



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



Editor: Stefanie Cole, RN, MPH ColeS4@michigan.gov October 14, 2015 Vol. 12; No. 31

Updates of Interest:

- So far for the 2015-16 flu season, [~98.5 million](#) doses of flu vaccine have been distributed nationally. Manufacturers currently project 171-179 million flu vaccine doses will be produced this season.

Influenza Surveillance Report for the Week Ending October 3, 2015

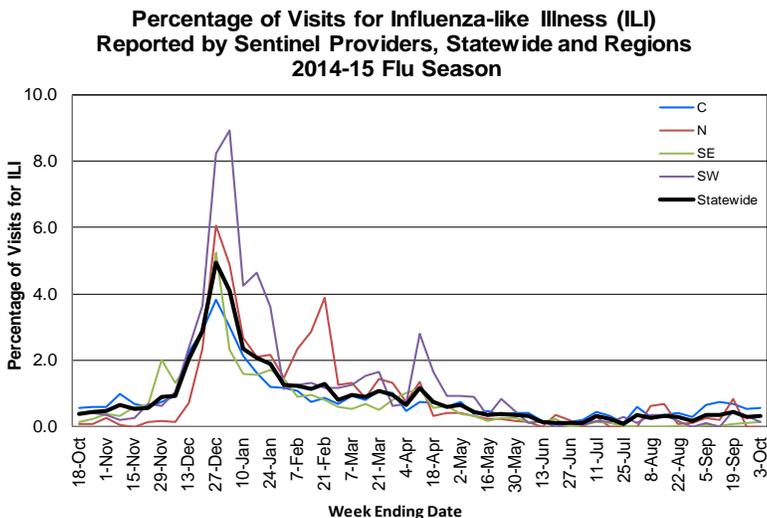
Michigan Disease Surveillance System

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

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

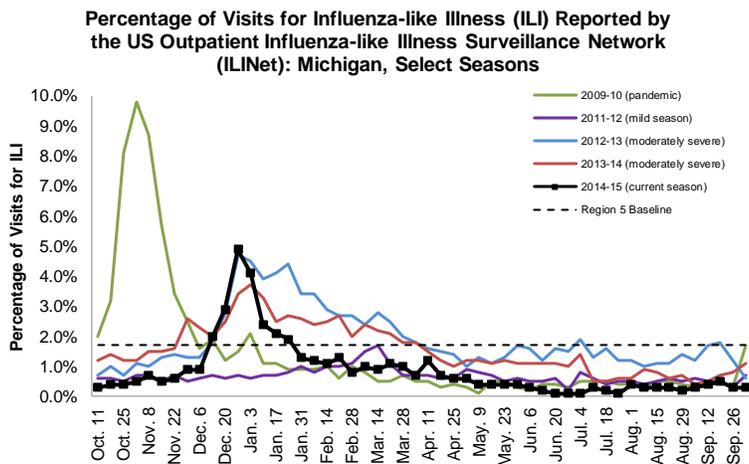


Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) remained the same at 0.3% overall; this is below the regional baseline (1.7%). A total of 19 patient visits due to ILI were reported out of 5,947 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (18 total):

- C (7)
- 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 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 no reported hospitalizations within the catchment area.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 10 hospitals (C, 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	32 (1N, 22C, 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	531 (20N, 19C, 436SE, 56SW)
Total	1	794 (26N, 95C, 593SE, 80SW)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 5 new positive influenza results: 1 A/H3, 1 2009 A/H1N1pdm, and 3 influenza B. A total of 579 positive influenza results have been reported for the 2014-15 season. Influenza results for the 2014-15 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			3	1	4		
Influenza A/H3	114	34	104	250	502	20* (3 A/Texas/50/2012-like**, 17 A/Switzerland/9715293/2013-like)	0 / 146
Influenza B	21	6	21	23	71	68 (48 B/Yamagata lineage [3* B/Massachusetts/02/2012-like [†] , 9* B/Phuket/3073/2013-like ^{††}], 17 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; ^{††}B/Phuket/3073/2013 virus is the B/Yamagata component of the 2015-16 Northern Hemisphere trivalent and quadrivalent flu vaccines.

In addition, 10 sentinel clinical labs (3SE,2SW,5C) reported influenza results. Two labs (SE) reported sporadic influenza A activity. Two labs (SE,C) reported sporadic influenza B activity. One lab (SE) reported low Parainfluenza activity. Two labs (SE) reported sporadic RSV activity. One lab (SW) reported low Adenovirus activity. No labs reported hMPV activity. Most testing volumes remained low, but several sites showed further increases and approached moderate levels.

Influenza Congregate Settings Outbreaks

There was 1 new facility outbreak reported to MDHHS (influenza A). There have been a total of 161 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	30	12	38	40	120
K-12 School	1		2		3
Daycare				1	1
Unknown / Investigation Pending	16		4	9	29
Healthcare Facility				4	4
Correctional Facility				1	1
Total	47	13	46	55	161

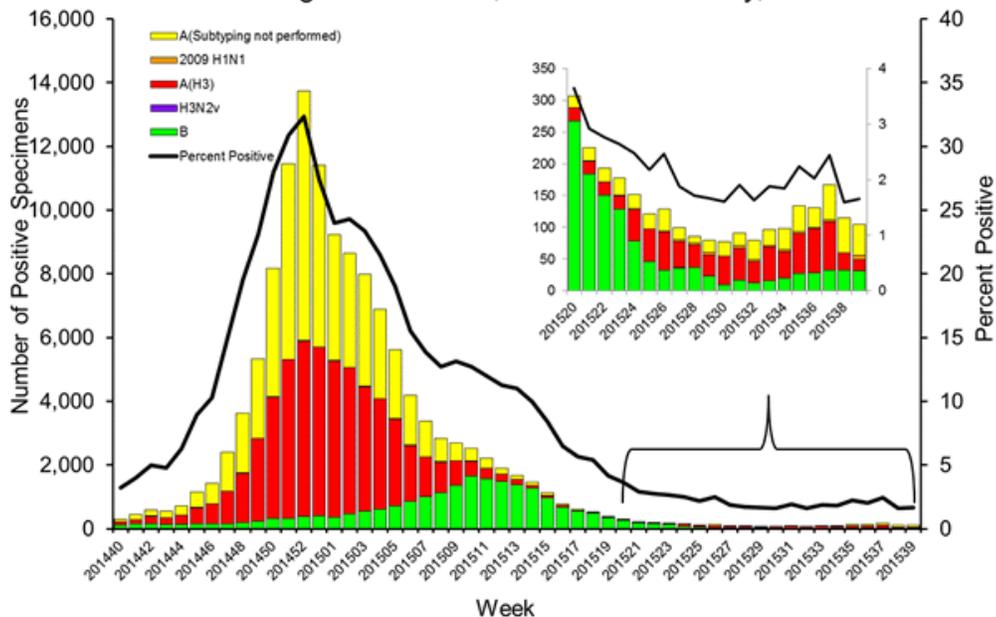
Influenza-associated Pediatric Mortality

No new influenza-associated pediatric deaths were 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: In the United States, 1.1% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.0%. There have been 146 influenza-associated pediatric deaths reported during the 2014-15 season. Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly/. **NOTE:** The full FluView surveillance report resumes on October 16, 2015 for the beginning of the 2015-16 flu surveillance season.

International: Globally, influenza activity generally decreased or remained low, with only a few countries reporting elevated respiratory illness levels. In Australia, flu activity generally seemed to be past the peak except in South Australia where flu continued to rise with predominantly flu B circulating followed by flu A(H3N2). 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. WHO/NREVSS Collaborating Laboratories, National Summary, 2014-15





2015-16 FLU NEWS IN MICHIGAN

- [Calhoun county offers flu shot drive-thru](#)
- [Health department of Northwest Michigan offers schedule for flu clinics](#)
- [Flu shot clinic set for Farmington area residents 50 and older](#)
- [Stay safe and healthy, get your influenza vaccine](#)
- [UMHS implements stricter employee flu shot policy](#)

INFLUENZA-RELATED JOURNAL ARTICLES

- *Obstetrics & Gynecology*: [Safety of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis and influenza vaccinations in pregnancy](#)
 - Concomitant administration of Tdap and flu vaccines during pregnancy not associated with higher risk of medically attended adverse acute outcomes or birth outcomes
- [Influenza transmission in the mother-infant dyad leads to severe disease, mammary gland infection, and pathogenesis by regulating host responses](#)
 - [Role of breast cell infection in flu transmission between mothers and breast-feeding ferrets](#)
 - Findings suggest mammary gland may have greater role in infection, immunity than previously thought

MDHHS FALL IMMUNIZATION CONFERENCES

[Register now](#) for the MDHHS Fall Regional Immunization Conferences! The following conferences still have open spots available:

- Nov. 3: Lansing
- Nov. 6: Flint
- Nov. 17: Kalamazoo
- Nov. 20: Troy

UPCOMING ICID FLU WEBCAST

The International Center for Infectious Diseases (ICID) is hosting a flu webcast on Tuesday, October 27 from 5:30-7:30 PM (EDT). The webcast is titled "Flu Vaccines for Little Kids – What's New, What's True." Click [here](#) if you'd like to know more about this webcast or to register.

FLU WEBSITES

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

AVIAN INFLUENZA A(H5N1) & A(H7N9) NEWS

- [Two more avian flu outbreaks in Ghana](#)
- [Avian flu found in Nigeria's Jigawa region](#)
- [Two H7N9 cases reported in China; Nigeria, Ghana, Vietnam report H5N1 outbreaks](#)
- [Travel advisory for Chinese province raised after new H7N9 case](#)

AVIAN INFLUENZA NEWS IN NORTH AMERICA

- [USDA adds avian influenza vaccine doses to the national veterinary stockpile](#)
- MSU Extension: [Poultry producers reminded to be on alert for avian influenza](#)
- [Avian influenza sampling to occur in Indiana](#)
- Any reports of sick or dead birds should be forwarded immediately to the proper agency:
 - For domestic poultry, contact MDARD:
 - M-F 8AM-5PM, 1-800-292-3939
 - After hours/weekends, 517-373-0440
 - For wildlife (die-off of waterfowl, gulls, or shorebirds), contact DNR:
 - M-F 8AM-5PM, 517-336-5030
 - After hours/weekends, 1-800-292-7800

OTHER INFLUENZA-RELATED NEWS

- CDC: [98.5 million doses of flu vaccine distributed in U.S.](#)
- CIDRAP: [UK experts give nod to flu antivirals in hospital cases](#)
- [Higher dose flu shot decreases hospitalization of older nursing home residents](#)
- [2014-15 flu vaccine reduced severe illness in hospitalized patients](#)
- [California Governor signs day care center worker vaccination bill, protects children in day care](#)
- [Delayed antiviral treatment may increase influenza severity in obese patients](#)
- [Laos reports H5N6 outbreak on farm](#)
- [Vietnam reports 2 new H5N6 avian flu outbreaks](#)
- [Severe influenza patient treated with investigational drug](#)
- [Visterra receives contract to develop new treatment for influenza A](#)
- [Vaxart to present influenza tablet vaccine data](#)

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.

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