MI Flu Focus
Influenza Surveillance Updates
Bureaus of Epidemiology and Laboratories

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Influenza Surveillance Report for the Week Ending October 28, 2017

MI’s Influenza Activity Level:
Sporadic

Updates of Interest: MI confirms its 2nd variant influenza infection of 2017, a close contact to the H3N2v case reported in October. While exposure to swine was reported for the patient, that exposure occurred more than a week preceding illness onset, which is outside of the typical incubation period. It is possible that limited human-to-human transmission occurred.

Sentinel Provider Surveillance
The proportion of visits due to influenza-like illness (ILI) decreased to 1.5% overall, which is below the regional baseline of 1.8%. A total of 165 patient visits due to ILI were reported out of 11,272 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region
(30 total):
- C (8)
- N (2)
- SE (13)
- SW (7)

National Surveillance: In the United States, 1.5% 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.

Influenza-associated Pediatric Mortality
No pediatric deaths have been reported to MDHHS during the 2017-2018 flu season. Nationally, 1 influenza-associated pediatric death has been reported thus far for the 2017-2018 flu season.
The CDC Influenza Hospitalization Surveillance Project provides population-based rates of hospitalization due to severe influenza-related illness through active surveillance and chart review of lab-confirmed cases from Oct. 1, 2017 until Apr. 30, 2018, for Clinton, Eaton, Ingham, Genesee, and Washtenaw counties. Since Oct. 1, there has been 1 pediatric and 1 adult influenza-related hospitalizations reported in the catchment area for the 2017-2018 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 7 facilities (N, C, SE & SW) reporting during this time period. Results for the 2017-18 flu season are listed in the table below. Additional hospitals are encouraged to join; please contact Seth Eckel at eckels1@michigan.gov.

### Age Group

<table>
<thead>
<tr>
<th>New Flu Hospitalizations Reported</th>
<th>Total 2017-18 Flu Hospitalizations Reported to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>0</td>
</tr>
<tr>
<td>5-17 years</td>
<td>0</td>
</tr>
<tr>
<td>18-49 years</td>
<td>0</td>
</tr>
<tr>
<td>50-64 years</td>
<td>0</td>
</tr>
<tr>
<td>65 years &amp; older</td>
<td>2 (N)</td>
</tr>
<tr>
<td>Total</td>
<td>2 (N)</td>
</tr>
</tbody>
</table>

### Laboratory Surveillance

MDHHS Bureau of Laboratories reported 7 new positive influenza results (6 A/H3 and 1 flu B) during this time period. A total of 30 positive influenza results have been reported for the 2017-18 season. Influenza results for the 2017-18 season are in the table below.

<table>
<thead>
<tr>
<th>Respiratory Virus</th>
<th>Total</th>
<th># Specimens Antigenically Characterized</th>
<th># Tested for Antiviral Resistance</th>
<th># Resistant / Total # Tested</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza A/H3</td>
<td>7</td>
<td>2</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Influenza B</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A / unsubtypeable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAIV recovery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, 10 sentinel clinical labs (2SE, 2SW, 6C, 0N) reported influenza testing results. Two (2) labs (SE, C) reported sporadic or very low influenza A activity. One (1) lab (C) reported sporadic influenza B activity. Four (4) labs (SE, SW, C) reported low or slightly increased Parainfluenza activity. Three (3) labs (SE, C) reported sporadic RSV activity. Three (3) labs (SE, SW, C) reported sporadic or low Adenovirus activity. One lab (SE) reported sporadic hMPV activity. Testing volumes are generally in the low range although multiple sites are slowly trending upwards.

### 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 2017-2018 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></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term Care / Assisted Living Facility</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Healthcare Facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daycare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeless Shelter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
WEBINAR: WHAT’S NEW FOR THE 2017-2018 FLU SEASON: RECOMMENDATIONS FOR CHILDREN

During this webinar, subject matter experts from the American Academy of Pediatrics (AAP) and the Centers for Disease Control and Prevention (CDC) will highlight critical information about this year’s flu season, and discuss strategies primary care providers and medical subspecialists can use to improve flu prevention and control in children. The webinar is scheduled for Tuesday, November 7, from 2:00-3:00pm (ET). Webinar access information is available online. Advanced registration is not required.

OCTOBER ACIP RECAP WEBINAR

The National Foundation for Infectious Diseases (NFID) is hosting a webinar recapping important updates from the October ACIP meeting. The webinar is scheduled for Thursday, November 9, at 12:00pm (ET). Dr. William Schaffner and Dr. Amanda Cohn will discuss updates from the October ACIP meeting, including current vaccination recommendations for adults, adolescents, and children. The webinar is free, but you must register in advance.

CDC BLOG-A-THON

The CDC is hosting a Blog-a-thon focused on healthcare providers, and encouraging them to give a strong flu vaccine recommendation to patients. The Blog-a-thon is scheduled for the second week of November (6-11). To participate in the blog-a-thon, write your own post on the importance of flu vaccination and the role that healthcare providers play. Copy the blog-a-thon badge to include with your post, and share your blog link on social media.

MAKE A STRONG FLU VACCINE RECOMMENDATION: A RESOURCE FOR HEALTH CARE PROFESSIONALS

The CDC has released a resource encouraging health care professionals to make a strong recommendation for flu vaccine to all patients. The document discusses the SHARE method for talking with patients about vaccines: S-Share, H-Highlight, A-Address, R-Remind, E-Explain. To read more about each step of the SHARE method, please review this resource and share with all health care professionals.

INFLUENZA-RELATED JOURNAL ARTICLES

- Study: Azithromycin overprescribed for kids’ pneumonia
- A cell-type-specific defect in assembly of influenza A virus particles in primary human macrophages
- Mortality due to influenza in the United States- An annualized regression approach using multiple-cause mortality data

OTHER INFLUENZA-RELATED NEWS

- CDC reports 3 variant flu cases, with possible human-to-human spread in 1
- Vaxart announces positive topline results for its oral tablet vaccine in phase 2 influenza challenge study
- Nebraska reports first H3N2 ‘swine’ flu case
- Four in 10 healthcare personnel work while sick
- Human vaccines project creates research program to develop universal influenza vaccines
- How can we better prepare for influenza epidemics?
- 4 in 1 flu shot might mean lifelong protection against influenza
- Influenza surveillance with rapid test network a ‘win-win’ situation
- Understanding difference between pandemics, epidemics critical to preparedness efforts
- Influenza vaccine effectiveness during the 2015-16 Season
- Influenza antivirals underused in high-risk outpatients
- Disparities in influenza outcomes

AVIAN INFLUENZA INTERNATIONAL NEWS

- High wild-bird death rates detailed in Dutch H5N8 outbreaks

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 Jalyn Ingalls at ingallsj@michigan.gov.

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