



MI Flu Focus

Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending April 22, 2017

**MI's Influenza
Activity Level:**
Local

Updates of Interest: CDC has released the [General Best Practice Guidelines for Immunization](#) as an online report that is available on the Advisory Committee on Immunization Practices (ACIP) [web page](#). For more information, see FluBytes on Page 4.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 1.6% overall, which is below the regional baseline of 1.9%. A total of 151 patient visits due to ILI were reported out of 9,592 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region

(29 total):

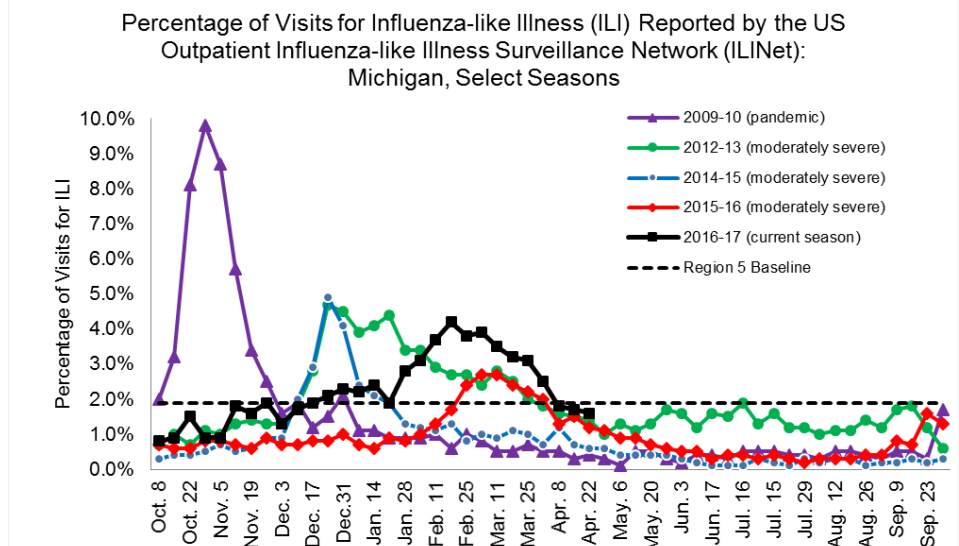
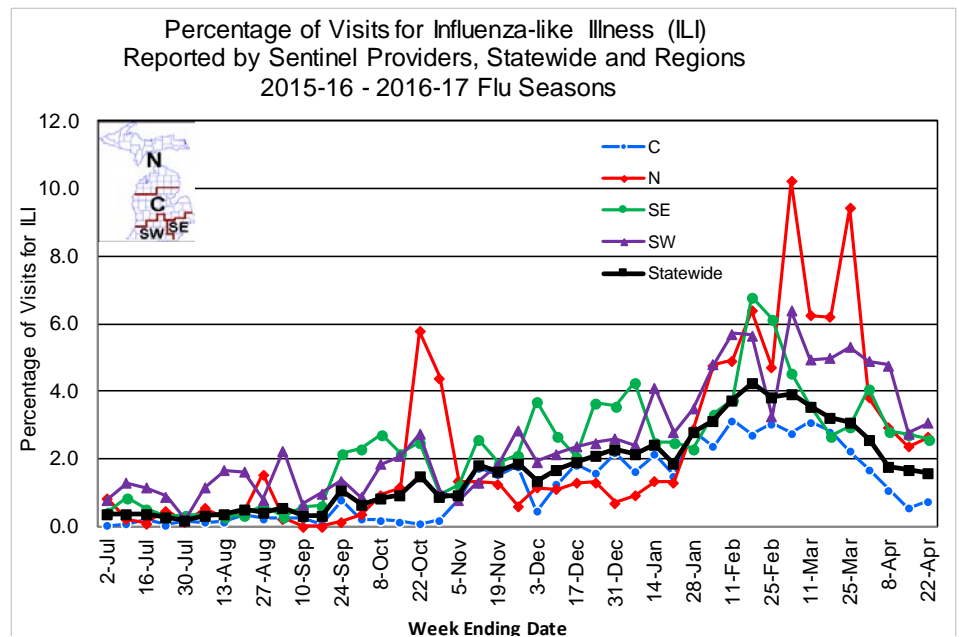
- C (12)
- N (2)
- SE (10)
- SW (5)

National Surveillance: In the United States, 1.8% of outpatient visits were due to influenza-like illness, which is below 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.



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 **66 pediatric and 569 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 13 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	1 (SE)	38 (22N, 1C, 8SE, 7SW)
5-17 years	1 (N)	50 (31N, 1C, 10SE, 8SW)
18-49 years	5 (4SE, 1SW)	128 (40N, 1C, 73SE, 14SW)
50-64 years	6 (3N, 3SE)	212 (51N, 1C, 131SE, 29SW)
65 years & older	13 (4N, 1C, 7SE, 1SW)	716 (144N, 9C, 487SE, 76SW)
Total	26 (8N, 1C, 15SE, 2SW)	1144 (288N, 13C, 709SE, 134SW)

Influenza-associated Pediatric Mortality

One (1) influenza-associated pediatric death was reported to MDHHS for the week ending April 22, 2017. A total of 5 influenza-associated pediatric deaths in Michigan have been reported thus far for the 2016-17 season. Four of the children tested positive for Influenza B, and one tested positive for Influenza A/H3. Nationally, 83 influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 18 new positive influenza results (1 A/H3 and 17 flu B) during this time period. A total of 609 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	117	26	111	179	433	8 (A/HONG KONG/4801/2014-LIKE)	0 / 95
Influenza B	55	11	42	63	171	4 (B/PHUKET/3073/2013-LIKE) 7 (B/BRISBANE/60/2008-LIKE)	
A / unsubtypeable							
LAIV recovery							

In addition, 10 sentinel clinical labs (2SE, 2SW, 6C, 0N) reported influenza testing results. Four (4) labs (SE, C) reported influenza A activity in the low or slightly elevated range but without any recent increases seen. All labs reported ongoing influenza B activity, with most sites now at low levels and all continuing a downward trend. Influenza B continues to be the dominant strain at nearly all sites. Four (4) labs (SE, SW, C) reported low Parainfluenza activity. Six (6) labs (SE, SW, C) reported RSV activity with most now at low levels. Four labs (SE, SW, C) reported low or sporadic Adenovirus activity. Four labs (SE, SW, C) reported low to slightly elevated hMPV activity but with an overall downward trend. Testing volumes continue to drop with most sites in the moderate range and several nearing low levels.

Congregate Setting Outbreaks of Viral Respiratory Illness

There were 2 new respiratory facility outbreaks (1C, 1SW) reported to MDHHS during this time period, all 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	29		26	40	95
Healthcare Facility	3		4	1	8
Daycare			1	2	3
Homeless Shelter			1		1
Total	35	4	32	46	115

Michigan Disease Surveillance System

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

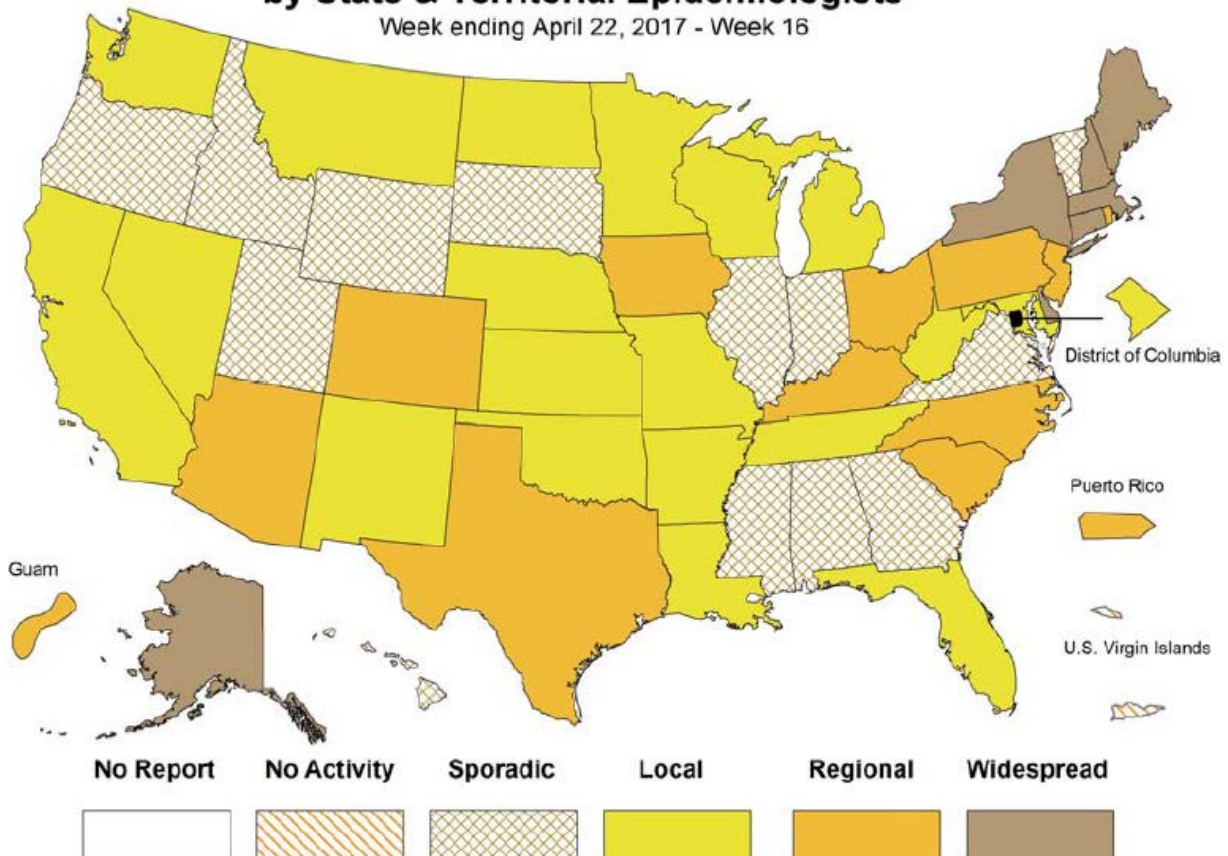
Emergency Department Surveillance

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

- 5 constitutional alerts (3C, 2SW)
- 2 respiratory alerts (C)
- 5 constitutional alerts (1N, 3C, 1SW), 5 respiratory alerts (2N, 3C)

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending April 22, 2017 - Week 16





CDC RELEASES GENERAL BEST PRACTICE GUIDELINES FOR IMMUNIZATION

CDC has released the [General Best Practice Guidelines for Immunization](#) as an online report that is available on the Advisory Committee on Immunization Practices (ACIP) [web page](#). The document goes beyond vaccine recommendations to give providers the most up-to-date guidance to vaccination practice.

CDC CHILDHOOD IMMUNIZATION AWARDS 2017

During National Infant Immunization Week (NIIW), an annual observance to highlight the importance of protecting infants from vaccine-preventable diseases and celebrate the achievements of immunization programs and their partners in promoting healthy communities, CDC honors individuals who are doing an exemplary job or going above and beyond to promote childhood immunizations in their communities.

There is a [2017 Award Winner](#) for each state. Michigan's 2017 Immunization Champion is Mary Zimmerman, Immunization Program Manager with Spectrum Health! Mary is passionate about increasing immunization efforts to prevent children from contracting vaccine-preventable diseases. Congratulations to Mary!

NEW PEDIATRIC IMMUNIZATION MATERIALS

The Division of Immunization has printed several new pediatric immunization materials that will be available for ordering at the [Healthy Michigan Clearinghouse](#) (click Enter Site, Immunizations). These materials include:

- [Pediatric Immunization Block Schedule](#)
- [Why MI Baby Needs Hepatitis B Vaccine at Birth](#)
- [Vaccines Required for School Entry](#) (for parents)
- [Vaccines Required for Child Care and Preschool Entry](#) (for parents)
- [Pediatric Immunization Poster Packet](#)
 - 2 copies each of the following 7 posters in a shrink-wrapped packet:
 - Special Firsts 2: Walking
 - Special Firsts: Detailed Flyer
 - Immunize to Shield Your Superhero 1
 - Immunize to Shield Your Superhero 3
 - Immunize to Shield Your Superhero 4
 - Immunize to Shield Your Superstar
 - Timely Immunization Poster

INFLUENZA-RELATED JOURNAL ARTICLES

- [Excess all-cause and influenza-attributable mortality in Europe, December 2016 to February 2017](#)
- [An overview of the epidemiology and emergence of influenza A infection in humans over time](#)
- [Disease severity determines health-seeking behavior amongst individuals with influenza-like illness in an internet-based cohort](#)
- [Better knowledge and regular vaccination practices correlate well with higher seasonal influenza vaccine uptake in people at risk: Promising survey results from a university outpatient clinic](#)
- [Avian and human influenza virus compatible sialic acid receptors in little brown bats](#)
- [Influenza A H5N1 and H7N9 in China: A spatial risk analysis](#)
- [Pediatric influenza vaccination: What's the effect of no nasal option?](#)

OTHER INFLUENZA-RELATED NEWS

- [Influenza-related death most common in children younger than 2 years](#)
- [Will the nasal flu vaccine be making a comeback?](#)
- [Flu vaccine may cause immune-related adverse events with checkpoint inhibitors](#)
- [CDC Flu Update: Levels of flu-like illness below the national baseline for the first time this season](#)
- [Study finds fears foiling flu-prevention efforts](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Significantly elevated number of human infections with H7N9 virus in Jiangsu in Eastern China, October 2016 to January 2017](#)
- [Influenza at the human-animal interface](#)
- [Sweden authorities says bird flu found at hen farm](#)

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 Jalyn Ingalls at ingallsj@michigan.gov.

MDHHS Contributors

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