



MI Flu Focus

Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories, and Division of Immunization/Bureau of Family Health Services



Editor: Jalyn Ingalls, MA

IngallsJ@michigan.gov

September 11, 2017

Vol. 14; No. 40

Summer Edition: Influenza Surveillance Report for the Week Ending September 2, 2017

2017 Summer Surveillance System Reports

Updates of Interest: CDC's Advisory Committee on Immunization Practices (ACIP) published the [recommendations](#) for influenza vaccination for the 2017-18 season in *Morbidity and Mortality Weekly Report (MMWR)* on August 25, 2017. This report updates the 2016 recommendations regarding the use of flu vaccines for the prevention and control of seasonal flu. A [summary](#) of the recommendations is available on the CDC's website. CDC has also updated the 2017-2018 Flu Campaign [toolkit](#) for flu vaccine promotion.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 0.7% overall, which is below the regional baseline of 1.9%. A total of 36 patient visits due to ILI were reported out of 5,519 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region

(20 total):

- C (5)
- N (2)
- SE (9)
- SW (4)

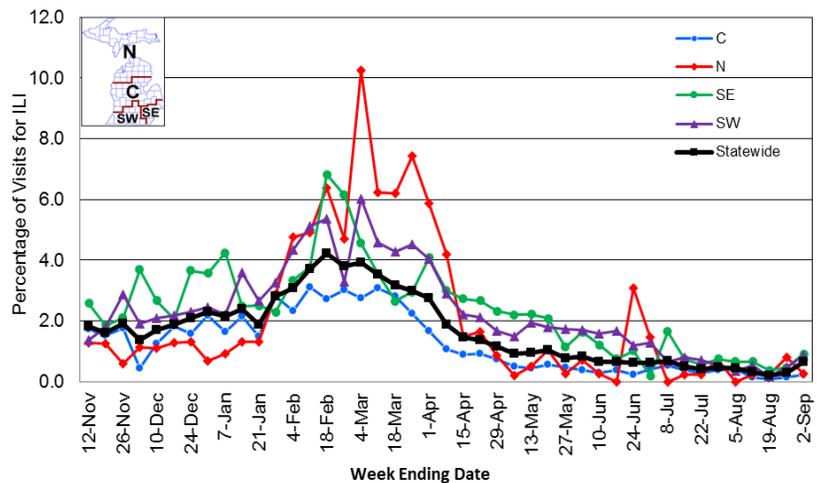
National Surveillance: In the United States, 1.0% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.2%.

Become a Sentinel Provider!

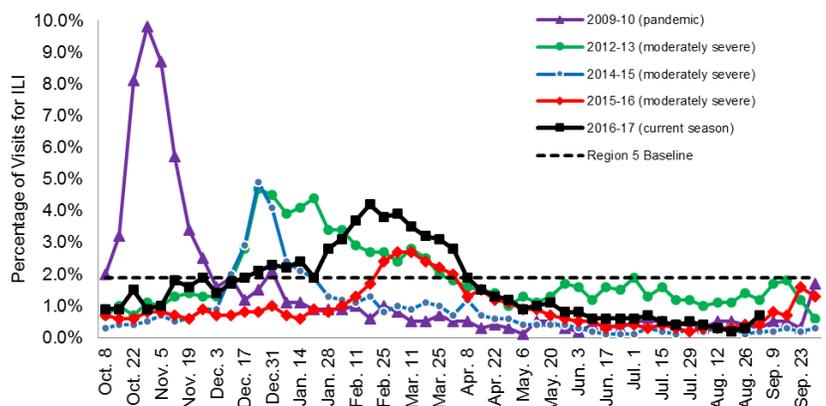
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

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 2016-17 Flu Season



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



Laboratory Surveillance

MDHHS Bureau of Laboratories reported 13 new positive influenza results (9 A/H3, 2 A/H1 & 2 flu B) during this time period. A total of 679 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	5	5	12	2 (A/CALIFORNIA/07/2009-LIKE (H1N1)pdm09)	
Influenza A/H3	122	26	128	187	463	12 (A/HONG KONG/4801/2014-LIKE)	0 / 95
Influenza B	66	11	51	76	204	8 (B/PHUKET/3073/2013-LIKE) 9 (B/BRISBANE/60/2008-LIKE)	
A / unsubtypeable							

In addition, 9 sentinel clinical labs (2SE, 1SW, 5C, 1N) reported influenza testing results. Three labs (SE, C) reported sporadic influenza A activity. One lab (SE) reported sporadic influenza B activity. Four labs (SE, SW, C, N) reported sporadic Parainfluenza activity. No labs reported RSV activity. Two labs (SW, C) reported sporadic Adenovirus activity. One lab (C) reported sporadic hMPV activity. Overall testing volumes remain in the low range but several sites are beginning to show small increases in volume.

Congregate Setting Outbreaks of Viral Respiratory Illness

There were no new respiratory facility outbreaks reported to MDHHS during this time period. 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	5		3	11
Long-term Care / Assisted Living Facility	32	1	29	43	105
Healthcare Facility	3		4	1	8
Daycare			1	2	3
Homeless Shelter			1		1
Total	38	6	35	49	128

2016-2017 Flu Season Surveillance Systems Summary Report

Hospital Surveillance

The Influenza Hospitalization Surveillance Project (IHSP) surveillance has concluded for the 2016-2017 flu season. During this season, 635 flu-related hospitalizations were reported for the catchment area (Eaton, Clinton, Ingham and Genesee). This is the highest single season total since IHSP surveillance was initiated after the influenza pandemic of 2009.

The MDHHS Influenza Sentinel Hospital Network monitors influenza-related admissions reported voluntarily by hospitals statewide. Surveillance peaked for the 2016-2017 season during the week ending February 25, with 156 flu-related hospitalizations reported by 12 facilities across the state. Additional hospitals are encouraged to join for the 2017-2018 season; please contact Seth Eckel at eckels1@michigan.gov.

Influenza-associated Pediatric Mortality

No new pediatric deaths were reported to MDHHS for the week ending August 19, 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, 105 influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

Michigan Disease Surveillance System

MDSS influenza data is comprised of both aggregate and individual reports. For the 2016-2017 season, aggregate counts peaked during Week 9 with 7,339 reports. Individual reports peaked during Week 9 with 2,790 cases having been reported to the MDSS.

Emergency Department Surveillance

In monitoring chief complaint data for the 2016-2017 flu season, constitutional complaints peaked during Week 8 with 14 county level and 1 statewide alert being issued. Respiratory complaints peaked during Week 6, with 7 county level alerts having been issued.

Novel Influenza A Viruses

Due to cases of human H3N2v and other variant influenza viruses recently being reported in nearby states, MDHHS has added a section to MIFF to share the most recent updates regarding H3N2v activity in the United States. As of week ending September 2, there have been no H3N2v cases reported to MDHHS for 2017.

Variant (Swine) Influenza Guidance for Healthcare & Public Health Providers

As Michigan fairs are now underway, clinicians are reminded to ask patients being evaluated for influenza-like illness if they have had any exposure to swine, such as attendance at county fairs or livestock exhibits. MDHHS recommends that providers with a suspect patients for variant influenza follow these guidelines:

1. Clinicians treating patients with an influenza-like illness (fever $\geq 100^{\circ}\text{F}$ plus a cough and or/a sore throat) should ask about recent exposure to swine or attendance at fairs.
2. Collection of upper respiratory specimens for any influenza-like illness is strongly advised.
3. Respiratory specimens should be collected as soon as possible after illness onset and submitted to MDHHS.
4. For more information on how to collect and submit specimens to the MDHHS Bureau of Laboratories, including the required test requisition form, refer to:

http://www.michigan.gov/mdhhs/0,5885,7-339-71551_2945_5103-213906--,00.html.

5. Early initiation of antiviral treatment (oseltamivir) is most effective in treating variant influenza infection.
6. Infection control should follow standard contact and droplet precautions for ill persons.
7. For more details, see [Variant \(Swine\) Influenza Guidance for Healthcare and Public Health Providers](#) (MDHHS Guidance).

To report suspect cases and arrange testing, contact your local health department immediately or contact MDHHS at 517-335-8165 or after hours at 517-335-9030.



Current Variant Influenza Activity in the United States

One human infection with a novel influenza A virus in Ohio was reported during the week ending September 2, 2017. The person was infected with an influenza A (H1N2) variant (H1N2v) virus. The person was younger than 18 years of age, and was not hospitalized. To date, a total of 20 variant virus infections have been reported in the United States during 2017. This most recent human infection was publicly reported in the September 2 [FluView report](#) (Week 35: August 26- September 2, 2017).

States reporting H3N2v Cases	Cases in 2015	Cases in 2016	Cases in 2017
Michigan	1	12	
Minnesota	1		
New Jersey	1		
North Dakota			1
Ohio		6	15
Pennsylvania			1
Texas			1
Total	3	18	18

Table 1. Case Counts of Detected Human Infections with H3N2v
<https://www.cdc.gov/flu/swineflu/h3n2v-case-count.htm>

CDC Recommendations

CDC has long-standing [guidance](#) for people attending agricultural fairs or other settings where swine might be present, including a recommendation that people who are at high risk of serious flu complications avoid pigs and swine barns. For more information about H3N2v, visit: <https://www.cdc.gov/flu/swineflu/h3n2v-basics.htm>. Similarly, a [Morbidity and Mortality Week Report](#) was issued in October 2016 detailing the outbreak of influenza A(H3N2) variant virus infections among persons in Michigan and Ohio.

2017-2018 INFLUENZA SEASON WEBINAR

Join the Centers for Disease Control and Prevention Influenza Division for a one hour webinar discussing the 2017-2018 flu season, and flu vaccination recommendations. The webinar is scheduled for Wednesday, September 13 from 12:00-1:00 PM (ET). The webinar is free, but you must [register](#) in advance.

AMERICAN ACADEMY OF PEDIATRICS: RECOMMENDATIONS FOR PREVENTION AND CONTROL OF INFLUENZA IN CHILDREN, 2017-2018

The American Academy of Pediatrics (AAP) has released a policy statement on the updated [recommendations](#) for the routine use of seasonal influenza vaccine and antiviral medications for the prevention and treatment of influenza in children. This policy statement expands the recommendations in the [influenza chapter](#) of the Red Book (p. 476-493). The *AAP News* has also published an [article](#) summarizing the expanded recommendations. The policy statement also highlights the need for health care personnel to receive an annual flu vaccine to prevent health care-associated influenza infections. Please feel free to share this policy statement with pediatric providers, as well as healthcare providers in your hospitals, clinics, or provider offices.

UPDATED FLU PREVENTION PROMOTIONAL MATERIALS

The California Vaccines for Children program website, www.EZIZ.org, has updated their [promotional materials](#) for the prevention of flu and respiratory disease. Please take a moment and review these materials, and consider printing and sharing appropriate materials in your provider offices. There are educational posters targeted towards patients of all ages, healthcare providers, pregnant women, and people with high-risk conditions.

CDC'S 2017-2018 FLU CAMPAIGN TOOLKIT

CDC's seasonal flu vaccination campaign [materials](#) are available to help vaccination partners communicate about the importance of getting the flu vaccine. The toolkit includes: social media and newsletter content, web assets, graphics, and print materials. The Seasonal Flu Vaccination Campaign Kickoff is scheduled in collaboration with National Foundation for Infectious Disease Press Conference on September 29. A link to the view the [press conference](#) online will be available in the next couple of weeks.

2017-2018 FLU RECOMMENDATIONS HAVE BEEN PUBLISHED

CDC's Advisory Committee on Immunization Practices (ACIP) published the [recommendations for influenza vaccination](#) for the 2017-18 season in Morbidity and Mortality Weekly Report (MMWR) on August 25, 2017. This report updates the 2016 recommendations regarding the use of flu vaccines for the prevention and control of seasonal flu. A [summary](#) of the recommendations is available on the CDC's website.

INFLUENZA-RELATED JOURNAL ARTICLES

- [Influenza epidemiology and immunization during pregnancy: Final report of a World Health Organization working group](#)
- [Diagnostic accuracy of novel and traditional rapid tests for influenza infection compared with reverse transcriptase polymerase chain reaction: A systematic review and meta-analysis](#)
- [A novel data-driven model for real-time influenza forecasting](#)
- [Update: Increase in human infections with novel Asian lineage avian influenza A\(H7N9\) viruses during the fifth epidemic- China, October 1, 2016 – August 7, 2017](#)
- [Risk of recurrence of adverse events following immunization: A systematic review](#)
- [Readiness to vaccinate critical personnel during an influenza pandemic, United States, 2015](#)

OTHER INFLUENZA-RELATED NEWS

- [What Australia's bad flu season means for Europe, North America](#)
- [10 things parents should know about flu shots](#)
- [Assessing the state of vaccine confidence in the United States: Recommendations from the National Vaccine Advisory Committee](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Risk for low pathogenicity avian influenza virus on poultry farms, the Netherlands, 2007-2013](#)

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

Bureau of Epidemiology – S. Bidol, MPH, S. Eckel, MPH

Bureau of Family Health Services, Division of Immunization – J. Ingalls, MA

Bureau of Labs – B. Robeson, MT, V. Vavricka, MS