



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending April 29, 2017

MI's Influenza Activity Level:
Local

Updates of Interest: IHSP surveillance has concluded for the 2016-17 flu season. During this season, more flu-related hospitalizations were reported to IHSP than during any other flu season since reporting began, including the moderately severe 2014-15 flu season.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 1.2% overall, which is below the regional baseline of 1.9%. A total of 143 patient visits due to ILI were reported out of 11,604 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region

(34 total):

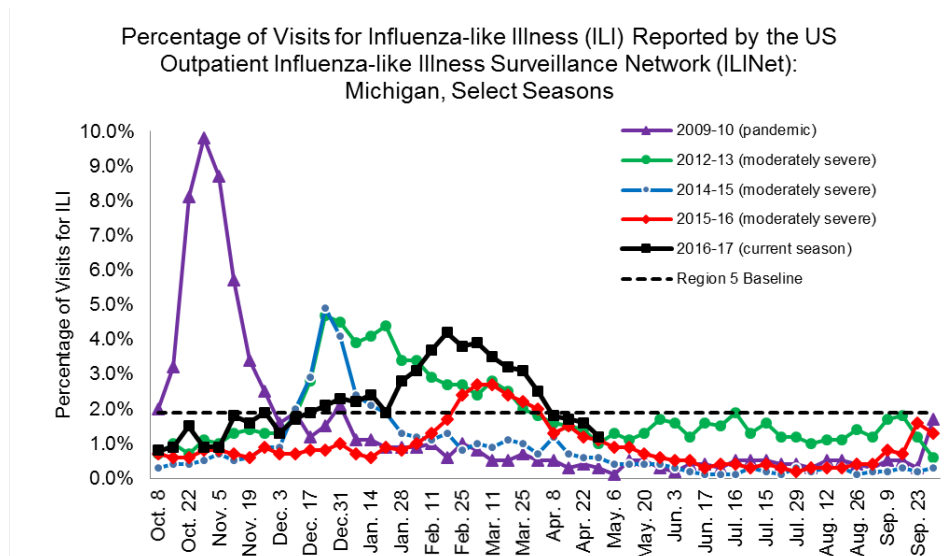
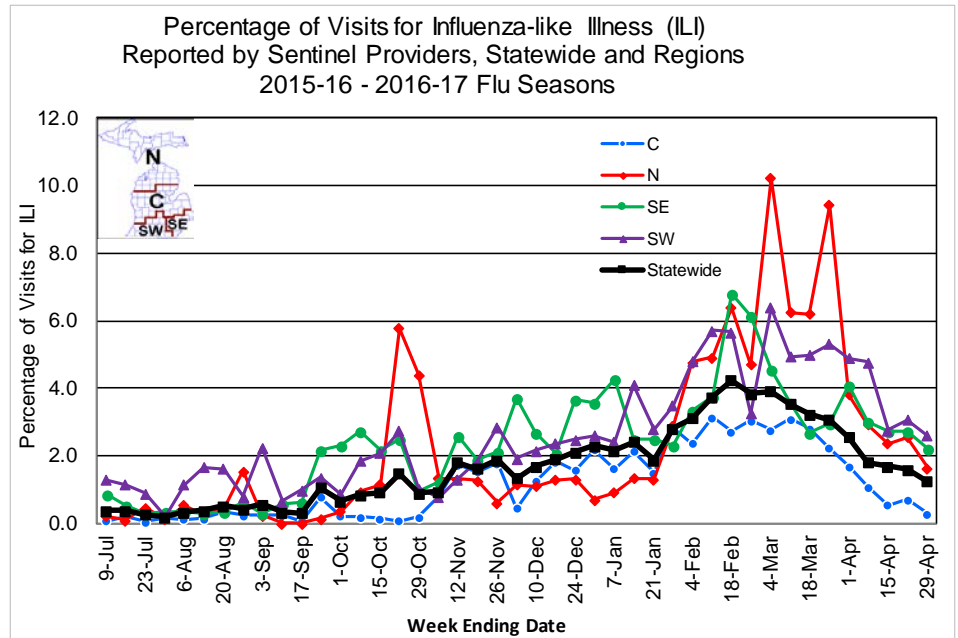
- C (12)
- N (3)
- SE (14)
- SW (5)

National Surveillance: In the United States, 1.4% 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 570 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	1 (N)	39 (23N, 1C, 8SE, 7SW)
5-17 years	2 (N)	52 (33N, 1C, 10SE, 8SW)
18-49 years	1 (SE)	129 (40N, 1C, 74SE, 14SW)
50-64 years	6 (2N, 4SE)	218 (53N, 1C, 135SE, 29SW)
65 years & older	13 (3N, 1C, 8SE, 1SW)	729 (147N, 10C, 495SE, 77SW)
Total	23 (8N, 1C, 13SE, 1SW)	1167 (296N, 14C, 722SE, 135SW)

Influenza-associated Pediatric Mortality

No new deaths were reported to MDHHS for the week ending April 29, 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, 89 influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 28 new positive influenza results (9 A/H3 and 19 flu B) during this time period. A total of 637 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	119	180	442	8 (A/HONG KONG/4801/2014-LIKE)	0 / 95
Influenza B	61	11	48	70	190	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. Seven (7) labs (SE, SW, C) reported influenza A activity in the low or very low range with a continued declining trend. Seven (7) labs (SE, SW, C) reported ongoing influenza B activity, with most sites at low levels and all continuing a downward trend. Influenza B continues to be the dominant viral type at nearly all sites. Four (4) labs (SE, SW, C) reported low or slightly increased Parainfluenza activity. Six (6) labs (SE, SW, C) reported RSV activity with all sites now at low levels. Three labs (SE, SW, C) reported low Adenovirus activity. Four labs (SE, SW, C) reported low or slightly elevated hMPV activity but at overall steady levels. Testing volumes continue to drop further with most sites in the moderate range and several at low levels.

Congregate Setting Outbreaks of Viral Respiratory Illness

There were 2 new respiratory facility outbreaks (1N, 1C) reported to MDHHS during this time period, both 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	30	1	26	40	97
Healthcare Facility	3		4	1	8
Daycare			1	2	3
Homeless Shelter			1		1
Total	36	5	32	46	119

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 lower than levels seen during the same time period last year.

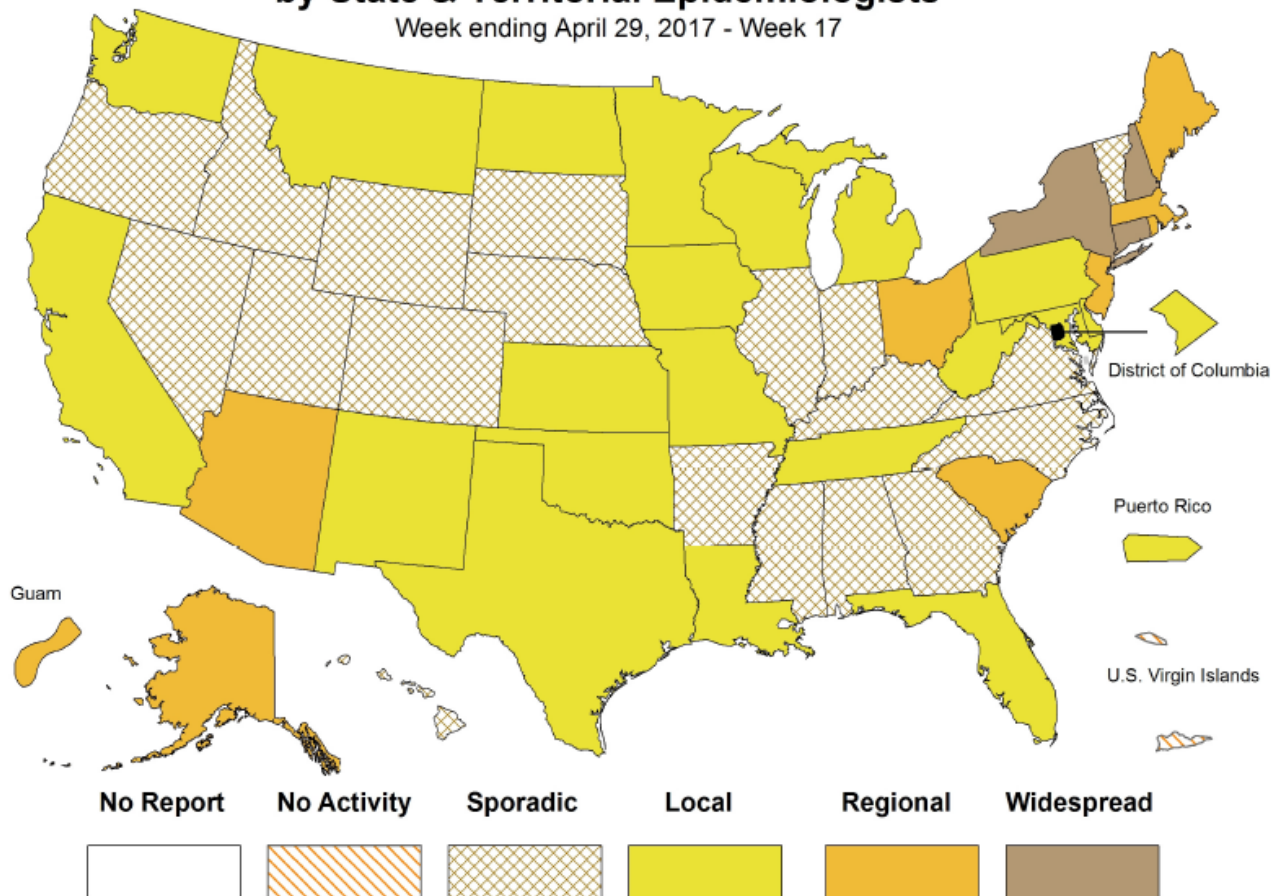
Emergency Department Surveillance

Compared to levels from the week prior, emergency department visits from constitutional and respiratory complaints 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 (3N, 1C, 1SE)
- No respiratory alerts
- 5 constitutional alerts (3C, 2SW), 2 respiratory alerts (C)

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending April 29, 2017 - Week 17





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.

VACCINE HANDBOOK APP IS NOW AVAILABLE

A comprehensive update of the Vaccine Handbook App is now available from the Immunization Action Coalition. The app is free and available for Apple iPhones and iPads only. The App is fully searchable, with functionality that includes bookmarking, highlighting, user annotation and links to important vaccination resources. The App may be found by searching the iTunes App Store for “The Vaccine Handbook App” or clicking on the following link: <https://itunes.apple.com/us/app/the-vaccine-handbook-app/id1043246009?ls=1&mt=8>.

WEBINAR: IMMUNIZATIONS AND SCHOOL ADMISSION

The California Immunization Coalition is hosting a webinar titled, “Immunizations and School Admission: The Role of Schools in Assessing Vaccination Status”, which will focus on understanding immunization requirements for school admission and the important role of schools in assessing vaccination status. The webinar is scheduled for Tuesday, May 23, from 3:00-4:00pm ET. The webinar is free, but you will need to [register](#) before the event.

TOOLS TO ASSIST SATELLITE, TEMPORARY, AND OFF-SITE VACCINATION CLINICS

The National Adult and Influenza Immunization Summit has developed a [Checklist of Best Practices](#) to help standardize the process of satellite, temporary and off-site vaccination clinics. There is also a [Frequently Asked Questions document](#), and a one page [summary of the checklist](#) which can be used a quick reference.

Please distribute these [documents](#) and use them as you plan for satellite, temporary, and off-site clinics!

INFLUENZA-RELATED JOURNAL ARTICLES

- [A review of the 2016-2017 flu season: Guidelines, costs, and barriers](#)
- [Forecasting influenza in Hong Kong with Google search queries and statistical model fusion](#)
- [Explanations for not receiving the seasonal influenza vaccine: An Ontario Canada based survey](#)
- [Direct and indirect effects of influenza vaccination](#)
- [A reassortant H9N2 influenza virus containing 2009 pandemic H1N1 internal-protein genes acquired enhanced pig-to-pig transmission after serial passages in swine](#)
- [Prevalence of non-influenza respiratory viruses in acute respiratory infection cases in Mexico](#)

OTHER INFLUENZA-RELATED NEWS

- [The could save your baby's life](#)
- [Can skeptical parents be persuaded to vaccinate?](#)
- [Here's the visual proof of why vaccines do more good than harm](#)
- [Hong Kong scientists worried to death about bird flu strain that kills chickens in only one day](#)
- [New CDC guidelines aim to prevent future influenza pandemics](#)
- [LAIV may provide immunity to diverse influenza strains without prior exposure](#)
- [Avian flu testing of wild ducks informs biosecurity and can reduce economic loss](#)
- [Hancock Park Veterinary Clinic addresses recent outbreak of canine influenza in Los Angeles](#)
- [Flu shot-free professor fired](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [H5N1 strikes Vietnam again as European H5N8 detections continue](#)

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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