**MI Flu Focus**

**Influenza Surveillance Updates**

Bureaus of Epidemiology and Laboratories, and Division of Immunization/Bureau of Family Health Services

Editor: Jalyn Ingalls, MA  
IngallsJ@michigan.gov

August 15, 2017  
Vol. 14; No. 38

Summer Edition: Influenza Surveillance Report for the Week Ending August 5, 2017

---

**Sentinel Provider Surveillance**

The proportion of visits due to influenza-like illness (ILI) decreased to 0.4% overall, which is below the regional baseline of 1.9%. A total of 22 patient visits due to ILI were reported out of 5,736 office visits. Please note: These rates may change as additional reports are received.

**Number of Reports by Region**

(26 total):

- C (8)
- N (2)
- SE (12)
- SW (4)

---

**National Surveillance:** In the United States, 0.7% 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.
### Laboratory Surveillance

MDHHS Bureau of Laboratories reported no new positive influenza results during this time period. A total of 664 positive influenza results have been reported for the 2016-17 season. Influenza results for the 2016-17 season are in the table below.

<table>
<thead>
<tr>
<th>Respiratory Virus</th>
<th># Positive Respiratory Virus Results by Region</th>
<th>Total</th>
<th># Specimens Antigenically Characterized</th>
<th># Tested for Antiviral Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C</td>
<td>N</td>
<td>SE</td>
<td>SW</td>
</tr>
<tr>
<td>2009 A/H1N1pdm</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Influenza A/H3</td>
<td>120</td>
<td>26</td>
<td>122</td>
<td>184</td>
</tr>
<tr>
<td>Influenza B</td>
<td>66</td>
<td>11</td>
<td>49</td>
<td>76</td>
</tr>
<tr>
<td>A / subtypeable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, 10 sentinel clinical labs (2SE, 1SW, 6C, 1N) reported influenza testing results. One lab (C) reported sporadic influenza A activity. One lab (C) reported sporadic influenza B activity. Three (3) labs (SE, C) reported sporadic to low Parainfluenza activity. No labs reported RSV activity. Two labs (SE, C) reported sporadic to low Adenovirus activity. No labs reported hMPV activity. Overall testing volumes remain in the low to very low range.

### Congregate Setting Outbreaks of Viral Respiratory Illness

There was one (SE) new respiratory facility outbreak reported to MDHHS during this time period. Respiratory facility outbreaks for the 2016-2017 season are listed in the table below.

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>C</th>
<th>N</th>
<th>SE</th>
<th>SW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12 School</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Long-term Care / Assisted Living Facility</td>
<td>31</td>
<td>1</td>
<td>29</td>
<td>43</td>
<td>104</td>
</tr>
<tr>
<td>Healthcare Facility</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Daycare</td>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Homeless Shelter</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>37</td>
<td>6</td>
<td>35</td>
<td>49</td>
<td>127</td>
</tr>
</tbody>
</table>

### 2016-2017 Flu Season Surveillance Systems Summary Report

#### Hospital Surveillance

The Influenza Hospitalization Surveillance Project (IHSP) surveillance has concluded for the 2016-2017 flu season. During this season, 635 flu-related hospitalizations were reported for the catchment area (Eaton, Clinton, Ingham and Genesee). This is the highest single season total since IHSP surveillance was initiated after the influenza pandemic of 2009.

The MDHHS Influenza Sentinel Hospital Network monitors influenza-related admissions reported voluntarily by hospitals statewide. Surveillance peaked for the 2016-2017 season during the week ending February 25, with 156 flu-related hospitalizations reported by 12 facilities across the state. Additional hospitals are encouraged to join for the 2017-2018 season; please contact Seth Eckel at eckels1@michigan.gov.

#### Influenza-associated Pediatric Mortality

No new pediatric deaths were reported to MDHHS for the week ending August 5, 2017. A total of 5 influenza-associated pediatric deaths in Michigan have been reported thus far for the 2016-17 season. Four of the children tested positive for Influenza B, and one tested positive for Influenza A/H3. Nationally, 104 influenza-associated pediatric deaths have been reported thus far for the 2016-17 flu season.

#### Michigan Disease Surveillance System

MDSS influenza data is comprised of both aggregate and individual reports. For the 2016-2017 season, aggregate counts peaked during Week 9 with 7,339 reports. Individual reports peaked during Week 9 with 2,790 cases having been reported to the MDSS.

#### Emergency Department Surveillance

In monitoring chief complaint data for the 2016-2017 flu season, constitutional complaints peaked during Week 8 with 14 county level and 1 statewide alert being issued. Respiratory complaints peaked during Week 6, with 7 county level alerts having been issued.
Novel Influenza A Viruses

Due to cases of human H3N2v and other variant influenza viruses recently being reported in a nearby state, MDHHS has added a section to MIFF to share the most recent updates regarding H3N2v activity in the United States. As of August 5th, there have been no H3N2v cases reported to MDHHS for 2017.

**Variant (Swine) Influenza Guidance for Healthcare & Public Health Providers**

As Michigan fairs are now underway, clinicians are reminded to ask patients being evaluated for influenza-like illness if they have had any exposure to swine, such as attendance at county fairs or livestock exhibits. MDHHS recommends that providers with a suspect patients for variant influenza follow these guidelines:

1. Clinicians treating patients with an influenza-like illness (fever ≥ 100°F plus a cough and or/a sore throat) should ask about recent exposure to swine or attendance at fairs.
2. Collection of upper respiratory specimens for any influenza-like illness is strongly advised.
3. Respiratory specimens should be collected as soon as possible after illness onset and submitted to MDHHS.
4. For more information on how to collect and submit specimens to the MDHHS Bureau of Laboratories, including the required test requisition form, refer to:
   [http://www.michigan.gov/mdhhs/0,5885,7-339-71551_2945-213906-00.html](http://www.michigan.gov/mdhhs/0,5885,7-339-71551_2945-213906--00.html).
5. Early initiation of antiviral treatment (oseltamivir) is most effective in treating variant influenza infection.
6. Infection control should follow standard contact and droplet precautions for ill persons.
7. For more details, see [Variant (Swine) Influenza Guidance for Healthcare and Public Health Providers](http://www.michigan.gov/mdhhs/0,5885,7-339-71551_2945-213906--00.html) (MDHHS Guidance).

To report suspect cases and arrange testing, contact your local health department immediately or contact MDHHS at 517-335-8165 or after hours at 517-335-9030.

**Current Variant Influenza Activity in the United States**

Three additional human infections with novel influenza A viruses were detected in Ohio during the week ending August 5, 2017. All three patients were infected with influenza A (H3N2) variant viruses, and all were children younger than 18 years of age who reported direct exposure to swine. Additionally, there was one reported human infection with H1N2v in Ohio. This is the first reported case of H1N2v in 2017. These most recent human infections are being publicly reported in this week’s FluView report (Week 31: July 30- August 5, 2017).

<table>
<thead>
<tr>
<th>States reporting H3N2v Cases</th>
<th>Cases in 2015</th>
<th>Cases in 2016</th>
<th>Cases in 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>1</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>6</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
<td><strong>18</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Table 1. Case Counts of Detected Human Infections with H3N2v [https://www.cdc.gov/flu/swineflu/h3n2v-case-count.htm](https://www.cdc.gov/flu/swineflu/h3n2v-case-count.htm)

**CDC Recommendations**

CDC has long-standing guidance for people attending agricultural fairs or other settings where swine might be present, including a recommendation that people who are at high risk of serious flu complications avoid pigs and swine barns. For more information about H3N2v, visit: [https://www.cdc.gov/flu/swineflu/h3n2v-basics.htm](https://www.cdc.gov/flu/swineflu/h3n2v-basics.htm). Similarly, a Morbidity and Mortality Week Report was issued in October 2016 detailing the outbreak of influenza A(H3N2) variant virus infections among persons in Michigan and Ohio.
SAVE THE DATE FOR THE 6TH ANNUAL PEDIATRIC AND ADULT INFLUENZA WEBINAR: 2017-2018 FLU SEASON

MDHHS and MSU are hosting the 6th annual Pediatric and Adult Influenza Webinar: 2017-2018 Flu Season on August 30, 2017 from 12:00-1:00pm (ET). We will be presenting everything you need to know to get ready for the upcoming flu season, including vaccine recommendations, antiviral education, and ways to improve influenza vaccination rates. There is 1.0 CME credit available for physicians and nurses, and 1.0 PCE credit available for pharmacists. Registration [http://events.anr.msu.edu/immunization](http://events.anr.msu.edu/immunization) is now open. Registration will remain open through August 29, or until we reach capacity. Please mark your calendars for this important event!

CDC WEBINAR ON POSITIVE CONVERSATIONS WITH ADULTS

CDC is hosting a webinar titled, “Peer to Peer: Proven Practices for Increasing Vaccination Rates in Adults and Pregnant Women” on August 24 at 12:30pm (ET). Panelists will share their tips for having positive vaccine conversations with adults. The webinar is free, but you must register in advance.

CDC WEBINAR ON POSITIVE CONVERSATIONS WITH PARENTS

CDC is hosting a webinar titled, “Getting Parents to Yes! Vaccine Conversations that Work for Providers and Parents” on August 25 at 12:00pm (ET). Pediatrician Dr. Sharon Humiston will moderate a panel with Dr. Nathan Boonstra and Dr. Margot Savoy, who will share suggestions for having positive conversations with parents about vaccines. The webinar is free, but you must register in advance.

VICNETWORK WEBINAR: COMMUNICATION STRATEGIES AND RECOMMENDATIONS FOR THE UPCOMING 2017-18 FLU SEASON

The VICNetwork is hosting a webinar on August 30, 2017 from 2:00-3:00pm (ET) titled, “Communication Strategies and Recommendations for the Upcoming 2017-18 Flu Season.” Speakers will provide important information you will want to know about flu vaccine, and updates on the communication plans by the Centers for Disease Control and Prevention. The webinar is free, but you must register in advance.

AAP NEWS: HOW TO CODE FOR INFLUENZA VACCINE IN THE 2017-18 SEASON

The American Academy of Pediatrics’ AAP News published an article, How to Code for Influenza Vaccine in the 2017-18 Season. The information in this article could be useful for healthcare professionals who will be administering flu vaccines during the 2017-18 flu season.

INFLUENZA-RELATED JOURNAL ARTICLES

- Influenza Vaccine Effectiveness in the United States during the 2015-16 Season (abstract)
- CIDRAP: Change in inhaled flu vaccine did not help in 2015-16
- Estimation of sickness absenteeism among Italian healthcare workers during seasonal influenza pandemics
- Higher rate of absenteeism among unvaccinated workers than vaccinated workers
- The role of human immunity and social behavior in shaping influenza evolution
- The household influenza vaccine effectiveness (HIVE) study: Lack of antibody response and protection following receipt of 2014-2015 influenza vaccine

OTHER INFLUENZA-RELATED NEWS

- Flu pandemic in Hong Kong, 320 dead
- First H1N2v swine flu in 2017 found in Ohio
- Influenza vaccine protective in elderly patients
- How can pharmacists improve flu vaccination rates in patients with COPD?
- Myanmar swine flu outbreak kills 10 as government rushed to stop spread

AVIAN INFLUENZA INTERNATIONAL NEWS

- H9N2 avian influenza case reported in Chinese baby
- Southern Africa pursues coordinated response to avian influenza outbreak
- Fears of mutant flu strain in HK spark concern 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/](http://vaccine.healthmap.org/)

Archived editions of FluBytes are available [here](http://vaccine.healthmap.org/) and MI FluFocus archives are [here](http://vaccine.healthmap.org/).

For questions or to be added to the distribution list, please contact Jalyn Ingalls at [ingallsj@michigan.gov](mailto:ingallsj@michigan.gov).

MDHHS Contributors

Bureau of Epidemiology – S. Bidol, MPH, S. Eckel, MPH
Bureau of Family Health Services, Division of Immunization – J. Ingalls, MA
Bureau of Labs – B. Robeson, MT, V. Vavricka, MS