RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 53, Ending January 2, 2021

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

Current Alerts:
Influenza activity remains extremely low statewide and nationally.

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 53, 2020  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

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
# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

## Trends in respiratory virus activity by PCR

### Week 53: Ending on January 2, 2021

<table>
<thead>
<tr>
<th>Respiratory virus (seasonal)</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</td>
<td>88</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Influenza</td>
<td>4802</td>
<td>3</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Parainfluenza</td>
<td>652</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RSV</td>
<td>1202</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Human metapneumovirus</td>
<td>657</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rhino-enterovirus</td>
<td>636</td>
<td>60</td>
<td>9.4%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Adenovirus</td>
<td>88</td>
<td>1</td>
<td>1.1%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Graph

- **Influenza**
- **RSV**
- **hMPV**
- **- Rhino-Enterovirus**
- **- Adenovirus**
- **- Parainfluenza**
- **- Coronavirus (seasonal)**

Week-ending % Positive by PCR (3-week moving average)

- 10/3
- 10/10
- 10/17
- 10/24
- 10/31
- 11/7
- 11/14
- 11/21
- 11/28
- 12/5
- 12/12
- 12/19
- 12/26
- 1/2
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) 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>B 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50-64</td>
<td>2</td>
<td>A (Unknown) 1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>65+</td>
<td>5</td>
<td>A (Unknown) 1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td></td>
<td>2</td>
<td>7</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

**Cumulative percentage of Wisconsin residents who received 1 or more doses of influenza vaccine, 2020-2021 influenza season**

**Healthy People 2020 Goal**
- 70%

**2019-2020 Total Vaccinated**
- 42%

**2020-2021 as of this week**
- 41%

As of this week, the influenza vaccination coverage in Wisconsin is 3% higher 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, 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: 38%
  - Hispanic: 23%
  - White: 36%
  - Black: 16%
  - Asian: 28%
  - American Indian/Alaska-Native: 17%