INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

STATE OF WISCONSIN

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

UNITED STATES

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

AT-A-GLANCE:

- Predominant Viruses of the Week:
  Rhino/enterovirus is the predominant virus this week.

Current Alerts:
Influenza activity continues to increase statewide. 428 confirmed cases of influenza were reported last week. Influenza A/H3 is the predominant influenza virus.

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 48, 2021</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>0</td>
<td>0</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

<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>46</td>
<td>0</td>
<td>142</td>
<td>10.4%</td>
<td>4.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>47</td>
<td>0</td>
<td>152</td>
<td>11.4%</td>
<td>4.6%</td>
<td>5.6%</td>
</tr>
<tr>
<td>48</td>
<td>Preliminary Data</td>
<td>0</td>
<td>148</td>
<td>13.7%</td>
<td>4.7%</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>Influenza A:</th>
<th>A (2009 H1N1)</th>
<th>A (H3N2)</th>
<th>A (Unknown)</th>
<th>96%</th>
<th>B (Victoria)</th>
<th>B (Yamagata)</th>
<th>B (Unknown)</th>
<th>4%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total positive (n)</td>
<td>7</td>
<td>230</td>
<td>620</td>
<td>1</td>
<td>0</td>
<td>36</td>
<td></td>
<td></td>
<td>894</td>
</tr>
<tr>
<td>% of total positive</td>
<td>1%</td>
<td>26%</td>
<td>69%</td>
<td>0%</td>
<td>0%</td>
<td>4%</td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>
WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR

Week 48 Ending on December 4, 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>11367</td>
<td>428</td>
<td>3.8%</td>
<td>110</td>
<td>4</td>
</tr>
<tr>
<td>Parainfluenza</td>
<td>1319</td>
<td>57</td>
<td>4.3%</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Coronavirus (seasonal)</td>
<td>278</td>
<td>7</td>
<td>2.5%</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Respiratory virus: Tested | Positive (n) | Positive (%) | CoV 229E | CoV OC43 | CoV NL63 | CoV HKU1 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RSV</td>
<td>6450</td>
<td>407</td>
<td>6.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human metapneumovirus</td>
<td>1332</td>
<td>10</td>
<td>0.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhino-enterovirus</td>
<td>1278</td>
<td>218</td>
<td>17.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenovirus</td>
<td>278</td>
<td>2</td>
<td>0.7%</td>
<td></td>
<td></td>
<td></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](image)

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>2</td>
<td>0</td>
<td>0</td>
<td>2</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>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5-17</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18-49</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>50-64</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>65+</td>
<td>16</td>
<td>0</td>
<td>2</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>0</td>
<td>3</td>
<td>20</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</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](image)

*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
SEASONAL INFLUENZA VACCINATION

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

- 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)

Influenza vaccine composition 2021-2022:

As of this week, the influenza vaccination coverage in Wisconsin is 6% 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**: 32%
- **Non-Hispanic**: 33%
- **Hispanic**: 20%
- **White**: 31%
- **Black**: 16%
- **Asian**: 26%
- **American Indian/Alaska-Native**: 18%

**Northeastern**

- **Total**: 32%
- **Non-Hispanic**: 33%
- **Hispanic**: 20%
- **White**: 31%
- **Black**: 14%
- **Asian**: 22%
- **American Indian/Alaska-Native**: 20%

**Northern**

- **Total**: 31%
- **Non-Hispanic**: 31%
- **Hispanic**: 18%
- **White**: 29%
- **Black**: 11%
- **Asian**: 22%
- **American Indian/Alaska-Native**: 17%

**Southeastern**

- **Total**: 30%
- **Non-Hispanic**: 32%
- **Hispanic**: 19%
- **White**: 30%
- **Black**: 16%
- **Asian**: 25%
- **American Indian/Alaska-Native**: 13%

**Southern**

- **Total**: 36%
- **Non-Hispanic**: 37%
- **Hispanic**: 25%
- **White**: 35%
- **Black**: 17%
- **Asian**: 32%
- **American Indian/Alaska-Native**: 27%

**Western**

- **Total**: 30%
- **Non-Hispanic**: 30%
- **Hispanic**: 19%
- **White**: 29%
- **Black**: 13%
- **Asian**: 23%
- **American Indian/Alaska-Native**: 16%