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 and SARS-CoV-2 (virus causing COVID-19)

Current Alerts:

Seven (7) confirmed cases of influenza were recorded this season. This is significantly lower than the number of cases reported during this same time period in previous years.

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 44, 2020</th>
<th>October 1, 2020 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

### Influenza season year-week

- **Percent of deaths associated with influenza and pneumonia**
- **Baseline**
- **Threshold**

<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>42</td>
<td>0</td>
<td>116</td>
<td>9.4%</td>
<td>4.3%</td>
<td>5.1%</td>
</tr>
<tr>
<td>43</td>
<td>0</td>
<td>149</td>
<td>11.5%</td>
<td>4.3%</td>
<td>5.1%</td>
</tr>
<tr>
<td>44 Preliminary Data</td>
<td>0</td>
<td>118</td>
<td>12.4%</td>
<td>4.4%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Seasonal total</td>
<td>0</td>
<td>551</td>
<td>9.2%</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
September 1, 2020 to present

<table>
<thead>
<tr>
<th></th>
<th>A (2009 H1N1)</th>
<th>Influenza A: A (H3N2)</th>
<th>57%</th>
<th>A (Unknown)</th>
<th>B (Victoria)</th>
<th>Influenza B: B (Yamagata)</th>
<th>43%</th>
<th>B (Unknown)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total positive (n)</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>% of total positive</td>
<td>0%</td>
<td>0%</td>
<td>57%</td>
<td>0%</td>
<td>0%</td>
<td>43%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR

![Chart showing trends in respiratory virus activity by PCR]

Week 44: Ending on October 31, 2020

<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 H1N1</td>
</tr>
<tr>
<td>Influenza</td>
<td>1491</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Parainfluenza</td>
<td>868</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Coronavirus (seasonal)</td>
<td>81</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</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>RSV</td>
<td>1024</td>
<td>4</td>
<td>0.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human metapneumovirus</td>
<td>873</td>
<td>0</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhino-enterovirus</td>
<td>860</td>
<td>64</td>
<td>7.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenovirus</td>
<td>81</td>
<td>1</td>
<td>1.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WISCONSIN STATE SUMMARY

ILI activity trend analysis by influenza season, Wisconsin

Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System
September 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&lt;6 weeks</th>
<th>Postpartum&lt;6 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>0</td>
<td>A (2009 H1N1) 0</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) 0</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) 0</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>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50-64</td>
<td>1</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>65+</td>
<td>2</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td></td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin

[Graph showing cumulative hospitalizations by influenza season]
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
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: 30%
- Non-Hispanic: 28%
- Hispanic: 15%
- White: 27%
- Black: 14%
- Asian: 20%
- American Indian/Alaska-Native: 15%

Northeastern
- Total: 30%
- Non-Hispanic: 30%
- Hispanic: 15%
- White: 29%
- Black: 11%
- Asian: 18%
- American Indian/Alaska-Native: 19%

Northern
- Total: 28%
- Non-Hispanic: 27%
- Hispanic: 14%
- White: 27%
- Black: 11%
- Asian: 18%
- American Indian/Alaska-Native: 14%

Southeastern
- Total: 29%
- Non-Hispanic: 29%
- Hispanic: 14%
- White: 28%
- Black: 14%
- Asian: 20%
- American Indian/Alaska-Native: 9%

Southern
- Total: 33%
- Non-Hispanic: 27%
- Hispanic: 16%
- White: 26%
- Black: 14%
- Asian: 23%
- American Indian/Alaska-Native: 21%

Western
- Total: 26%
- Non-Hispanic: 25%
- Hispanic: 14%
- White: 25%
- Black: 10%
- Asian: 18%
- American Indian/Alaska-Native: 10%