



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending April 8, 2017

MI's Influenza Activity Level:
Regional

Updates of Interest: A [study](#) published in *Pediatrics* found that children of immunizing adults were 2.77 times more likely to also be immunized for seasonal influenza. See *FluBytes* on page 4 for more details.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 1.9% overall, which is at the regional baseline of 1.9%. A total of 195 patient visits due to ILI were reported out of 10,040 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region

(32 total):

- C (11)
- N (3)
- SE (13)
- SW (5)

National Surveillance: In the United States, 2.6% of outpatient visits were due to influenza-like illness, which is above the national baseline of 2.2%.

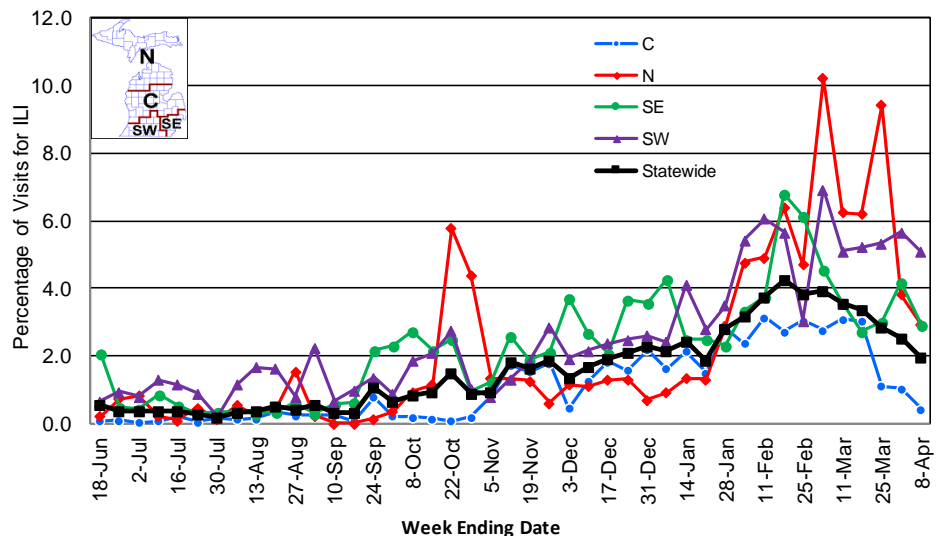
Become a Sentinel Provider!

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 Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

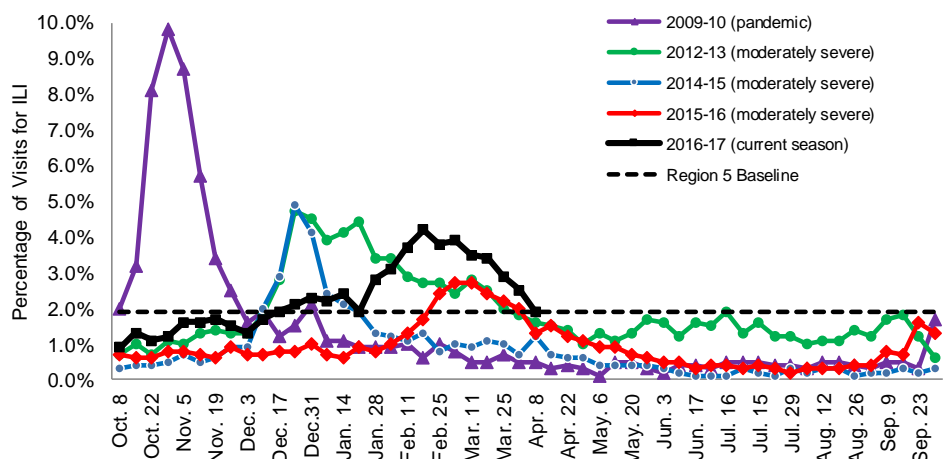
Additional information is in the weekly FluView reports available at:

www.cdc.gov/flu/weekly.

Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Statewide and Regions 2015-16 - 2016-17 Flu Seasons



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



Hospital Surveillance

The CDC Influenza Hospitalization Surveillance Project provides population-based rates of hospitalization due to severe influenza-related illness through active surveillance and chart review of lab-confirmed cases from Oct. 1, 2016 until Apr. 30, 2017, for Clinton, Eaton, Genesee, and Ingham counties. Since Oct. 1, there have been **64 pediatric and 554 adult** influenza-related hospitalizations reported in the catchment area for the 2016-2017 season. Note: Cumulative totals may change from week to week as cases are reviewed to determine if they meet the case definition.

The MDHHS Influenza Sentinel Hospital Network monitors influenza-related admissions reported voluntarily by hospitals statewide, with 12 facilities (N, C, SE, SW) reporting during this time period. Results for the 2016-17 flu season are listed in the table below. Additional hospitals are encouraged to join; please contact Seth Eckel at eckels1@michigan.gov.

Age Group	New Flu Hospitalizations Reported	Total 2016-17 Flu Hospitalizations Reported to Date
0-4 years	0	37 (22N, 1C, 7SE, 7SW)
5-17 years	1 (SE)	49 (30N, 1C, 10SE, 8SW)
18-49 years	5 (2N, 3SE)	121 (40N, 1C, 67SE, 13SW)
50-64 years	9 (2N, 6SE, 1SW)	194 (46N, 1C, 119SE, 28SW)
65 years & older	40 (8N, 1C, 29SE, 2SW)	675 (132N, 6C, 463SE, 74SW)
Total	55 (12N, 1C, 39SE, 3SW)	1076 (270N, 10C, 666SE, 130SW)

Influenza-associated Pediatric Mortality

One (1) influenza-associated pediatric death was reported to MDHHS for the week ending April 8, 2017. A total of 4 influenza-associated pediatric deaths in Michigan have been reported thus far for the 2016-17 season. Three of the children tested positive for Influenza B, and one tested positive for Influenza A/H3. Nationally, 72 influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 17 new positive influenza results (13 A/H3 and 4 flu B) during this time period. A total of 555 positive influenza results have been reported for the 2016-17 season. Influenza results for the 2016-17 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	1	1	1	2	5	1 (A/CALIFORNIA/07/2009-LIKE (H1N1)pdm09)	
Influenza A/H3	114	26	110	171	421	6 (A/HONG KONG/4801/2014-LIKE)	0 / 95
Influenza B	44	9	41	35	129	4 (B/PHUKET/3073/2013-LIKE) 6 (B/BRISBANE/60/2008-LIKE)	
A / unsubtypeable							
LAIV recovery							

In addition, 11 sentinel clinical labs (2SE, 2SW, 6C, 1N) reported influenza testing results. Nine (9) labs (SE, SW, C) reported continued influenza A activity ranging from low to modestly elevated, with all showing a declining pattern. Ten (10) labs (SE, SW, C, N) reported ongoing influenza B activity, with many still at moderate levels but all now showing significant decreases. Nearly all labs continue to show predominant influenza B activity. Three (3) labs (SE, C, N) reported low Parainfluenza activity. Seven (7) labs (SE, SW, C, N) reported RSV activity with most now at low or decreasing levels. Four labs (SE, C, N) reported low Adenovirus activity. Four labs (SE, C, N) reported low to moderate hMPV activity. Overall testing volumes have dropped considerably with many sites now down to the moderate range.

Congregate Setting Outbreaks of Viral Respiratory Illness

There were 6 new respiratory facility outbreaks (1C, 3SE, 2SW) reported to MDHHS during this time period, 5 of which were confirmed influenza. Respiratory facility outbreaks for the 2016-2017 season are listed in the table below.

Facility Type	C	N	SE	SW	Total
K-12 School	3	4		3	10
Long-term Care / Assisted Living Facility	27		25	37	89
Healthcare Facility	3		4	1	8
Daycare			1	2	3
Homeless Shelter			1		1
Total	33	4	31	43	111

Michigan Disease Surveillance System

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

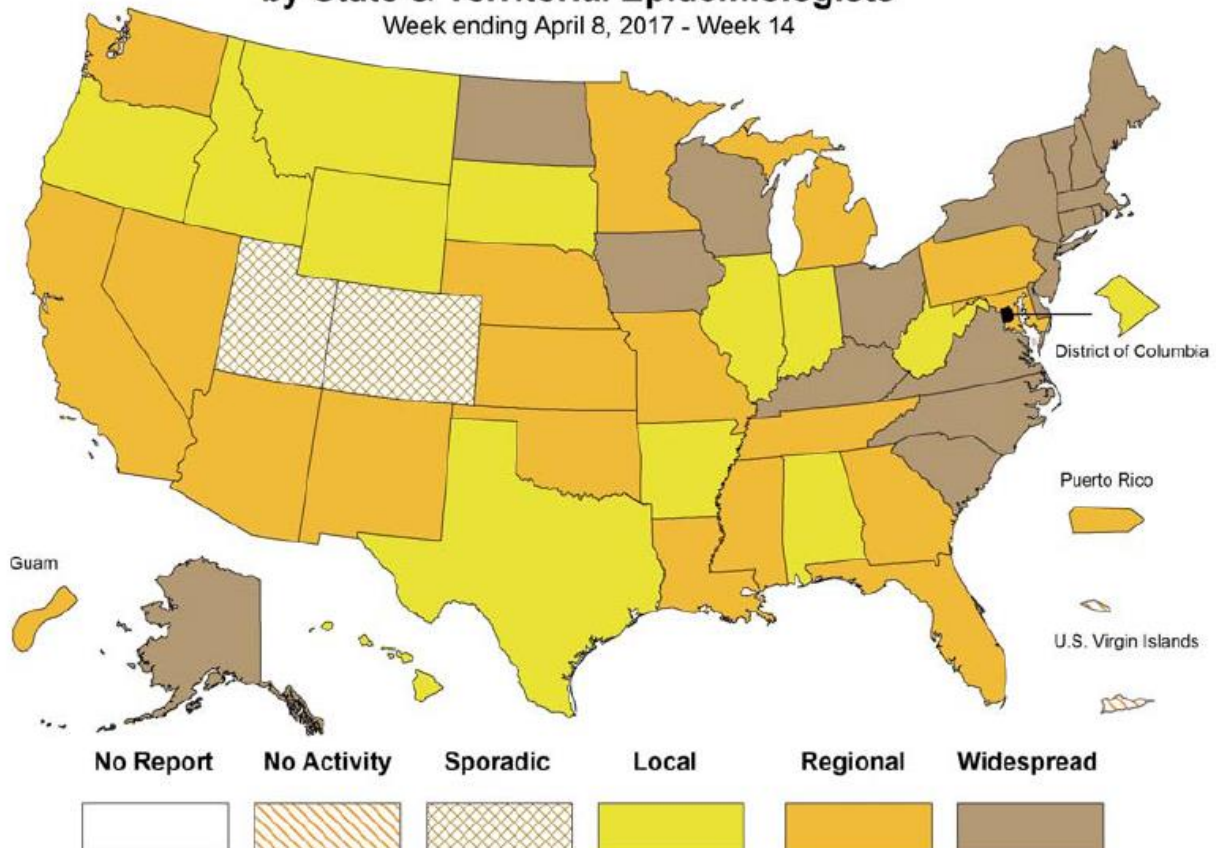
Emergency Department Surveillance

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

- 1 constitutional alerts (SW)
- No respiratory alerts reported
- Last MIFF report: 5 constitutional alerts (1N, 3C, 1SW), 3 respiratory alerts (1C, 2SW)

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending April 8, 2017 - Week 14





MDHHS REPORTS FOUR PEDIATRIC FLU DEATHS FOR THE 2016-2017 FLU SEASON

The Michigan Department of Health and Human Services has reported four influenza-associated pediatric deaths for the 2016-2017 influenza season. Three of the children tested positive for Influenza B, and one tested positive for Influenza A/H3. Nationally there have been 72 pediatric deaths reported to date.

It is not too late to get vaccinated against the flu this season! Influenza claims the lives of children every year across the United States, which is why it is important to continue to vaccinate against the flu. The 2016-2017 flu vaccine is a good match to the flu viruses that are circulating nationally and in Michigan.

LESSONS FROM THE FIELD WEBINAR – NIVDP

The National Influenza Vaccination Disparities Partnership is hosting a webinar titled, “Lessons from the Field: Immunization Leaders Sharing Strategies to Protect Underserved Populations.” The webinar is scheduled for Thursday, April 20 from 2:00-3:00pm ET. This webinar is free, but you must [register](#) in order to participate.

MDHHS ANNOUNCES THE 2017 ANNUAL IMMUNIZATION CONFERENCE DATES

The Michigan Department of Health and Human Services has finalized the 2017 Fall Immunization Regional Conferences Schedule! Please mark the appropriate date on your calendar and be looking for more information about registration in the upcoming months!

October 10 – Marquette
October 12 – Gaylord
October 17 – Lansing
October 18 – Flint
October 20 – Kalamazoo
November 14 – Grand Rapids
November 16 – Dearborn
November 17 – Troy

FLU WEBSITES

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

INFLUENZA-RELATED JOURNAL ARTICLES

- [The concordance of parent and child immunization](#)
 - Children of immunizing adults were 2.77 times more likely to also be immunized for seasonal influenza
 - Children’s likelihood of following schedule is associated with parent’s immunization behavior
- [The immunity community: A community engagement strategy for reducing vaccine hesitancy](#)
- [Low-pathogenic influenza A viruses in North American diving ducks contribute to the emergence of a novel highly pathogenic influenza A\(H7N8\) virus](#)
- [Evolution of the neuraminidase gene of seasonal influenza A and B viruses in Thailand between 2010 and 2015](#)

OTHER INFLUENZA-RELATED NEWS

- [Live attenuated influenza vaccine: Looking forward](#)
- [Influenza vaccine coverage varies by occupation](#)
- [Flu hit middle-aged people hardest during this flu season](#)
- [Los Angeles reports dozens of confirmed and suspected canine influenza, or dog flu cases](#)
- [Avian influenza surveillance zones lifted in western Kentucky](#)
- [Flu vaccine won’t definitely stop you from getting the flu, but it’s more important than you think](#)
- [New mouse developed that could provide advance warning of next flu pandemic](#)
- [It’s all in how you ask: a little ‘nudge’ increases flu shots by 37%](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Tibet autonomous region statement on their first H7N9 case](#)
- [China bird flu death toll rises to 161 in worst outbreak since 2009](#)
- [Why chinese scientists are more worried than ever about bird flu](#)
- [Niger reports first H5N8 outbreak; high-path viruses hit other nations](#)
- [H7N9 avian influenza in China: 14 additional human cases](#)

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 Jalyn Ingalls at ingallsj@michigan.gov.

MDHHS Contributors

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