



MI Flu Focus

Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories



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MI's Current Influenza

Activity Level:
Widespread

Updates of Interest:

China has reported the world's 2nd human case of avian influenza A(H5N6) in a 58-year-old man. See the press release [here](#).

Influenza Surveillance Report for the Week Ending December 20, 2014

Michigan Disease Surveillance System

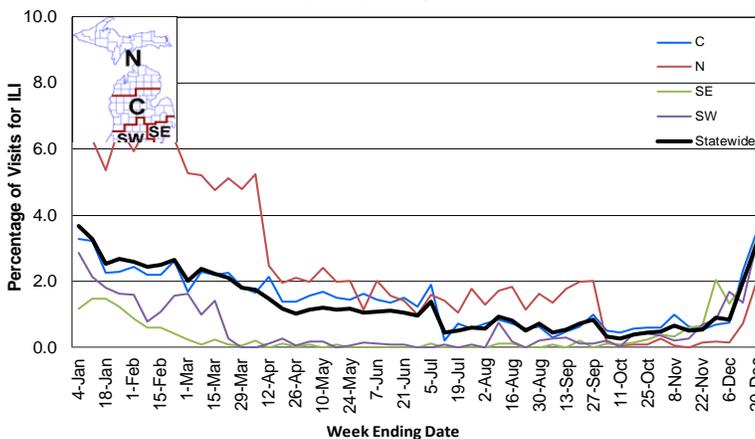
MDSS influenza data indicated that compared to levels from the previous week, aggregate reports decreased and individual reports increased. Aggregate reports are slightly lower and individual reports are higher than levels seen during the same time period last year.

Emergency Department Surveillance

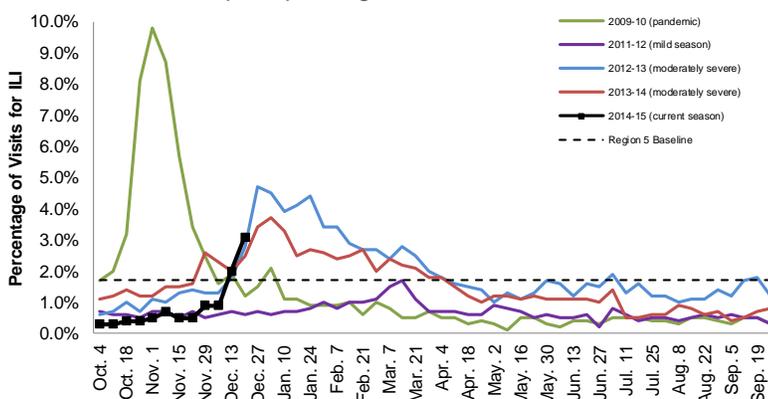
Compared to levels from the week prior, emergency department visits from constitutional and respiratory complaints increased. Levels of constitutional and respiratory complaints were higher when compared to the same time period last year.

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

Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Statewide and Regions 2014-15 Flu Season



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) increased to 3.1% overall; this is above the regional baseline (1.7%). A total of 311 patient visits due to ILI were reported out of 9,992 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (35 total):

- C (16)
- N (5)
- SE (12)
- SW (2)

Become a Sentinel Provider!

As part of pandemic influenza surveillance, CDC and MDCH 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, for Clinton, Eaton, Genesee, and Ingham counties. There were 38 influenza-related hospitalizations reported (accumulated total since Oct. 1: 28 children, 63 adults).

Based on these counts, there have been 14.5 pediatric influenza hospitalizations per 100,000 population and 9.2 adult influenza hospitalizations per 100,000 population within the catchment area.

The MDCH Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide. Six hospitals (SE,SW,C) 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	3 (C)	6 (C)
5-17 years	8 (C)	17 (C)
18-49 years	6 (SE)	23 (6C,17SE)
50-64 years	11 (2C,8SE,1SW)	25 (4C,20SE,1SW)
65 years & older	57 (4C,53SE)	114 (6C,108SE)
Total	85 (17C,67SE,1SW)	185 (39C,145SE,1SW)

Laboratory Surveillance

MDCH Bureau of Laboratories reported 70 new positive influenza results: 64 A/H3, 5 influenza B, and 1 A unable to be subtyped. A total of 202 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	36	16	77	53	182		
Influenza B	3		11	4	18		
Influenza A, unsubtypeable	1				1		

In addition, 13 sentinel labs (5SE,2SW,5C,1N) reported influenza results. All 13 labs (SE,SW,C,N) reported influenza A activity, with most sites showing continued strong increases. Five labs (SE,C) reported low or slightly increasing influenza B activity. Four labs (SE,SW,C) reported low or slightly increasing Parainfluenza activity. Ten labs (SE,SW,C,N) reported RSV activity, with several sites (SE) showing low to moderate increases. Two labs (SE,C) reported low or increasing Adenovirus activity. Two labs (SE,SW) reported low hMPV activity. Most testing volumes continue to rise further into the very high range with several sites (SE) at sustained historic levels.

Influenza-associated Pediatric Mortality

No pediatric influenza-associated mortalities have been reported to MDCH for the 2014-15 season.

Influenza Congregate Settings Outbreaks

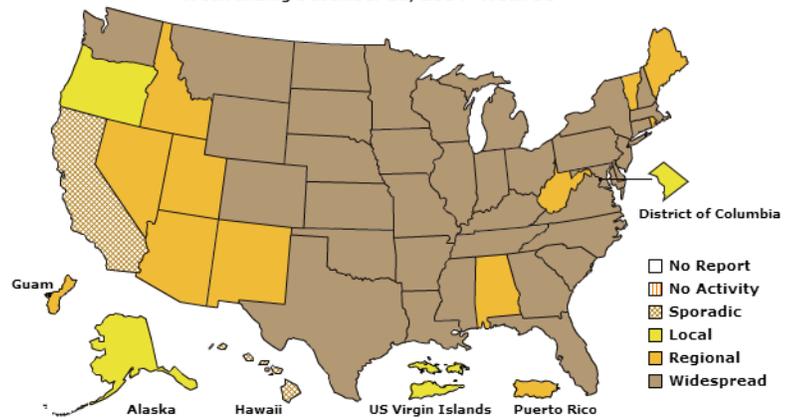
There were 23 respiratory facility outbreaks (14 flu A, 4 confirmed flu, 2 A/H3, 2 unknown etiology/no testing, and 1 confirmed flu A and B) reported. There have been a total of 31 respiratory facility outbreaks reported to MDCH for the 2014-15 season. Respiratory facility outbreaks are listed in the table below by facility type and surveillance region.

Facility Type	C	N	SE	SW	Total
Adult Care Facility			2		2
Long-Term Care/Assisted Living Facility	6	3	12	5	26
K-12 School	1		1		2
Daycare				1	1
Total	7	3	15	6	31

National: Influenza activity continued to increase in the United States, with 5.5% of outpatient visits due to influenza-like illness. Four influenza-associated pediatric deaths were reported. Additional information is in the weekly FluView reports available online at: www.cdc.gov/flu/weekly/.

International: Influenza activity increased in the northern hemisphere with influenza A(H3N2) viruses predominating so far. 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 December 20, 2014- Week 51



FluBytes



INFLUENZA ACTIVITY THROUGHOUT THE U.S.

- [Mississippi teacher, 28, dies of flu](#)
- [Jackson County: more than 1,000 flu cases in December](#)
- [Flu widespread across Ohio](#)

AVIAN INFLUENZA A(H5N1)

- [Egyptian update: 21st H5N1 case of 2014](#)
- [4 H5N1 deaths in Libya](#)
- [Tenth Egyptian dies of H5N1 bird flu](#)
- [Indian official hospitalized with suspected bird flu after geese cull](#)

AVIAN INFLUENZA A(H7N9)

- [Seven additional human cases of H7N9 in mainland](#)
 - 4 were fatal; global H7N9 count 470 cases
- WHO: [Human infection with avian influenza A\(H7N9\) virus - China](#)
- [Hong Kong reports 11th imported H7N9 case, influenza pandemic alert raised](#)
- [H7N9 virus antibodies in close contacts of infected persons, China, 2013-2014](#)
 - About 10% of close contacts had antibodies to H7N9

OTHER AVIAN INFLUENZA NEWS

- [Avian flu found at non-commercial farm in British Columbia](#)
- [More avian flu reported in Vietnam, Germany](#)
- [China reports world's 2nd H5N6 case](#)
- WHO: [Human infection with avian influenza A\(H5N6\) virus - China](#)
- [Japan orders cull of thousands of birds as 2nd avian influenza outbreak identified](#)

INFLUENZA UPDATE FOR PEDIATRICIANS

Last week, the CDC posted an [Influenza Update for Pediatricians](#) for the 2014-15 season which includes a summary of guidance for healthcare providers. Please share this update with pediatricians in your area!

INFLUENZA-RELATED JOURNAL ARTICLES

- [Text messaging reminders increase second dose influenza vaccinations in children](#)
- [Avian influenza A\(H10N7\) virus-associated mass deaths among harbor seals](#)
- [Comparing introduction to Europe of highly pathogenic avian influenza viruses A\(H5N8\) in 2014 and A\(H5N1\) in 2005](#)

OTHER INFLUENZA-RELATED NEWS

- [CDC Seasonal Flu Doses Distributed: ~145.4 million doses in U.S. as of December 5, 2014](#)
- [FDA approval of peramivir makes IV flu drug available](#)
- [Circulation of drifted H3N2 viruses in the European Union](#)

FLU WEBSITES

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

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For questions or to be added to the distribution list, please contact Stefanie DeVita at devitas1@michigan.gov.

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