



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending March 18, 2017

MI's Influenza Activity Level:
Widespread

Updates of Interest: MDHHS has partnered with the Fanny Strong Foundation to create [I Vaccinate](#), a campaign designed to provide information and tools to help Michigan parents protect their kids against vaccine preventable diseases.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 3.3% overall, which is above the regional baseline of 1.9%. A total of 385 patient visits due to ILI were reported out of 11,753 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region

(34 total):

- C (12)
- N (3)
- SE (14)
- SW (5)

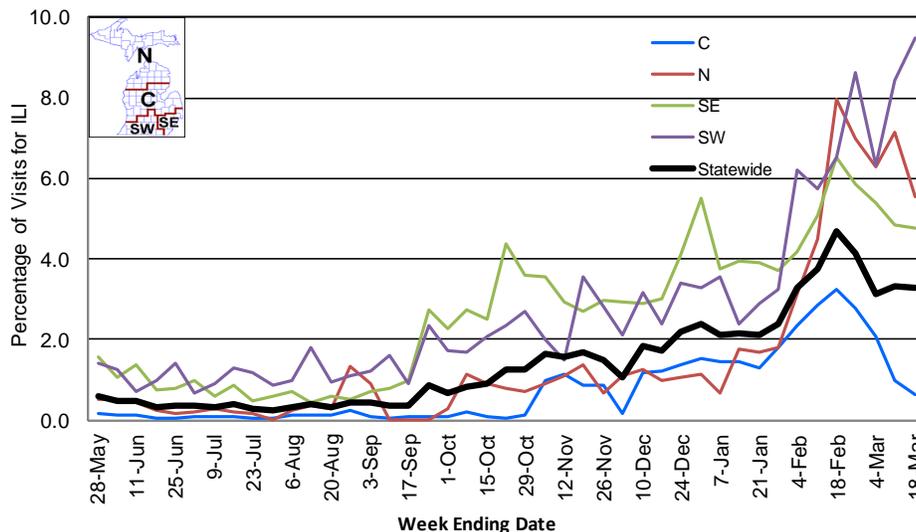
National Surveillance: In the United States, 3.2% of outpatient visits were due to influenza-like illness, which is above the national baseline of 2.2%.

Become a Sentinel Provider!

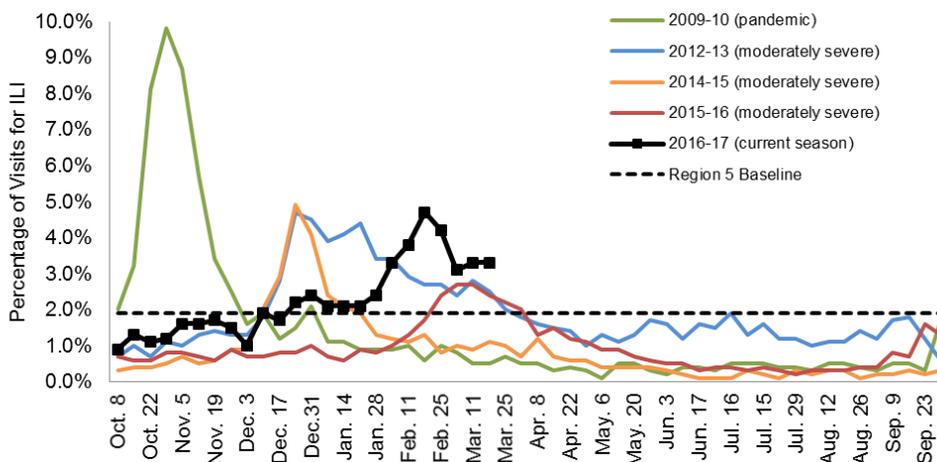
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

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

Hospital Surveillance data are from the week ending March 11. It will be updated in the next MI Flu Focus report.

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 **47 pediatric and 346 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		27 (13N, 1C, 6SE, 7SW)
5-17 years		31 (17N, 1C, 6SE, 7SW)
18-49 years		86 (22N, 1C, 51SE, 12SW)
50-64 years		125 (24N, 80SE, 21SW)
65 years & older		455 (78N, 4C, 318SE, 55SW)
Total		724 (154N, 7C, 461SE, 102SW)

Influenza-associated Pediatric Mortality

No new influenza-associated pediatric deaths were reported to MDHHS. In Michigan, there have been no influenza-associated pediatric deaths reported for the 2016-17 season. Nationally, 53 influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

Laboratory Surveillance

Laboratory Surveillance data are from the week ending March 11. It will be updated in the next MI Flu Focus report.

A total of 470 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	1	4	1 (A/CALIFORNIA/07/2009-LIKE (H1N1)pdm09)	
Influenza A/H3	88	26	108	143	365	5 (A/HONG KONG/4801/2014-LIKE)	0 / 95
Influenza B	29	3	40	29	101	4 (B/PHUKET/3073/2013-LIKE) 6 (B/BRISBANE/60/2008-LIKE)	
A / unsubtypeable							
LAIV recovery							

In addition, 10 sentinel clinical labs (2SE, 1SW, 6C, 1N) reported influenza testing results. All ten labs reported continued influenza A activity with nearly all sites showing stable levels or a gradually declining trend; one site (C) reported increased activity. Nine labs (SE, SE, C, N) reported ongoing influenza B activity with most remaining at stable or slightly decreasing levels; one lab (SE) showed increases. Most sites are now showing predominant or co-dominant influenza B activity. Four labs (SE, C, N) reported low Parainfluenza activity. Nine labs (SE, SW, C, N) reported RSV activity, with most at slightly elevated but stable levels. Three labs (SE, C) reported low or slightly elevated Adenovirus activity. Four labs (SE, C, N) reported low to moderate hMPV activity. Overall testing volumes remain high but gradually decreasing, while a few sites showed modest increases.

Congregate Setting Outbreaks of Viral Respiratory Illness

Congregate Setting Outbreaks data are from the week ending March 11. It will be updated in the next MI Flu Focus report.

Respiratory facility outbreaks for the 2016-2017 season are listed in the table below.

Facility Type	C	N	SE	SW	Total
K-12 School	2	3		2	7
Long-term Care / Assisted Living Facility	24		18	28	70
Healthcare Facility	1		1	1	3
Daycare			1	2	3
Homeless Shelter			1		1
Total	27	3	21	33	84

Michigan Disease Surveillance System

Michigan Disease Surveillance System data are from the week ending March 11. It will be updated in the next MI Flu Focus report.

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

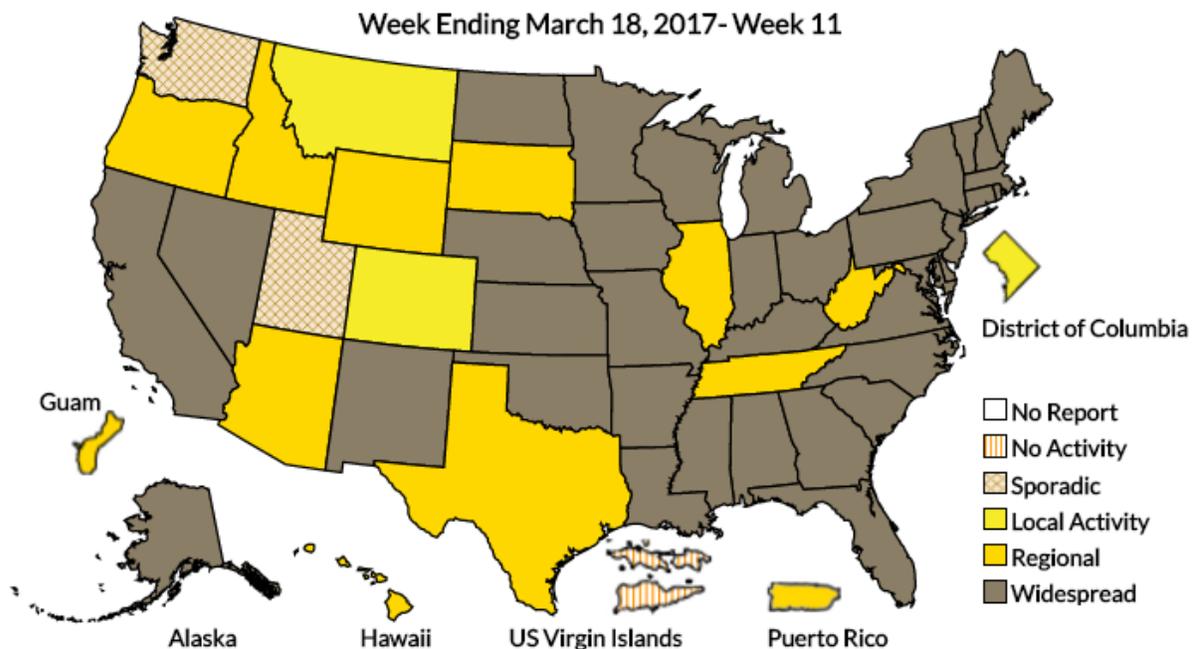
Emergency Department Surveillance

Emergency Department Surveillance data are from the week ending March 11. It will be updated in the next MI Flu Focus report.

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

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

A Weekly Influenza Surveillance Report Prepared by the Influenza Division Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*





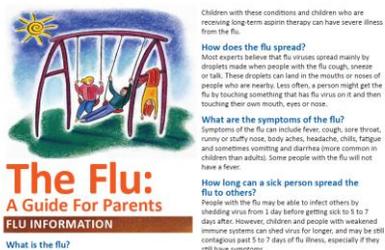
MDHHS AND THE FRANNY STRONG FOUNDATION LAUNCH I VACCINATE CAMPAIGN

The Michigan Department of Health and Human Services has partnered with the Franny Strong Foundation to create [I Vaccinate](#), a multi-media campaign designed to provide information and tools based on medical science and research to help Michigan parents protect their kids against vaccine preventable diseases. The website, www.ivaccinate.org, provides parents with information about vaccine safety, effectiveness, and protecting children in a community through vaccination. Other campaign media include TV, radio, print, outdoor and [digital ads](#).



THE FLU: A GUIDE FOR PARENTS

The CDC has a free [Flu Guide](#) to educate parents about the flu. This guide provides information about the flu, symptoms of the flu, and how to care for a child with the flu. As flu continues to spread, refer parents to this guide so they know how to recognize flu, and can care for their children.



AVIAN INFLUENZA INTERNATIONAL NEWS

- [Germany relaxes some bird flu restrictions as threat recedes](#)
- [Japan orders major poultry cull after first bird flu outbreak in nearly two years](#)
- [Avian influenza and the top five epidemic risk factors for 2017](#)
- [China: 18 additional H7N9 avian influenza cases reported in past week](#)

INFLUENZA-RELATED JOURNAL ARTICLES

- [Pandemic influenza surge plan for managing in- and out-of-hospital deaths](#)
- [Influenza vaccines differentially regulate the interferon response in human dendritic cell subsets](#)
- [Two doses of influenza vaccine improve effectiveness in solid organ transplant recipients](#)
- [Influenza and respiratory syncytial virus in infants study \(IRIS\) of hospitalized and non-ill infants aged <1 year in four countries: study design and methods](#)
- [Analysis of anti-influenza virus neuraminidase antibodies in children, adults, and the elderly by ELISA and enzyme inhibition: Evidence for original antigenic sin](#)
- [Effectiveness of seasonal influenza vaccination in community-dwelling elderly people: An individual participant data meta-analysis of test-negative design case-control studies](#)

OTHER INFLUENZA-RELATED NEWS

- [The role Michigan played in saving lives, through vaccines](#)
- ['Why risk that for a vaccination that's free?' The push to get older Australians vaccinated](#)
- [10 things to know about this flu season, starting with no. 1: It's not even over](#)
- [Parental perceptions about influenza vaccine inhibit uptake](#)
- [While influenza A declines, influenza B makes late-season surge](#)
- [When avian influenza occurs, state and federal agencies respond together](#)
- [Influenza vaccine safe during any trimester of pregnancy](#)
- [Chickens destroyed at Pickens County Peco farm after testing positive for bird flu](#)
- [Influenza vaccine is underused in children with heart disease](#)
- [Single nucleotide change responsible for allowing H7N9 flu to jump from birds to humans found](#)

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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