



# MI Flu Focus

## Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories



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**MI's Current Influenza Activity Level:**  
Local

**Updates of Interest:** As of December 1, 92 of 146 individuals in MI tested for EV-D68 by CDC were positive (63%); 4 had some degree of neurologic illness of undetermined origin. Per CDC, the limb weakness illness is now referred to as acute flaccid myelitis. MDCH is discontinuing weekly summaries of EV-D68 data at this time due to the observed seasonal decline in disease activity.

### Influenza Surveillance Report for the Week Ending November 22, 2014

#### Michigan Disease Surveillance System

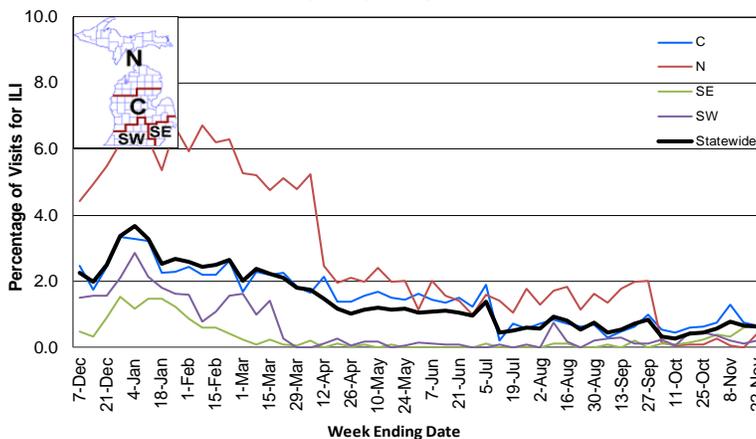
MDSS influenza data indicated that compared to levels from the previous week, aggregate reports decreased while individual reports increased. Aggregate reports are lower than and individual reports are higher than levels seen during the same time period last year.

#### Emergency Department Surveillance

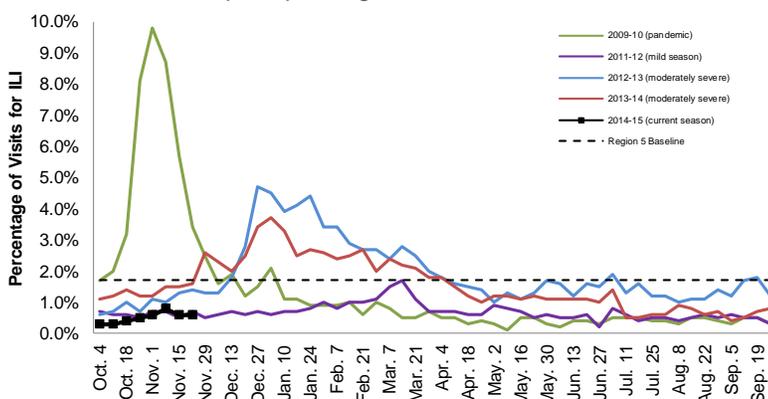
Compared to levels from the week prior, emergency department visits from constitutional complaints increased slightly while respiratory complaints decreased slightly. Levels of constitutional complaints were slightly higher and respiratory complaints were slightly lower when compared to the same time period last year.

- 4 constitutional alerts (1SW, 3C)
- 8 respiratory alerts (2SW, 5C, 1N)

**Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Statewide and Regions 2014-15 Flu Season**



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



#### Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) remained the same at 0.6% overall; this is below the regional baseline (1.7%). A total of 70 patient visits due to ILI were reported out of 11,216 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (33 total):

- C (16)
- N (4)
- SE (10)
- SW (3)

#### Become a Sentinel Provider!

As part of pandemic influenza surveillance, CDC and MDCH highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Stefanie DeVita at [devitas1@michigan.gov](mailto:devitas1@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, starting on October 1, 2014, for Clinton, Eaton, Genesee, and Ingham counties. Three influenza-related hospitalizations were reported (accumulated total since Oct. 1: 6 adults, 6 children).

The MDCH Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide. Five hospitals (SE,SW,C) reported. Results are listed in the table below. **Additional hospitals are welcome to join; please contact Susan Bohm at [bohms@michigan.gov](mailto:bohms@michigan.gov).**

Age Group	New Flu Hospitalizations Reported	Total 2014-15 Flu Hospitalizations to Date
0-4 years	0	1 (C)
5-17 years	1 (C)	3 (C)
18-49 years	1 (SE)	6 (4C,2SE)
50-64 years	1 (SE)	2 (SE)
65 years & older	4 (SE)	10 (SE)
<b>Total</b>	<b>7 (1C,6SE)</b>	<b>22 (8C,14SE)</b>

### Laboratory Surveillance

MDCH Bureau of Laboratories reported 8 new positive influenza results: 8 A/H3. A total of 46 positive influenza results have been reported for the 2014-15 season. Influenza results for the 2014-15 season are reported 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		
Influenza A/H3	2		30	4	36		
Influenza B			8	1	9		

In addition, 13 sentinel labs (5SE,2SW,5C,1N) reported influenza results. Seven labs (SE,SW,C) reported influenza A activity with notable increases observed in the SE region. Two labs (SE) reported low or slightly increasing influenza B activity. Three labs (SE,SW) reported low or slightly increasing Parainfluenza activity. Seven labs (SE,C,N) reported low or increasing RSV activity. Three labs (SE,SW) reported sporadic to low Adenovirus activity. Two labs (SE) reported sporadic hMPV activity. Most testing volumes are at low-to-moderate levels with a few sites (SE) increasing further in the high range.

### Influenza-associated Pediatric Mortality

No pediatric influenza-associated influenza mortalities have been reported to MDCH for the 2014-15 season.

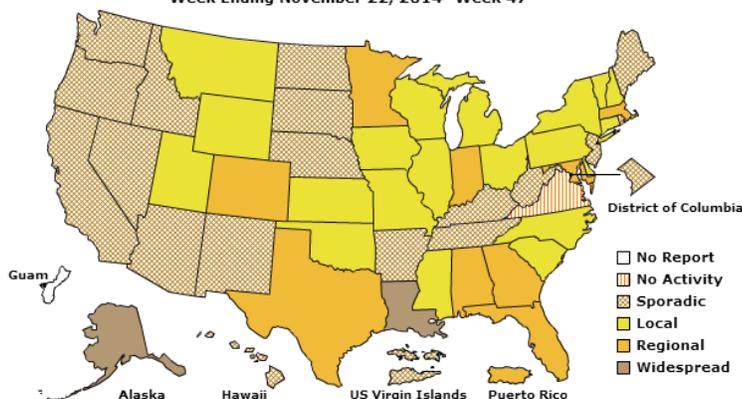
### Influenza Congregate Settings Outbreaks

One respiratory facility outbreak in an adult care facility (no testing performed) was reported. There have been a total of two respiratory facility outbreaks reported to MDCH for the 2014-15 season.

**National:** Influenza activity increased slightly in the United States, with 2.0% of outpatient visits due to influenza-like illness. Four influenza-associated pediatric deaths were reported. Additional information is in the weekly FluView reports available online at: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/).

**International:** Globally, influenza activity was low, with the exception of some Pacific Islands. Summary information is available online at [www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/).

A Weekly Influenza Surveillance Report Prepared by the Influenza Division  
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*  
Week Ending November 22, 2014- Week 47





## INFLUENZA ACTIVITY THROUGHOUT THE U.S.

- [Ottawa County health department requires flu vaccine for its workers](#)
- [Flu on the rise in Illinois](#)
- [Oklahoma health officials report new flu hospitalizations](#)

## NATIONAL INFLUENZA VACCINATION WEEK

National Influenza Vaccination Week (NIVW) is next week! NIVW highlights the importance of continuing influenza vaccination throughout the entire flu season. Check out CDC's [NIVW webpage](#) for a calendar of events, materials, a media toolkit, and more! Don't forget to [share your NIVW plans](#) with CDC and colleagues.

## INFLUENZA-RELATED JOURNAL ARTICLES

- [Influenza vaccine effectiveness in households with children during the 2012-2013 season: assessments of prior vaccination and serologic susceptibility](#)
  - Lower vaccine effectiveness (VE) observed in those vaccinated in both 2011-12 and 2012-13 compared with those vaccinated in 2012-13 only
  - Residual protection from vaccination in the prior season was indicated by both VE and serologic results
  - [How can we solve the enigma of influenza vaccine-induced protection?](#)
- [Potential antigenic explanation for atypical H1N1 infections among middle-aged adults during the 2013-14 influenza season](#)
- [Link between seasonal influenza and non-communicable diseases: strategies for improving vaccination coverage](#)
- [Twitter improves influenza forecasting](#)

## CLINICIANS LOOKING FOR FLU VACCINE

Are you a healthcare provider looking to purchase more influenza vaccine? The [Influenza Vaccine Availability Tracking System](#) (IVATS) can help clinicians find influenza vaccine. IVATS has information from wholesale vaccine distributors and manufacturers of U.S. licensed flu vaccine. Updates to IVATS are made throughout the flu season, so make sure to check back!

## AVIAN INFLUENZA A(H5N1)

- [Three Egyptians die of H5N1 virus](#)

## AVIAN INFLUENZA A(H7N9)

- [China reports new human case of H7N9 bird flu](#)
  - Since virus emerged in 2013, global total of [462 cases](#), 175 deaths
- [Notification of confirmed human case of avian influenza A\(H7N9\) in Guangdong](#)

## OTHER AVIAN INFLUENZA NEWS

- [Dutch discover bird flu in wild ducks, cull continues](#)
- [New Dutch cull ordered after bird flu confirmed as H5N8](#)
- [Two H5 outbreaks in India, 1 case in wild duck in Germany](#)
- [Low pathogenic avian influenza detected in South Africa](#)

## OTHER INFLUENZA-RELATED NEWS

- [CDC Seasonal Flu Doses Distributed](#): ~139.7 million doses in U.S. as of November 14, 2014
- [Italy's pharmaceutical watchdog ends alarm on flu drug](#)
  - CIDRAP: [Novartis flu vaccine on hold in Italy after deaths](#)
- [Flu shot discovery may change way vaccines are made](#)
- [Mutation increases risk of infections](#)

## CDC NETCONFERENCE ON FLU

CDC held a *Current Issues in Immunization NetConference* today. Topics included an update on flu activity and antiviral use policies in the U.S., how ACIP develops vaccine recommendations, and National Influenza Vaccination Week. Slides and a recast will be available [here](#).

## FLU WEBSITES

[www.michigan.gov/flu](http://www.michigan.gov/flu)  
[www.cdc.gov/flu](http://www.cdc.gov/flu)  
[www.flu.gov](http://www.flu.gov)  
<http://vaccine.healthmap.org/>

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For questions or to be added to the distribution list, please contact Stefanie DeVita at [devitas1@michigan.gov](mailto:devitas1@michigan.gov).

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