INFLUENZA ACTIVITY UPDATE: 2022-2023 Influenza Season

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Virologic Surveillance – Percent Positive for Influenza

Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories,
National Summary, October 2, 2022 – February 25, 2023
Virologic Surveillance – Virus Characteristics

**Viruses Collected in the U.S. since October 2, 2022**

<table>
<thead>
<tr>
<th>Virus</th>
<th>Genetic Characterization</th>
<th>Antigenic Characterization</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/H1</td>
<td>818</td>
<td>0.6% 6B.1A.5a.1</td>
</tr>
<tr>
<td>A/H3</td>
<td>1,413</td>
<td>100% 3C.2a1b.2a2</td>
</tr>
<tr>
<td>B/Victoria</td>
<td>58</td>
<td>6.9% V1A.3</td>
</tr>
</tbody>
</table>

**Antiviral Susceptibility**

- Oseltamivir, Peramivir, Zanamivir – 2,312 tested, 1 (<0.1%) with reduced inhibition by oseltamivir
- Baloxavir – 2,235 tested, 0 resistant

**Outpatient Respiratory Illness**

Percentage of Outpatient Visits for Respiratory Illness: 2020-2022

- The map shows the distribution of outpatient visits for respiratory illness by age group and location.
- The data reflects trends in respiratory illness from 2020 to 2022.

Vaccines Used:

- Seasonal Influenza Vaccine
- Pandemic Influenza Vaccine
- Respiratory Syncytial Virus Vaccine

**Summary for the Week Ending February 5, 2023**

- Influenza activity remains elevated in most regions.
- Oseltamivir, Peramivir, Zanamivir are still effective.
- Baloxavir has shown no resistant strains.
Long-term Care Facilities (LTCF) and Hospitals

New Influenza Hospital Admissions Reported to HHS Protect, National Summary
October 3, 2022 – February 26, 2023

FluSurv-NET – Cumulative Rate of Influenza Hospitalizations, All Ages, 2015-16 to 2023 week 8

FluSurv-NET – Weekly Rate of Influenza Hospitalizations, All Ages, 2015-16 to 2023 week 8

Mortality

Pneumonia, Influenza, and COVID-19 Mortality from the National Center for Health Statistics Mortality Surveillance System Data as of March 2, 2023

Influenza-Associated Pediatric Deaths by Week of Death, 2019-2020 season to 2022-2023 season

Number of Deaths - 10,000

Weeks of Death
### Preliminary In-Season Burden Estimates, 2022-23

**CDC estimates** that, from October 1, 2022 through February 25, 2023, there have been:

- 26 – 40 million flu illnesses
- 12 – 24 million flu medical visits
- 290,000 - 620,000 flu hospitalizations
- 18,000 - 54,000 flu deaths

**Estimated Range of Annual Burden of Flu in the U.S. from 2010 – 2020**

- Hospitalizations: 140,000-710,000
- Illnesses: 9,000,000-41,000,000

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### Interim Influenza Vaccine Effectiveness Estimates, 2022-2023 season

- **3 CDC networks:**
  - Flu vaccination provided substantial protection against flu illness and against serious flu-related outcomes.
  - Reduced risk of flu hospitalization
    - Among children – by nearly three-quarters
    - Among adults – by nearly half
  - Reduced risk of illness and ED visits
    - By about half for all age groups
  - [Link](https://www.cdc.gov/flu/spotlights/2022-2023/flu-vaccine-protection.htm)
  - **Marshfield Clinic**
    - Reduced risk of provider visit for flu illness by half for children and adults <65 years
    - Reduced risk of getting sick with flu by more than two-thirds among children
    - [Link](https://www.cdc.gov/mmwr/volumes/72/wr/mm7208a1.htm)

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Children (6 mos - 17 years) | ED Visit | 40% | 49% | 47%
 | Hospitalization | 60% | 64% | 69%
All Adults | ED Visit | 20% | 27% | 32%
 | Hospitalization | 39% | 47% | 63%
Adults 18-64 years | ED Visit | 15% | 21% | 37%
 | Hospitalization | 41% | 49% | 64%
Adults 65 years and older | ED Visit | 15% | 21% | 37%
 | Hospitalization | 44% | 51% | 71%
2023-2024 Northern Hemisphere Influenza Vaccine Strain Selection Decisions: WHO and VRBPAC

- A/H1 - updated
  - A/Victoria/4807/2022 (H1N1)pdm09-like virus (egg)
  - A/Wisconsin/67/2022 (H1N1)pdm09-like virus (cell/recombinant)

- A/H3 – no change
  - A/Darwin/9/2021 (H3N2)-like virus (egg)
  - A/Darwin/9/2021 (H3N2)-like virus (cell/recombinant)

- B/Victoria – no change
  - B/Austria/1359417/2021 (B/Victoria lineage)-like virus (egg/cell/recombinant)

- B/Yamagata – no change
  - B/Phuket/3073/2013 (B/Yamagata lineage)-like virus (egg/cell/recombinant)

For more information, contact CDC
1-800-CDC-INFO (232-4636)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.