



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending January 2, 2016

MI's Influenza Activity Level:
Sporadic

Updates of Interest:

- A hospitalized case of variant H3N2 (H3N2v) was recently [reported](#) by New Jersey. The patient visited a swine holding facility before becoming ill.

Michigan Disease Surveillance System

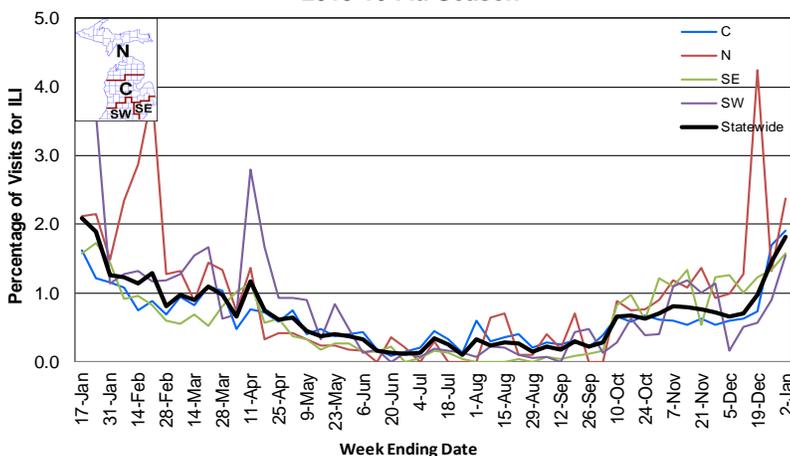
MDSS influenza data indicated that compared to levels from the previous week, aggregate reports had decreased while individual reports had increased. Aggregate and individual reports were both lower than levels seen during the same time period last year.

Emergency Department Surveillance

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

- 5 constitutional alerts (1SW, 2C, 2N)
- 8 respiratory alerts (3SW, 4C, 1N)
- Last MIFF report: 19 constitutional alerts (3SE, 4SW, 8C, 3N, 1 Statewide), 10 respiratory alerts (1SE, 2SW, 3C,

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



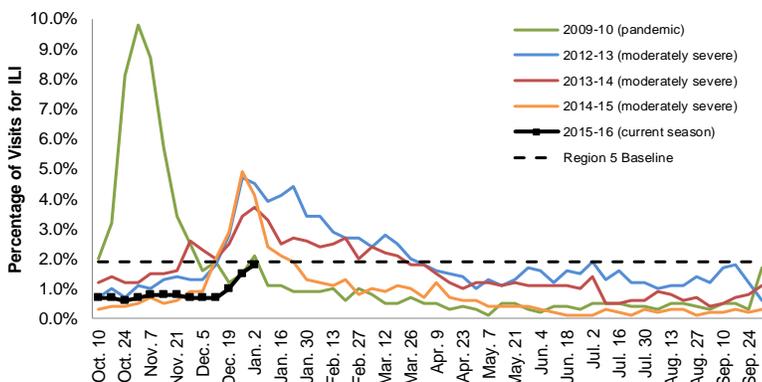
Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 1.8% overall; this is below the regional baseline (1.9%). A total of 114 patient visits due to ILI were reported out of 6,279 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (31 total):

- C (11)
- N (3)
- SE (11)
- SW (6)

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	0	5 (1N, 4SE)
50-64 years	0	1 (SE)
65 years & older	2 (SE)	5 (4SE, 1SW)
Total	2 (SE)	14 (1N, 12SE, 1SW)

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 7 new positive influenza results: 6 2009 A/H1N1pdm and 1 influenza B. A total of 52 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	2	1	27	4	34	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				1	1		
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, 13 sentinel clinical labs (4SE,2SW,6C,1N) reported influenza results. Three labs (SE) reported sporadic or relatively low influenza A activity. Two labs (SW,C) reported sporadic influenza B activity. Three labs (SE,C) reported low or slightly increased Parainfluenza activity. Eleven labs (SE,SW,C) reported low to moderate RSV activity, with further increases continuing. Four labs (SE,SW,C) reported slightly elevated or increasing Adenovirus activity. Four labs (SE,SW,C) reported low or increasing hMPV activity. Most testing volumes are 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

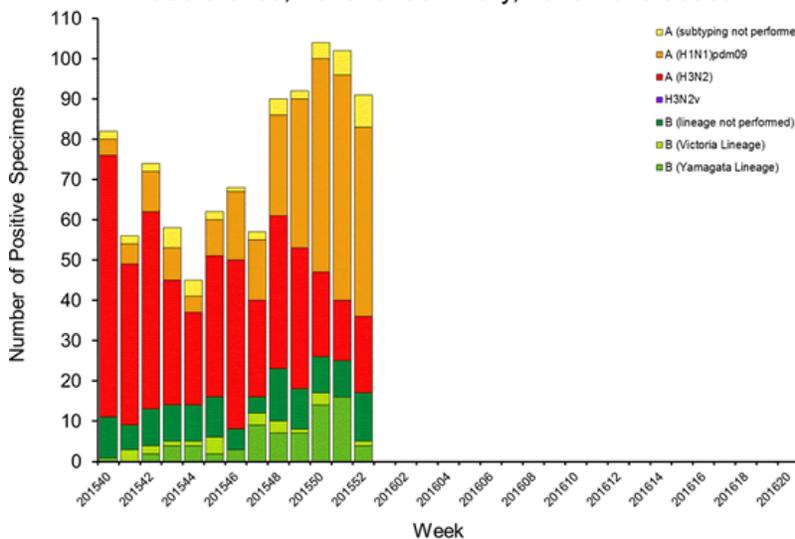
Influenza-associated Pediatric Mortality

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

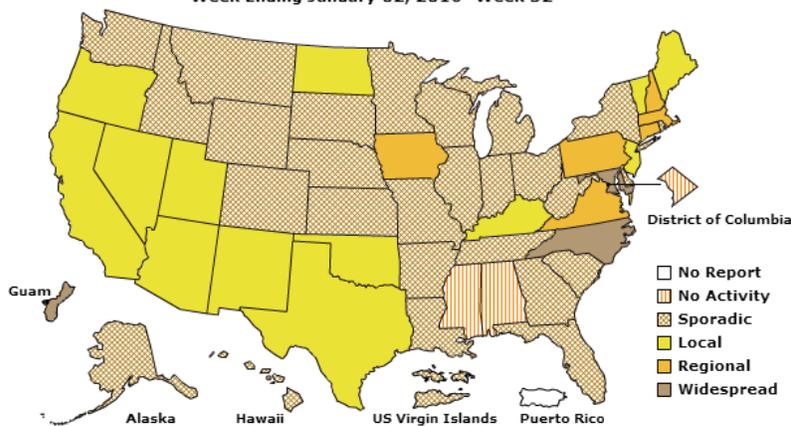
National: In the United States, flu activity increased slightly with 2.8% of outpatient visits due to influenza-like illness, which was above the national baseline of 2.1%. Seven of 10 regions reported ILI at or above region-specific baselines. Two new influenza-associated pediatric deaths were reported, for a total of 6 pediatric deaths for the 2015-16 flu season. Additional information is in the weekly FluView reports available at: www.cdc.gov/flu/weekly/.

International: Globally, influenza activity generally remained low in both hemispheres. 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 02, 2016- Week 52





U.S. SEASONAL INFLUENZA NEWS

- [CDC reports H3N2v case as US flu activity rises slightly](#)
- [Three influenza strains circulating in Iowa](#)
- [Mississippi state health officials confirm first case of influenza for the 2015-16 flu season](#)

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!

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Tests reveal H5N1 in outbreak at Scottish farm](#)
- [Taiwan CDC commends suspected H7N9 influenza patient for voluntarily notifying quarantine office at airport upon arrival](#)
- [CHP notified of 8 additional human cases of avian influenza A\(H7N9\) in Mainland](#)
- [H5N6 kills another in China; H7N9 sickens 9](#)
 - Global H5N6 case total now at 8
 - CDC travel notice: [Lunar New Year](#)
- [Avian flu outbreaks reported in Scotland, Vietnam, Nigeria](#)
- [Avian flu outbreaks affect thousands of poultry in France, Nigeria](#)
- [Northern, Southern Nigeria both hit by bird flu outbreaks](#)

AVIAN INFLUENZA NEWS IN NORTH AMERICA

- 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

OTHER INFLUENZA-RELATED NEWS

- CDC: [144.9 million doses of flu vaccine distributed in U.S.](#)
- Kansas State University: [New NDV-H5Nx avian influenza vaccine has potential for mass vaccination of poultry](#)

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

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.

INFLUENZA-RELATED JOURNAL ARTICLES

- *Eurosurveillance*: [Effectiveness of seasonal influenza vaccine in preventing influenza primary care visits and hospitalizations in Auckland, New Zealand in 2015: interim estimates](#)
 - Preliminary VE results were 36% for general practice encounters and 50% for hospitalizations
 - H3N2 VE for hospitalizations was 53%
- [Studies note nasal spray vaccine failure against H1N1 flu](#)
- [Are plasma mineral levels related to antibody response to influenza vaccination in older adults?](#)
 - Phosphorus associated with seroprotection and seroconversion to influenza A after vaccination
- [Characterization of viral load, viability and persistence of influenza A virus in air and on surfaces of swine production facilities](#)
 - During swine influenza A virus outbreaks, aerosols and surfaces in barns contained significant levels of flu virus
 - Exposure hazard to swine and people
- [A systematic review of reported reassortant viral lineages of influenza A](#)
- [Functional interplay between type I and II interferons is essential to limit influenza A virus-induced tissue inflammation](#)
- [Development of the Flu-PRO: a patient-reported outcome \(PRO\) instrument to evaluate symptoms of influenza](#)

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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