RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 2, Ending January 15, 2022

Wisconsin Department of Health Services | Division of Public Health
Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section

www.dhs.wisconsin.gov/dph/bcd.htm | dhsdphbcd@dhs.wi.gov
INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

STATE OF WISCONSIN

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

UNITED STATES

AT-A-GLANCE:

- Predominant Viruses of the Week:
  Seasonal Coronavirus are the predominant viruses this week.

Current Alerts:

Influenza-like illness activity has been decreasing for the previous 4 weeks.
Seasonal coronavirus activity increased significantly this week.

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:

<table>
<thead>
<tr>
<th></th>
<th>Week 2, 2022</th>
<th>October 1, 2021 to present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisconsin</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nationwide</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

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

![Graph showing percent of deaths associated with influenza and pneumonia over time.]

**Influenza- and pneumonia-associated deaths by most recent 3 week period.**

<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>52</td>
<td>3</td>
<td>170</td>
<td>11.6%</td>
<td>5.3%</td>
<td>6.1%</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>158</td>
<td>10.6%</td>
<td>5.4%</td>
<td>6.2%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>128</td>
<td>10.2%</td>
<td>5.5%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Preliminary Data

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 9, 2021 to present

<table>
<thead>
<tr>
<th></th>
<th>A (2009 H1N1)</th>
<th>Influenza A:</th>
<th>Influenza B:</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A (H3N2)</td>
<td>A (Unknown)</td>
<td></td>
</tr>
<tr>
<td>Total positive (n)</td>
<td>12</td>
<td>743</td>
<td>4,035</td>
<td>1</td>
</tr>
<tr>
<td>% of total positive</td>
<td>0%</td>
<td>15%</td>
<td>83%</td>
<td>0%</td>
</tr>
</tbody>
</table>
WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR

Week 2 Ending on January 15, 2022

<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>11225</td>
<td>372</td>
<td>3.3%</td>
<td>45</td>
<td>4</td>
</tr>
<tr>
<td>Parainfluenza</td>
<td>1225</td>
<td>29</td>
<td>2.4%</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Coronavirus (seasonal)</td>
<td>298</td>
<td>29</td>
<td>9.7%</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respiratory virus</th>
<th>Tested</th>
<th>Positive (n)</th>
<th>Positive (%)</th>
<th>CoV 229E</th>
<th>CoV OC43</th>
<th>CoV NL63</th>
<th>CoV HKU1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronavirus (seasonal)</td>
<td>298</td>
<td>29</td>
<td>9.7%</td>
<td>8</td>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respiratory virus</th>
<th>Tested</th>
<th>Positive (n)</th>
<th>Positive (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSV</td>
<td>5468</td>
<td>146</td>
<td>2.7%</td>
</tr>
<tr>
<td>Human metapneumovirus</td>
<td>1232</td>
<td>32</td>
<td>2.6%</td>
</tr>
<tr>
<td>Rhino-enterovirus</td>
<td>1194</td>
<td>80</td>
<td>6.7%</td>
</tr>
<tr>
<td>Adenovirus</td>
<td>298</td>
<td>2</td>
<td>0.7%</td>
</tr>
</tbody>
</table>
WISCONSIN STATE SUMMARY

ILI activity trend analysis by influenza season, Wisconsin

![Graph showing ILI activity trend analysis by influenza season, Wisconsin]

Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System

October 1, 2021 to present

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Total reported (n)</th>
<th>A (2009 H1N1)</th>
<th>A (H3N2)</th>
<th>A (Unknown)</th>
<th>B</th>
<th>Not reported</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>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1-4</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5-17</td>
<td>11</td>
<td>1</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18-49</td>
<td>40</td>
<td>0</td>
<td>3</td>
<td>36</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>50-64</td>
<td>25</td>
<td>0</td>
<td>1</td>
<td>22</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>65+</td>
<td>121</td>
<td>0</td>
<td>4</td>
<td>105</td>
<td>12</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
<td>2</td>
<td>8</td>
<td>182</td>
<td>16</td>
<td>0</td>
<td>20</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin

![Graph showing reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin]

*The 2020 - 2021 influenza season was unusually low due much in part to the ongoing COVID-19 pandemic. As such, numbers for that season are substantially different than previous seasons and should be considered an anomaly.*
ILI ACTIVITY TREND ANALYSIS

Wisconsin

Northeastern Region

Northern Region
ILI ACTIVITY TREND ANALYSIS

Southeastern Region

Southern Region

Western Region
Influenza vaccine composition 2021-2022:

**Egg-based vaccines** are recommended to contain:
- A/Victoria/2570/2019 (H1N1) pdm09-like virus
- A/Cambodia/e0826360/2020 (H3N2)-like virus
- B/Washington/02/2019- like virus (B/Victoria lineage)
- B/Phuket/3073/2013-like virus (B/Yamagata lineage)

**Cell- or recombinant-based vaccines** are recommended to contain:
- A/Wisconsin/588/2019 (H1N1) pdm09-like virus
- A/Cambodia/e0826360/2020 (H3N2)-like virus
- B/Washington/02/2019- like virus (B/Victoria lineage)
- B/Phuket/3073/2013-like virus (B/Yamagata lineage)

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

Cumulative percentage of Wisconsin residents who received 1 or more doses of influenza vaccine, 2021-2022 influenza season

- **Healthy People 2030 Goal**: 70%
- **2020-2021 Total Vaccinated**: 44%
- **2021-2022 Total Vaccinated (as of this week)**: 37%

As of this week, the influenza vaccination coverage in Wisconsin is 4% lower than this time last year.

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**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).

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**Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by race and ethnicity and region, 2021-2022 influenza season**

- **All of Wisconsin**
  - Total: 37%
  - Non-Hispanic: 38%
  - Hispanic: 24%
  - White: 36%
  - Black: 20%
  - Asian: 31%
  - American Indian/Alaska-Native: 21%

- **Northeastern**
  - Total: 37%
  - Non-Hispanic: 37%
  - Hispanic: 24%
  - White: 36%
  - Black: 17%
  - Asian: 27%
  - American Indian/Alaska-Native: 23%

- **Southern**
  - Total: 43%
  - Non-Hispanic: 42%
  - Hispanic: 30%
  - White: 40%
  - Black: 21%
  - Asian: 37%
  - American Indian/Alaska-Native: 32%

- **Western**
  - Total: 35%
  - Non-Hispanic: 35%
  - Hispanic: 23%
  - White: 35%
  - Black: 16%
  - Asian: 37%
  - American Indian/Alaska-Native: 27%