



Influenza Activity Update: 2022-2023 Influenza Season

National Adult and Influenza Immunization Summit
May 11, 2023

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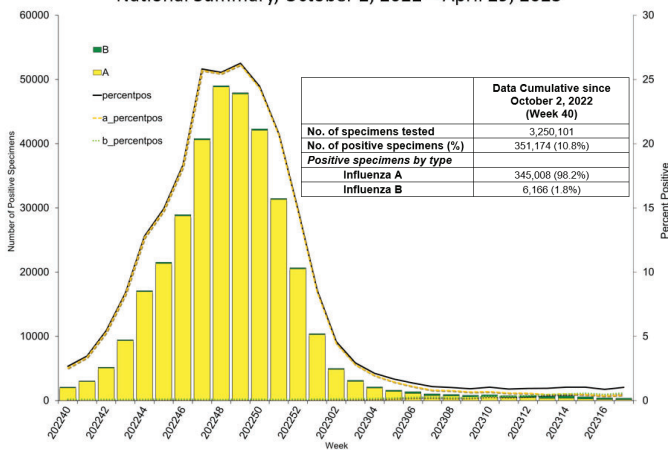
Outline

- 2021-22 talk title: The return of influenza
 - Levels of activity – low
 - Timing of activity - late
- Proposed 2022-23 title: Moving more toward “normal”
 - Levels of activity – “normal”
 - Timing of activity – early

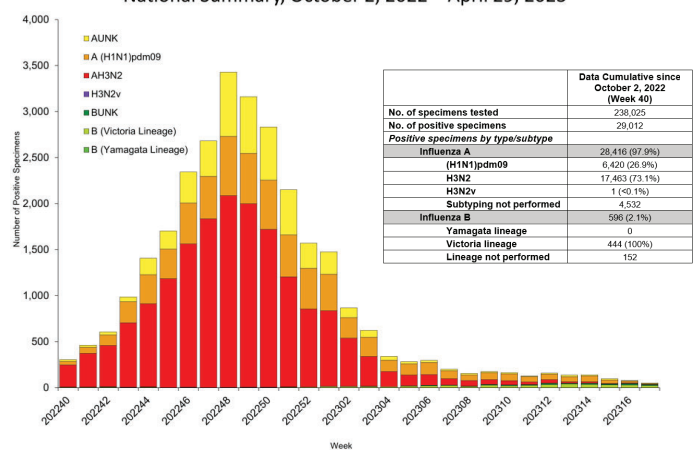
Level of Influenza Activity

Virologic Surveillance – Amount of Activity

Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, October 2, 2022 – April 29, 2023



Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, October 2, 2022 – April 29, 2023



Time Period	Peak Percent Positive at Clinical Labs (Median & Range)	Peak Number of Positives at PHLs (Median and Range)
Pre: COVID: 2015-16 - 2019-20	26.3 (23.6 - 30.3)	3,482 (3,274 - 4,334)
Early COVID: 2020-21 & 2021-22	0.3 - 9.9	24 - 1528
This Season: 2022-23	26.3	3,429

* Data through April 29, 2023; reported to CDC as of May 3.

Virologic Surveillance – Virus Characteristics*

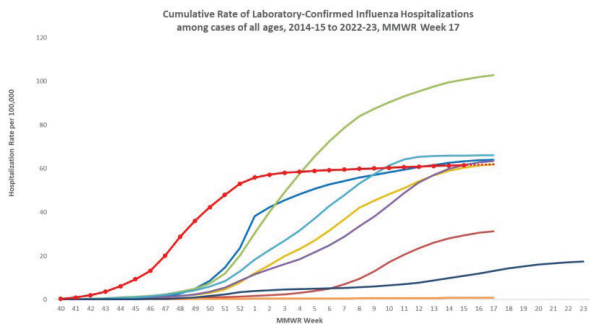
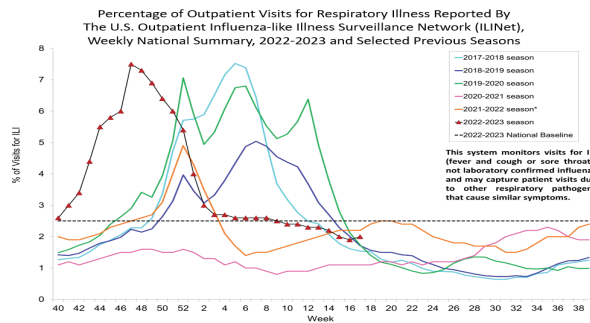
Virus Subtype or Lineage	Genetic Characterization				
	Total No. of Subtype/Lineage Tested	HA Clade	Number (% of subtype/lineage tested)	HA Subclade	Number (% of subtype/lineage tested)
A/H1	1,029				
		6B.1A.5a	1,029 (100%)	1	6 (0.6%)
				2a	156 (15.2%)
				2a.1	867 (84.3%)
A/H3	1,627				
		3C.2a1b.2a	1,627 (100%)	2a	25 (1.5%)
				2a.1	184 (11.3%)
				2a.1b	133 (8.2%)
				2a.3	46 (2.8%)
				2a.3a	3 (0.2%)
				2a.3a.1	70 (4.3%)
				2a.3b	11 (0.7%)
				2b	1,155 (71.0%)
				2c	0 (0%)
B/Victoria	157				
		V1A	157 (100%)	3	4 (2.5%)
				3a.2	153 (97.5%)
B/Yamagata	0				
		Y3	0	Y3	0 (0%)

Antiviral Susceptibility

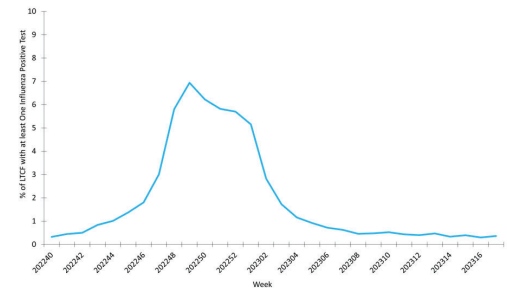
- Oseltamivir, Peramivir, Zanamivir
 - 2,801 tested
 - 1 (<0.1%) with reduced inhibition by oseltamivir
- Baloxavir
 - 2,716 tested
 - 0 resistant

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

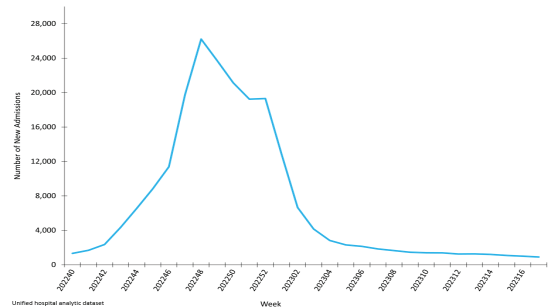
Morbidity Surveillance – Amount of Activity



Percent of Long-term Care Facilities (LTCF) with at Least One Confirmed Influenza Positive Test among Residents, Reported to CDC National Healthcare Safety Network (NHSN), National Summary, October 3, 2022 – April 30, 2023



New Influenza Hospital Admissions Reported to HHS Protect, National Summary, October 2, 2022 – April 29, 2023

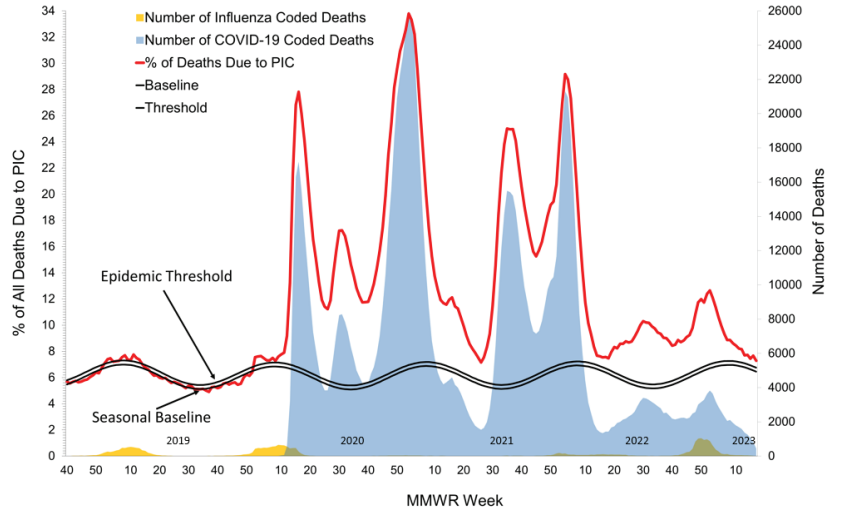


* Data through April 29, 2023; reported to CDC as of May 3.

Mortality Surveillance – Amount of Activity

	Number of Influenza-Associated Pediatric Deaths*
2004-05	47
2005-06	46
2006-07	77
2007-08	88
2008-09	137
2009-10	288
2010-11	124
2011-12	37
2012-13	171
2013-14	111
2014-15	148
2015-16	95
2016-17	110
2017-18	188
2018-19	144
2019-20	199
2020-21	1
2021-22	46
2022-23	149

Pneumonia, Influenza, and COVID-19 Mortality from the National Center for Health Statistics Mortality Surveillance System
Data as of May 4, 2023



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Annual U.S. Influenza Burden Estimates

Estimated Range from 2010 – 2020

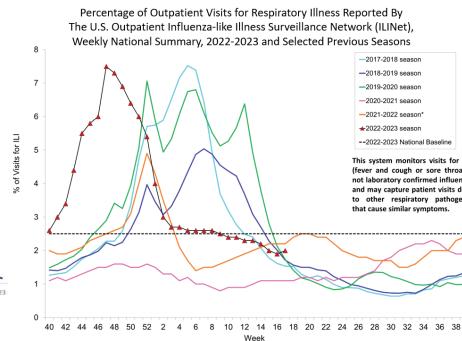
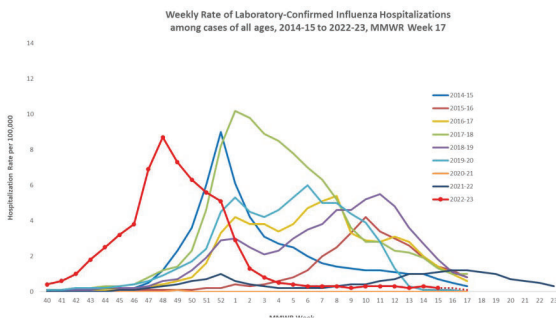
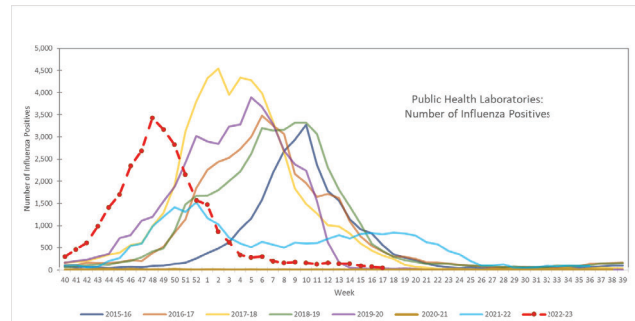
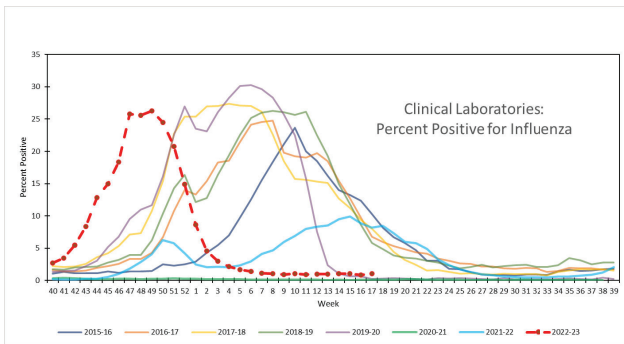
2022 – 2023 Estimates



* Data through April 29, 2023; reported to CDC as of May 3.

Timing of Influenza Activity

Early Start and Peak



Timing of peak

- 2022-23- late Nov/early Dec
- Most frequent - February

* Data through April 29, 2023; reported to CDC as of May 3.

Summary

Summary

- 2022-23 season
 - Levels of influenza activity similar to pre-COVID seasons
 - H3 predominant season
 - Activity increased and peaked early
 - No second wave...yet

- 2023-24 season
 - What other tricks does flu have up its sleeve?

Thank you!

Any questions?

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For more information, contact CDC
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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.

