Influenza Activity in the United States
2021 – 2022 Season

Data through the week ending April 9 (week 14)

Influenza Virologic Surveillance – United States,
October 3, 2021 through April 9, 2022

Number of influenza positives = 17,211
### Antiviral Resistance

- Oseltamivir, Peramivir, Zanamivir
  - 833 tested
  - None with reduced inhibition
- Baloxavir
  - 819 tested
  - 1 A/H3 with decreased susceptibility

### Genetic Characterization

<table>
<thead>
<tr>
<th>Virus Subtype or Lineage</th>
<th>Total No. of Subtype/Lineage Tested</th>
<th>HA Clade</th>
<th>Number (% of subtype/lineage tested)</th>
<th>HA Subclade</th>
<th>Number (% of subtype/lineage tested)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/H1</td>
<td>4</td>
<td>6B.1A</td>
<td>4 (100%)</td>
<td>6a.1</td>
<td>2 (50%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6a.2</td>
<td>2 (50%)</td>
<td></td>
</tr>
<tr>
<td>A/H3</td>
<td>993</td>
<td>3C.2a/3b</td>
<td>90% (100%)</td>
<td>3a</td>
<td>1 (10%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1b</td>
<td>1 (10%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2a</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2a.1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2a.2</td>
<td>991 (99.8%)</td>
<td></td>
</tr>
<tr>
<td>B/Victoria</td>
<td>23</td>
<td>V1A</td>
<td>23 (100%)</td>
<td>V1A.1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V1A.2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V1A.3</td>
<td>9 (10.1%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V1A.3a</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V1A.3a.1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V1A.3a.2</td>
<td>14 (60.9%)</td>
<td></td>
</tr>
<tr>
<td>B/Yamagata</td>
<td>0</td>
<td>Y3</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Antigenic Characterization

<table>
<thead>
<tr>
<th>Virus</th>
<th>Number Tested</th>
<th>Number (%) antigenically similar to vaccine reference virus</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/H3N2</td>
<td>74</td>
<td>4 (5%) similar to cell-grown reference virus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19 (26%) similar to egg-grown reference virus</td>
</tr>
<tr>
<td>A/H1N1</td>
<td>3</td>
<td>2 (67%) similar to cell-grown reference virus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 (67%) similar to egg-grown reference virus</td>
</tr>
<tr>
<td>B/Victoria</td>
<td>15</td>
<td>11 (73%) similar to cell-grown reference virus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11 (73%) similar to egg-grown reference virus</td>
</tr>
<tr>
<td>B/Yamagata</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Outpatient Visits for Respiratory Illness, Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

#### Percentage of Outpatient Visits for Respiratory Illness National Summary

*This system monitors visits for respiratory illness that includes fever plus cough or sore throat (referred to as ILI) not laboratory confirmed influenza, and may capture patient visits due to other respiratory pathogens that cause similar symptoms.*
ILI Activity Level, Determined by Data Reported to ILINet
Week ending April 9, 2022 (Week 14)

*This system monitors visits for ILI (fever and cough or sore throat), not laboratory confirmed influenza and may capture patient visits due to other respiratory pathogens that cause similar symptoms.

Percent of Long-Term Care Facilities (LTCF) with at least One Confirmed Influenza Case among Residents, Reported to CDC National Healthcare Safety Network (NHSN), National Summary, October 4, 2021 – April 9, 2022
Influenza Hospitalizations
United States

Influenza Hospital Admissions Reported to HHS Protect
National Summary
October 3, 2021 – April 9, 2022

FluSurv-NET
Cumulative rate of laboratory-confirmed influenza hospitalizations among cases of all ages, 2015-16 to 2021-22, MMWR Week 14

Influenza-Related Mortality
United States

Pneumonia, Influenza, and COVID-19 Mortality from the National Center for Health Statistics Mortality Surveillance System Dates as of April 14, 2022

Influenza-Associated Pediatric Deaths by Week of Death, 2018-2019 season to 2021-2022 season

Number of Deaths = 144 Number of Deaths = 159 Number of Deaths = 1 Number of Deaths = 19

Deaths Reported Previous Weeks Deaths Reported Current Week
International Influenza Activity:
Number of Influenza Positives Reported to WHO’s FluNet
October 2018 – April 9, 2022
([https://www.who.int/tools/flunet](https://www.who.int/tools/flunet))

Highly Pathogenic Avian Influenza (HPAI) A(H5N1):
U.S. Status as of April 18, 2022

- Continued detections of HPAI H5N1 in birds
  - Wild birds – 32 states
  - Commercial poultry and backyard flocks – 29 states

- No human cases in the U.S.

More information:
Summary

- Seasonal influenza activity in the U.S. is increasing.
- It is an unusual time of year for flu activity to increase.
- Activity remains low compared to pre-COVID influenza seasons.

<table>
<thead>
<tr>
<th>Burden Estimates</th>
<th>2021-22 Estimate</th>
<th>2010-2020 Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illnesses</td>
<td>at least 4.3 million</td>
<td>9 million to 41 million</td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>at least 42,000</td>
<td>140,000 to 710,000</td>
</tr>
<tr>
<td>Deaths</td>
<td>at least 2,500</td>
<td>12,000 to 52,000</td>
</tr>
</tbody>
</table>

- Vast majority of flu viruses circulating are influenza A/H3N2.
- HPAI H5 outbreak is continuing (expanding) in birds in the U.S. but no human cases have been identified at this time
  - Risk to those exposed to poultry and wild birds may be increased as the outbreaks continue
  - Risk to general public is low

Additional Information

Influenza Activity
- FluView
  - [https://www.cdc.gov/flu/weekly/index](https://www.cdc.gov/flu/weekly/index)
- FluView Interactive
  - [https://www.cdc.gov/flu/weekly/fluviewinteractive.htm](https://www.cdc.gov/flu/weekly/fluviewinteractive.htm)
- WHO’s FluNet
  - [https://www.who.int/tools/flunet](https://www.who.int/tools/flunet)

Other Respiratory Virus Activity
- COVID Data Tracker Weekly Review
- COVID Data Tracker
- National Respiratory Virus Surveillance System (NREVSS)
  - [https://www.cdc.gov/surveillance/nrevss/index.html](https://www.cdc.gov/surveillance/nrevss/index.html)