



MI Flu Focus

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



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Summer Edition: Influenza Surveillance Report for the Week Ending June 24, 2017

2017 Summer Surveillance System Reports

Updates of Interest: The summer fair season usually brings an increase in the number of interactions between people and pigs, which can lead to human cases of H3N2v or other variant flu viruses. 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. Please immediately contact your local health department to report any suspected cases of variant or novel influenza. For more information, see FluBytes on page 3.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 0.6% overall, which is below the regional baseline of 1.9%. A total of 48 patient visits due to ILI were reported out of 7,784 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region

(27 total):

- C (9)
- N (1)
- SE (14)
- SW (3)

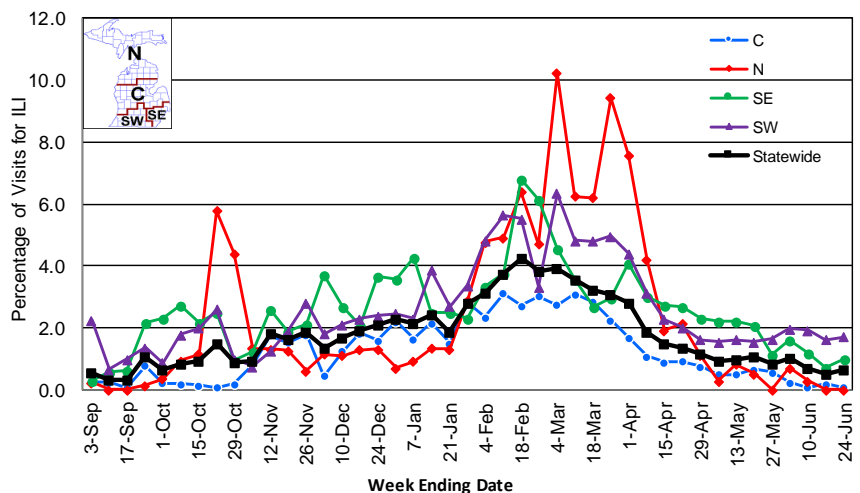
National Surveillance: In the United States, 0.8% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.2%.

Become a Sentinel Provider!

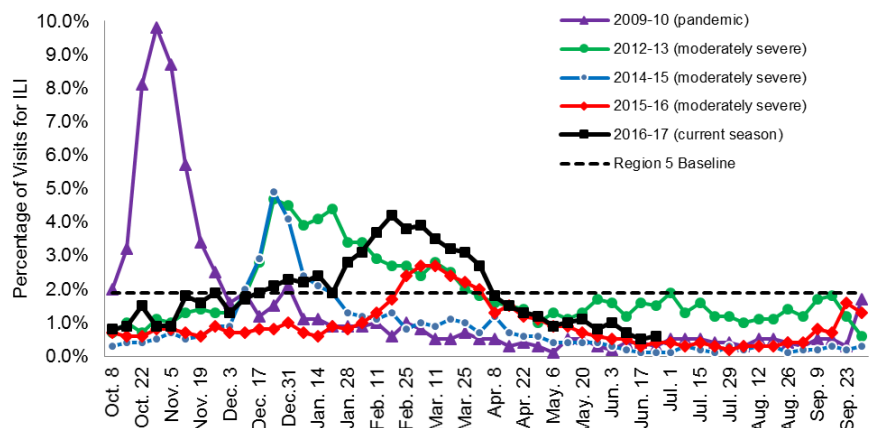
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

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 5 new positive influenza results (3 A/H3 and 2 A/H1) during this time period. A total of 658 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	3	3	8	2 (A/CALIFORNIA/07/2009-LIKE (H1N1)pdm09)	
Influenza A/H3	118	26	121	184	449	11 (A/HONG KONG/4801/2014-LIKE)	0 / 95
Influenza B	66	11	48	76	201	6 (B/PHUKET/3073/2013-LIKE) 9 (B/BRISBANE/60/2008-LIKE)	
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In addition, 8 sentinel clinical labs (1SE, 2SW, 5C, 0N) reported influenza testing results. No labs reported influenza A activity. One (1) lab (SE) reported sporadic influenza B activity. Three (3) labs (SW, C) reported low Parainfluenza activity. No labs reported RSV activity. One lab (SE, C) reported low Adenovirus activity. Two labs (C, SW) reported low hMPV activity. Overall testing volumes remain in the low range.

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	4		3	10
Long-term Care / Assisted Living Facility	31	1	28	43	103
Healthcare Facility	3		4	1	8
Daycare			1	2	3
Homeless Shelter			1		1
Total	37	5	34	49	125

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 June 24, 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, 101 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.

FluBytes

ADOLESCENT IMMUNIZATION UPDATE AND THE 16-YEAR-OLD PLATFORM

Dr. William Atkinson, Immunization Action Coalition's associate director for immunization education, will present a webinar on adolescent immunization on July 10 from 1:00pm – 2:00pm (ET). Dr. Atkinson will review the recommendations for each adolescent vaccine, including those recommended at 11-12 years of age and those at 16 years of age. The webinar is free, but you must [register](#) in advance.

WEBINAR ON JUNE 2017 ACIP MEETING

The National Foundation for Infectious Diseases (NFID) will be offering a webinar on July 13 from 12:00pm – 1:00pm (ET). Dr. William Schaffner will discuss updates from the June 2017 ACIP meeting, including updated recommendations for adult vaccination. The webinar is free, but you must [register](#) in advance.

PREPAREDNESS CHECKLIST FOR PEDIATRIC PRACTICES – AMERICAN ACADEMY OF PEDIATRICS

The American Academy of Pediatrics (AAP) completed a [study](#) in May 2017 that found only 7% of child care center directors had taken actions to prepare their centers for a pandemic influenza outbreak. As a result of this study, the AAP created a [preparedness checklist](#) for pediatric practices to use as a guide to prepare their office for a disaster. This document lists 13 specific steps that can be taken to improve office preparedness. Please share this document widely with child care centers, and encourage them to make preparedness plans.

H3N2V GUIDANCE FOR HEALTHCARE AND PUBLIC HEALTH PROVIDERS

As the summer fair season approaches, there is an increase of human contact with swine, and an increased risk of human cases of H3N2v. In 2016, Michigan reported 12 human cases of H3N2v, all occurring after exposure to swine. The Michigan Department of Health and Human Services has provided [guidance](#) for clinicians to help identify and treat human cases of H3N2v. Clinicians should ask patients who are being evaluated for influenza-like illness about past exposure to swine, and immediately contact their local health department to report any suspected cases of variant or novel influenza. Additionally, the Centers for Disease Control and Prevention [provides educational and communication resources](#) that can be used to help educate patients about preventing the spread of flu between pigs and people.

INFLUENZA-RELATED JOURNAL ARTICLES

- [Epidemiological and serological investigation into the role of gestational maternal influenza virus infection and Autism Spectrum Disorders](#)
 - Neither influenza A or influenza B virus infection was associated with increased ASD risk
- [Trends in influenza and pneumococcal vaccination among US nursing home residents, 2006-2014](#)
- [Effects of influenza strain label on worry and behavioral intentions](#)
- [Emergence of oseltamivir-resistant H7N9 influenza viruses in immunosuppressed cynomolgus macaques](#)
- [A systematic review of the health economic consequences of quadrivalent influenza vaccination](#)

OTHER INFLUENZA-RELATED NEWS

- [Update: Influenza activity in the United States during the 2016-17 season and composition of the 2017-18 influenza vaccine](#)
- [Researchers develop microneedle patch for flu vaccination](#)
- [AAP News: Core flu vaccination recommendations carry over for 2017-18](#)
- [Recombinant influenza vaccine safe, effective among seniors](#)
- [APHIS issues epidemiology report for avian influenza affected poultry in Tennessee, Alabama, Kentucky, and Georgia](#)
 - Official Report: [Epidemiologic and other analyses of HPAI/LPAI affected poultry flocks](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Ten H7N9 cases confirmed in China as poultry outbreak noted](#)
- [Large poultry die off in Heilongjiang – H7N9 confirmed \(HPAI suspected\)](#)

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.

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