RESPIRATORY VIRUS SURVEILLANCE REPORT
Week 4, Ending January 30, 2021
INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

STATE OF WISCONSIN

REGION V OF US
(WI, MN, IL, MI, OH, IN)

UNITED STATES

ILI: BELOW BASELINE
ILI: HIGH LEVELS
ILI: MODERATE LEVELS
ILI: INSUFFICIENT DATA

AT-A-GLANCE:

Predominant Viruses of the Week:
Rhino/enterovirus and SARS-CoV-2 (virus causing COVID-19)

Current Alerts:
Due to the unusually low number of influenza cases nationwide, a preliminary influenza vaccine efficacy estimate could not be determined for the 2020-21 season.

Additional data on SARS-CoV-2 (the virus causing COVID-19) trends in Wisconsin can be found at:
https://www.dhs.wisconsin.gov/covid-19/data.htm

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

Week 4, 2021 October 1, 2020 to present

Wisconsin 0 0
Nationwide 0 1

For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/
INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

Influenza and Pneumonia Deaths, Wisconsin

Influenza- and pneumonia-associated deaths by influenza season year and week, Wisconsin

<table>
<thead>
<tr>
<th>Influenza season week</th>
<th>Influenza-associated deaths (I)</th>
<th>Pneumonia-associated deaths (P)</th>
<th>Percent I+P of all deaths</th>
<th>Baseline I+P of all deaths</th>
<th>Threshold I+P of all deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>153</td>
<td>12.1%</td>
<td>5.8%</td>
<td>6.6%</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>154</td>
<td>12.2%</td>
<td>5.9%</td>
<td>6.7%</td>
</tr>
<tr>
<td>4 Preliminary Data</td>
<td>0</td>
<td>98</td>
<td>10.4%</td>
<td>5.9%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Seasonal total</td>
<td>1</td>
<td>2977</td>
<td>11.5%</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Data source: DPH, Office of Health Informatics
Wisconsin positive influenza results and subtypes by PCR

Cumulative number of positive influenza PCR tests by subtype
October 1, 2020 to present

<table>
<thead>
<tr>
<th></th>
<th>A (2009 H1N1)</th>
<th>Influenza A: A (H3N2)</th>
<th>34% A (Unknown)</th>
<th>B (Victoria)</th>
<th>Influenza B: B (Yamagata)</th>
<th>66% B (Unknown)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total positive (n)</td>
<td>0</td>
<td>2</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>38</td>
</tr>
<tr>
<td>% of total positive</td>
<td>0%</td>
<td>5%</td>
<td>29%</td>
<td>0%</td>
<td>0%</td>
<td>66%</td>
<td>100%</td>
</tr>
</tbody>
</table>
WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR

Week 4: Ending on January 30, 2021

<table>
<thead>
<tr>
<th>Respiratory virus</th>
<th>Tested</th>
<th>Positive (n)</th>
<th>Positive (%)</th>
<th>Influenza A</th>
<th>Influenza B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H3N2</td>
<td>2009</td>
</tr>
<tr>
<td>Influenza</td>
<td>3728</td>
<td>1</td>
<td>0%</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Parainfluenza</td>
<td>323</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Coronavirus (seasonal)</td>
<td>112</td>
<td>2</td>
<td>0.1%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RSV</td>
<td>825</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Human metapneumovirus</td>
<td>327</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rhino-enterovirus</td>
<td>346</td>
<td>27</td>
<td>7.8%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Adenovirus</td>
<td>112</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
WISCONSIN STATE SUMMARY

ILI activity trend analysis by influenza season, Wisconsin

Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System
October 1, 2020 to present

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Total reported (n)</th>
<th>Influenza subtype</th>
<th>Admitted to ICU</th>
<th>Required mechanical ventilation</th>
<th>Pregnant</th>
<th>Postpartum (≤6 weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>0</td>
<td>A (2009 H1N1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1-4</td>
<td>0</td>
<td>A (H3N2)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5-17</td>
<td>0</td>
<td>A (Unknown)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18-49</td>
<td>2</td>
<td></td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50-64</td>
<td>4</td>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>65+</td>
<td>5</td>
<td></td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td></td>
<td>3</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin
ILI ACTIVITY TREND ANALYSIS

Wisconsin

Northeastern Region

Northern Region
ILI ACTIVITY TREND ANALYSIS

Southeastern Region

Southern Region

Western Region
Influenza vaccine composition 2020-2021:

**Trivalent (three-component) egg-based vaccines** are recommended to contain:
- A/Guangdong-Maonan/SWL1536/2019 (H1N1)pdm09-like virus (updated)
- A/Hong Kong/2671/2019 (H3N2)-like virus (updated)
- B/Washington/02/2019 (B/Victoria lineage)-like virus (updated)

**Quadrivalent (four-component) egg-based vaccines**, which protect against a second lineage of B viruses, are recommended to contain: the three recommended viruses above, plus B/Phuket/3073/2013 -like (Yamagata lineage) virus.

**Cell- or recombinant-based vaccines** are recommended to contain:
- A/Hawaii/70/2019 (H1N1)pdm09-like virus (updated)
- A/Hong Kong/45/2019 (H3N2)-like virus (updated)
- B/Washington/02/2019 (B/Victoria lineage)-like virus (updated)
- B/Phuket/3073/2013 -like (Yamagata lineage) virus

Data source: All influenza vaccination rates presented were calculated using data from the Wisconsin Immunization Registry (numerator) and Wisconsin population estimates (denominator).

As of this week, the influenza vaccination coverage in Wisconsin is 3% higher than this time last year.
SEASONAL INFLUENZA VACCINATION

Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by age group and influenza season

Each season includes doses administered during the same time period (August 1 through May 3).

Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by race and ethnicity and region, 2020-2021 influenza season

- **All of Wisconsin**
  - **Total**: 41%
  - **Non-Hispanic**: 38%
  - **Hispanic**: 23%
  - **White**: 37%
  - **Black**: 21%
  - **Asian**: 29%
  - **American Indian/Alaska-Native**: 22%

- **Northeastern**
  - **Total**: 41%
  - **Non-Hispanic**: 40%
  - **Hispanic**: 24%
  - **White**: 38%
  - **Black**: 17%
  - **Asian**: 26%
  - **American Indian/Alaska-Native**: 28%

- **Northern**
  - **Total**: 39%
  - **Non-Hispanic**: 38%
  - **Hispanic**: 22%
  - **White**: 37%
  - **Black**: 17%
  - **Asian**: 28%
  - **American Indian/Alaska-Native**: 22%

- **Southeastern**
  - **Total**: 40%
  - **Non-Hispanic**: 40%
  - **Hispanic**: 23%
  - **White**: 38%
  - **Black**: 22%
  - **Asian**: 29%
  - **American Indian/Alaska-Native**: 14%

- **Southern**
  - **Total**: 43%
  - **Non-Hispanic**: 35%
  - **Hispanic**: 24%
  - **White**: 34%
  - **Black**: 20%
  - **Asian**: 31%
  - **American Indian/Alaska-Native**: 29%

- **Western**
  - **Total**: 38%
  - **Non-Hispanic**: 37%
  - **Hispanic**: 23%
  - **White**: 36%
  - **Black**: 16%
  - **Asian**: 28%
  - **American Indian/Alaska-Native**: 17%