



# MI Flu Focus

## Influenza Surveillance Updates

### Bureaus of Epidemiology and Laboratories



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### Influenza Surveillance Report for the Week Ending April 15, 2017

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

**Updates of Interest:** [National Infant Immunization Week](#), April 22-29, is an annual observance to highlight the importance of protecting infants from vaccine-preventable diseases, and celebrate immunization programs promoting healthy communities.

#### Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 1.7% overall, which is below the regional baseline of 1.9%. A total of 193 patient visits due to ILI were reported out of 11,302 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)

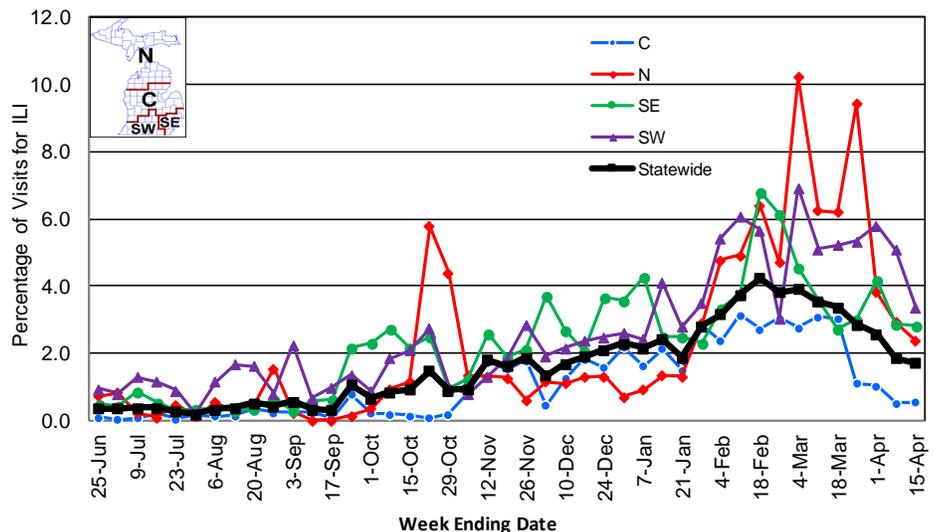
**National Surveillance:** In the United States, 2.0% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.2%.

#### Become a Sentinel Provider!

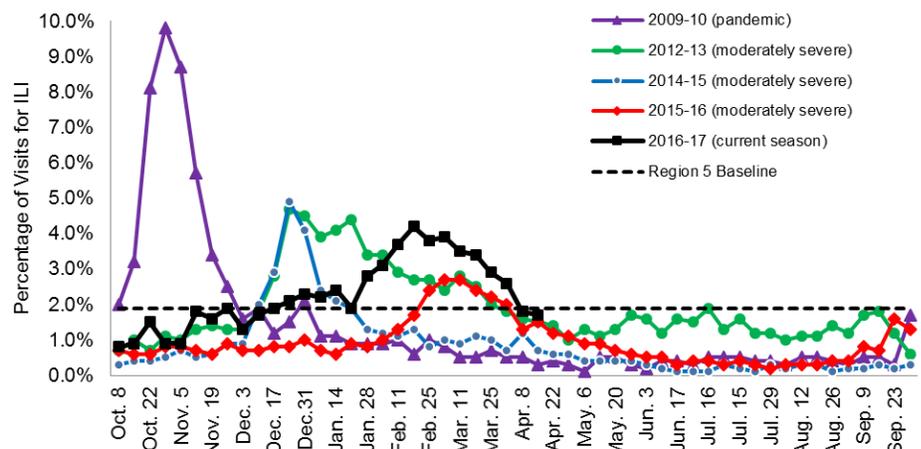
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls ([IngallsJ@michigan.gov](mailto:IngallsJ@michigan.gov)) for more information.

Additional information is in the weekly FluView reports available at: [www.cdc.gov/flu/weekly](http://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 **66 pediatric and 564 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](mailto: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	0	49 (30N, 1C, 10SE, 8SW)
18-49 years	2 (SE)	123 (40N, 1C, 69SE, 13SW)
50-64 years	12 (2N, 9SE, 1SW)	206 (48N, 1C, 128SE, 29SW)
65 years & older	28 (8N, 2C, 17SE, 1SW)	703 (140N, 8C, 480SE, 75SW)
<b>Total</b>	<b>42 (10N, 2C, 28SE, 2SW)</b>	<b>1118 (280N, 12C, 694SE, 132SW)</b>

## Influenza-associated Pediatric Mortality

No (0) influenza-associated pediatric deaths were reported to MDHHS for the week ending April 15, 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, 77 influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

## Laboratory Surveillance

MDHHS Bureau of Laboratories reported 36 new positive influenza results (11 A/H3 and 25 flu B) during this time period. A total of 591 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	178	432	6 (A/HONG KONG/4801/2014-LIKE)	0 / 95
Influenza B	49	9	42	54	154	4 (B/PHUKET/3073/2013-LIKE) 6 (B/BRISBANE/60/2008-LIKE)	
A / unsubtypeable							
LAIV recovery							

In addition, 10 sentinel clinical labs (2SE, 2SW, 6C, 0N) reported influenza testing results. All ten (10) labs reported influenza A activity with most sites now in the low range and with none showing increases. All labs reported ongoing influenza B activity, with multiple sites still at elevated levels but all continuing a downward trend. Influenza B continues to predominate at nearly all sites. Three (3) labs (SE, SW, C) reported low Parainfluenza activity. Seven (7) labs (SE, SW, C) reported RSV activity with most now at low or stable levels. Four labs (SE, SW C) reported low or sporadic Adenovirus activity. Five labs (SE, SW, C) reported low to slightly elevated hMPV activity. Overall testing volumes have dropped further with most sites now down to the moderate range.

### Congregate Setting Outbreaks of Viral Respiratory Illness

There were 4 new respiratory facility outbreaks (1C, 1SE, 2SW) 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	28		26	39	93
Healthcare Facility	3		4	1	8
Daycare			1	2	3
Homeless Shelter			1		1
<b>Total</b>	<b>34</b>	<b>4</b>	<b>32</b>	<b>45</b>	<b>115</b>

### 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 reports are lower than levels seen during the same time period last year, while individual reports are higher.

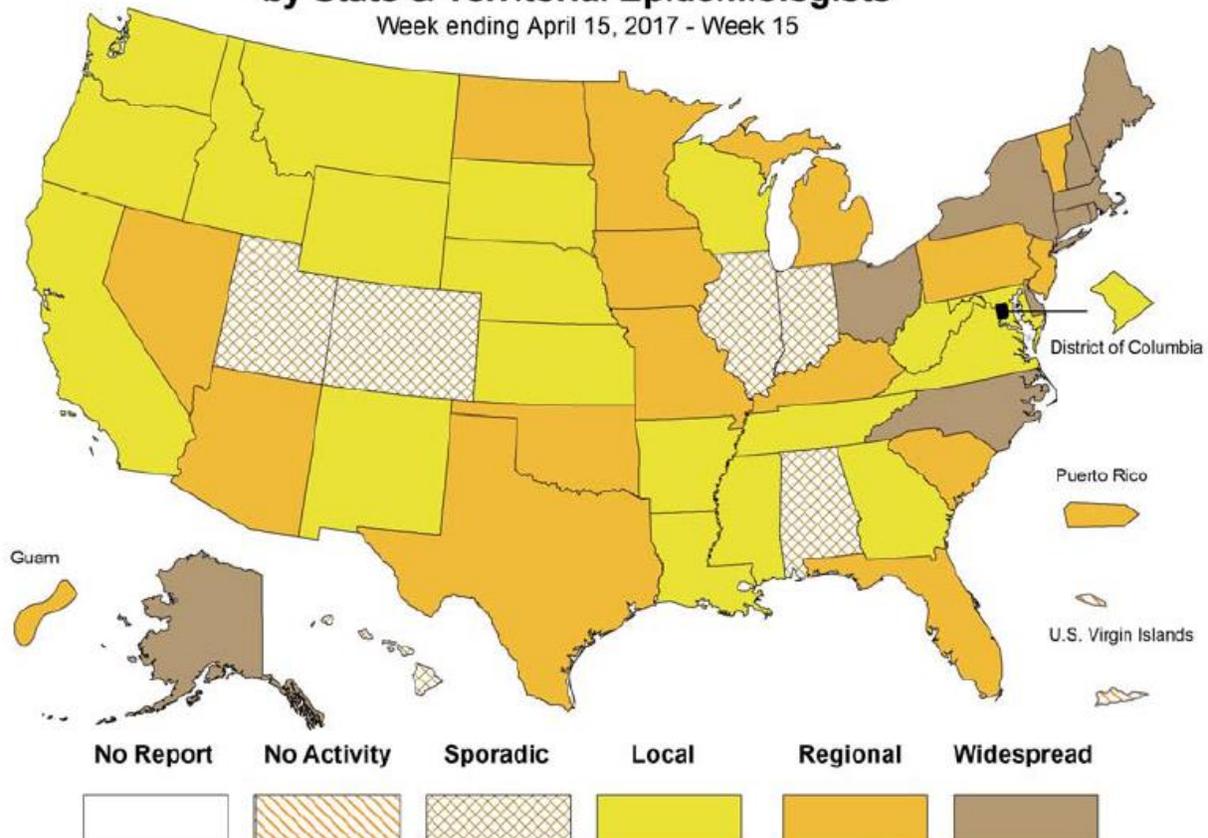
### Emergency Department Surveillance

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

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

### Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists\*

Week ending April 15, 2017 - Week 15





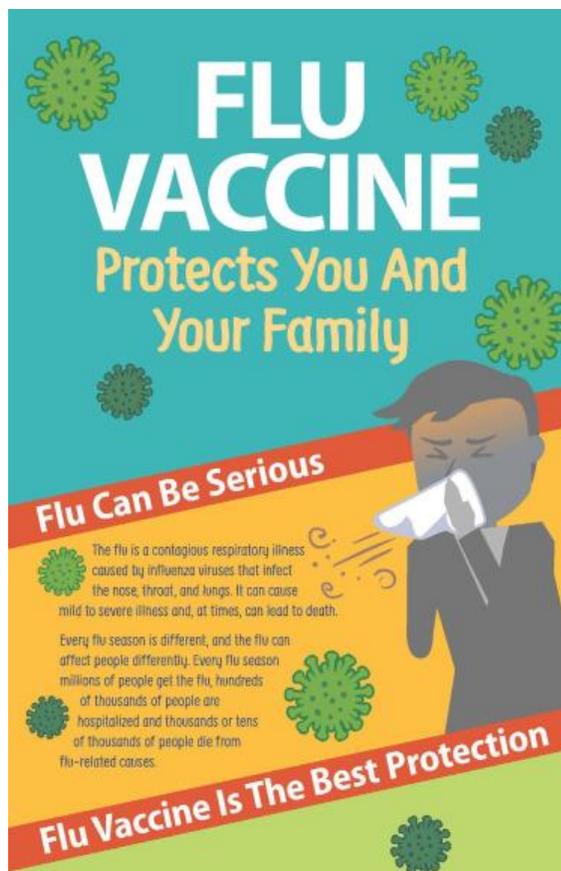
## NATIONAL INFANT IMMUNIZATION WEEK (NIIW)

NIIW is 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.

The [NIIW website](#) has sample social media posts, key messages to share, educational resources, and a media relations toolkit that you can use to help promote NIIW!

## NEW FLU VACCINE INFOGRAPHIC: FLU VACCINE PROTECTS YOU AND YOUR FAMILY

The Centers for Disease Control and Prevention has designed a new infographic, "Flu Vaccine Protects You and Your Family." To view [the complete infographic](#) and to access a free printable version, visit the CDC's influenza website.



Archived editions of FluBytes are available [here](#) and MI FluFocus archives are [here](#).

## INFLUENZA-RELATED JOURNAL ARTICLES

- [Community mitigation guidelines to prevent pandemic influenza – United States, 2017](#)
  - A section has been added regarding the timely and effective use of nonpharmaceutical interventions which depend on community acceptance and action
- [Outbreak communication: Best practices for communicating with the public during an outbreak](#)
- [Antiviral therapy in patients with influenza](#)
- [Drug resistance in influenza A virus: The epidemiology and management](#)
  - Traces the epidemiology of resistant influenza A virus subtypes, and suggests research directions to manage the circulation of influenza A viruses

## OTHER INFLUENZA-RELATED NEWS

- [15 minute test catches out flu virus](#)
- [As flu season wanes, researchers discover potentially powerful flu-fighting compound](#)
- [Congress, WHO sound the alarm over pandemic avian flu in China](#)
- [Recommendation against inhaled flu vaccine is good- for now](#)
- [How hospitals can prepare for an influenza pandemic](#)
- [What is the role of the chicken egg in making the influenza vaccine?](#)
- [Making recommendation for immunizations at work](#)

## AVIAN INFLUENZA INTERNATIONAL NEWS

- [South Korea to downgrade bird flu alert status from highest level](#)
- [H5N1 strikes Vietnamese poultry again; more H5N8 in Europe](#)
- [Human infection with avian influenza A\(H7N9\) virus - China](#)
- [Conservation, development, and the management of infectious disease: avian influenza in China, 2004-2012](#)
- [Chickens at large poultry farms more prone to avian influenza](#)

## FLU WEBSITES

[www.michigan.gov/flu](http://www.michigan.gov/flu)  
[www.cdc.gov/flu](http://www.cdc.gov/flu)  
[www.flu.gov](http://www.flu.gov)  
<http://vaccine.healthmap.org/>

For questions or to be added to the distribution list, please contact Jalyn Ingalls at [ingallsj@michigan.gov](mailto:ingallsj@michigan.gov).

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