INFLUENZA ACTIVITY UPDATE:
2022-2023 Influenza Season

National Adult and Influenza Immunization Summit
November 3, 2022

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Virologic Surveillance – Percent Positive for Influenza
Virologic Surveillance – Percent Positive for Influenza
October 2, 2022 – October 22, 2022

• 98% influenza A
  • 84% H3
  • 16% H1

Virologic Surveillance – Virus Characteristics

**Viruses Collected in the U.S. since May 1, 2022**

<table>
<thead>
<tr>
<th>Virus</th>
<th>Genetic Characterization</th>
<th>Antigenic Characterization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number Tested Clade/Subclade</td>
<td>Number Tested</td>
</tr>
<tr>
<td>A/H1</td>
<td>36 13% - 6B.1A.5a.1</td>
<td>14 87% - 6B.1A.5a.2</td>
</tr>
<tr>
<td>A/H3</td>
<td>408 100% - 3C.2a1b.2a.2</td>
<td>35</td>
</tr>
<tr>
<td>B/Victoria</td>
<td>2 100% - V1A.3</td>
<td>1</td>
</tr>
</tbody>
</table>

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, May 22, 2022 – October 22, 2022
Outpatient Respiratory Illness

All ages combined, multiple seasons

Percentage of Outpatient Visits for Respiratory Illness Reported By The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2022-2023* and Selected Previous Seasons

Summer and this season; multiple age groups

Percentage of Outpatient Visits for Respiratory Illness by Age Group Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, May 22, 2022-October 22, 2022*

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.
Outpatient Respiratory Illness

- Highest levels match with areas reporting increased flu activity
- Also being driven by
  - RSV
  - Rhinovirus/Enterovirus
  - Sars-CoV-2
Long-term Care Facilities (LTCF) and Hospitals

Percent of LTCFs with ≥1 Influenza Positive Test Among Residents, National Summary
May 23, 2022 – October 23, 2022

New Influenza Hospital Admissions Reported to HHS Protect, National Summary
May 22, 2022 – October 22, 2022
FluSurvNET – Hospitalization Rates

Cumulative Rate of Laboratory-Confirmed Influenza Hospitalizations among cases of all ages, 2015-16 to 2022-23, MMWR Week 42
FluSurvNET – Hospitalization Rates

Week 42:
- All ages, rate per 100,000 = 1.5
- Prior 10 years: 0.1 – 0.5
FluSurv-NET – Hospitalization Rates

Children, <18 years
Week 42, rate per 100,000:
• 2022: 2.1
• Prior 10 years: 0.0 – 0.2

Adults, 18+ years
Week 42, rate per 100,000:
• 2022: 1.4
• Prior 10 years: 0.0 – 0.6
Mortality

Pneumonia, Influenza, and COVID-19 Mortality from the National Center for Health Statistics Mortality Surveillance System
Data as of October 27, 2022

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

- Number of Deaths = 198
- Number of Deaths = 1
- Number of Deaths = 43
- Number of Deaths = 1
Influenza Activity Timing – early and not alone

PRE-COVID – Usually peaked in Dec.

RSV (reported to NREVSS)

2021 – Aug peak

2022 – peak?
Southern Hemisphere

A/H3 predominant overall and in most (but not all) countries

Northern Hemisphere

South Africa

Southwest Europe

Temperate South America

Canada
Summary

• Influenza activity is increasing earlier than “usual.”
  • Highest flu activity is in the southeast and south-central regions
  • Mostly A/H3, some A/H1 and a few Bs

• It’s too early to know how severe the season will be.

• In the U.S. so far this season:
  • At least 880,000 illnesses
  • At least 420,000 medical visits
  • At least 6,900 hospitalizations
  • At least 360 deaths

• It’s a great time to get vaccinated!