What Happened to Influenza?
A summary of the 2020-2021 Influenza Season

Maintaining Influenza Prevention During the Ongoing COVID-19 Pandemic
National Adult and Influenza Immunization Summit
May 20, 2021

Alicia Budd, MPH
Influenza Division, NCIRD, CDC

Outline

- U.S. influenza surveillance data
- International influenza activity
- Influenza vaccine strain recommendations
- What’s next?
Influenza Activity in the United States

Influenza Tests Reported to CDC by U.S. Clinical Laboratories, National Summary 2015-2016 through 2020-2021*  

Percent Positive by Week  

Season Statistics – through week 17

<table>
<thead>
<tr>
<th>Year</th>
<th>Specimens Tested</th>
<th>Influenza Positives</th>
<th>Peak % Positive</th>
<th>Total % Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-16</td>
<td>627,895</td>
<td>65,437</td>
<td>23.6</td>
<td>10.3</td>
</tr>
<tr>
<td>2016-17</td>
<td>864,649</td>
<td>127,866</td>
<td>24.7</td>
<td>14.7</td>
</tr>
<tr>
<td>2017-18</td>
<td>1,215,229</td>
<td>234,479</td>
<td>27.4</td>
<td>19.2</td>
</tr>
<tr>
<td>2018-19</td>
<td>1,098,863</td>
<td>175,782</td>
<td>26.3</td>
<td>16.3</td>
</tr>
<tr>
<td>2019-20</td>
<td>1,378,446</td>
<td>250,120</td>
<td>30.3</td>
<td>18.5</td>
</tr>
<tr>
<td>Average</td>
<td>1,098,863</td>
<td>176,737</td>
<td>26.5</td>
<td>15.8</td>
</tr>
<tr>
<td>Median</td>
<td>1,098,863</td>
<td>175,782</td>
<td>26.3</td>
<td>16.3</td>
</tr>
<tr>
<td>2020-21</td>
<td>989,837</td>
<td>1,814</td>
<td>0.4</td>
<td>0.2</td>
</tr>
</tbody>
</table>

* Data through May 1, 2021; reported to CDC as of May 6.
Influenza Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2015-2016 through 2020-2021 Seasons*

<table>
<thead>
<tr>
<th></th>
<th>Specimens Tested through week 17</th>
<th>Influenza Positives through week 17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>A</td>
</tr>
<tr>
<td>2015-16</td>
<td>68,081</td>
<td>26,682</td>
</tr>
<tr>
<td>2016-17</td>
<td>82,957</td>
<td>40,728</td>
</tr>
<tr>
<td>2017-18</td>
<td>99,525</td>
<td>54,007</td>
</tr>
<tr>
<td>2018-19</td>
<td>80,353</td>
<td>43,231</td>
</tr>
<tr>
<td>2019-20</td>
<td>91,993</td>
<td>45,863</td>
</tr>
<tr>
<td>Average</td>
<td>84,582</td>
<td>42,302</td>
</tr>
<tr>
<td>Median</td>
<td>82,957</td>
<td>43,231</td>
</tr>
<tr>
<td>2020-21</td>
<td>463,374</td>
<td>245</td>
</tr>
</tbody>
</table>

* Data through May 1, 2021; reported to CDC as of May 6.
FluSurv-NET: Influenza-Associated Hospitalizations, Cumulative Rate 2020-2021 and Selected Previous Seasons

Influenza-Associated Pediatric Deaths by Week of Death 2017-2018 through 2020-2021* Seasons

* Data through May 1, 2021, reported to CDC as of May 6.
Pneumonia, Influenza and COVID-19 (PIC) Mortality, NCHS Mortality Surveillance System
October 2016 through April 2021*

* Data through May 1, 2021; reported to CDC as of May 6.

International Influenza Activity
Global Influenza Surveillance and Response System (GISRS)
Influenza Positives Worldwide
October 2008 through April 2021

Global Influenza Surveillance and Response System (GISRS)
Influenza Positives, Select Transmission Zones/Regions
May 2020 – April 2021
Influenza Vaccine Strains

Vaccine Viruses:
2021-22 Northern Hemisphere Season

- **A/H1pdm09 - Updated**
  - A/Victoria/2570/2019 (H1N1)pdm09-like virus (egg)
  - A/Wisconsin/588/2019 (H1N1)pdm09-like virus (cell or recombinant)
- **A/H3N2 – Updated**
  - A/Cambodia/e0826360/2020 (H3N2)-like virus (egg, cell or recombinant)
- **B/Victoria – No change**
  - B/Washington/02/2019 (B/Victoria lineage)-like virus (egg, cell or recombinant)
- **B/Yamagata – No change**
  - B/Phuket/3073/2013 (B/Yamagata lineage)-like virus (egg, cell or recombinant)
Summary

What Happened to Influenza?

- Influenza activity was at an unusually low level both in the U.S. and worldwide
- COVID-19 mitigation measures likely played a significant roll
  - Social distancing, mask wearing, hand washing
  - Remote learning and telework
  - Decreased travel domestically and internationally
  - Staying home while ill
- Influenza vaccination also provided another layer of protection
What’s Next?

- Influenza is unpredictable.
- Other respiratory viruses are slowly beginning to increase. Will flu follow?
- What happens in the fall when schools reopen?

Thank you!

Any questions?

Alicia Budd
ABudd@cdc.gov

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.