



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending December 5, 2015

MI's Influenza Activity Level:
Sporadic

Updates of Interest:

- Early season flu vaccine coverage estimates for 2015-16 have been [released](#), as well as the estimated [impact of flu vaccination](#) in 2014-15.

Michigan Disease Surveillance System

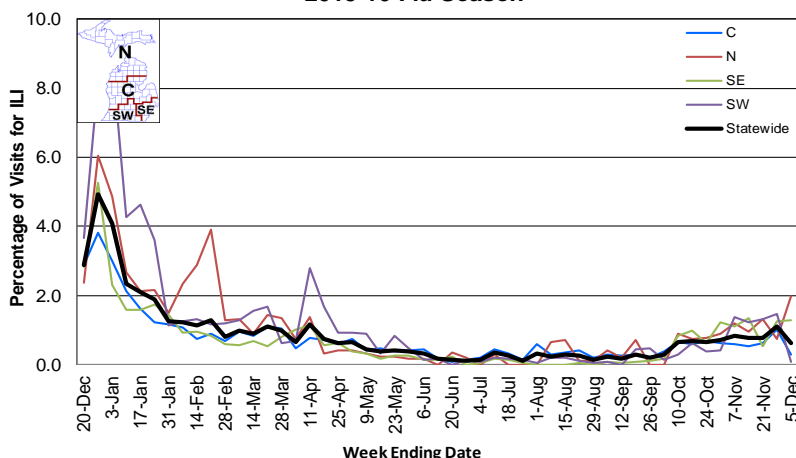
MDSS influenza data indicated that compared to levels from the previous week, aggregate and individual reports had both increased. Aggregate reports were higher than levels seen during the same time period last year, while individual reports were lower.

Emergency Department Surveillance

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

- 6 constitutional alerts (2SE, 1SW, 2C, 1N)
- 7 respiratory alerts (1SE, 2SW, 4C)
- Last MIFF report: 10 constitutional alerts (2SW, 6C, 2N), 14 respiratory alerts (4SW, 6C, 4N)

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



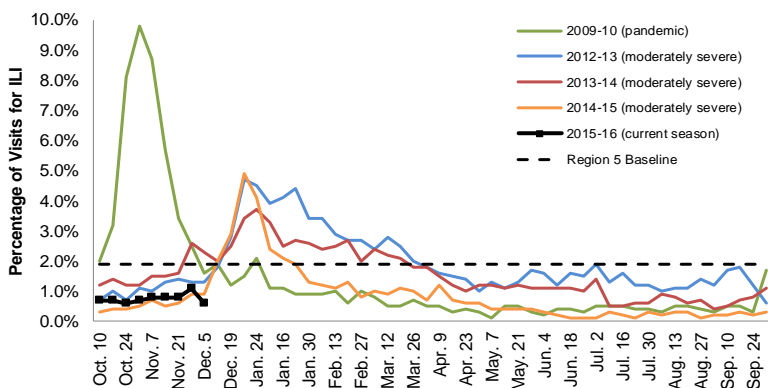
Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) decreased to 0.6% overall; this is below the regional baseline (1.9%). A total of 73 patient visits due to ILI were reported out of 11,990 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (30 total):

- C (12)
- N (3)
- SE (11)
- SW (4)

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 has been 1 pediatric and 1 adult hospitalization reported within the catchment area.

The MDHHS Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide, and 13 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 | 0 |
| 5-17 years | 0 | 0 |
| 18-49 years | 1 (SE) | 2 (SE) |
| 50-64 years | 0 | 1 (SE) |
| 65 years & older | 0 | 1 (SE) |
| Total | 1 (SE) | 4 (SE) |

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 2 new positive influenza results: 2 A/H3. A total of 19 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 | 1 | | 7 | | 8 | 1* (1 A/California/07/2009-like (H1N1)pdm09**) | 1 / 2 |
| Influenza A/H3 | 1 | | 8 | 2 | 11 | 1* (1 A/Switzerland/9715293/2013-like†) | |
| 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 (4SE,2SW,5C,1N) reported influenza results. Six labs (SE,SW,C) reported sporadic influenza A activity. Two labs (SE) reported sporadic influenza B activity. Five labs (SE,SW,C) reported low or slightly elevated Parainfluenza activity. Eight labs (SE,SW,C) reported low or slightly increasing RSV activity. Six labs (SE,SW) reported low or slightly elevated Adenovirus activity. Two labs (SE,C) reported sporadic hMPV activity. Most testing volumes were in the low to moderate range with small increases continuing.

Influenza Congregate Settings Outbreaks

There were no new respiratory facility outbreaks reported. There has been a total of 1 respiratory facility outbreak 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 |
| Total | 0 | 0 | 0 | 1 | 1 |

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 but remained low overall with 1.8% of outpatient visits due to influenza-like illness, which is below the national baseline of 2.1%. Four of 10 regions reported ILI at or above region-specific baselines. Two influenza-associated pediatric deaths were reported (one of which occurred in 2014-15), for a total of 3 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/.

FluBytes



2015-16 EARLY SEASON FLU COVERAGE

On December 10, CDC released 2015-16 early season estimates for flu vaccination coverage for the [general population](#), [healthcare personnel](#), and [pregnant women](#). CDC also released an update on 2015-16 [influenza activity](#) in *MMWR* and the estimated [impact](#) of vaccination in 2014-15.

Check out two new infographics from CDC: [Benefits of flu vaccination 2014-2015](#) and [Flu vaccine and pregnancy](#).

INFLUENZA-RELATED JOURNAL ARTICLES

- *The Pediatric Infectious Disease Journal*: [Influenza vaccine effectiveness for fully and partially vaccinated children 6 months to 8 years old during 2011-2012 and 2012-2013: the importance of two priming doses](#)
 - Children who received 2 doses of flu vaccine during a previous flu season were better protected against H3N2 and B
 - CDC: [Study looks at flu vaccine dosing in children](#) (Dec. 11)
- [Strategies for early vaccination during novel influenza outbreaks](#)
 - For urban areas, attack rates lowest for children younger than 5 years; for remote population, attack rates lowest for adults over 50 years
- *The Journal of Infectious Diseases*: [Evaluation of the safety and immunogenicity of a candidate pandemic live attenuated influenza vaccine \(pLAIV\) against influenza A\(H7N9\)](#)
 - NIAID: [Prime-boost H7N9 influenza vaccine concept promising in clinical trial](#)
- [Systems analysis of immunity to influenza vaccination across multiple years and in diverse populations reveals shared molecular signatures](#)

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

AVIAN INFLUENZA NEWS IN NORTH AMERICA

- [Minnesota lifts quarantines on all farms infected with highly pathogenic avian influenza](#)
- 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

AVIAN INFLUENZA INTERNATIONAL NEWS

- [France has 2 new avian flu outbreaks \(H5N1, H5N2\); H5N6 noted in China, Vietnam](#)
- [Avian flu spreads in France as official downplays risk](#)
- [Bird flu spreads to fourth region in southwest France](#)
- [Avian flu confirmed in Taiwan and German poultry, Russian duck](#)
- [Odisha peacock deaths not related to avian influenza](#)
- [Avian influenza A\(H7N9\) detected in two humans in China](#)

OTHER INFLUENZA-RELATED NEWS

- CDC: [142.0 million doses of flu vaccine distributed in U.S.](#)
- [US flu season continues slow start](#)
- [HHS funds development of high-speed manufacturing for N95 respirators](#)
- [Cases of influenza on the rise in Italy](#)
- [Idaho woman dies from 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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