



MI Flu Focus

Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories

Michigan Department
of Community Health



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**MI's Current Influenza
Activity Level:**
Widespread

Updates of Interest:

To date, MDCH has identified 12 parotitis cases positive for influenza A/H3, all with onset after December 1, 2014. Also, [Canada reports 1st H7N9 case.](#)

Influenza Surveillance Report for the Week Ending January 17, 2015

Michigan Disease Surveillance System

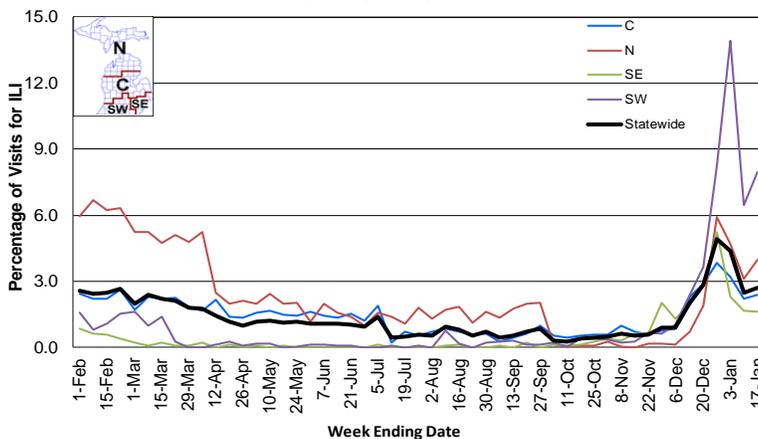
MDSS influenza data indicated that compared to levels from the previous week, aggregate reports increased and individual reports decreased. Aggregate reports are slightly lower and individual reports are higher than levels seen during the same time period last year.

Emergency Department Surveillance

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

- 8 constitutional alerts (7C,1N)
- 6 respiratory alerts (2C,4N)

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



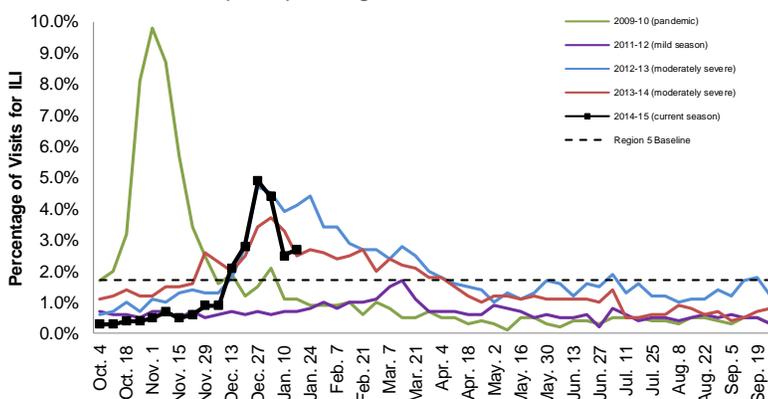
Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 2.7% overall; this is above the regional baseline (1.7%). A total of 243 patient visits due to ILI were reported out of 8,980 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (29 total):

- C (12)
- N (3)
- SE (9)
- SW (5)

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



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 26 influenza-related hospitalizations reported (accumulated total since Oct. 1: 59 children, 243 adults).

Based on these counts, there have been 30.6 pediatric influenza hospitalizations per 100,000 population and 35.5 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	1 (SW)	18 (14C, 3SE, 1SW)
5-17 years	0	25 (24C, 1SE)
18-49 years	5 (1C, 4SE)	43 (8C, 34SE, 1SW)
50-64 years	4 (SE)	57 (8C, 47SE, 2SW)
65 years & older	15 (12SE, 3SW)	308 (15C, 274SE, 19SW)
Total	25 (1C, 20SE, 4SW)	451 (69C, 359SE, 23SW)

Laboratory Surveillance

MDCH Bureau of Laboratories reported 38 new positive influenza results: 37 A/H3 and 1 influenza B. A total of 393 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	100	28	91	152	371	8* (3 A/Texas/50/2012-like**, 5 A/Switzerland/9715293/2013-like)	0 / 34
Influenza B	3		12	4	19	18 (17 B/Yamagata lineage, 1 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.

All 11 labs (SE,SW,C,N) reported further declining influenza A activity with the majority of sites now at or near moderate levels. Eight labs (SE,SW,C,N) reported sporadic or low influenza B activity. Three labs (SW,C) reported low Parainfluenza activity. Ten labs (SE,SW,C,N) reported low or moderate RSV activity, with the highest levels seen in the SE region. Three labs (SE,SW,C) reported low Adenovirus activity. Three labs (SE,SW,C) reported low hMPV activity. Nearly all testing volumes continue downward with most sites substantially reduced over the last two weeks.

Influenza Congregate Settings Outbreaks

There were 24 respiratory facility outbreaks (18 confirmed flu A and 6 unknown etiology/no testing) reported. There have been a total of 117 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		1	2		3
Long-Term Care / Assisted Living Facility	22	5	27	29	83
K-12 School	1		1		2
Daycare				1	1
Unknown / Investigation Pending	15		3	8	26
Healthcare Facility				2	2
Total	38	6	33	40	117

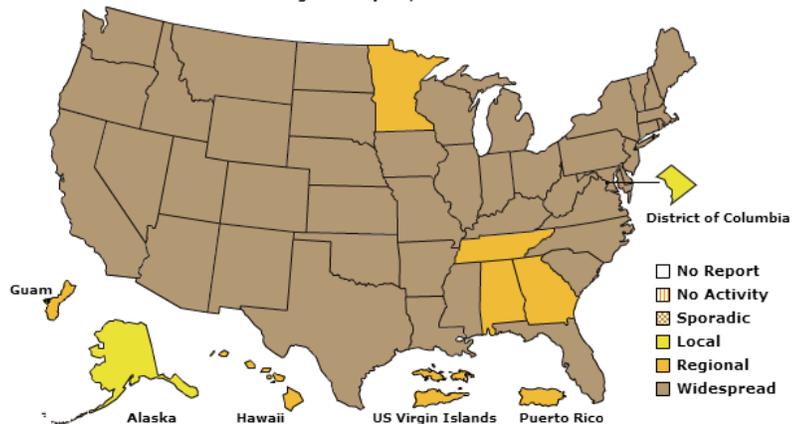
Influenza-associated Pediatric Mortality

No new influenza-associated pediatric deaths were reported to MDCH. One influenza-associated pediatric death (1SE) has been reported to MDCH for the 2014-15 season.

National: Influenza activity remained elevated in the United States, with 4.5% of outpatient visits due to influenza-like illness. Eleven influenza-associated pediatric deaths were reported, bringing the 2014-15 total to 56. Additional information is in the weekly FluView reports available online at: www.cdc.gov/flu/weekly/.

International: Influenza activity was high 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 January 17, 2015- Week 2



FluBytes

INFLUENZA ACTIVITY THROUGHOUT THE U.S.

- [16 more flu-related deaths in Oklahoma](#)
- [Flu-related deaths increase to 23 in South Dakota](#)

AVIAN INFLUENZA A(H5N1)

- [Egypt reports 8th bird flu death in 2015](#)
- [Timing of H5N1 in poultry and humans and seasonal influenza activity worldwide, 2004-2013](#)
 - Surveillance should be enhanced Jan-Mar when H5N1 outbreaks typically occur and overlap with seasonal flu circulation

AVIAN INFLUENZA A(H7N9)

- [Canada has first H7N9 case in North America](#)
- [Husband of Canadian H7N9 patient probably was infected, officials say](#)
- [China reports new H7N9 cases in Shanwei and Dongguan](#)
- [Hong Kong reports 12th imported H7N9 case](#)

OTHER AVIAN INFLUENZA NEWS

- USDA Press Release: [Highly pathogenic H5N8 avian influenza confirmed in commercial turkey flock in California](#)
- [H5N8 virus surfaces on California turkey farm](#)
- [Nigeria, Israel, West Bank fight avian flu in poultry](#)
- [New bird flu found in U.S. duck for first time](#)
- [Avian flu outbreaks in Taiwan trigger human monitoring](#)

INFLUENZA-RELATED JOURNAL ARTICLES

- [Low influenza vaccination rates among nursing home employees put residents at risk](#)
- [Studies on influenza virus transmission between ferrets: the public health risks revisited](#)
- [New research may improve influenza treatment](#)

OTHER INFLUENZA-RELATED NEWS

- [CDC Seasonal Flu Doses Distributed](#): ~147.4 million doses in U.S. as of January 16, 2015
- [Boston Medical Center pediatric sickle cell disease patients achieve near-perfect influenza vaccination rate](#)
- [Taiwan boy dies of H3N2 flu](#)
- [Mandatory flu shots: why one N.J. hospital had 4,400 employees vaccinated](#)
- [House GOP to hold hearing on flu](#)
- [Mutations delay influenza vaccine in New Zealand](#)
- [Nasty H3N2 flu season may have peaked in Canada, health officials say](#)

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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