



MI Flu Focus

Influenza Surveillance Updates

Bureaus of Epidemiology and Laboratories



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Influenza Surveillance Report for the Week Ending December 3, 2016

MI's Influenza Activity Level:
Sporadic

Updates of Interest: In observance of NIVW last week, CDC released 2016-17 early season flu vaccination coverage estimates, and 2015-16 estimates of flu burden and the burden averted by vaccination. See FluBytes (pg.4) for details.

Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) increased to 1.5% overall, which is below the regional baseline of 1.9%. A total of 141 patient visits due to ILI were reported out of 9,557 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (30 total):

- C (10)
- N (1)
- SE (14)
- SW (5)

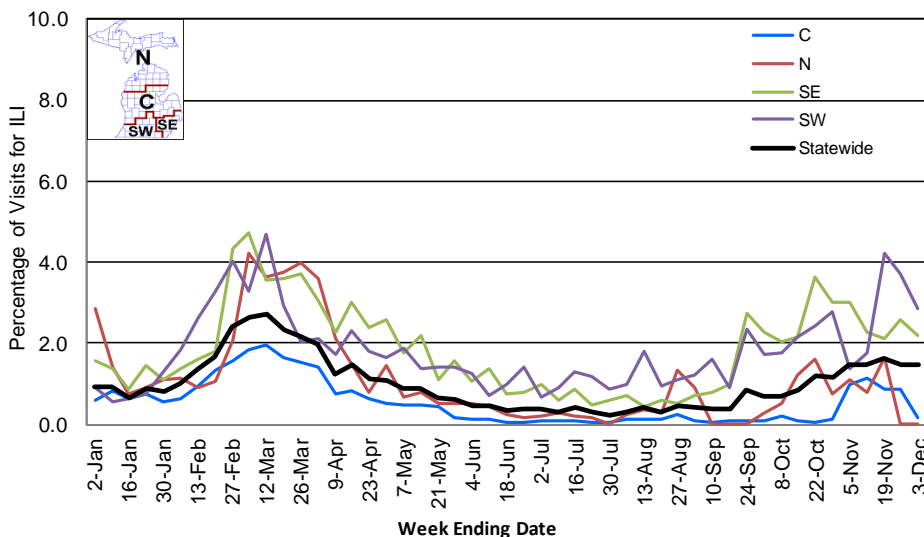
National Surveillance: In the United States, 1.8% of outpatient visits were due to influenza-like illness, which is below the national baseline of 2.2%.

Become a Sentinel Provider!

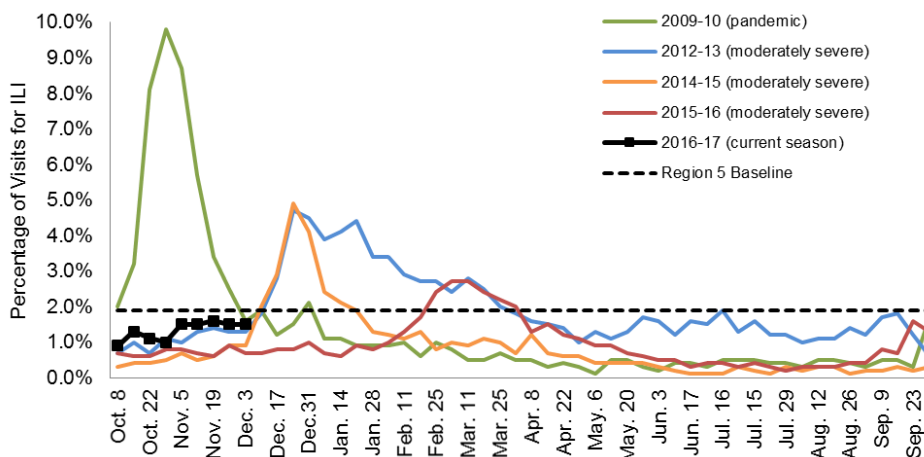
As part of pandemic influenza surveillance, CDC and MDHHS highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Jalyn Ingalls (IngallsJ@michigan.gov) for more information.

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 2015-16 - 2016-17 Flu Seasons



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



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 from Oct. 1, 2016 until Apr. 30, 2017, for Clinton, Eaton, Genesee, and Ingham counties. Since Oct. 1, there have been **1 pediatric and 4 adult** influenza-related hospitalizations reported in the catchment area for the 2016-2017 season. Note: Cumulative totals may change from week to week as cases are reviewed to determine if they meet the case definition.

The MDHHS Influenza Sentinel Hospital Network monitors influenza-related admissions reported voluntarily by hospitals statewide, with 9 facilities (N, C, SE, SW) reporting during this time period. Results for the 2016-17 flu season are listed in the table below. Additional hospitals are encouraged to join; please contact Seth Eckel at eckels1@michigan.gov.

Age Group	New Flu Hospitalizations Reported	Total 2016-17 Flu Hospitalizations Reported to Date
0-4 years	0	1 (N)
5-17 years	0	0
18-49 years	1 (SE)	1 (SE)
50-64 years	0	1 (N)
65 years & older	1 (SE)	8 (2N, 6SE)
Total	2 (SE)	11 (4N, 7SE)

Influenza-associated Pediatric Mortality

No new influenza-associated pediatric deaths were reported to MDHHS. In Michigan, there have been no influenza-associated pediatric deaths reported for the 2016-17 season. Nationally, no influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

Laboratory Surveillance

MDHHS Bureau of Laboratories reported 5 new positive influenza results (4 A/H3, 1 flu B) during this time period. A total of 32 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							
Influenza A/H3	7	1	18	3	29		0 / 8
Influenza B			2	1	3	1 (B/PHUKET/3073/2013-LIKE)	
A / unsubtypeable							
LAIV recovery							

In addition, 11 sentinel clinical labs (2SE, 2SW, 6C, 1N) reported influenza testing results. Three labs (SE, SW, C) reported sporadic influenza A activity. Two labs (SW, C) reported sporadic influenza B activity. Six labs (C, SE, SW) reported low or gradually increasing Parainfluenza activity. Four labs (SE, SW, C, N) reported low or increasing RSV activity. Three labs (SE, SW, C) reported sporadic or low Adenovirus activity. Four labs (SE, SW, C) reported sporadic hMPV activity. Testing volumes remain generally steady or gradually increasing, with most at low to moderate levels.

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					
Long-term Care / Assisted Living Facility			1	2	3
Healthcare Facility					
Daycare					
Correctional Facility					
Total			1	2	3

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 lower than levels seen during the same time period last year, while individual reports were higher.

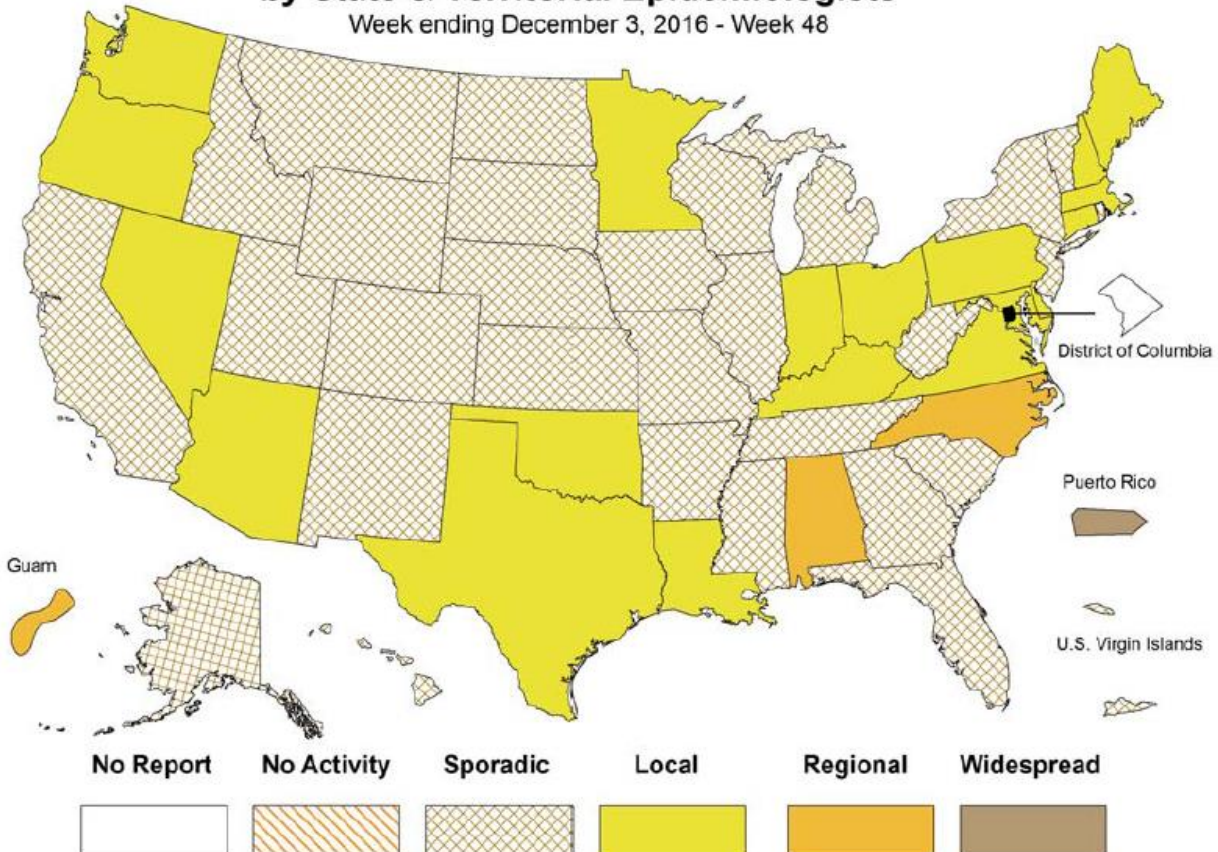
Emergency Department Surveillance

Compared to levels from the week prior, emergency department visits from constitutional and respiratory complaints were similar. Levels of constitutional complaints were similar to those recorded during the same time period last year, while respiratory complaints were higher.

- 10 constitutional alerts (3N, 7C)
- 12 respiratory alerts (2N, 6C, 4SW)
- Last MIFF report: 13 constitutional alerts (1 Statewide, 3N, 6C, 3SW), 9 respiratory alerts (2N, 3C, 1SE, 3SW)

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Week ending December 3, 2016 - Week 48





FLULAVAL QUADRIVALENT INFLUENZA VACCINE IN INFANTS

FluLaval® Quadrivalent is now licensed for use in all persons 6 months of age and older. The dosage for using FluLaval® Quadrivalent is **0.5 mL for all persons 6 months of age and older**. MDHHS has updated the following flu vaccine educational handouts (linked below and attached):

- [Seasonal Influenza Vaccines 2016-17](#) (presentation chart)
- [Who Needs Two Doses of 2016-17 Seasonal Influenza Vaccine?](#)
- [A Quick Look at Inactivated Influenza Vaccines](#)

Additionally, the Immunization Action Coalition has updated their [Influenza Vaccine Products](#) chart.

NATIONAL INFLUENZA VACCINATION WEEK

In observance of NIVW last week, CDC released a couple of important flu updates:

Early season 2016-17 flu vaccination coverage estimates data

- Estimated 39.8% of people aged 6 months and older reported being vaccinated
 - Children 6 months – 17 years: 37.3%
 - Adults 18 years and older: 40.6%
- Estimated 46.6% of pregnant women have received their flu vaccine
- Estimated 68.5% of healthcare providers have received their flu vaccine

2015-16 estimates of flu burden and the burden averted by flu vaccination:

- Estimated that flu vaccination prevented 5.1 million influenza illnesses, 2.5 million influenza-associated medical visits, and 71,000 influenza-associated hospitalizations
- If flu vaccinations were 5% higher, another 500,000 illnesses and 6,000 flu hospitalizations could have been prevented

FLU WEBSITES

www.michigan.gov/flu

www.cdc.gov/flu

www.flu.gov

<http://vaccine.healthmap.org/>

CHILD VACCINATION ACROSS AMERICA: INTERACTIVE INFOGRAPHIC

The American Academy of Pediatrics recently released an [interactive infographic](#) that highlights immunization rates for DTaP, MMWR, varicella, HPV, and influenza vaccines, as well as the combined 7-vaccine series for ages 19-35 months for each state in the U.S.

NEW EDUCATIONAL MATERIALS PROMOTING FLU VACCINATION

- NFID [Infographic](#): Flu in Adults age 65 years and Older: What are the Risks?
- Families Fighting Flu [PSA](#): Play it Safe
- Influenza VIS now available in:
 - [Chuukese](#)
 - [Ilokano](#)
 - [Marshallese](#)

INFLUENZA-RELATED JOURNAL ARTICLES

- [Assessment of public health and economic impact of intranasal live-attenuated influenza vaccination of children in France using a dynamic transmission model](#)
 - LAIV prevented 865,000 influenza cases per year
- [Highly pathogenic avian influenza A\(H5N8\) outbreaks: Protection and management of exposed people in Europe, 2014/15 and 2016](#)
- [Monitoring the fitness of antiviral-resistant influenza strains during an epidemic: A mathematical modelling study](#)

OTHER INFLUENZA-RELATED NEWS

- [Confirmed flu cases reach 512 statewide – Pennsylvania](#)
- [Influenza vaccination rates remain low as flu activity continues to rise](#)
- [School flu jabs could prevent 2.3m GP visits a year by baby boomers](#)
- [Puerto Rico declares influenza epidemic](#)

AVIAN INFLUENZA INTERNATIONAL NEWS

- [Europe weigh H5N8 threat as Russia reports new outbreak](#)
- [H5N8 outbreaks expand to Serbia](#)

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.

MDHHS Contributors

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