending May 23, 2015

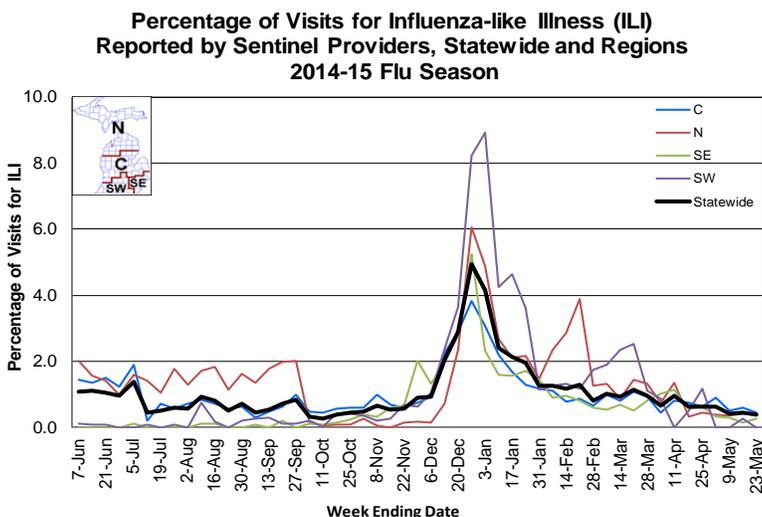
Michigan Disease Surveillance System

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

- 6 constitutional alerts (1SE, 1SW, 4C)
- 3 respiratory alerts (2SW, 1C)

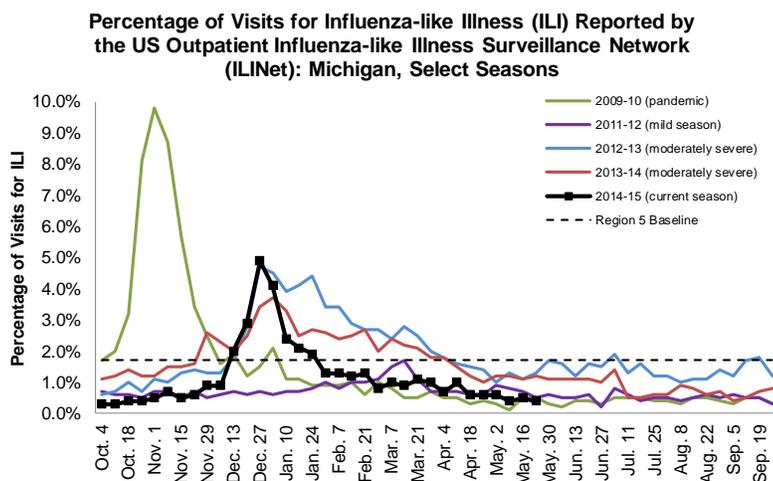


Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 0.4% overall; this is below the regional baseline (1.7%). A total of 39 patient visits due to ILI were reported out of 10,302 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (27 total):

- C (11)
- N (3)
- SE (11)
- 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 9 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	0	130 (3N, 14C, 99SE, 14SW)
65 years & older	1 (SE)	529 (20N, 19C, 435SE, 55SW)
Total	1 (SE)	791 (26N, 94C, 592SE, 79SW)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 2 new positive influenza results: 2 influenza B. A total of 558 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	20	65	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, 9 sentinel clinical labs (3SE,2SW,4C) reported influenza results. Seven labs (SE,SW,C) reported low influenza B activity. One lab (SE) reported sporadic influenza A activity. Four labs (SE,SW,C) reported ongoing Parainfluenza activity. Three labs (SE,SW,C) reported sporadic RSV activity. Two labs (SE,C) reported low Adenovirus activity. One lab (SE) reported sporadic hMPV activity. Most testing volumes remain at moderate or low levels.

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

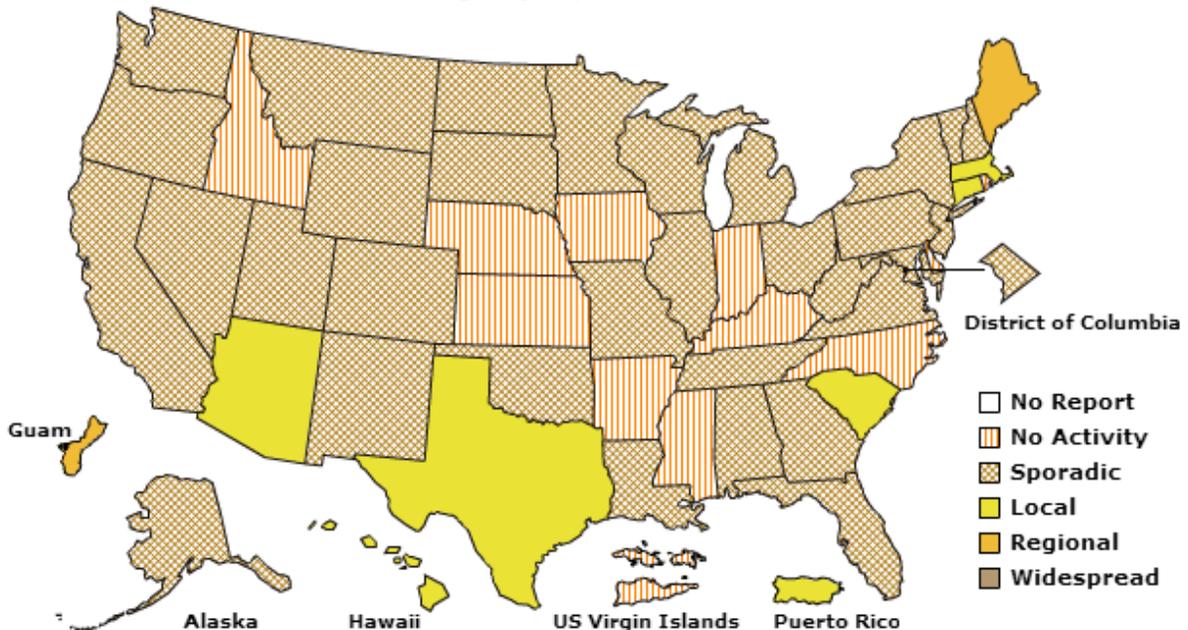
Influenza-associated Pediatric Mortality

One new influenza-associated pediatric death in an adolescent from the C region associated with an influenza B virus was reported to MDHHS. There have been a total of 3 influenza-associated pediatric deaths (1C, 1SE, 1SW) reported to MDHHS for the 2014-15 season.

National: Influenza activity continued to decrease in the United States, with 1.2% of outpatient visits due to influenza-like illness. Influenza B viruses were 88% of all positive flu specimens reported. Two influenza-associated pediatric deaths were reported, bringing the 2014-15 total to 141. One pediatric death recently reported that occurred during 2013-14 was reclassified as not due to flu, bringing the 2013-14 total to 111. Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly/. **NOTE:** The May 17-23, 2015 FluView marks the final full influenza surveillance report for the 2014-2015 flu season in the United States. Influenza surveillance in the U.S. will continue through the summer months with condensed reports available at www.cdc.gov/flu/weekly/; though this page will not be updated until publication of the full FluView resumes on October 16, 2015. [FluView interactive](#) will be updated over the summer months.

International: Globally, influenza activity has decreased from its peak in early 2015 to low levels. In the Southern Hemisphere, flu activity remained at inter-seasonal levels. 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 23, 2015- Week 20**





AVIAN INFLUENZA NEWS IN NORTH AMERICA

- USDA: Birds affected nearly [45 million](#)
- [USDA seeks registered federal contractors to assist with highly pathogenic avian influenza response](#)
- [Iowa, Minnesota report more avian flu; bird-show bans spread](#)
 - [Indiana](#)
 - [Michigan](#)
 - [Poultry show FAQs](#)
 - [Ohio](#)
- CDC Health Advisory: [Bird infections with highly-pathogenic avian influenza A \(H5N2\), \(H5N8\), and \(H5N1\) viruses: Recommendations for human health investigations and response](#)
 - Includes CDC recommendations for surveillance and testing, worker protection, infection control, antiviral treatment and chemoprophylaxis
- [Avian influenza quarantines end in 2 North Dakota counties](#)
- [Iowa governor extends bird flu disaster proclamation](#)
- [Avian flu hits four more turkey farms in Midwest](#)
- [Truckloads of dead birds headed to landfills](#)

ALANA'S FOUNDATION ANNUAL FUNDRAISER

Save the date! Alana's Foundation is holding their annual fundraiser on August 6, 2015. Their Summer Concert Bash will be in Pontiac at the Crofoot at 7:30 PM. Tickets are \$35 in advance and \$40 at the door. More info on this year's fundraiser can be found [here](#).

AVIAN INFLUENZA A(H5N1) NEWS ARTICLES

- [H5N1 strikes Ivory Coast for first time in more than 8 years](#)

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

UPCOMING ACIP MEETING JUNE 24-25

The draft agenda for the upcoming Advisory Committee on Immunization Practices (ACIP) meeting on June 24-25, 2015 is [online](#). Influenza A(H5N1) and seasonal influenza vaccination recommendations are scheduled to be discussed on June 24 and will include votes on proposed recommendations for both. If you would like to listen in to the ACIP meeting, the webcast instructions can be found [here](#).

INFLUENZA-RELATED JOURNAL ARTICLES

- [Persistence of antibodies to influenza hemagglutinin and neuraminidase following one or two years of influenza vaccination](#)
 - "Antibody titers...may persist over multiple seasons, however, antigenic drift of circulating viruses may still necessitate annual vaccination."
- [Focused antibody response to influenza linked to antigenic drift](#)
- [Seasonal influenza vaccination for children in Thailand: a cost-effectiveness analysis](#)
 - Vaccinating school-aged children with live attenuated influenza vaccine likely to be cost-effective in the short term

CANINE INFLUENZA NEWS IN THE U.S.

- [5 dogs infected with H3N2 canine influenza in Minnesota](#)
- [Dog flu arrives in California](#)
- [Kansas State research offers insight into new canine flu](#)

OTHER INFLUENZA-RELATED NEWS

- [Avian flu continues to affect Taiwan](#)

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 Stefanie DeVita at devitas1@michigan.gov.

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