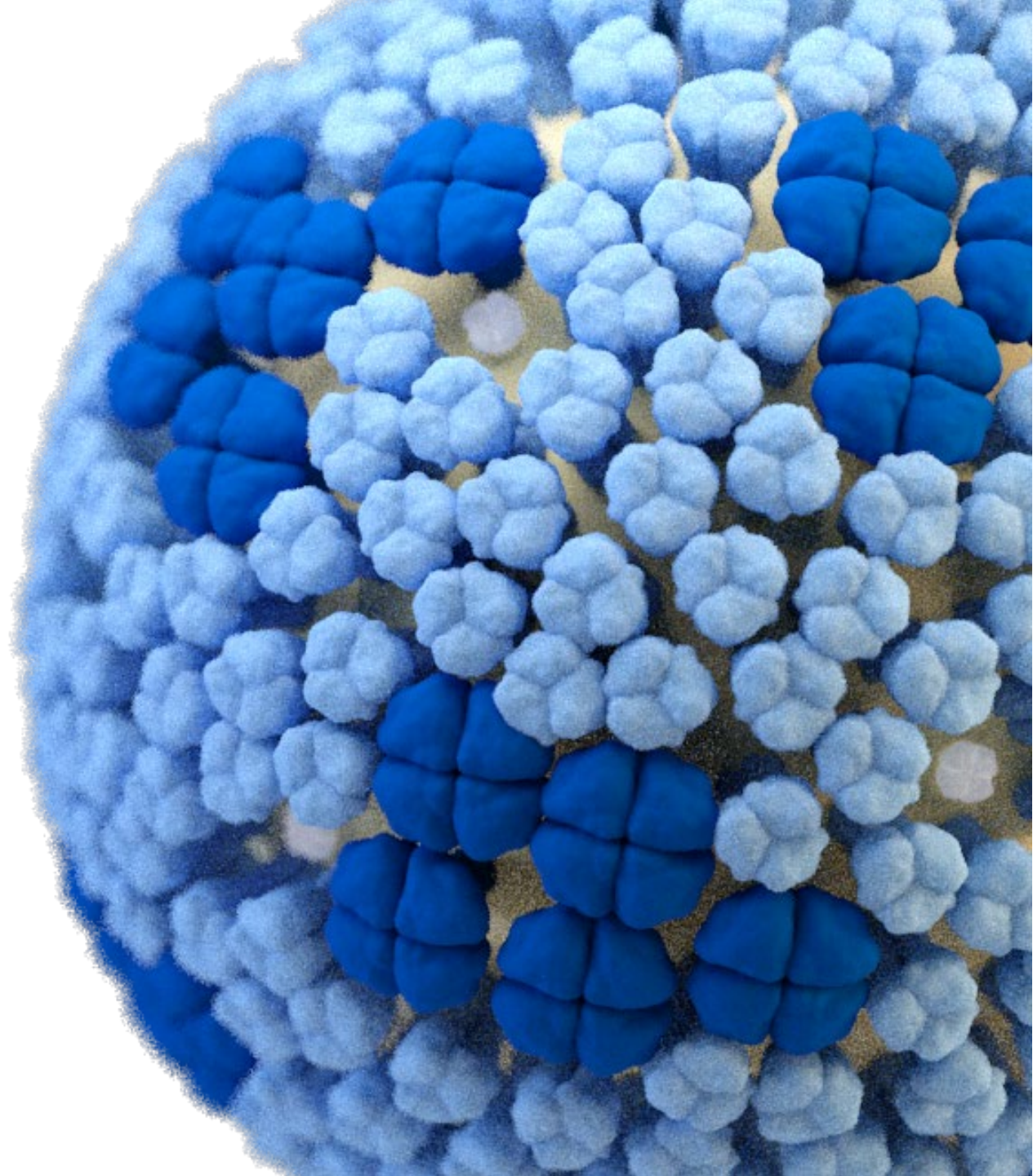


INFLUENZA ACTIVITY UPDATE: 2022-2023 Influenza Season

National Adult and Influenza Immunization Summit
November 3, 2022

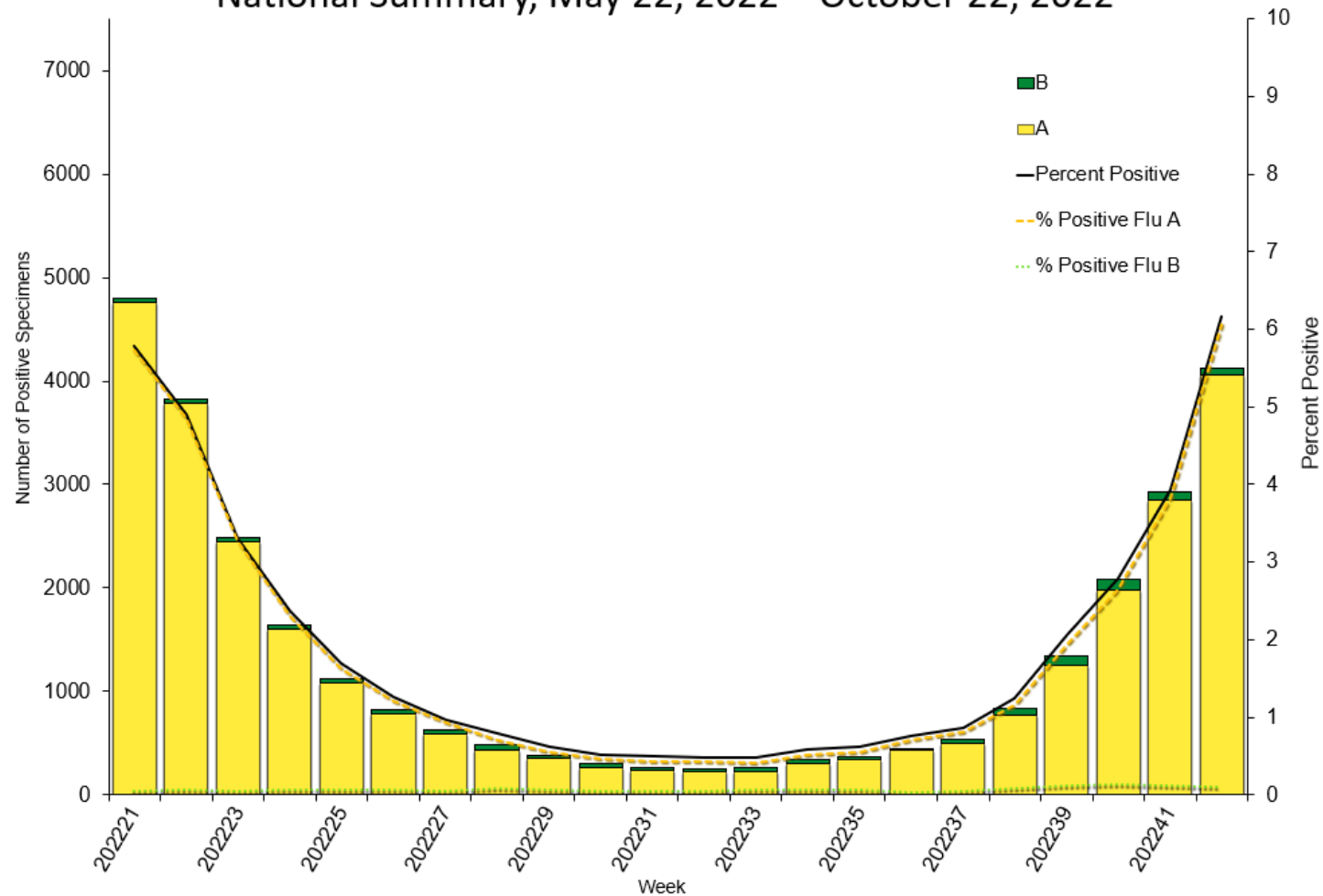
Alicia Budd, MPH

Influenza Division, CDC



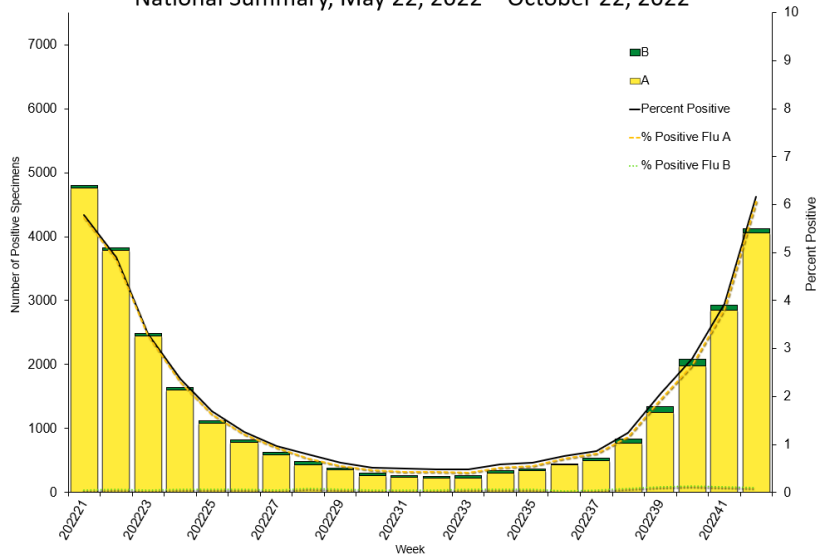
Virologic Surveillance – Percent Positive for Influenza

Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories,
National Summary, May 22, 2022 – October 22, 2022

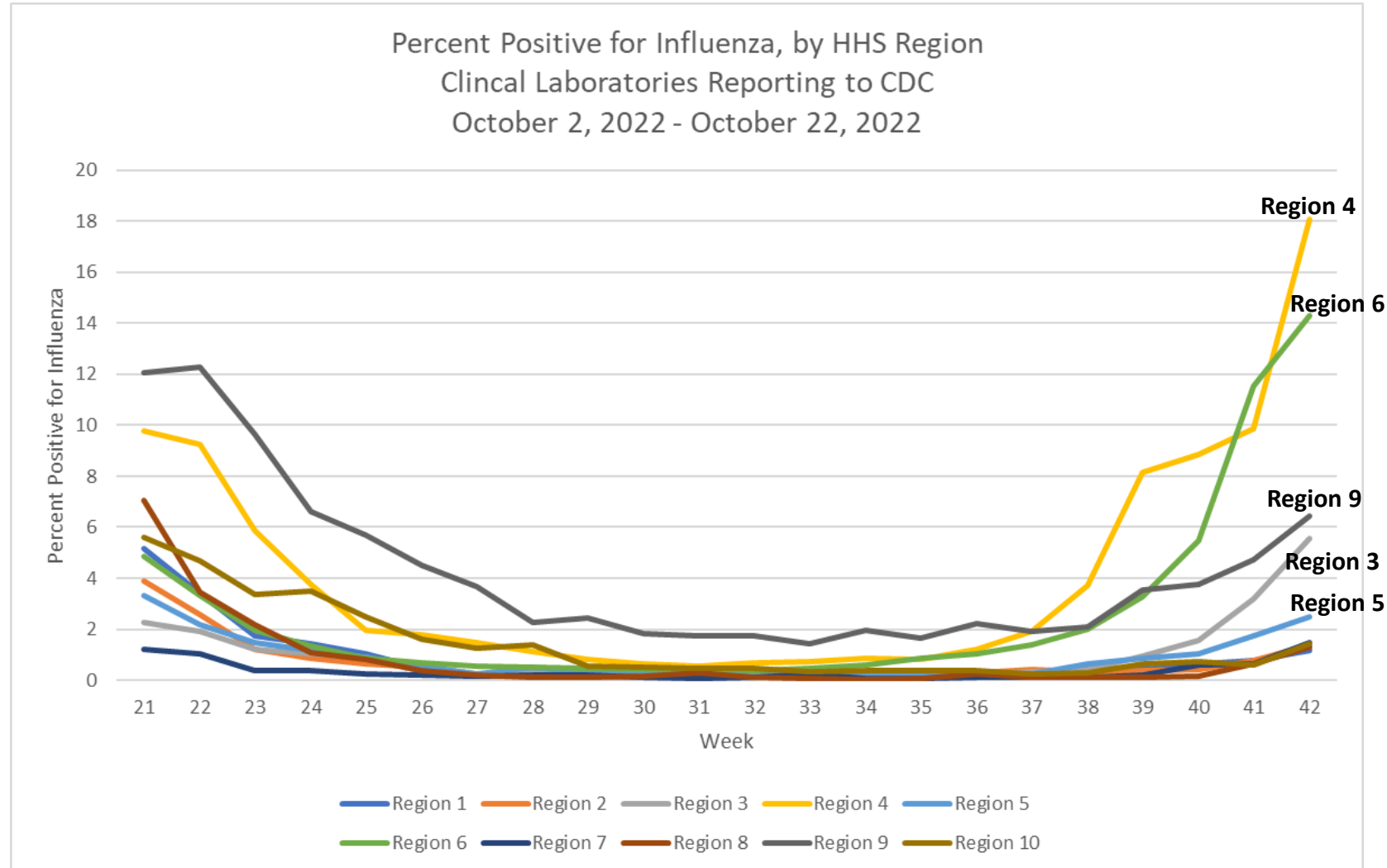


Virologic Surveillance – Percent Positive for Influenza

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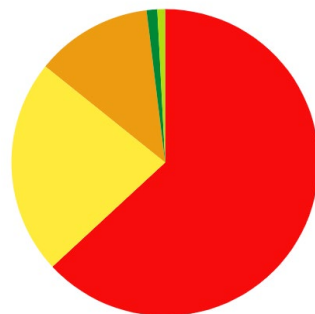
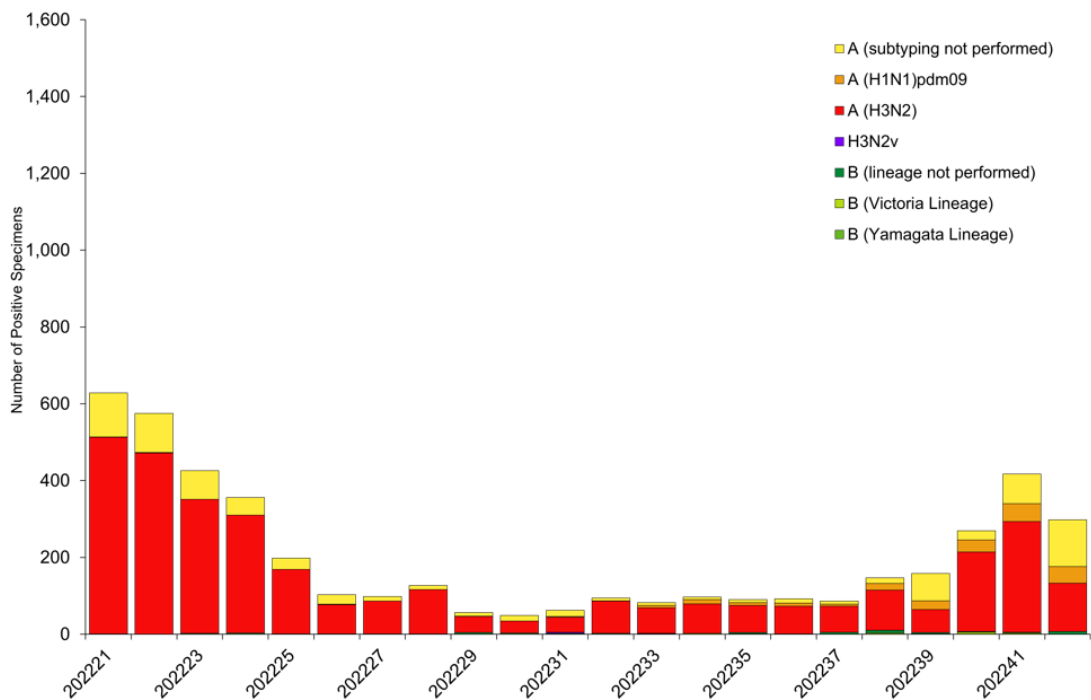


Percent Positive for Influenza, by HHS Region
Clinical Laboratories Reporting to CDC
October 2, 2022 - October 22, 2022



Virologic Surveillance – Virus Characteristics

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



October 2, 2022 – October 22, 2022

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

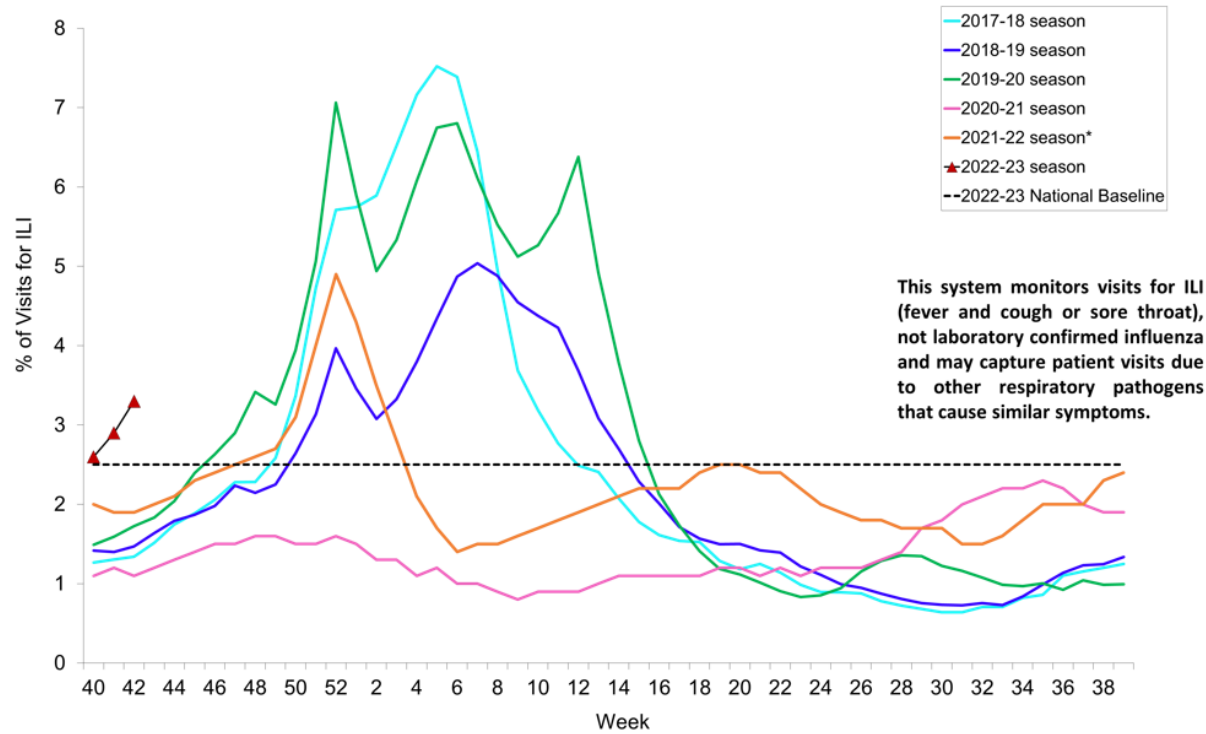
Viruses Collected in the U.S. since May 1, 2022

Virus	Genetic Characterization		Antigenic Characterization	
	Number Tested	Clade/Subclade	Number Tested	Similarity to vaccine reference virus
A/H1	36	13% - 6B.1A.5a.1	14	86% similar to cell-grown
		87% - 6B.1A.5a.2		86% similar to egg-grown
A/H3	408	100% - 3C.2a1b.2a.2	35	100% similar to cell-grown
				94% similar to egg-grown
B/Victoria	2	100% - V1A.3	1	100% similar to cell-grown
				100% similar to egg-grown

Outpatient Respiratory Illness

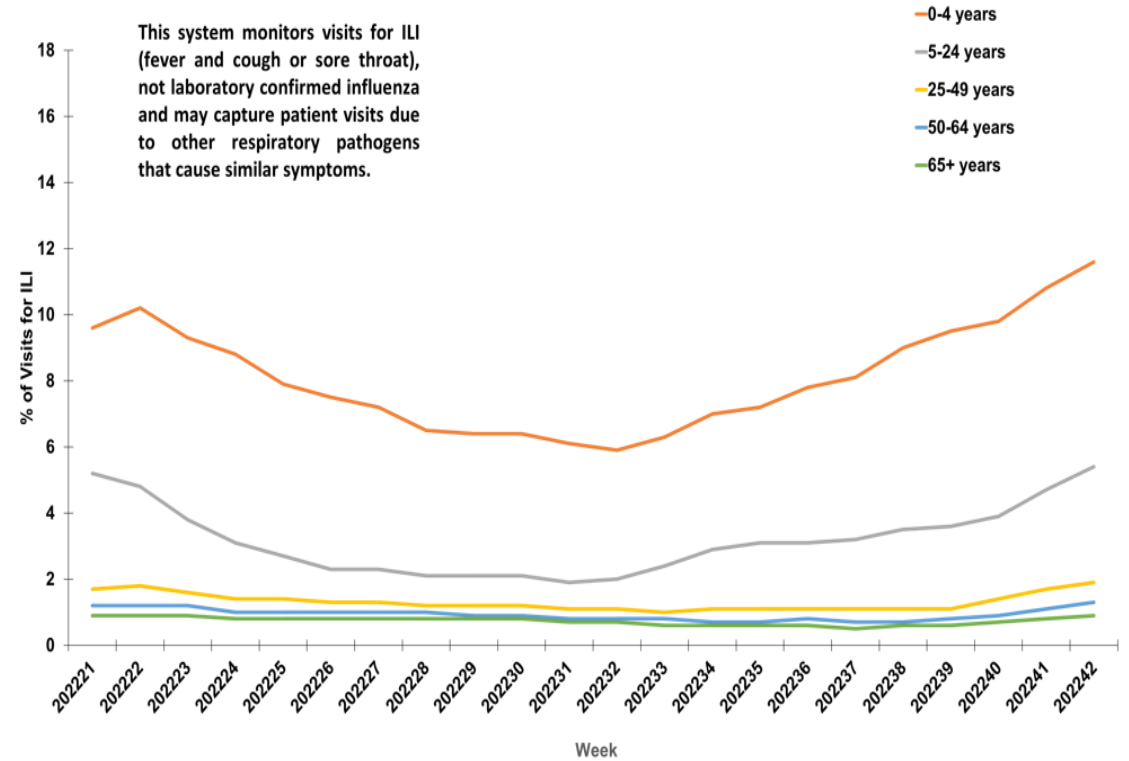
All ages combined, multiple seasons

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



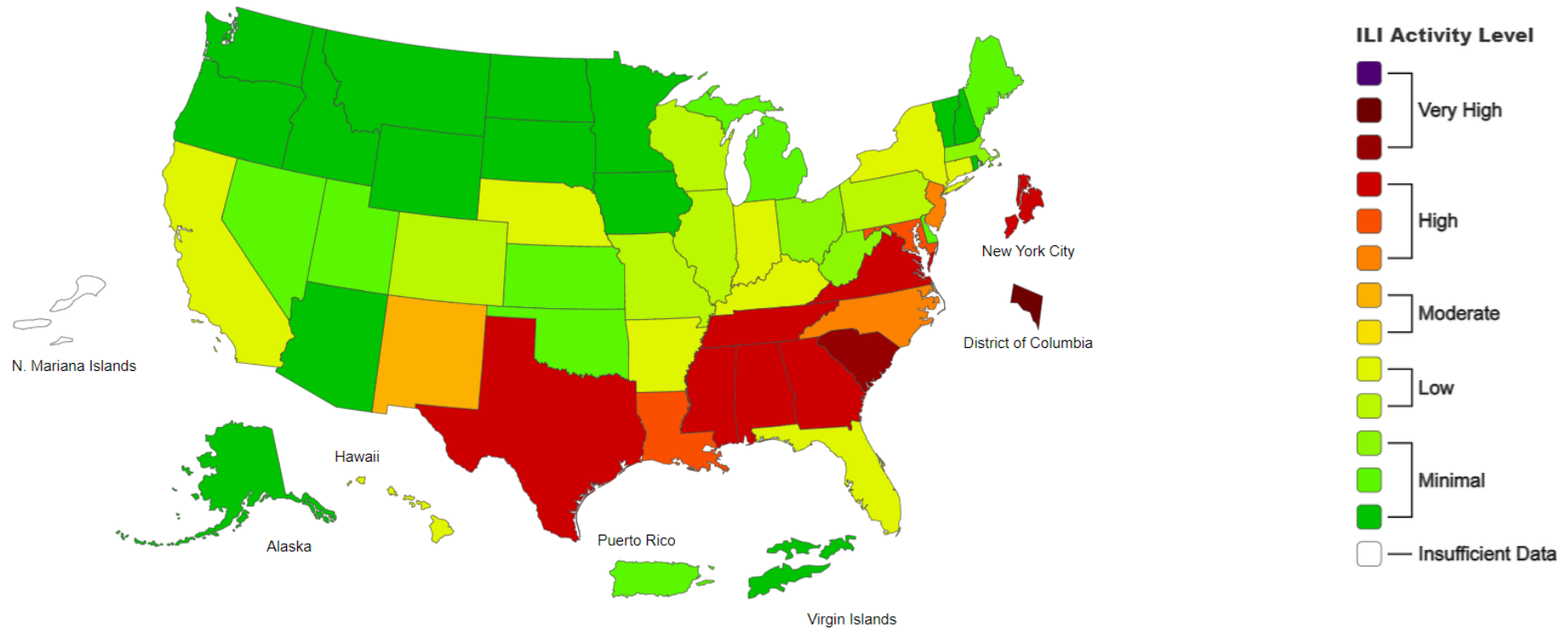
Summer and this season; multiple age groups

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*



Outpatient Respiratory Illness

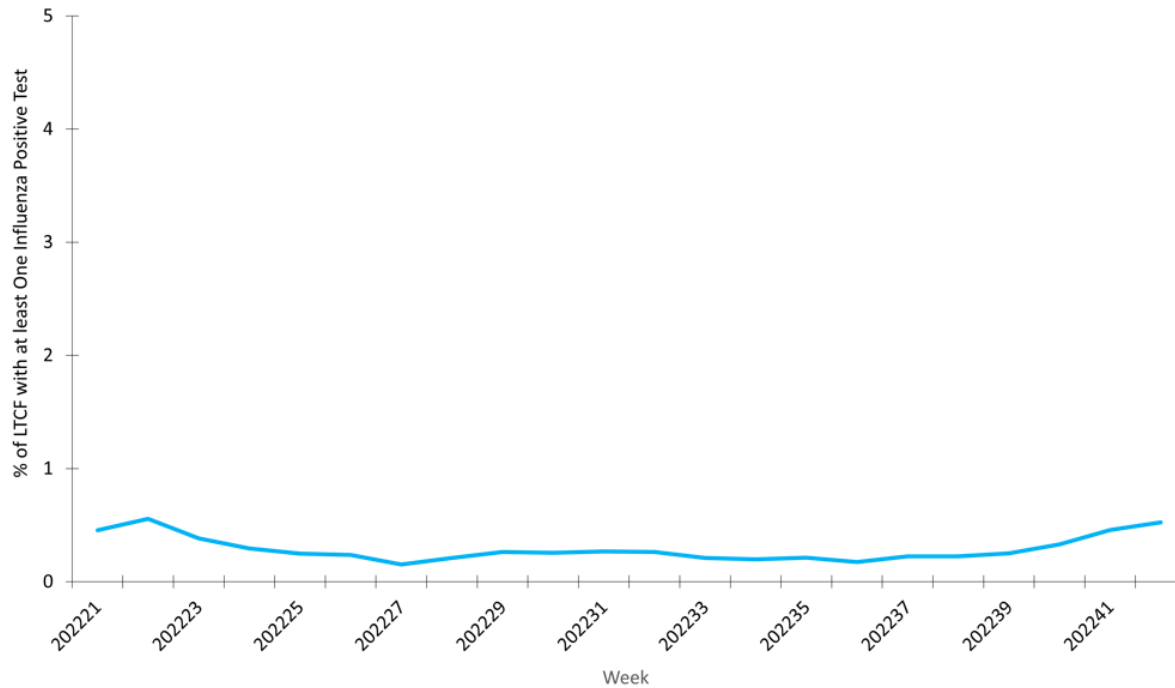
2022-23 Influenza Season Week 42 ending Oct 22, 2022



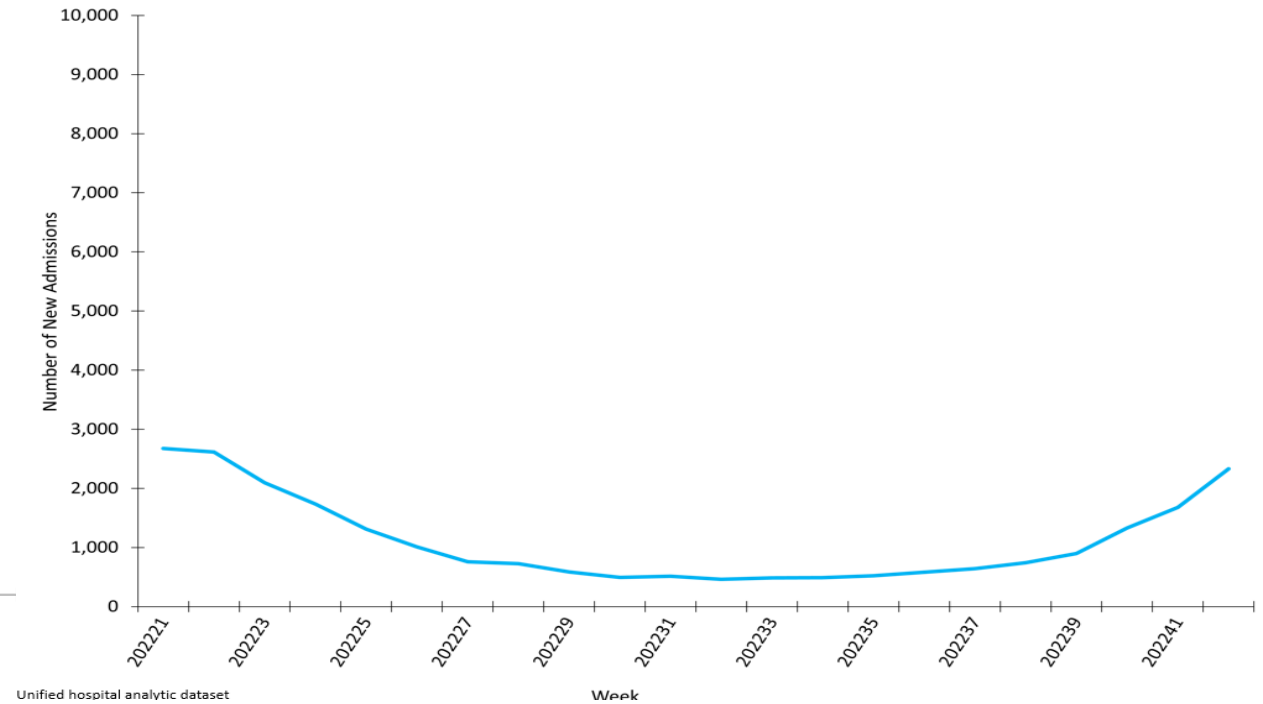
- Highest levels match with areas reporting increased flu activity
- Also being driven by
 - RSV
 - Rhinovirus/Enterovirus
 - Sars-CoV-2

Long-term Care Facilities (LTCF) and Hospitals

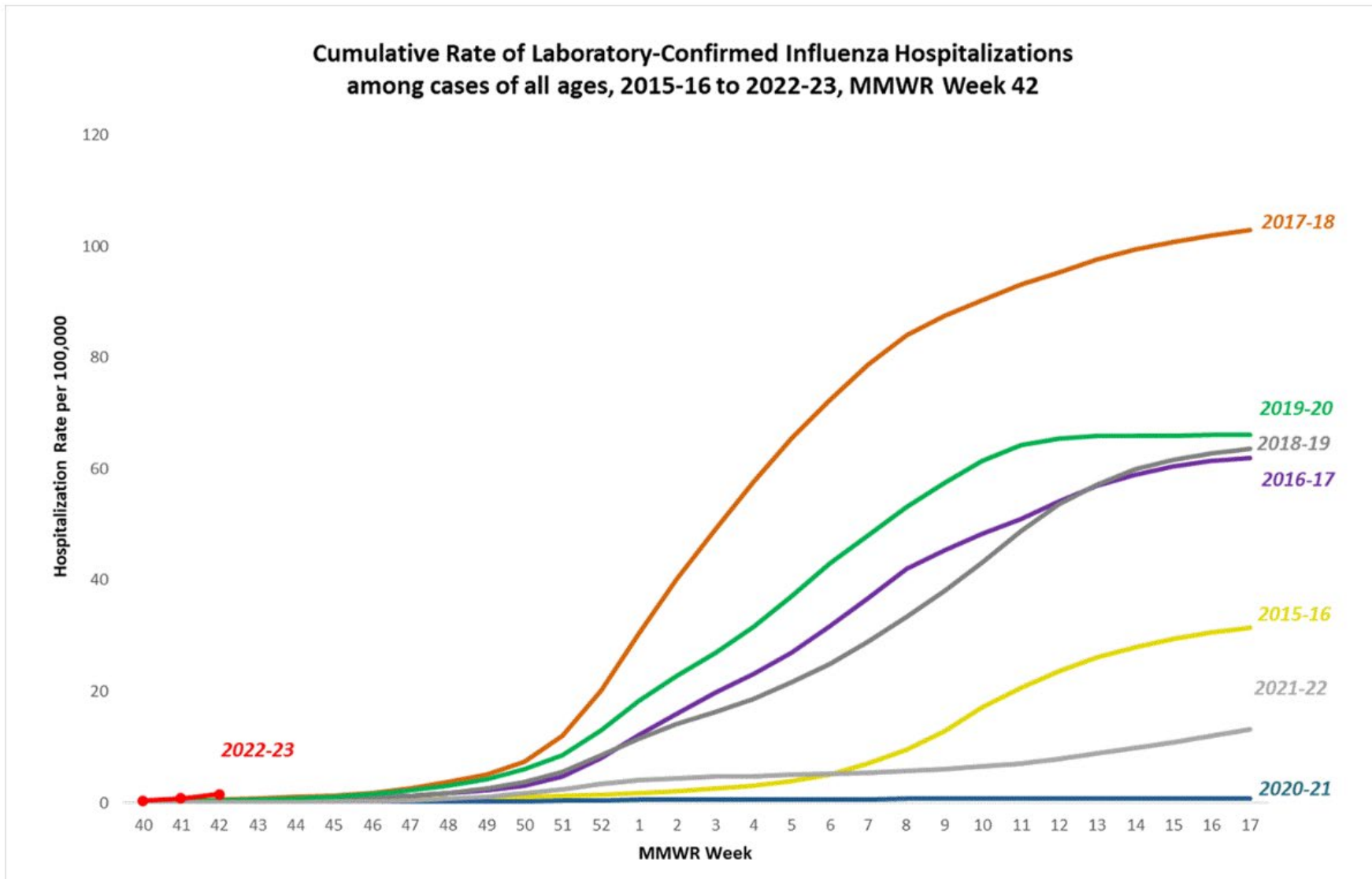
Percent of LTCFs with ≥ 1 Influenza Positive Test
Among Residents, National Summary
May 23, 2022 – October 23, 2022



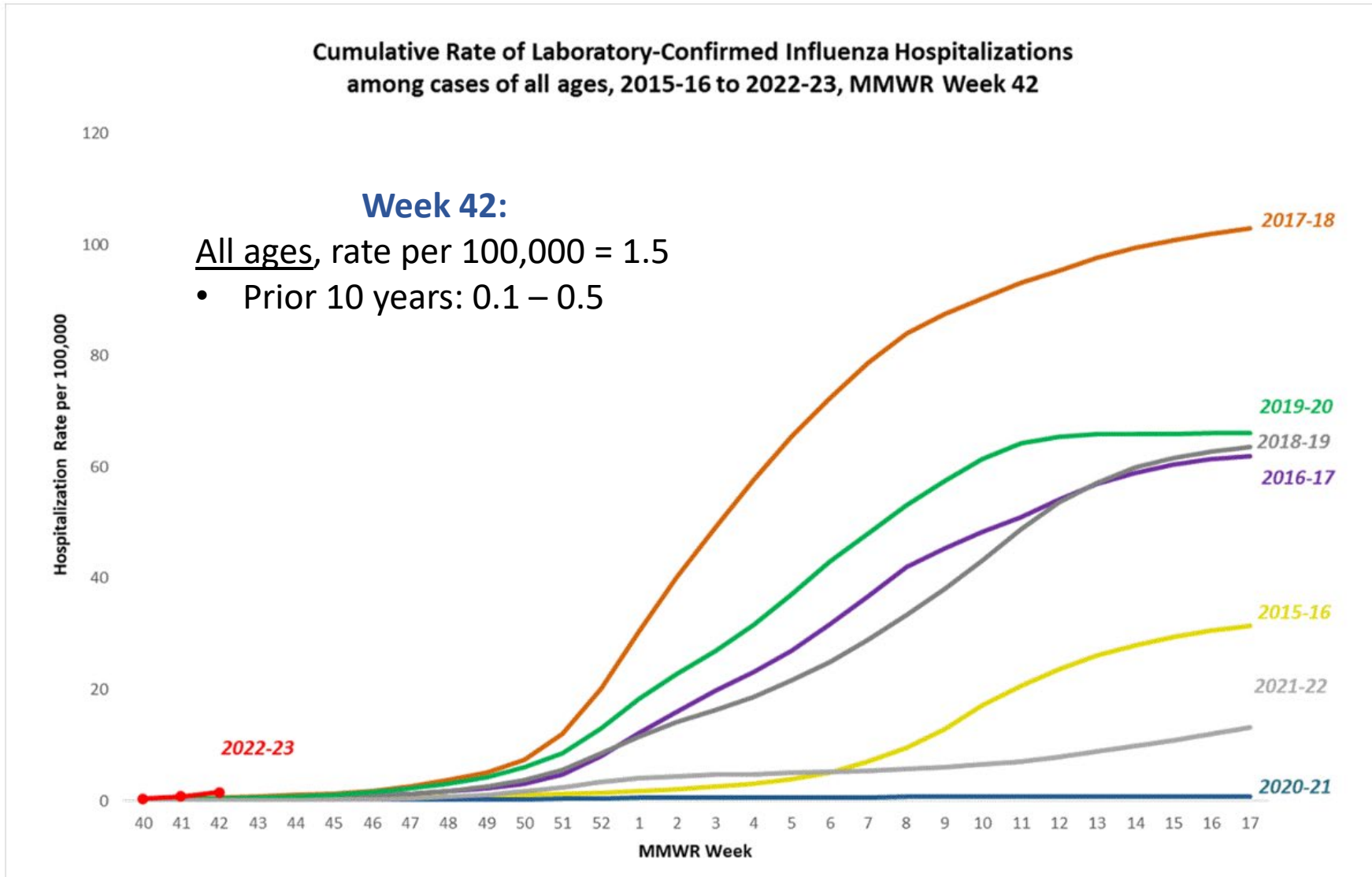
New Influenza Hospital Admissions
Reported to HHS Protect, National Summary
May 22, 2022 – October 22, 2022



FluSurvNET – Hospitalization Rates



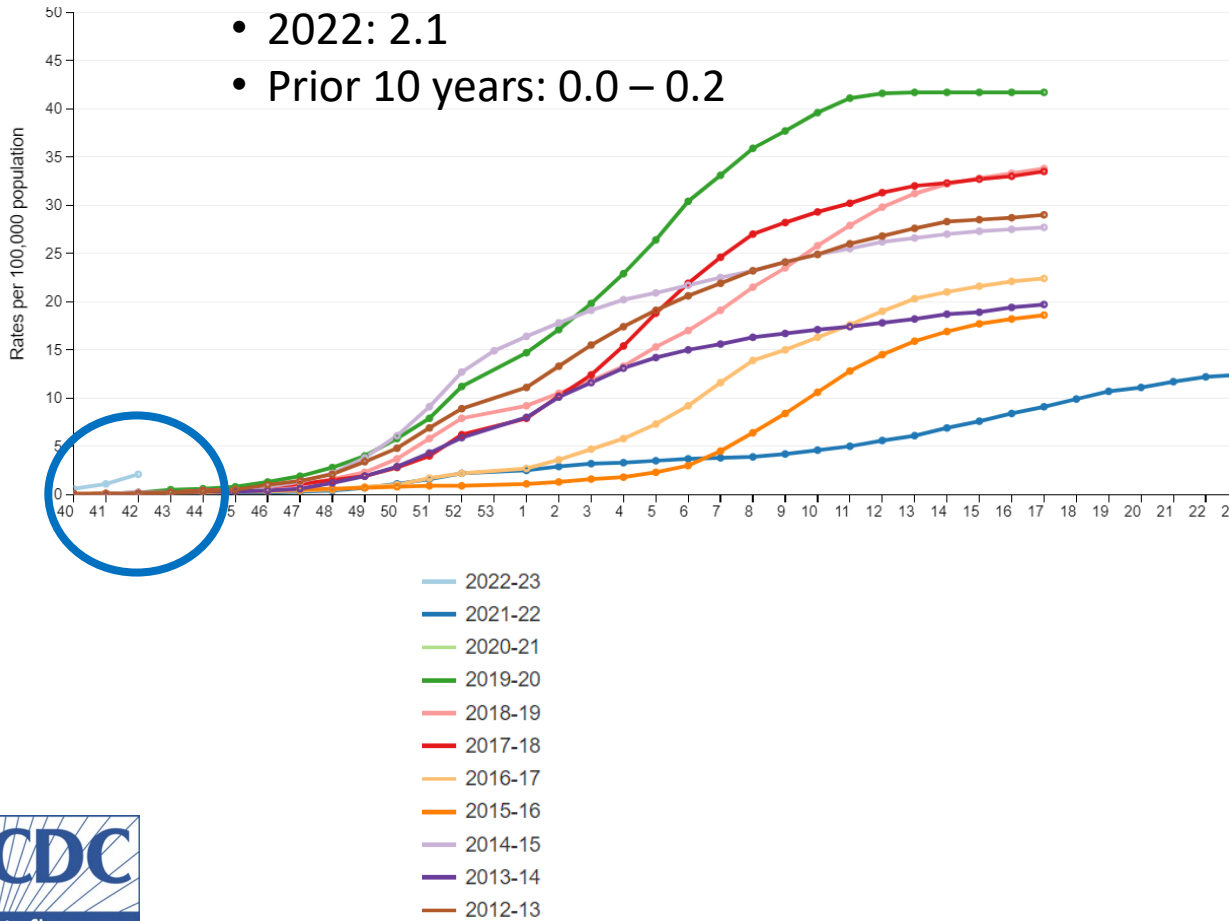
FluSurvNET – Hospitalization Rates



FluSurv-NET – Hospitalization Rates

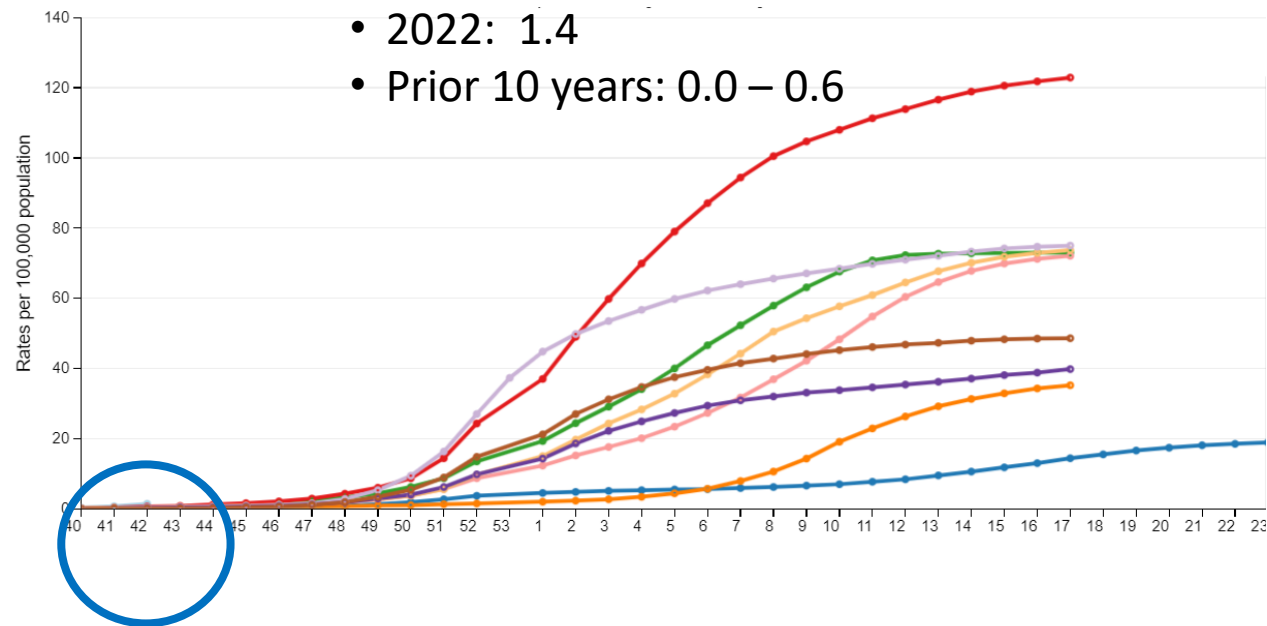
Children, <18 years
Week 42, rate per 100,000:

- 2022: 2.1
- Prior 10 years: 0.0 – 0.2



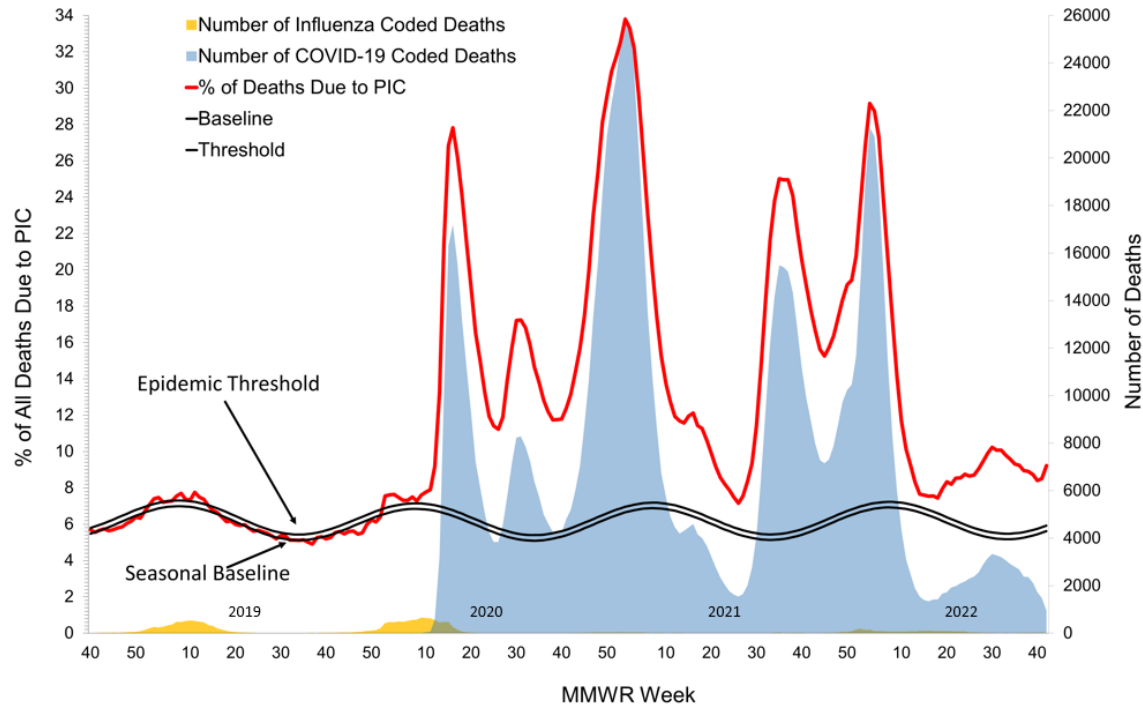
Adults, 18+ years
Week 42, rate per 100,000:

- 2022: 1.4
- Prior 10 years: 0.0 – 0.6

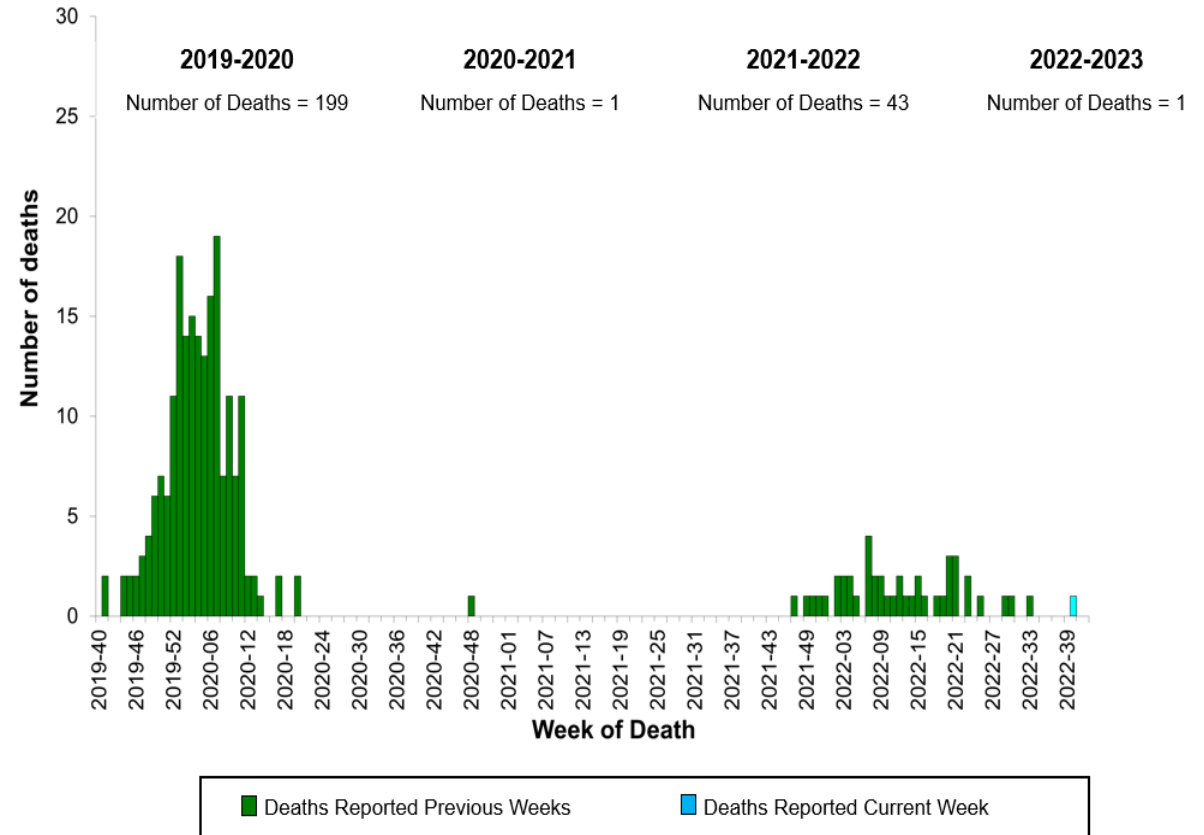


Mortality

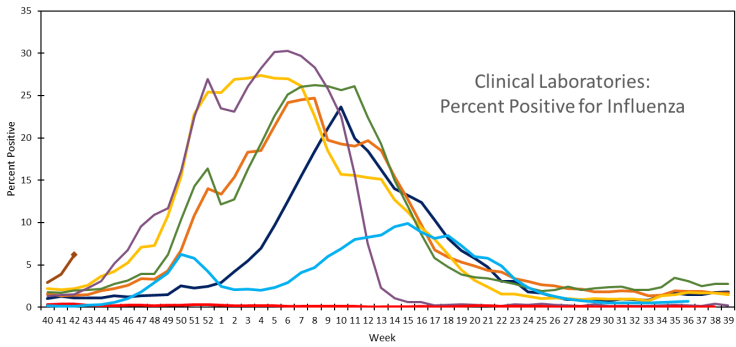
Pneumonia, Influenza, and COVID-19 Mortality from the National Center for Health Statistics Mortality Surveillance System
Data as of October 27, 2022



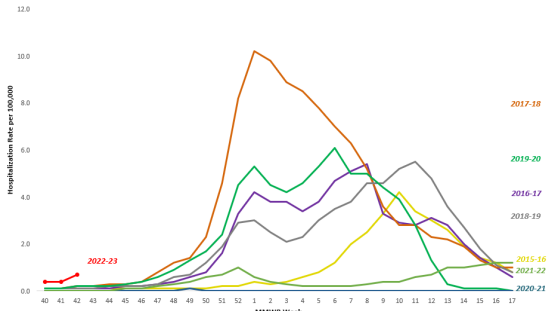
Influenza-Associated Pediatric Deaths by Week of Death, 2019-2020 season to 2022-2023 season



Influenza Activity Timing – early and not alone



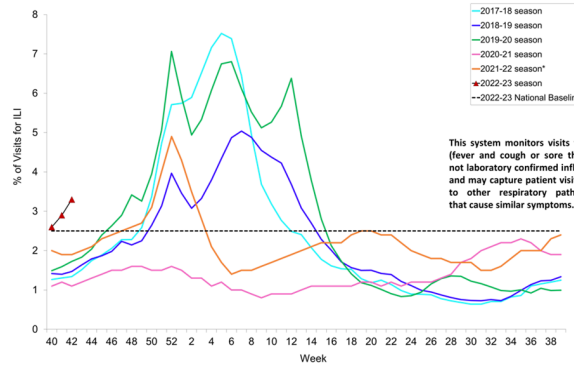
Weekly Rate of Laboratory-Confirmed Influenza Hospitalizations among cases of all ages, 2015-16 to 2022-23, MMWR Week 42



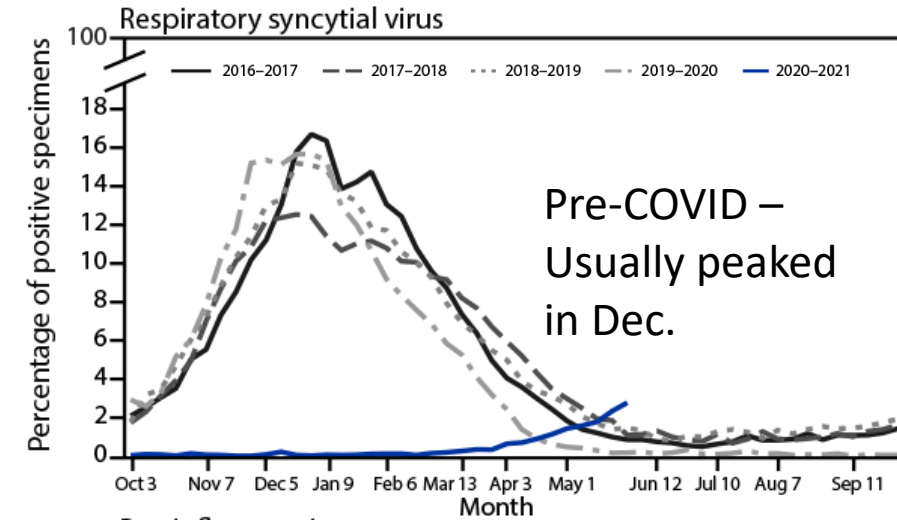
**In this figure, weekly rates for all seasons prior to the 2022-23 season reflect end-of-season rates. For the 2022-23 season, rates for recent hospital admissions are subject to reporting delays. As hospitalization data are received each week, prior case counts and rates are updated accordingly.



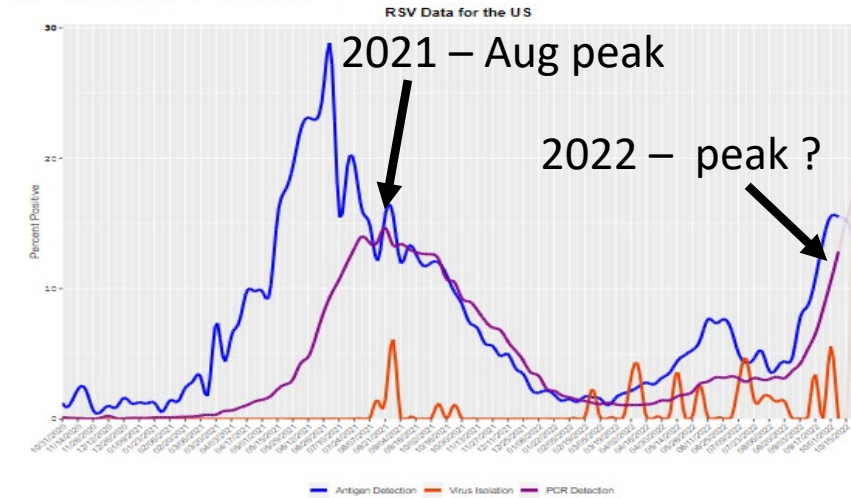
Percentage of Outpatient Visits for Respiratory Illness Reported by The U.S. Outpatient Influenza-like Illness Surveillance Network (ILI_{Net}), Weekly National Summary, 2022-2023* and Selected Previous Seasons



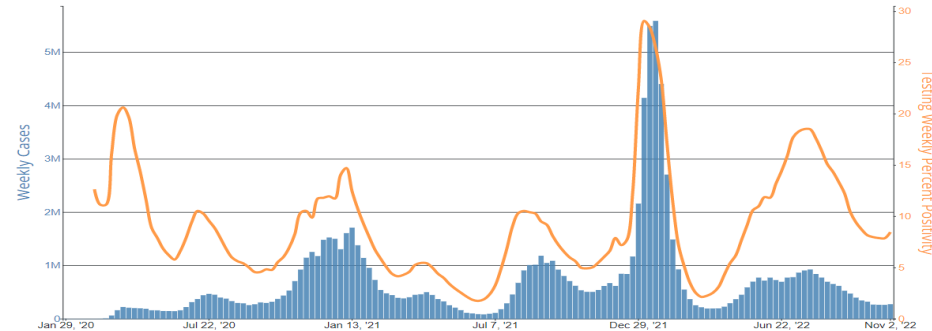
RSV (reported to NREVSS)



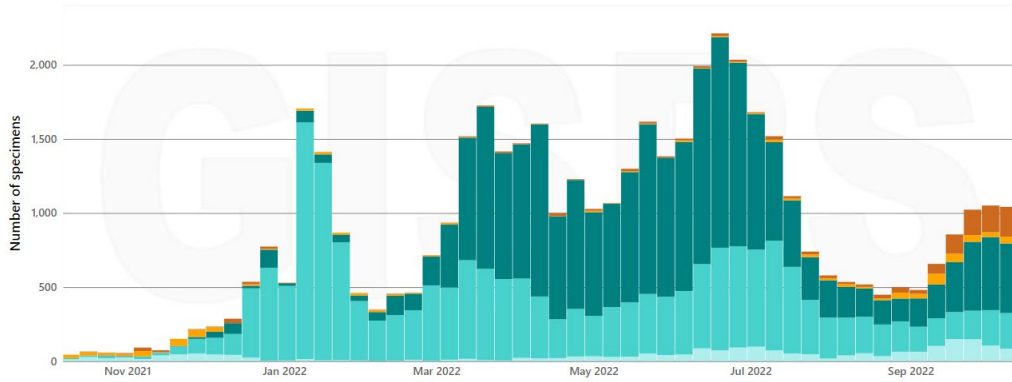
Percent Positive



Weekly Trends in Number of Cases and COVID-19 Nucleic Acid Amplification Tests (NAATs) 7-day Percent Positivity in The United States Reported to CDC

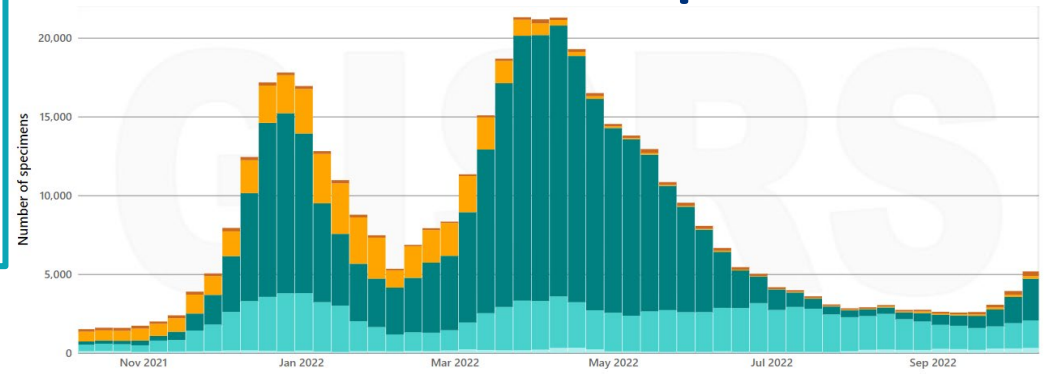


Southern Hemisphere

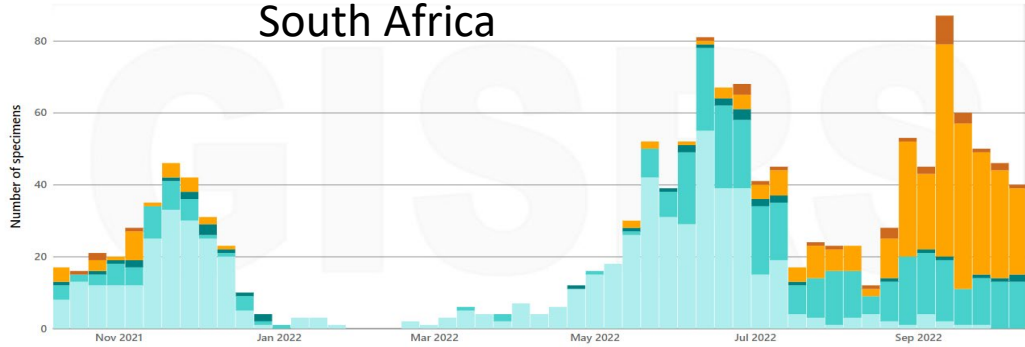


A/H3
predominant
overall and in
most
(but not all)
countries

Northern Hemisphere

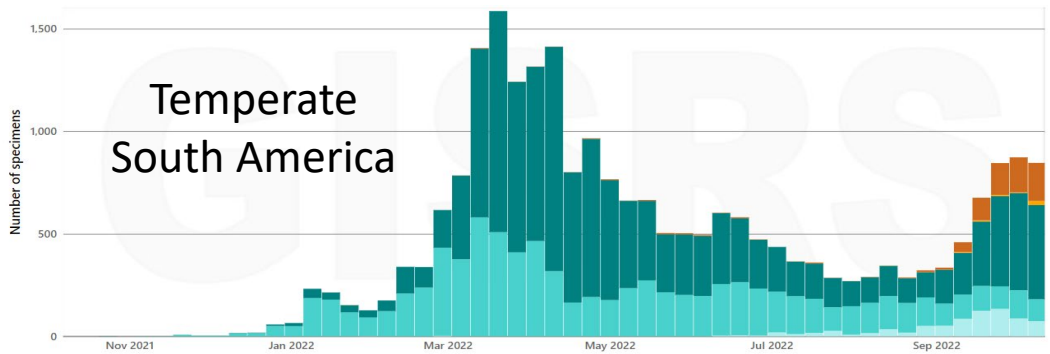


South Africa

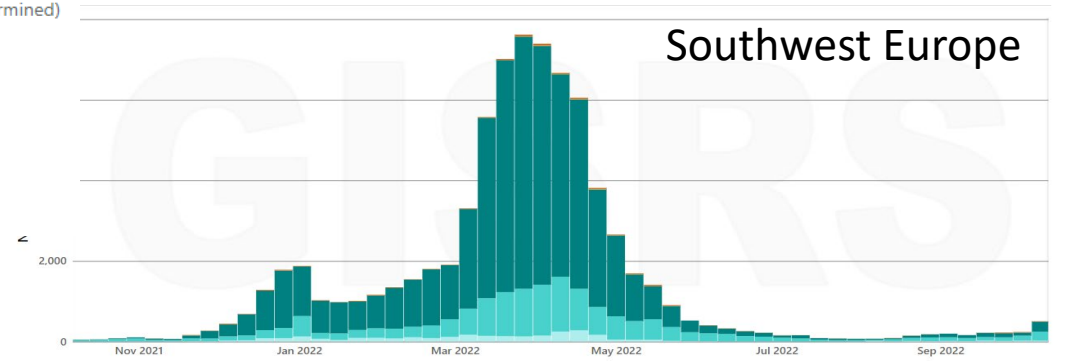


- Influenza subtype
- Select all
 - Influenza B (lineage not determined)
 - Influenza B (Victoria)
 - Influenza B (Yamagata)
 - Influenza A not subtyped
 - Influenza A(H3)
 - Influenza A(H1N1)pdm09
 - Influenza A(H1)
 - Influenza A(H5)

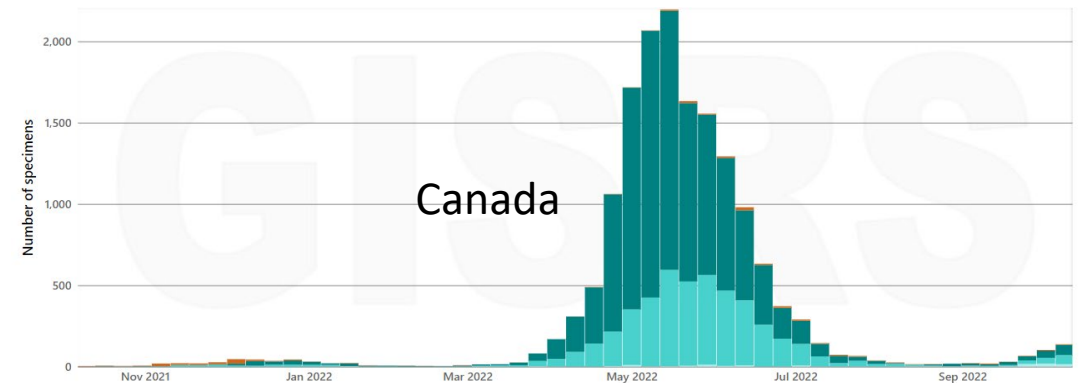
Temperate South America



Southwest Europe



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!