



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



Editor: Stefanie Cole, RN, MPH ColeS4@michigan.gov January 20, 2016 Vol. 13; No. 1

Influenza Surveillance Report for the Week Ending January 9, 2016

MI's Influenza Activity Level:
Sporadic

Updates of Interest:

- High-pathogenic and low-pathogenic avian influenza [H7N8](#) has been identified in Indiana turkey farms; [CDC statement](#) and risk assessment.

Michigan Disease Surveillance System

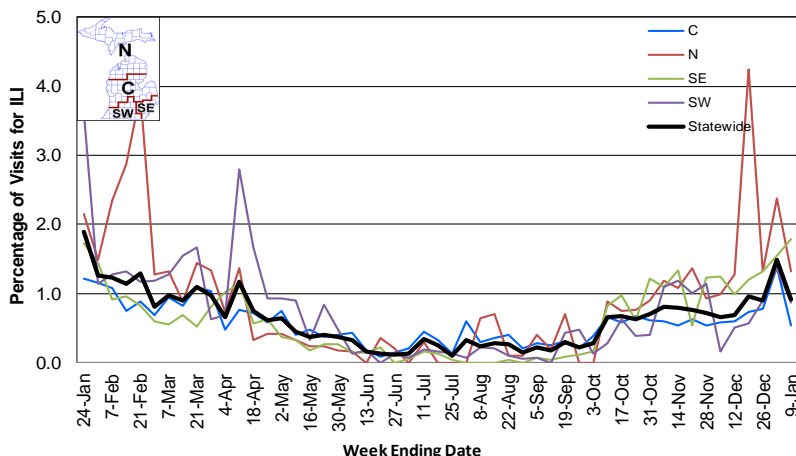
MDSS influenza data indicated that compared to levels from the previous week, both aggregate and individual reports had increased. Aggregate and individual reports were both lower than levels seen during the same time period last year.

Emergency Department Surveillance

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

- 1 constitutional alert (C)
- 2 respiratory alerts (N)
- Last MIFF report: 5 constitutional alerts (1SW, 2C, 2N), 8 respiratory alerts (3SW, 4C, 1N)

Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Statewide and Regions 2015-16 Flu Season



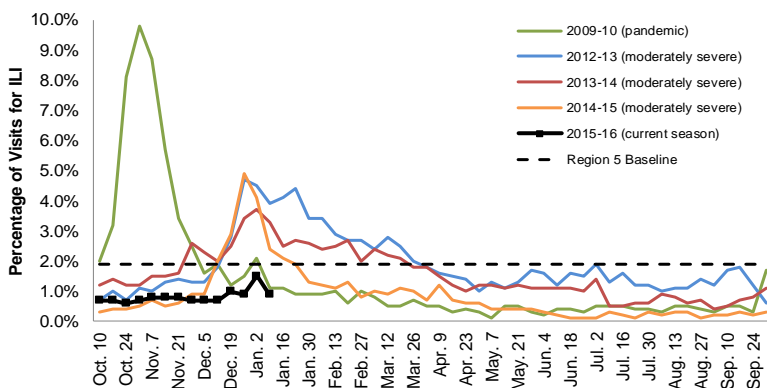
Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 0.9% overall; this is below the regional baseline (1.9%). A total of 103 patient visits due to ILI were reported out of 11,260 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (30 total):

- C (10)
- N (3)
- SE (10)
- SW (7)

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



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 Stefanie Cole (ColeS4@michigan.gov) for more information.

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Hospital Surveillance

The CDC Influenza Hospitalization Surveillance Project provides population-based rates of hospitalization due to severe influenza illness through active surveillance and chart review of lab-confirmed cases beginning on Oct. 1, 2015, for Clinton, Eaton, Genesee, and Ingham counties. Since Oct. 1, there have been 3 pediatric and 3 adult hospitalizations reported within the catchment area.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 14 hospitals (N, C, SE & SW) reported. Results for the 2015-16 flu season are listed in the table below. Additional hospitals are welcome to join; please contact Seth Eckel at eckels1@michigan.gov.

Age Group	New Flu Hospitalizations Reported	Total 2015-16 Flu Hospitalizations Reported to Date
0-4 years	0	3 (SE)
5-17 years	0	0
18-49 years	1 (SE)	6 (1N, 5SE)
50-64 years	2 (SE)	3 (SE)
65 years & older	3 (SE)	8 (7SE, 1SW)
Total	6 (SE)	20 (1N, 18SE, 1SW)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 6 new positive influenza results: 5 2009 A/H1N1pdm and 1 influenza A unable to be subtyped. A total of 58 positive influenza results have been reported for the 2015-16 season. Influenza results for the 2015-16 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	3	1	29	6	39	2* (2 A/California/07/2009-like (H1N1)pdm09**)	1 / 13
Influenza A/H3	4		8	3	15	2* (2 A/Switzerland/9715293/2013-like†)	0 / 5
Influenza B	1		1		2		
A / unsubtypeable				2	2		
RSV			2		2		

*Specimens antigenically characterized by CDC; **A/California/07/2009-like (H1N1)pdm09 is the H1N1 component of the 2015-16 Northern Hemisphere flu vaccines; †A/Switzerland/9715293/2013-like (H3N2) is the H3N2 component of the 2015-16 Northern Hemisphere flu vaccines.

In addition, 12 sentinel clinical labs (3SE,2SW,6C,1N) reported influenza results. Five labs (SE,SW) reported sporadic or low influenza A activity. No labs reported influenza B activity. Three labs (SE,SW,C) reported low or slightly increased Parainfluenza activity. Eleven labs (SE,SW,C) reported low to moderate RSV activity but mostly at stable levels. Five labs (SE,SW,C) reported low or slightly elevated Adenovirus activity. Three labs (SE,SW,C) reported low or slightly increased hMPV activity. Most testing volumes were in the moderate to upper-moderate range.

Influenza Congregate Settings Outbreaks

There were no new respiratory facility outbreaks reported. There have been a total of 2 respiratory facility outbreaks reported to MDHHS for the 2015-16 season. Respiratory facility outbreaks are listed in the table below by facility type and surveillance region.

Facility Type	C	N	SE	SW	Total
K-12 School	0	0	0	1	1
Long-term Care / Assisted Living Facility	1	0	0	0	1
Total	1	0	0	1	2

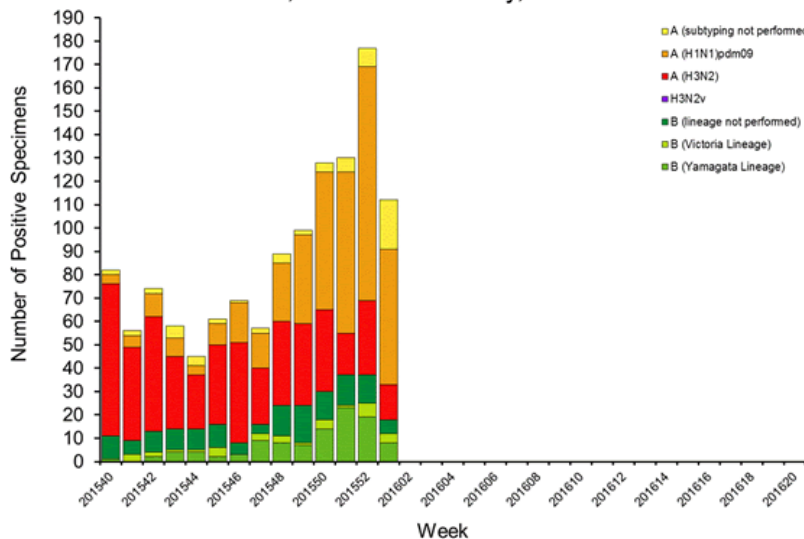
Influenza-associated Pediatric Mortality

No influenza-associated pediatric deaths have been reported to MDHHS for the 2015-16 season.

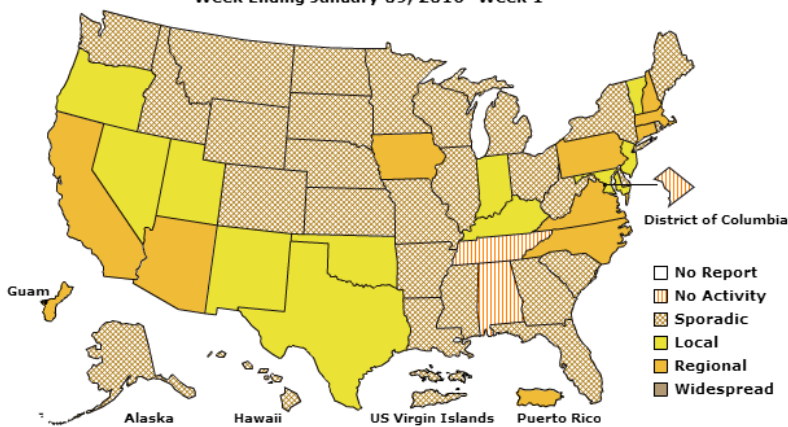
National: In the United States, laboratory data indicated that flu activity increased slightly with 2.0% of outpatient visits due to influenza-like illness, which was below the national baseline of 2.1%. Four of 10 regions reported ILI at or above region-specific baselines. One new influenza-associated pediatric death was reported, for a total of 7 pediatric deaths for the 2015-16 flu season. Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly/.

International: High levels of flu activity were reported from some countries in Western Asia. Globally, flu activity was picking up in some temperate countries of the Northern Hemisphere but in general remained low. More information is available at: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/.

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2015-2016 Season



A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*
Week Ending January 09, 2016- Week 1





AVIAN INFLUENZA NEWS IN NORTH AMERICA

- [High-path H7N8 outbreak reported at Indiana turkey farm](#)
- [H7N8 detections at more Indiana farms suggest mutation](#)
- USDA: [Update on H7 avian influenza cases in Indiana, additional flocks confirmed as low pathogenic](#)
- Indiana State Board of Animal Health: [Highly pathogenic avian influenza](#)
- CDC: [Avian influenza H7N8 update](#)
- [NAFTA countries sign letter on avian flu](#)
- Any reports of sick or dead birds should be forwarded immediately to the proper agency:
 - For domestic poultry, contact MDARD:
 - M-F 8AM-5PM, 1-800-292-3939
 - After hours/weekends, 517-373-0440
 - For wildlife (die-off of waterfowl, gulls, or shorebirds), contact DNR:
 - M-F 8AM-5PM, 517-336-5030
 - After hours/weekends, 1-800-292-7800

U.S. SEASONAL INFLUENZA NEWS

- [L.A. County confirms first flu season deaths](#)
- [North Carolina records first flu death of the season](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [China confirms H5N6, H7N9 avian flu cases](#)
- [CHP notified of 9th human case of avian influenza A\(H5N6\) in Guangdong](#)
- [H5 avian flu virus detected in Changhua, Taiwan, 27,538 chickens culled](#)
- [Vietnam reports new H5N6 avian flu outbreak; Taiwan details H5N2 events](#)
- [H5 viruses strike more poultry in Nigeria, Vietnam](#)
- [China reports H5N1 case in Sichuan province man; France confirms 2 new high-path avian flu outbreaks, 69 total](#)

ACOG FLU VACCINE RESOURCES

The American College of Obstetricians and Gynecologists (ACOG) has several resources for providers and patients to help promote flu vaccine to pregnant women. ACOG recently updated their flu vaccination during pregnancy [toolkit](#), they have a monthly flu season [newsletter](#), and more!

Archived editions of FluBytes are available [here](#) and MI FluFocus archives are [here](#).

INFLUENZA-RELATED JOURNAL ARTICLES

- [Lactoferrin acts as an adjuvant during influenza vaccination of neonatal mice](#)
 - Researchers found lactoferrin to be safe and effective adjuvant for inducing influenza antibodies in neonates
- [Estimated number of patients with influenza A\(H1\)pdm09, or other viral types, from 2010 to 2014 in Japan](#)
 - Close monitoring of estimated number of ILI cases by virological type highlights huge impact of previous flu epidemics in Japan, may aid in prediction of future outbreaks
- [The genetic diversity of influenza A viruses in wild birds in Peru](#)
 - Researchers identified 10 HA subtypes (H1-H4, H6-H7, H10-H13) and 8 NA subtypes (N1-N3, N5-N9)
 - Suggests substantial avian influenza A virus diversity circulates undetected throughout South America

OTHER INFLUENZA-RELATED NEWS

- CDC: [145.4 million doses of flu vaccine distributed in U.S.](#)
- [US flu levels up a bit, as activity spikes in Middle East](#)
- [Children's Hospital of Michigan bans visitors under 18 due to flu cases](#)
- ECDC: [Influenza virus characterization, Summary Europe, December 2015](#)
- [AHS advocates immunization after 5 influenza deaths confirmed in Alberta](#)
- [Influenza epidemic hits eastern Switzerland](#)

CDC CHILDHOOD IMMUNIZATION CHAMPION

MDHHS is accepting nominations for the 2016 CDC Childhood Immunization Champion Award! This award recognizes individuals who significantly contribute to public health through their work in childhood immunizations. The 2016 awardees will be announced during National Infant Immunization Week (April 17-23). For more information, including the award criteria and nomination packet, please go [here](#). If you would like to submit a nomination, please email it to Stephanie Sanchez at SanchezS@michigan.gov by February 11.

FLU WEBSITES

www.michigan.gov/flu
www.cdc.gov/flu
www.flu.gov
<http://vaccine.healthmap.org/>

For questions or to be added to the distribution list, please contact Stefanie Cole at ColeS4@michigan.gov.

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