



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

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Summer Edition: Influenza Surveillance Report for the Week Ending September 16, 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 1.3% overall, which is below the regional baseline of 1.9%. A total of 97 patient visits due to ILI were reported out of 7,257 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region

(21 total):

- C (6)
- N (2)
- SE (9)
- SW (4)

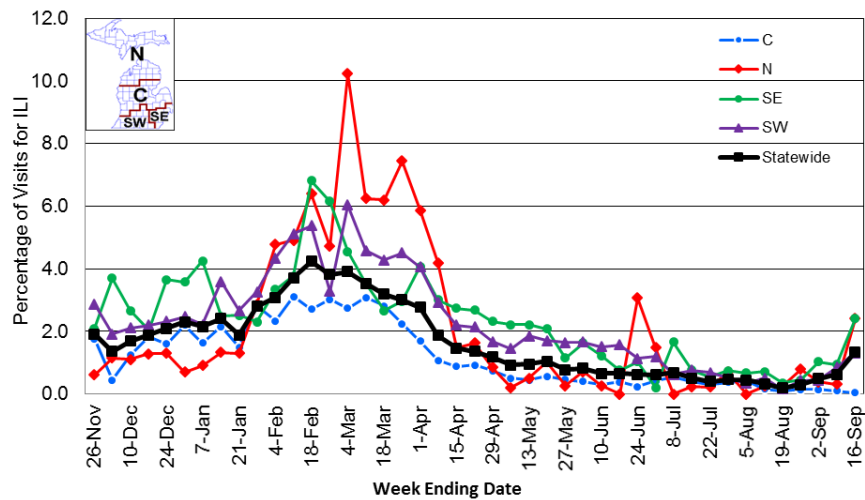
National Surveillance: In the United States, 1.2% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.2%.

Become a Sentinel Provider!

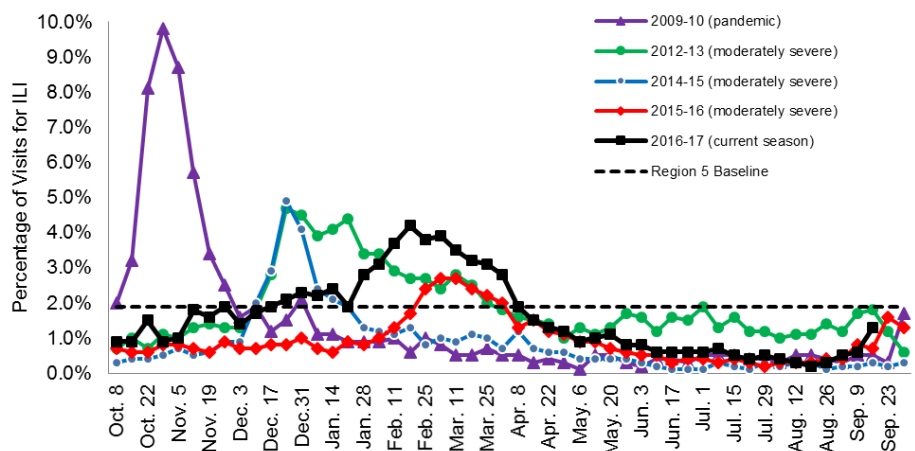
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

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 29 new positive influenza results (25 A/H3, 3 A/H1 & 1 flu B) during this time period. A total of 708 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	2	1	7	5	15	2 (A/CALIFORNIA/07/2009-LIKE (H1N1)pdm09)	
Influenza A/H3	125	26	147	190	488	12 (A/HONG KONG/4801/2014-LIKE)	0 / 95
Influenza B	66	11	52	76	205	8 (B/PHUKET/3073/2013-LIKE) 9 (B/BRISBANE/60/2008-LIKE)	
A / unsubtypeable							

In addition, 7 sentinel clinical labs (2SE, 2SW, 3C, 0N) reported influenza testing results. Two labs (SE) reported influenza A activity ranging from sporadic to multiple positives, the latter of which reflected a localized cluster of illnesses. No labs reported influenza B activity. Two labs (SE, SW) reported sporadic or low Parainfluenza activity. Two labs (SE) reported sporadic RSV activity. One lab (SE) reported low Adenovirus activity. No labs reported hMPV activity. Overall testing volumes remain in the low range but several sites are showing further small increases in volume.

Congregate Setting Outbreaks of Viral Respiratory Illness

There were two new respiratory facility outbreaks (SE) 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 / University	3	5	1	3	12
Long-term Care / Assisted Living Facility	32	1	29	43	105
Healthcare Facility	3		4	1	8
Daycare			1	2	3
Homeless Shelter / Correctional Facility			2		2
Total	38	6	37	49	130

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 September 16, 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, 106 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 16, 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

There were no additional human infections with novel influenza A infection reported to CDC during week 27. 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: AAFP

The American Academy of Family Physicians (AAFP) is hosting a webinar, "Increasing Influenza Vaccinations for Adults 65 Years and Older: Evidence-based Strategies in Primary Care." The webinar is scheduled for September 26, from 12:00-1:00pm (ET). The webinar is free, but you must [register](#) in advance.

CDC CONTINUES TO RECOMMEND FLU VACCINE FOR PREGNANT WOMEN

There has been recent media attention around the association of receiving flu vaccine during pregnancy and spontaneous abortion, based on a [study](#) published in the journal *Vaccine* titled: Association of spontaneous abortion with receipt of inactivated influenza vaccine containing H1N1pdm09 in 2010-11 and 2011-12. This study found an association between spontaneous abortion and flu vaccination among women vaccinated during the first trimester of pregnancy with a flu vaccine containing the pandemic H1N1 component, who also had been vaccinated during the prior season with a flu vaccine containing the pandemic H1N1 component. It is important to note that this study is a case-control study and the findings cannot be estimated as overall risk. Therefore, the findings cannot be used to estimate the possibility of miscarriage for all pregnant women who received a H1N1-containing flu vaccination two years in a row.

Key Messages to Communicate:

- Influenza can put pregnant women and their developing baby at an increased risk of serious illness.
- It is important for healthcare providers to continue to recommend and offer flu vaccine to pregnant patients.
- Influenza vaccines have had a long and very good safety record.

For more information, please see the CDC's [Flu Vaccine Safety and Pregnancy webpage](#).

CDC'S 2017-2018 FLU CAMPAIGN TOOLKIT

CDC's seasonal flu vaccination campaign materials are available to help vaccination partners communicate 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 28. 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

- [Performance of inhaled flu vaccine confounds experts](#)
- [Strategies in recommending influenza vaccination in Europe and US](#)
- [Racial/ethnic differences in receipt of influenza and pneumococcal vaccination among long-stay nursing home residents](#)

OTHER INFLUENZA-RELATED NEWS

- [EpiVax awarded grant for vaccine engineering](#)
- [Experts say 2017 flu season could be severe](#)
- [Mandatory flu vaccine policies: Dealing with employees who refuse the shot](#)
- [100 years after the lethal 1918 flu pandemic, we are still vulnerable](#)
- [Flu vaccine: The other pneumonia shot](#)
- [Exhibits at 3 Maryland fairs shut down after swine flu cases](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Five distinct reassortants of H5N6 highly pathogenic avian influenza A viruses affected Japan during the winter of 2016](#)

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