Michigan Flu Focus
Weekly Influenza Surveillance Report

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Week Ending March 21, 2020 | WEEK 12

Michigan Influenza Activity

| No Activity | Sporadic | Local | Regional | Widespread |

*Clicking on the current activity level will direct you to the CDC webpage defining each activity level for the geographic spread of influenza

Updates of Interest

Nationally, laboratory-confirmed influenza activity has decreased, but influenza-like illness activity levels have increased and remains elevated. Note: Due to the COVID-19 pandemic in the United States, influenza surveillance data may have been impacted. Please visit the following link for more details.

https://www.cdc.gov/flu/weekly/

Influenza-associated Pediatric Mortality

Nationally, 155 influenza-associated pediatric deaths have been reported thus far for the 2019-2020 flu season. Four (4) pediatric influenza (B) deaths have been confirmed by MDHHS during this season.

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending March 21, 2020 - Week 12

*Note: Data may have been impacted due to the COVID-19 pandemic in the United States.
U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

Michigan participates in ILINet, a collaborative effort between the CDC, state and local health departments, and volunteer sentinel clinicians as part of Michigan’s influenza surveillance. ILINet provides data on the total number outpatient visits to health care providers seen for any reason and the number of those patients with influenza-like illness (ILI). For this system, ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat without a known cause other than influenza.

Number of Reports and ILI % by Region in Michigan during this time period:

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of Reporters Total (24)</th>
<th>ILI %</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>8</td>
<td>3.1</td>
</tr>
<tr>
<td>N</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td>SE</td>
<td>8</td>
<td>6.1</td>
</tr>
<tr>
<td>SW</td>
<td>3</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Data is provisional and may change as additional reports are received.

Michigan ILI Activity 3.5%

(Last week: 3.7%)
Regional Baseline*: 1.9%

A total of 149 patient visits due to ILI were reported out of 4,301 office visits during this period.

*Regional baseline is determined by calculating the mean percentage of patient visits due to ILI during non-influenza weeks for the previous three seasons and adding two standard deviations.

National Surveillance

In the United States, 6.4% of outpatient visits were due to ILI. (Last week: 5.6%)

This is above the national baseline of 2.4%

Become an ILINET provider!
Contact Shelly Doebler at DoeblerM@michigan.gov
**Influenza Hospitalization Surveillance Project (IHSP)**

The CDC’s Influenza Hospitalization Surveillance Network (FluSurv-NET) provides population-based rates of laboratory-confirmed influenza-associated hospitalizations from October 1st through April 30th each year. Michigan participates as an IHSP state in FluSurv-NET for Clinton, Eaton, Genesee, Ingham, and Washtenaw Counties.

There were 34 (4 pediatric, 30 adult) influenza-associated hospitalizations reported to MDHHS for the IHSP during this time period. Since October 1st, 954 (148 pediatric, 806 adult) influenza-related hospitalizations were reported in the catchment area for the 2019-2020 season.

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**Join the Influenza Sentinel Hospital Network (ISHN)!**

**What is it?** ISHN is a group of hospitals in Michigan that voluntarily report weekly aggregate counts of influenza positive inpatients to assist MDHHS with statewide flu surveillance.

**How it works:** As a participating hospital in the ISHN, you would complete a brief Survey Monkey every week containing:

- Number of hospitalizations with a positive influenza test by age group during that time period
- The total number of hospitalizations due to any condition during that time period (if available)

The data you provide is aggregated by region and can assist providers and public health in recognizing changes in the age or geographic distribution of flu in this population.

If your facility is interested in participating or would like more details, please contact Sue Kim (KimS2@michigan.gov).
Laboratory (Virologic) Surveillance

Week Ending Mar 21, 2020

There were 0 new positive influenza results (0C, 0N, 0SE, 0SW) reported by the MDHHS Bureau of Laboratories (BOL) during this time period.

# of Positive Respiratory Virus Results by Region

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>N</th>
<th>SE</th>
<th>SW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1N1</td>
<td>124</td>
<td>26</td>
<td>43</td>
<td>106</td>
<td>299</td>
</tr>
<tr>
<td>H3N2</td>
<td>5</td>
<td>0</td>
<td>12</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>Infl B</td>
<td>109</td>
<td>7</td>
<td>64</td>
<td>122</td>
<td>302</td>
</tr>
<tr>
<td>Total</td>
<td>238</td>
<td>33</td>
<td>119</td>
<td>238</td>
<td>628</td>
</tr>
</tbody>
</table>

Data is provisional and may change as additional results are reported.

Influenza Positive Test Results, 2019-2020

Note: Flu B subtyping will be reported based on MDHHS BOL testing runs and will be backtracked into this graph
Latest MDHHS BOL Flu B lineage determination run: February 28, 2020

Michigan Sentinel Clinical Lab Network Respiratory Virus Data

Eleven (11) sentinel clinical labs (2SE, 2SW, 6C, 1N) reported during this week

SE Region

- Influenza A: moderate; marked decreases
- Influenza B: slightly elevated; decreasing
- Parainfluenza: slightly elevated
- RSV: elevated
- Adenovirus: elevated
- hMPV: elevated

Central Region

- Influenza A: slightly elevated; decreasing
- Influenza B: low to slightly elevated; decreasing
- Parainfluenza: sporadic – low
- RSV: sporadic – low
- Adenovirus: sporadic – low
- hMPV: low

SW Region

- Influenza A: moderate; marked decreases
- Influenza B: low – slightly elevated; decreasing
- Parainfluenza: sporadic – low
- RSV: low – slightly elevated
- Adenovirus: low
- hMPV: elevated; some increases

North Region

- Influenza A: slightly elevated; decreasing
- Influenza B: low; decreasing
- Parainfluenza: sporadic – low
- RSV: low
- Adenovirus: low
- hMPV: elevated

There were 0 new positive influenza results (0C, 0N, 0SE, 0SW) reported by the MDHHS Bureau of Laboratories (BOL) during this time period.
There were 8 new respiratory outbreaks (2C, 2N, 1SE, 3SW) reported to MDHHS during this time period. Respiratory outbreaks for the 2019-2020 season are listed in the table below.

### # of Congregate Setting Outbreaks by Region

<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>Schools: K-12 &amp; College</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>Long-term Care / Assisted Living Facility</td>
<td>27</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>75</td>
</tr>
<tr>
<td>Healthcare Facility</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Daycare</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Homeless Shelter</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Correctional Facility</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>33</td>
<td>18</td>
<td>22</td>
<td>36</td>
<td>109</td>
</tr>
</tbody>
</table>

### Did you know?

Congregate setting outbreaks of viral respiratory illnesses are **required** to be reported to your local health department? See:

- Influenza Guidance for Healthcare Providers
- Guideline for influenza and Respiratory Virus Outbreaks in Long-Term Care Facilities
Influenza Vaccine Updates

**WHO Recommendations for 2020-2021 Influenza Vaccine**

The [World Health Organization (WHO)](https://www.who.int) has announced the recommended composition of influenza virus vaccines for use in the 2020-2021 Northern Hemisphere influenza season.

The WHO has made different recommendations for the vaccine virus strains to be included in egg-based compared to cell- or recombinant-based vaccines.

### 2020-2021 Flu Vaccine Components Include:

**Egg-based Vaccines**
- an A/Guangdong-Maonan/SWL1536/2019 (H1N1)pdm09-like virus;
- an A/Hong Kong/2671/2019 (H3N2)-like virus;
- a B/Washington/02/2019 (B/Victoria lineage)-like virus; and
- *a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

**Cell- or recombinant-based Vaccines**
- an A/Hawaii/70/2019 (H1N1)pdm09-like virus;
- an A/Hong Kong/45/2019 (H3N2)-like virus;
- a B/Washington/02/2019 (B/Victoria lineage)-like virus; and
- *a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

*The B/Phuket (B/Yamagata lineage) virus will not be included in the trivalent vaccines.

The influenza A/H1N1, A/H3N2, and B/Victoria components all are different than the virus strains included in the current Northern Hemisphere influenza vaccine for the 2019-2020 flu season.

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**Influenza News Blast**

- **NEW STUDY: Improving Influenza Vaccination in Children with Asthma**
- **NEW STUDY: Influenza VE in Children**
- **Global Flu Surveillance Update**
- **Relative Effectiveness of Flu Vaccines in Seniors**
- **FDA Approves Quadrivalent Adjuvanted Flu Vaccine for Seniors**
- **NEW Study: Influenza Vaccine During Pregnancy and 6-month Infant Development**
- **Immunization Schedules, 2020**

**Additional Resources**

- [MDHHS Influenza Webpage](#)
- [MDHHS Bureau of Laboratories (BOL) Webpage and Test Request Forms](#)
- [CDC FluView Weekly Report](#)
- [NFID Flu and Chronic Health Conditions Toolkit](#)
- [CDC Healthcare Professionals Flu Toolkit](#)
- [Immunization Action Coalition: Ask the Experts- Flu](#)
- [MDHHS- Influenza Vaccine F.A.Q. View Michigan Flu Focus Report archives here.](#)

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**Influenza Burden Estimates**

The Centers for Disease Control and Prevention (CDC) have once again begun to release [preliminary burden estimates](https://www.cdc.gov/flu/about/burden/index.htm) for the 2019-2020 influenza season.

Between October 1, 2019 through March 21, 2020 it is estimated that there have been:

- 38 million – 54 million flu illnesses
- 18 million – 26 million flu medical visits
- 400,000 – 730,000 flu hospitalizations
- 24,000 – 62,000 flu deaths

Additionally, there have been 155 confirmed flu-associated pediatric deaths for the 2019-2020 flu season.

Influenza activity continues to be elevated throughout the country. Check out [CDC’s Weekly Influenza Surveillance Report](https://www.cdc.gov/flu/weekly/) for more information.

Remember: It is not too late to get vaccinated! Get your flu shot!