RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 1, Ending January 8, 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:**
  Rhino/enterovirus is the predominant virus this week.

- **Current Alerts:**
  Influenza-like illness activity has been decreasing for the previous 3 weeks.

  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](https://www.dhs.wisconsin.gov/covid-19/data.htm)

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

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

INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

Influenza and Pneumonia Deaths, Wisconsin

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

Percent of deaths associated with influenza and pneumonia
Baseline
Threshold

![Graph showing percent of deaths associated with influenza and pneumonia, baseline, and threshold over influenza season years and weeks.]

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>51</td>
<td>2</td>
<td>188</td>
<td>13.2%</td>
<td>5.2%</td>
<td>6.0%</td>
</tr>
<tr>
<td>52</td>
<td>0</td>
<td>160</td>
<td>12.0%</td>
<td>5.3%</td>
<td>6.1%</td>
</tr>
<tr>
<td>1</td>
<td>Preliminary Data</td>
<td>2</td>
<td>127</td>
<td></td>
<td></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 9, 2021 to present

<table>
<thead>
<tr>
<th></th>
<th>A (2009 H1N1)</th>
<th>A (H3N2)</th>
<th>A (Unknown)</th>
<th>B (Victoria)</th>
<th>B (Yamagata)</th>
<th>B (Unknown)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total positive</td>
<td>8</td>
<td>698</td>
<td>3,720</td>
<td>1</td>
<td>0</td>
<td>74</td>
<td>4,501</td>
</tr>
<tr>
<td>% of total positive</td>
<td>0%</td>
<td>16%</td>
<td>83%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Trends in respiratory virus activity by PCR

Week 1: Ending on January 8, 2022

<table>
<thead>
<tr>
<th>Respiratory virus</th>
<th>Tested (n)</th>
<th>Positive (n)</th>
<th>Positive (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3N2</td>
<td>14405</td>
<td>563</td>
<td>3.9%</td>
</tr>
<tr>
<td>2009 H1N1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td>64</td>
<td>0</td>
</tr>
<tr>
<td>Victoria</td>
<td></td>
<td>0</td>
<td>493</td>
</tr>
<tr>
<td>Yamagata</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Parainfluenza 1</td>
<td>1354</td>
<td>54</td>
<td>4.0%</td>
</tr>
<tr>
<td>Parainfluenza 2</td>
<td></td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Parainfluenza 3</td>
<td></td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Parainfluenza 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronavirus (seasonal)</td>
<td>170</td>
<td>4</td>
<td>2.4%</td>
</tr>
<tr>
<td>CoV 229E</td>
<td></td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>CoV OC43</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CoV NL63</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>CoV HKU1</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>RSV</td>
<td>6584</td>
<td>195</td>
<td>3.0%</td>
</tr>
<tr>
<td>Human metapneumovirus</td>
<td>1390</td>
<td>56</td>
<td>4.0%</td>
</tr>
<tr>
<td>Rhino-enterovirus</td>
<td>1331</td>
<td>125</td>
<td>9.4%</td>
</tr>
<tr>
<td>Adenovirus</td>
<td>170</td>
<td>1</td>
<td>0.6%</td>
</tr>
</tbody>
</table>
**WISCONSIN STATE SUMMARY**

ILI activity trend analysis by influenza season, Wisconsin

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![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>7</td>
<td>1</td>
<td>0</td>
<td>5</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>38</td>
<td>0</td>
<td>3</td>
<td>34</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>24</td>
<td>0</td>
<td>1</td>
<td>21</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>115</td>
<td>0</td>
<td>4</td>
<td>100</td>
<td>11</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>198</td>
<td>2</td>
<td>8</td>
<td>173</td>
<td>15</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)

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**SEASONAL INFLUENZA VACCINATION**

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.

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

- **Southeastern**
  - **Total**: 36%
  - **Non-Hispanic**: 37%
  - **Hispanic**: 23%
  - **White**: 35%
  - **Black**: 20%
  - **Asian**: 31%
  - **American Indian/Alaska-Native**: 17%

- **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**: 33%
  - **Black**: 16%
  - **Asian**: 27%
  - **American Indian/Alaska-Native**: 19%