



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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May 25, 2016

Vol. 13; No. 19

Influenza Surveillance Report for the Week Ending May 14, 2016

MI's Influenza Activity Level:
Local

Updates of Interest:

Studies say flu vaccine helps pregnant women, heart failure patients

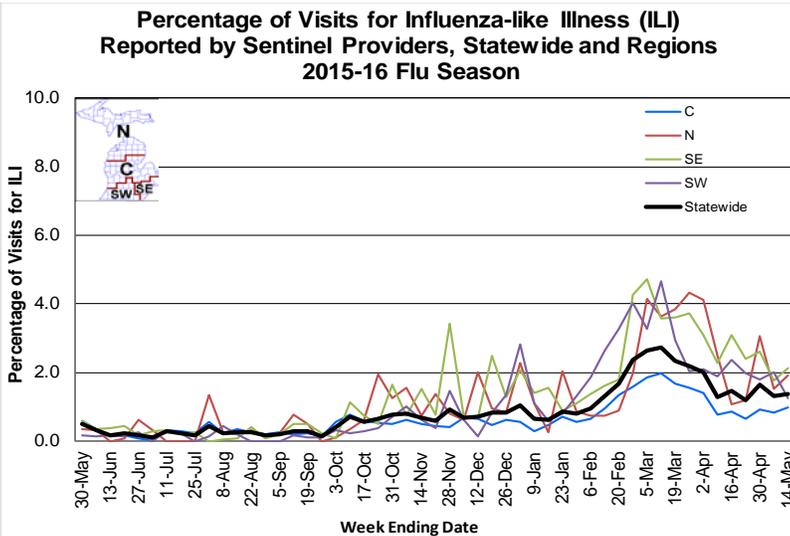
Michigan Disease Surveillance System

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

Emergency Department Surveillance

Compared to levels from the week prior, emergency department visits from constitutional and respiratory complaints were both similar. Levels of constitutional complaints were similar to those recorded during the same time period last year, while those from respiratory complaints were lower.

- 1 constitutional alert (SW)
- 4 respiratory alerts (1N, 3C)
- Last MIFF report: 2 constitutional alerts (1N, 1C), 2 respiratory alerts (C)



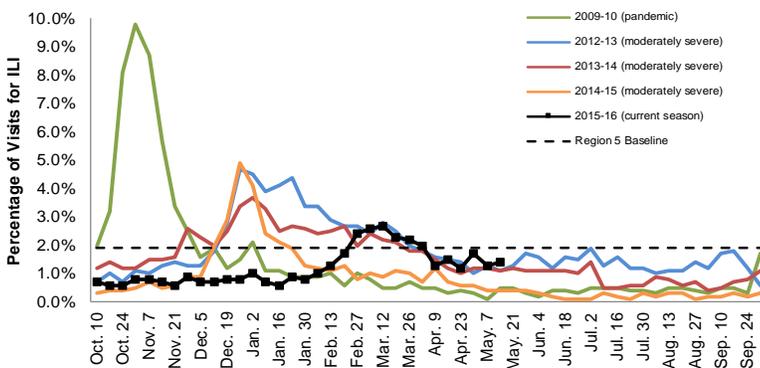
Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 1.4% overall, which is below the regional baseline of 1.9%. A total of 178 patient visits due to ILI were reported out of 12,914 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (36 total):

- C (13)
- N (3)
- SE (14)
- SW (6)

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 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 from Oct. 1, 2015 until Apr. 30, 2016, for Clinton, Eaton, Genesee, and Ingham counties. During the surveillance period, there were 75 pediatric (39.3 per 100,000 population) and 217 adult (31.6 per 100,000 population) hospitalizations reported within the catchment area. Note: The catchment period for the IHSP has ended for the 2015-2016 influenza season.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 9 hospitals (C, SE, & SW) reported. Results for the 2015-16 flu season 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 2015-16 Flu Hospitalizations Reported to Date
0-4 years	0	40 (22N, 1C, 8SW, 9SE)
5-17 years	0	28 (13N, 1C, 4SW, 10SE)
18-49 years	1 (SE)	163 (30N, 3C, 32SW, 98SE)
50-64 years	0	225 (30N, 9C, 40SW, 146SE)
65 years & older	0	260 (30N, 9C, 42SW, 179SE)
Total	1 (SE)	716 (125N, 23C, 126SW, 442SE)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 2 new positive influenza results: Both 2009 A/H1N1pdm. A total of 370 positive influenza results have been reported for the 2015-16 season. Influenza results for the 2015-16 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	62	19	72	111	264	21* (21 A/California/07/2009-like (H1N1)pdm09**)	2 / 96
Influenza A/H3	14	6	12	16	48	8* (6 A/Switzerland/9715293/2013-like [†])	0 / 20
Influenza B	8	6	17	22	53	43 (18 B/Yamagata lineage [5 B/Phuket/3073/2013-like ^{††}], 21 B/Victoria lineage [3 B/Brisbane/60/2008-like])	
A / unsubtypeable				5	5		
LAIV recovery				1	1		
RSV			2		2		
Adenovirus	2		1		3		
Parainfluenza type 1			1		1		

*Specimens antigenically characterized by CDC; **A/California/07/2009-like (H1N1)pdm09 is the H1N1 component of the 2015-16 Northern Hemisphere flu vaccines; [†]A/Switzerland/9715293/2013-like (H3N2) is the H3N2 component of the 2015-16 Northern Hemisphere flu vaccines; ^{††}B/Phuket/3073/2013-like virus is the B/Yamagata component of the 2015-16 Northern Hemisphere trivalent and quadrivalent flu vaccines.

In addition, 11 sentinel clinical labs (3SE, 2SW, 6C) reported influenza results. Six labs (SE, SW, C) reported influenza A positives at further declining or steady levels, with all sites in the low or sporadic range. Nine labs (SE, SW, C) reported influenza B activity at further declining levels with most sites at or nearing low levels. Three labs (SE, SW, C) reported low Parainfluenza activity. Five labs (SE, SW, C) reported low or sporadic RSV activity. Five labs (SE, SW, C) reported low or sporadic Adenovirus activity. Four labs (SE, SW, C) reported low hMPV activity. Most testing volumes are now in the moderate or low range and continue to trend down.

