



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending April 30, 2016

MI's Influenza Activity Level:
Local

Updates of Interest:

Flu vaccination protective against premature birth in Laos, and other Flu Scan [updates](#)

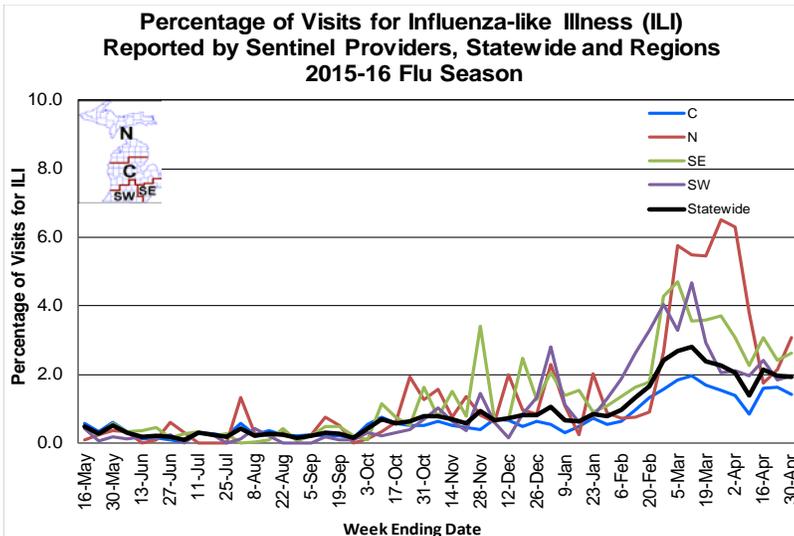
Michigan Disease Surveillance System

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

- 7 constitutional alerts (5C, 2SW)
- 9 respiratory alerts (1N, 5C, 3SW)
- Last MIFF report: 3 constitutional alerts (1N, 2C), 2 respiratory alerts (1N, 1C)



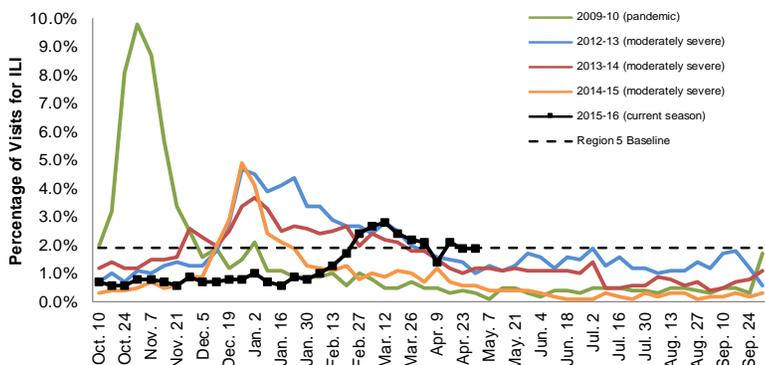
Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) remained at the regional baseline of 1.9%. A total of 244 patient visits due to ILI were reported out of 12,646 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (35 total):

- C (11)
- N (4)
- SE (13)
- SW (7)

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 beginning on Oct. 1, 2015, for Clinton, Eaton, Genesee, and Ingham counties. Since Oct. 1, there have been 75 pediatric (39.3 per 100,000 population) and 217 adult (31.6 per 100,000 population) hospitalizations reported within the catchment area. Note: IHSP case classification is an ongoing process and the cumulative totals may change from week to week.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 11 hospitals (C, N, 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	1 (C)	38 (20N, 1C, 8SW, 9SE)
5-17 years	4 (1N, 1C, 2SE)	28 (13N, 1C, 4SW, 10SE)
18-49 years	0	162 (30N, 3C, 32SW, 97SE)
50-64 years	3 (1N, 1C, 1SE)	225 (30N, 9C, 40SW, 146SE)
65 years & older	7 (1N, 3SW, 3SE)	259 (29N, 9C, 42SW, 179SE)
Total	15 (3N, 2C, 3SW, 6SE)	712 (122N, 23C, 126SW, 441SE)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 10 new positive influenza results: Two 2009 A/H1N1pdm, three A/H3 and five influenza B. A total of 356 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	108	261	21* (21 A/California/07/2009-like (H1N1)pdm09**)	2 / 96
Influenza A/H3	14	1	12	16	43	6* (6 A/Switzerland/9715293/2013-like [†])	0 / 20
Influenza B	6	6	15	20	47	32 (18 B/Yamagata lineage [2 B/Phuket/3073/2013-like ^{††}], 14 B/Victoria lineage)	
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, 12 sentinel clinical labs (3SE, 2SW, 6C, 1N) reported influenza results. Nine labs (SE, SW, C, N) reported influenza A positives at continued declining levels with all sites now in the low to sporadic range. Eight labs (SE, SW, C, N) reported influenza B activity at mixed levels ranging from low to moderate. Three labs (SE, SW, C) reported sporadic Parainfluenza activity. Six labs (SE, SW, C,) reported overall low RSV activity. Four labs (SE, SW, C) reported low Adenovirus activity. Four labs (SE, SW, C) reported ongoing hMPV activity at overall steady levels ranging from low to slightly elevated. Most testing volumes are now near the moderate range and continue to trend down.

Influenza Congregate Settings Outbreaks

There was 2 new respiratory facility outbreak reported, both of which tested positive for influenza A. There have been a total of 33 respiratory facility outbreaks reported to MDHHS for the 2015-16 season. Respiratory facility outbreaks are listed in the table below by facility type and surveillance region.

Facility Type	C	N	SE	SW	Total
K-12 School	1	2		4	7
Long-term Care / Assisted Living Facility	8	1	5	8	22
Healthcare Facility		1	1		2
Daycare				1	1
Correctional Facility		1			1
Total	9	5	6	13	33

Influenza-associated Pediatric Mortality

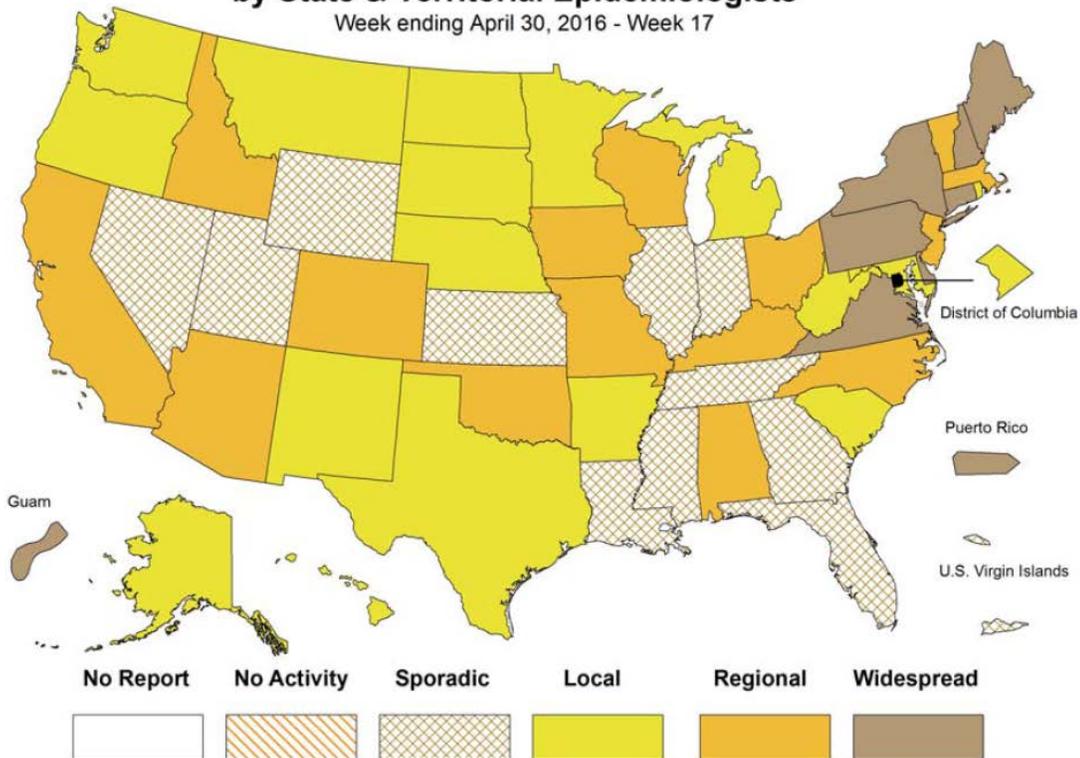
No new influenza-associated pediatric deaths were reported to MDHHS. One influenza-associated pediatric death (SE) has been reported to MDHHS for the 2015-16 season.

National: In the United States, flu activity dropped to 1.8% of outpatient visits due to influenza-like illness, which is below the national baseline of 2.1%. Three of 10 regions reported ILI at or above region-specific baselines. Four new influenza-associated pediatric deaths were reported, for a total of 64 pediatric deaths for the 2015-16 flu season. Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly/.

International: In the Northern Hemisphere, influenza activity continued to decrease, with influenza B predominating in many parts. In the Southern Hemisphere, slight increases in influenza-like illness activity was reported. More information is available at: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/.

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending April 30, 2016 - Week 17



For questions or to be added to the distribution list, please contact Seth Eckel at eckels1@michigan.gov.

MDHHS Contributors

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