Influenza, RSV, and COVID-19 Updates

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12/7/2023

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Agenda

- Epidemiology of Influenza, RSV, and COVID-19
- Influenza vaccination
- RSV (Respiratory Syncytial Virus) vaccination
- COVID-19 vaccination

Epidemiology

Tracking Respiratory Virus Activity

- Core Data:
  - Emergency department visits (National Syndromic Surveillance Program)
  - Hospitalizations
  - Deaths

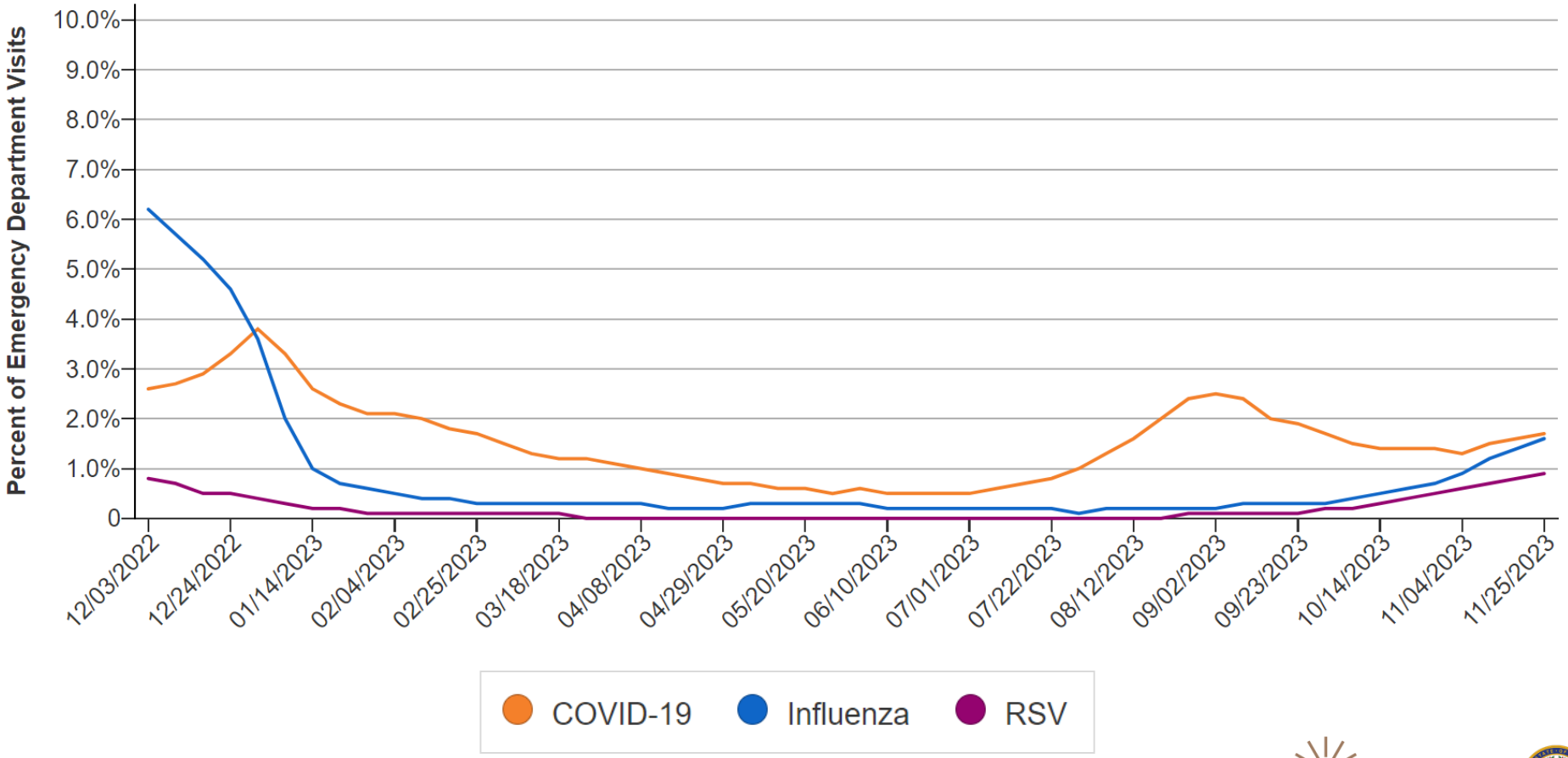
- Supplemental Data:
  - Outpatient provider visits for “influenza-like illness” (ILI), defined as fever with cough or sore throat
  - Test positivity from local hospitals or NREVSS (National Respiratory and Enteric Virus Surveillance System)
  - Wastewater surveillance (for COVID-19 only currently)

Emergency Department Visits for Viral Respiratory Illness

Weekly percent of total emergency department visits associated with COVID-19, influenza, and RSV.

State/Territory

United States



https://www.cdc.gov/respiratory-viruses/data-research/dashboard/activity-levels.html

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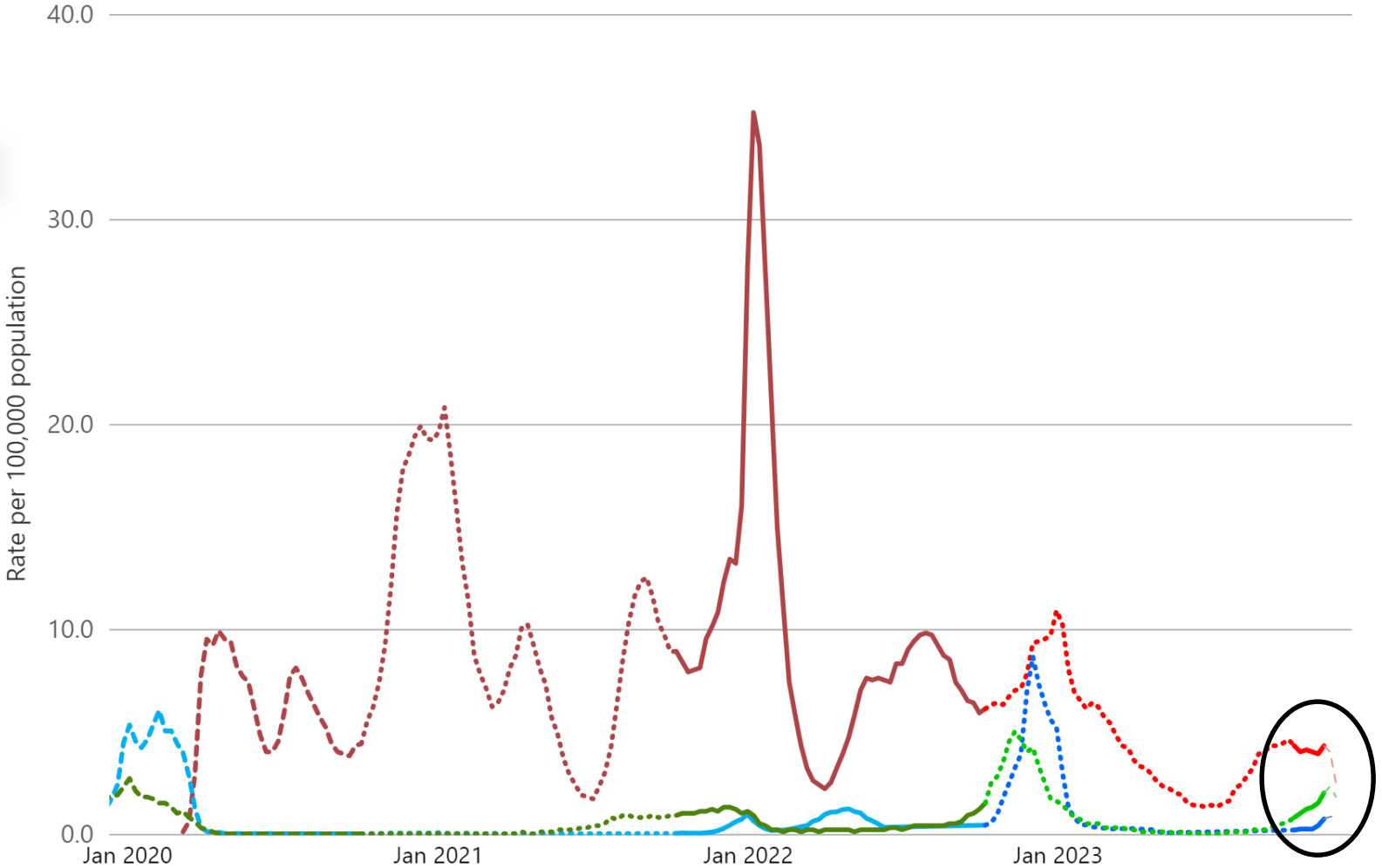
Weekly Rates of COVID-19, RSV, and Influenza Hospitalizations in the U.S., 2020-2024



https://www.cdc.gov/surveillance/resp-net/dashboard.html

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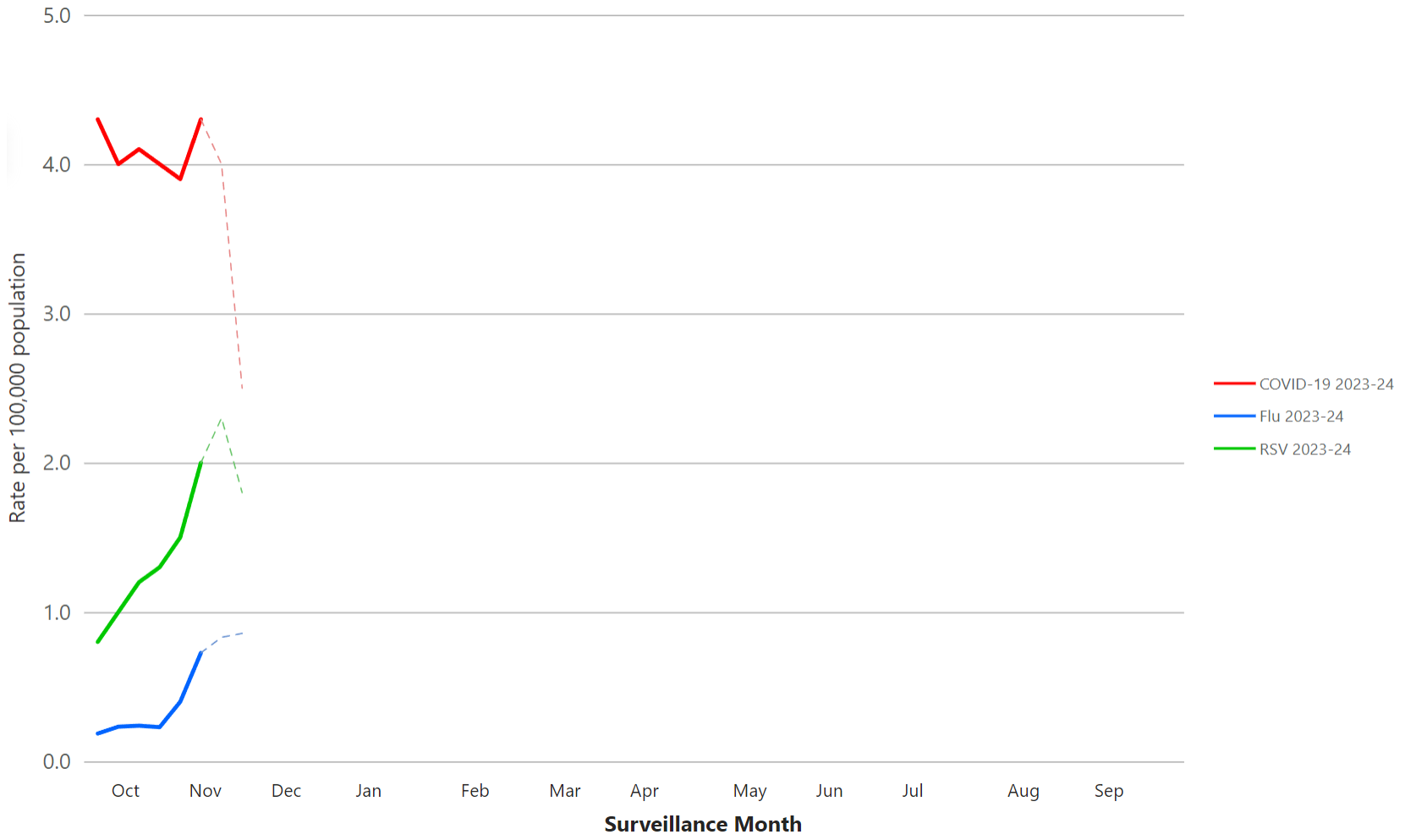
Weekly Rates of COVID-19, RSV, and Influenza Hospitalizations in the U.S., 2023-2024



https://www.cdc.gov/surveillance/resp-net/dashboard.html

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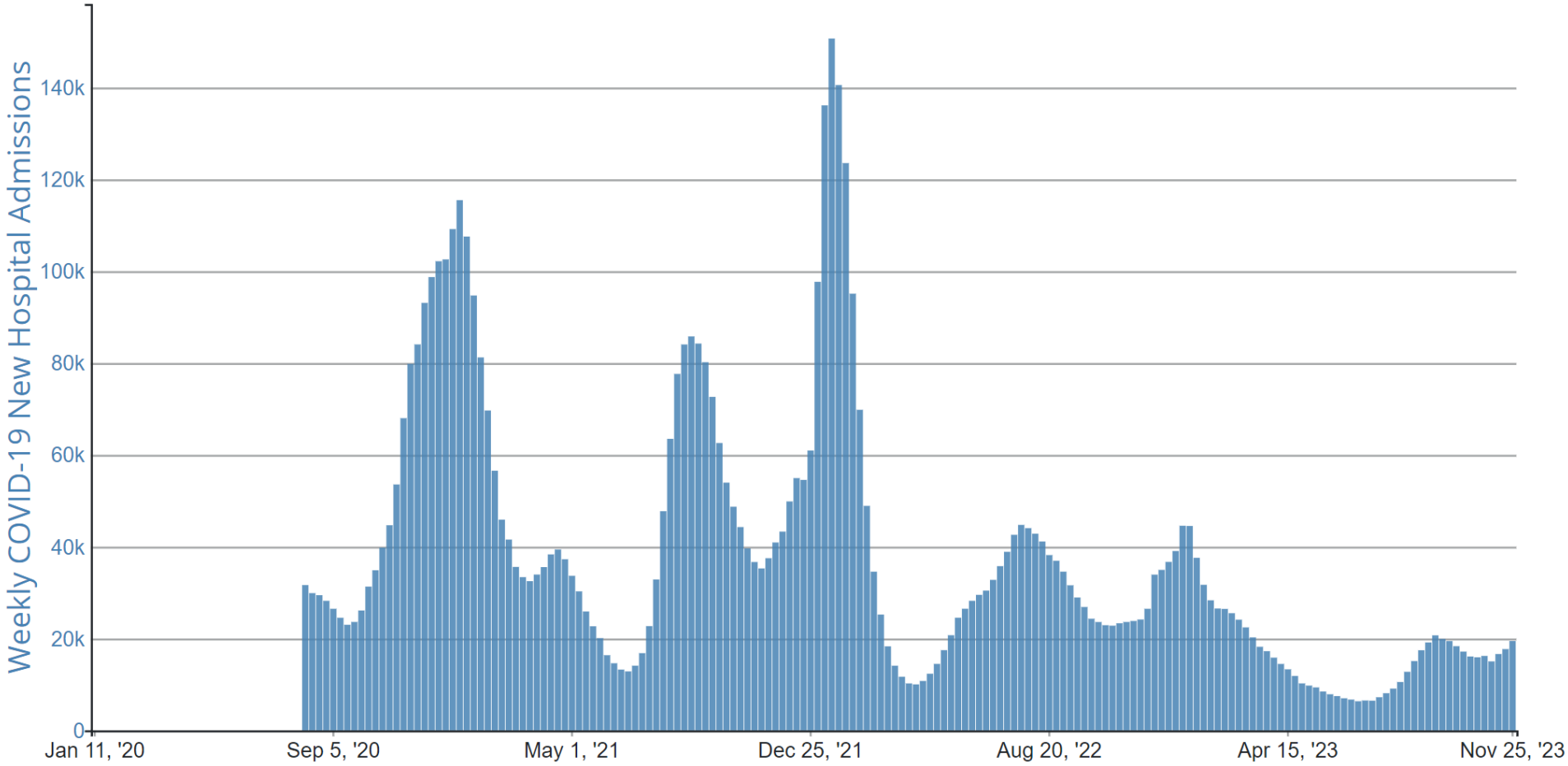
COVID-19 Hospitalizations in the U.S.



https://covid.cdc.gov/covid-data-tracker/#trends_weeklyhospitaladmissions_select_00

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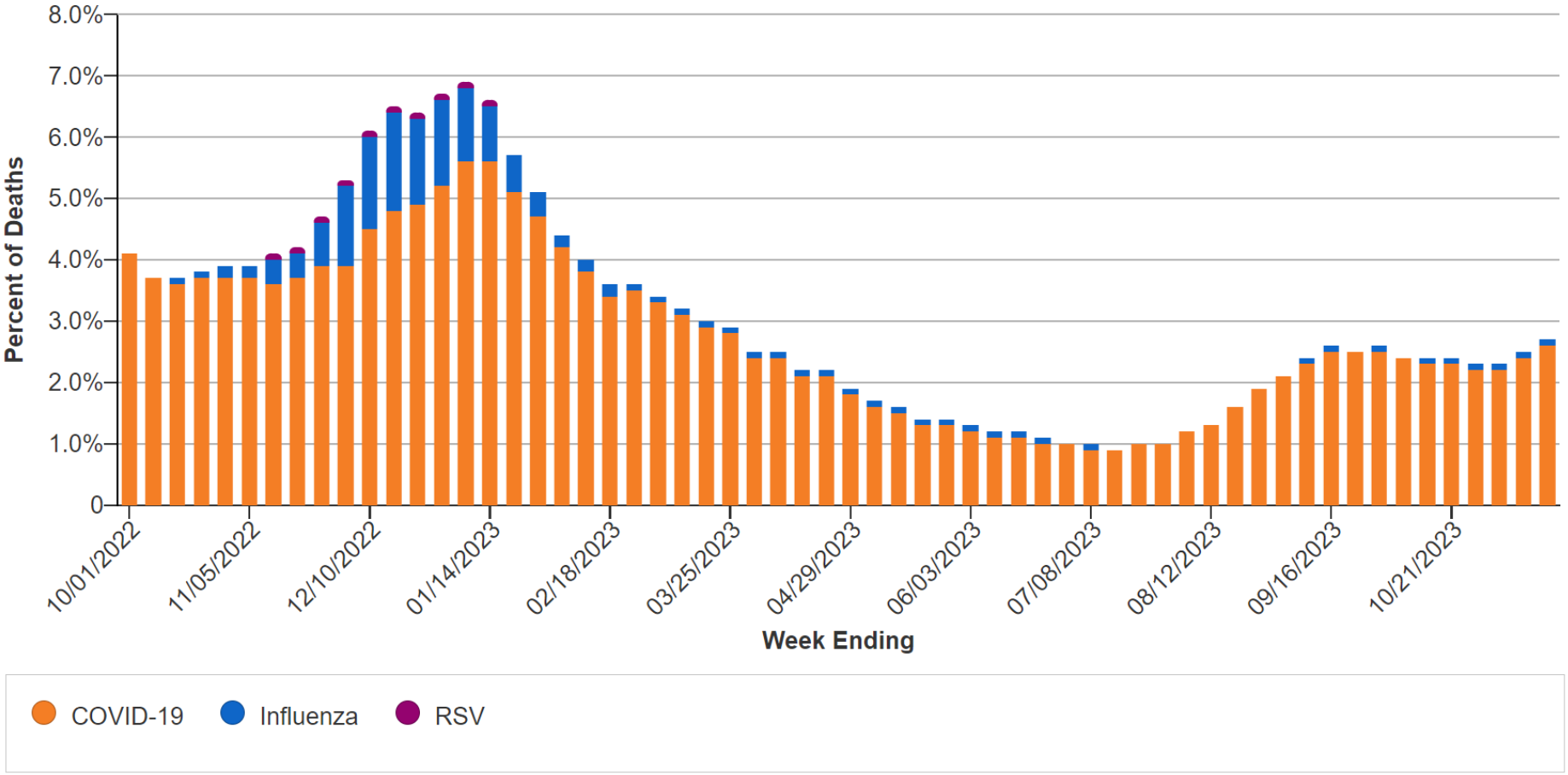
Trends in Viral Respiratory Deaths in the United States

Weekly percent of total deaths associated with COVID-19, influenza, and RSV.



One or more data points are based on death counts between 1-9 and have been suppressed in accordance with National Center for Health Statistics confidentiality standards.

https://www.cdc.gov/respiratory-viruses/data-research/dashboard/illness-severity.html

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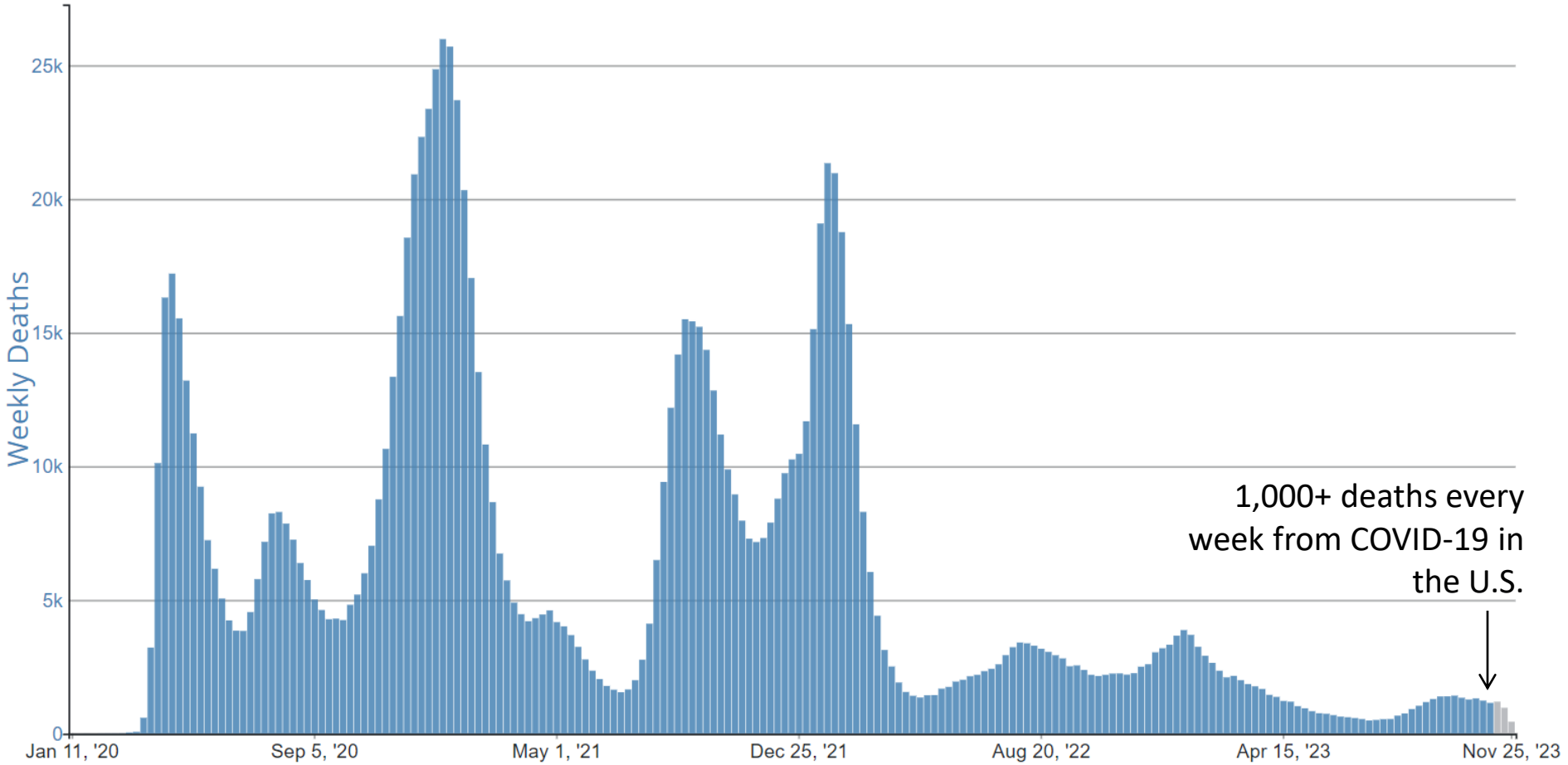
COVID-19 Deaths in the U.S.



https://covid.cdc.gov/covid-data-tracker/#trends_weeklydeaths_select_00

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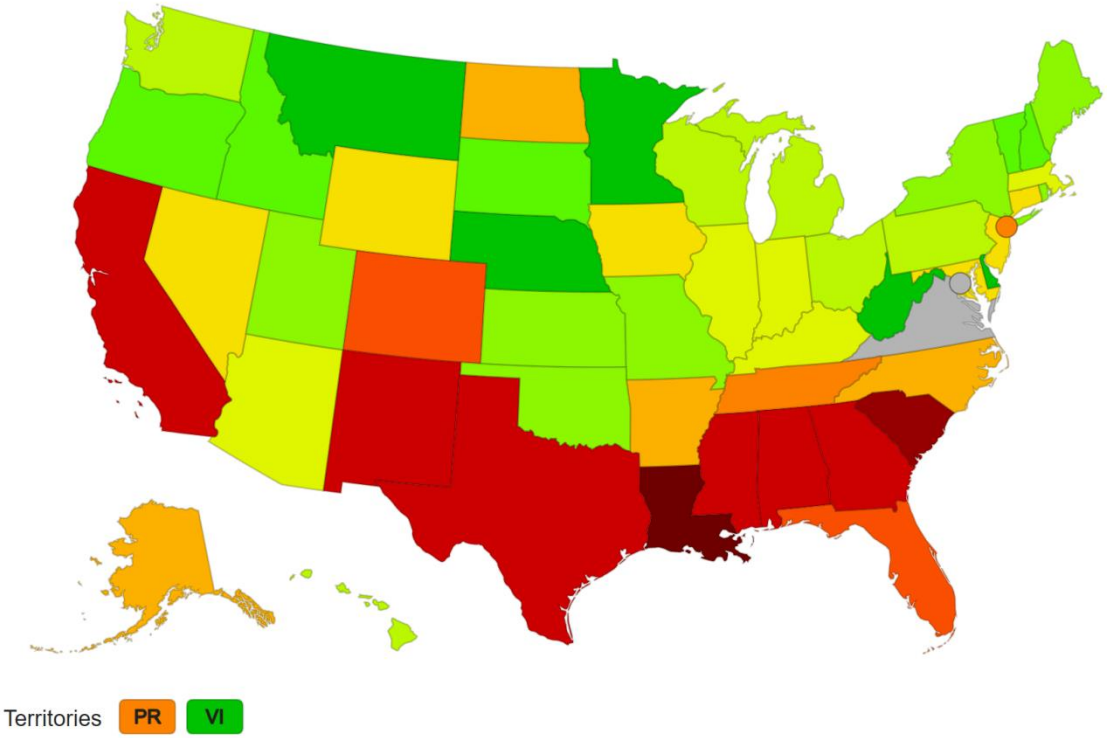
Outpatient Visits for Influenza-Like Illness (ILI)



https://www.cdc.gov/respiratory-viruses/data-research/dashboard/activity-levels.html

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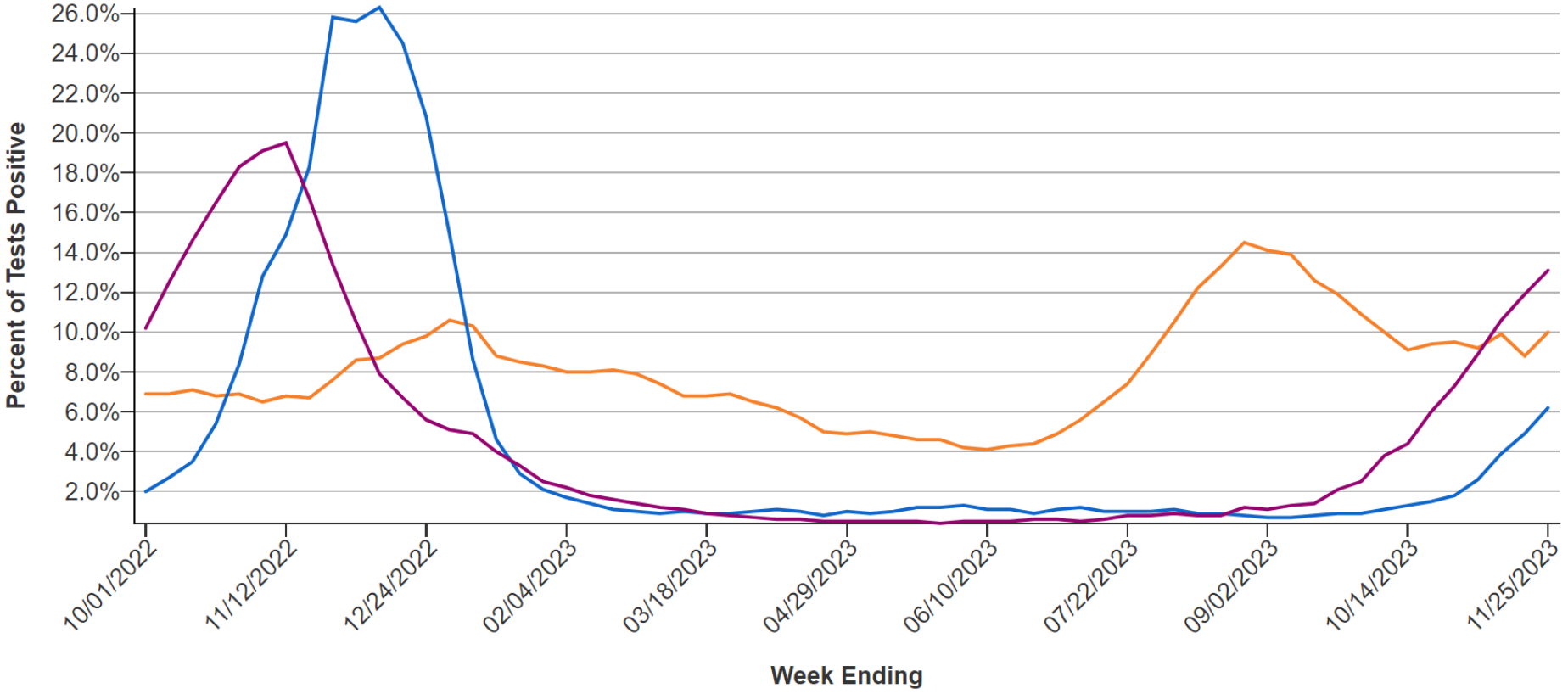
Percent of Tests Positive for Respiratory Viruses

Weekly percent of tests positive for the viruses that cause COVID-19, influenza, and RSV at the national level.



https://www.cdc.gov/respiratory-viruses/data-research/dashboard/activity-levels.html

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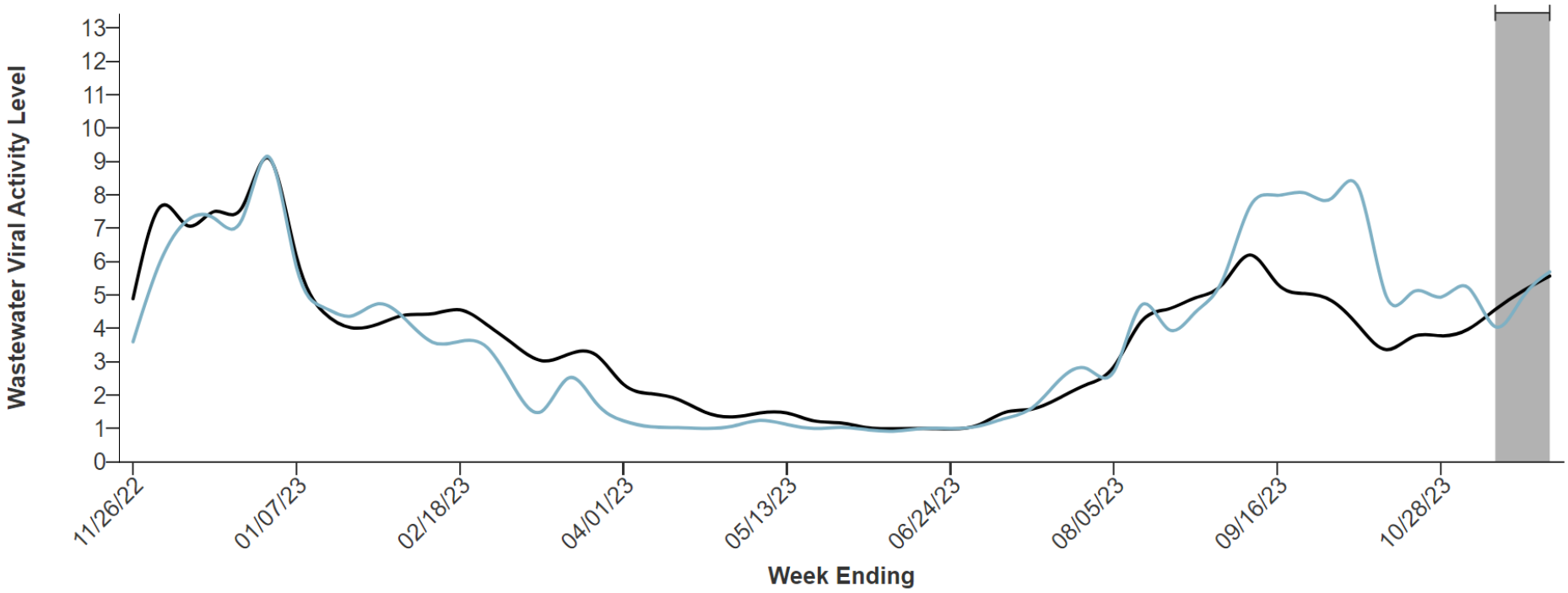
National and Regional COVID-19 Wastewater Activity Levels



Select a geography to add or remove it from the visualization.

RESET

National Midwest South Northeast West

https://www.cdc.gov/nwss/rv/COVID19-nationaltrend.html

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Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic

Updated May 8, 2023 Print

The recommendations in this guidance continue to apply after the expiration of the federal COVID-19 Public Health Emergency.

Summary of Recent Changes

Updates as of May 8, 2023

- Updated recommendations for universal source control and admission testing in nursing homes
- Added Appendix to assist facilities with how and when to implement broader use of source control, including examples of potential metrics

Key Points

- This guidance applies to all U.S. settings where healthcare is delivered, including nursing homes and home health.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html

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Viral Respiratory Pathogens Toolkit for Nursing Homes

Print

Viral Respiratory Pathogens Toolkit for Nursing Homes [PDF – 5 pages]

Preparing for and responding to nursing home residents or healthcare personnel (HCP) who develop signs or symptoms of a respiratory viral infection

ACTION: PREPARE for respiratory viruses (e.g., SARS-CoV-2, influenza, RSV)

ACTION: RESPOND when a resident or HCP develops signs or symptoms of a respiratory viral infection

ACTION: CONTROL respiratory virus spread when transmission is identified.

General Infection Prevention Guidance

More ways to protect yourself and others

Stay up to date with vaccines

- Everyone 6 months and older should get a yearly flu vaccine and a current COVID-19 vaccine. Find a vaccine at Vaccines.gov.
- CDC recommends that all infants receive protection from one of these tools to protect them from getting very sick with RSV.
    - An RSV vaccine given during pregnancy
    - An RSV immunization given to infants and some older babies
- Adults 60 years and older also may receive one dose of RSV vaccine and should talk with their healthcare provider about whether RSV vaccination is right for them.

Seek testing and possible treatment if you get sick

Improve airflow and ventilation

- Options include bringing in as much fresh air as possible, filtering the air, using a portable air cleaner, turning on exhaust fans, or choosing outdoor options.

Practice good hand hygiene and cover your coughs and sneezes

Stay home when you are sick and avoid others who are sick

https://www.cdc.gov/respiratory-viruses/index.html

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Influenza Vaccination

ACIP Recommendations: Influenza Vaccines

- All persons 6 months of age or older who do not have a contraindication should receive an updated annual influenza vaccine
  - Egg allergy no longer requires any additional safety measures or precautions beyond those recommended for all vaccine recipients, regardless of the severity of a person's previous reaction to egg
  - Adults 65 years of age or older should preferentially receive the high-dose, adjuvanted, or recombinant influenza vaccine, if available

https://www.cdc.gov/mmwr/volumes/72/rr/rr7202a1.htm

Morbidity and Mortality Weekly Report (*MMWR*)

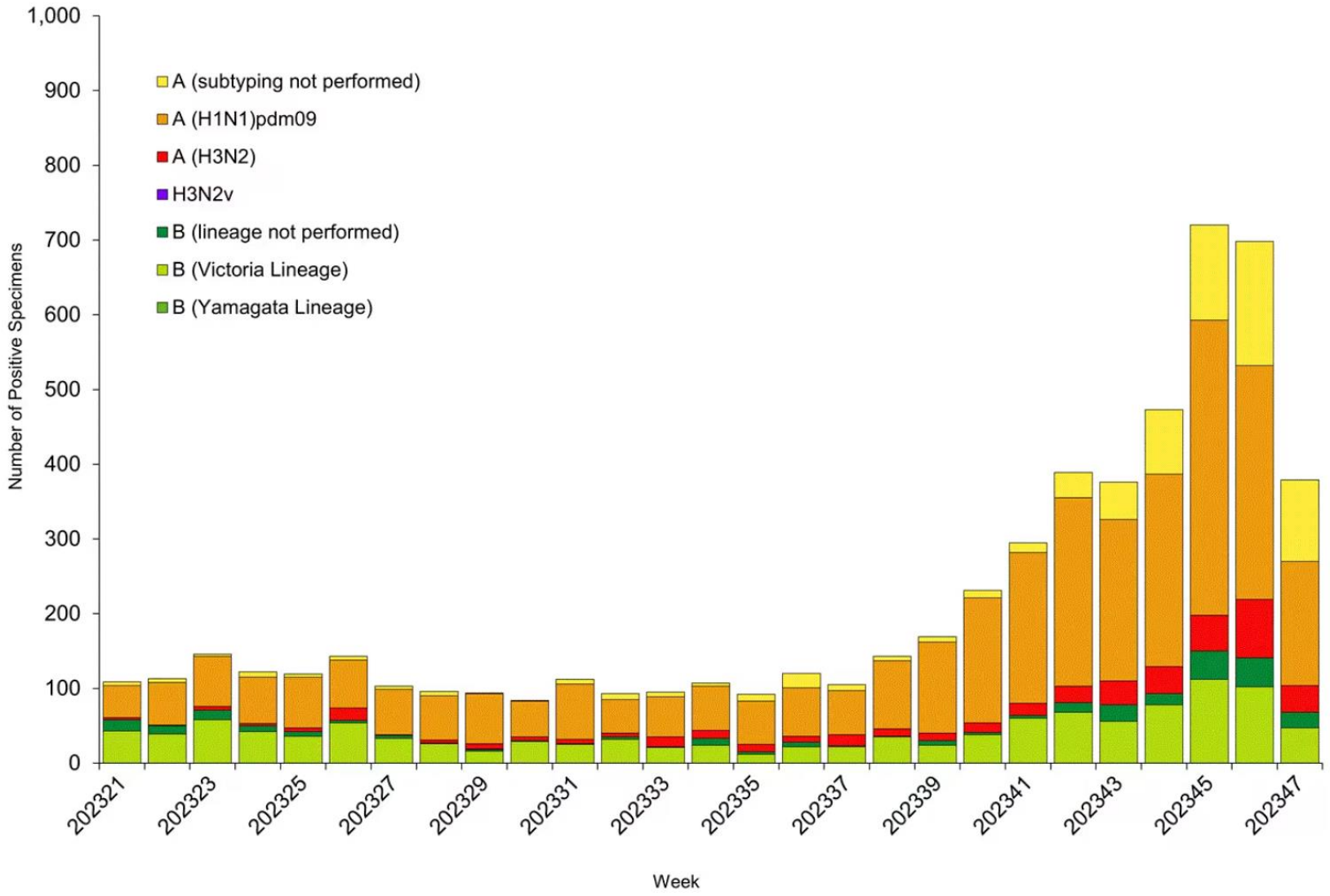
Interim Effectiveness Estimates of 2023 Southern Hemisphere Influenza Vaccines in Preventing Influenza-Associated Hospitalizations — REVELAC–i Network, March–July 2023

Early Release / September 8, 2023 / 72

- H1N1 viruses predominated in the Southern Hemisphere
  - This years influenza vaccine contains an updated H1N1 virus component
- Vaccination reduced the risk for influenza-associated hospitalizations by 52%

https://www.cdc.gov/mmwr/volumes/72/wr/mm7237e1.htm

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, May 21, 2023 – November 25, 2023



https://www.cdc.gov/flu/weekly/

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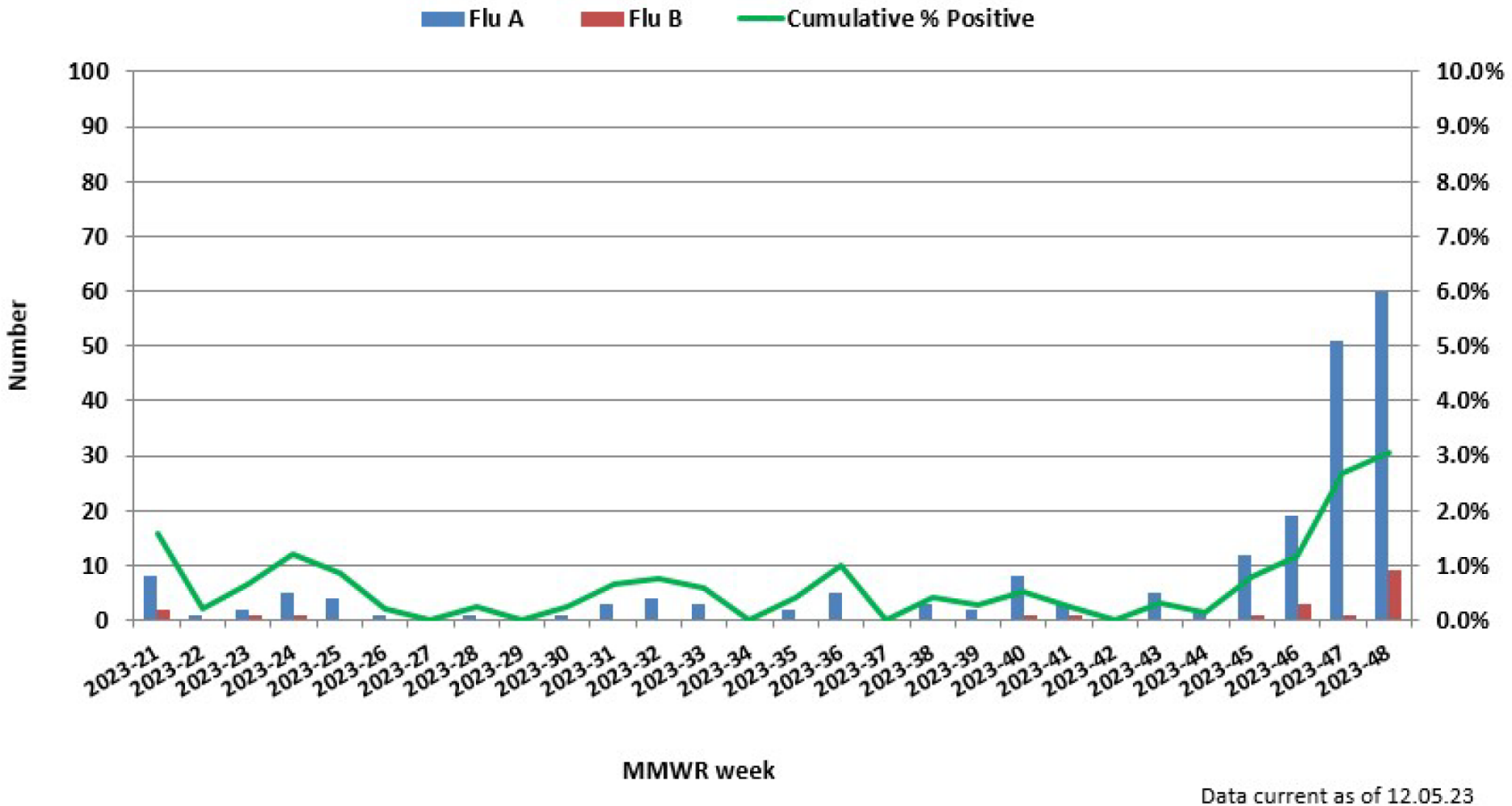
Influenza Positive Tests Reported to NH DHHS by Hospital Clinical Laboratories, 2023-2024 Season to Date



Data current as of 12.05.23

https://www.dhhs.nh.gov/programs-services/disease-prevention/infectious-disease-control/influenza-flu/influenza-activity

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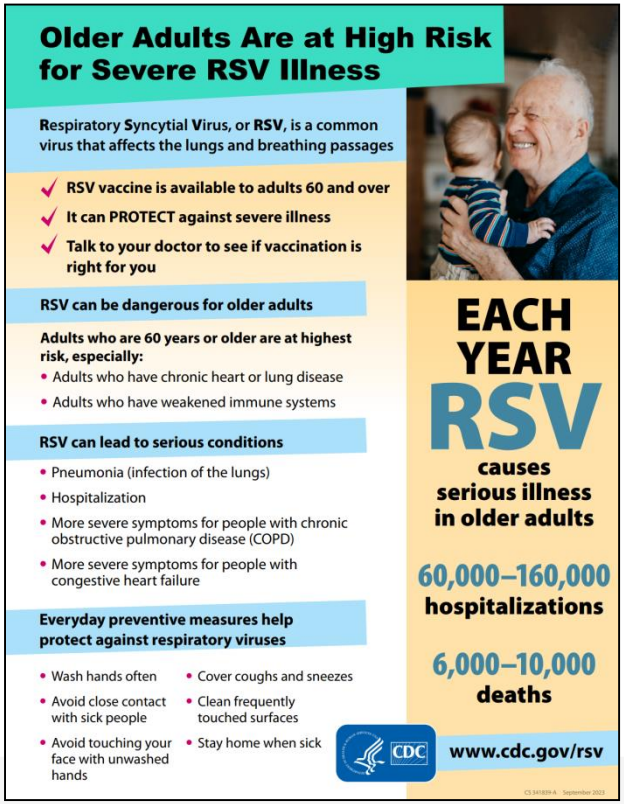
RSV Vaccination

Background

Symptoms

People infected with RSV usually show symptoms within 4 to 6 days after getting infected. Symptoms of RSV infection usually include

- Runny nose
- Decrease in appetite
- Coughing
- Sneezing
- Fever
- Wheezing



Severe RSV Infection

When an adult gets RSV infection, they typically have mild cold-like symptoms, but some may develop a lung infection or pneumonia.

RSV can sometimes also lead to worsening of serious conditions such as:

- Asthma
- Chronic obstructive pulmonary disease (COPD) – a chronic disease of the lungs that makes it hard to breathe
- Congestive heart failure – when the heart can't pump enough blood and oxygen through the body

https://www.cdc.gov/rsv/index.html

RSV Burden Estimates

RSV Burden Estimates

Each year in the United States, RSV leads to approximately:

- 2.1 million outpatient (non-hospitalization) visits among children younger than 5 years old.[1]
- 58,000-80,000 hospitalizations among children younger than 5 years old.[1,2,3]
- 60,000-160,000 hospitalizations among adults 65 years and older.[4-8]
- 6,000-10,000 deaths among adults 65 years and older.[9-11]
- 100–300 deaths in children younger than 5 years old.[11]

https://www.cdc.gov/rsv/research/index.html

RSV Treatment and Prevention

- People with severe disease may need to be hospitalized for supportive care (oxygen, IV fluids, etc.) until symptoms improve
- RSV vaccines for adults 60+ years of age (2 different vaccines available produced by Pfizer and GSK)
- RSV vaccine (Pfizer only) for pregnant persons at 32-36 weeks gestation during RSV season – recommended to protect the infant
- Monoclonal antibody products are available for prevention in infants and young children (Nirsevimab and Palivizumab)
- Either maternal RSV vaccination during pregnancy OR nirsevimab for the infant is recommended, but both are NOT needed for most infants

https://www.cdc.gov/rsv/index.html

New Immunizations to Protect Against Severe RSV

Who Does It Protect?	Type of Product	Is It for Everyone in Group?
Adults 60 and over	RSV vaccine	Talk to your doctor first
Babies	RSV antibody given to baby	All infants entering or born during RSV season. Small group of older babies for second season.
	OR	
Babies	RSV vaccine given during pregnancy	Can get if you are 32–36 weeks pregnant during September–January

www.cdc.gov/rsv

CDC

https://www.cdc.gov/respiratory-viruses/whats-new/rsv-update-2023-09-22.html

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ACIP Recommendations: RSV Vaccines

- ACIP recommends that adults aged 60+ years of age may receive a single dose of an RSV vaccine using shared clinical decision-making (based on a discussion between the healthcare provider and patient), taking into account the patient's risk for severe RSV disease

https://www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7229a4-H.pdf

Medical Conditions and Factors Associated with Increased Risk for Severe RSV Disease

Chronic underlying medical conditions associated with increased risk

- Lung disease (such as chronic obstructive pulmonary disease and asthma)
- Cardiovascular diseases (such as congestive heart failure and coronary artery disease)
- Moderate or severe immune compromise*
- Diabetes mellitus
- Neurologic or neuromuscular conditions
- Kidney disorders
- Liver disorders
- Hematologic disorders
- Other underlying conditions that a health care provider determines might increase the risk for severe respiratory disease

Other factors associated with increased risk

- Frailty†
- Advanced age§
- Residence in a nursing home or other long-term care facility
- Other underlying factors that a health care provider determines might increase the risk for severe respiratory disease

https://www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7229a4-H.pdf

Use of Respiratory Syncytial Virus Vaccines in Older Adults: Recommendations of the Advisory Committee on Immunization Practices — United States, 2023

- GSK: 1-dose adjuvanted recombinant prefusion F-protein vaccine
- Pfizer: 1-dose (non-adjuvanted) recombinant prefusion F-protein vaccine
- GSK and Pfizer studies were not powered to estimate efficacy against hospitalization, severe RSV illness requiring respiratory support, or death

TABLE 1. Efficacy of 1 dose of GSK respiratory syncytial virus RSVpreF3 vaccine against respiratory syncytial virus–associated disease among adults aged ≥60 years — multiple countries, 2021–2023

Efficacy evaluation period	Vaccine efficacy against outcome*	
	RSV-associated LRTD†	RSV-associated medically attended LRTD§
Season 1¶	82.6 (57.9–94.1)**	87.5 (58.9–97.6)††
Season 2§§	56.1 (28.2–74.4)††	—¶¶
Combined seasons 1 and 2 (interim)***	74.5 (60.0–84.5)†††	77.5 (57.9–89.0)††

Abbreviations: LRTD = lower respiratory tract disease; RSV = respiratory syncytial virus.

TABLE 3. Efficacy of 1 dose of Pfizer respiratory syncytial virus RSVpreF vaccine against respiratory syncytial virus–associated disease among adults aged ≥60 years — multiple countries, 2021–2023

Efficacy evaluation period	Vaccine efficacy against outcome, % (95% CI)*	
	RSV-associated LRTD†	RSV-associated medically attended LRTD§
Season 1¶	88.9 (53.6–98.7)	84.6 (32.0–98.3)
Season 2 (interim)**	78.6 (23.2–96.1)	—††
Combined seasons 1 and 2 (interim)§§	84.4 (59.6–95.2)	81.0 (43.5–95.2)

Abbreviations: LRTD = lower respiratory tract disease; LRTI = lower respiratory tract illness; RSV = respiratory syncytial virus.

Common Vaccine Side Effects

- Local injection site pain
- Fatigue
- Headache
- Muscle aches

https://www.nejm.org/doi/full/10.1056/NEJMoa2209604
https://www.nejm.org/doi/full/10.1056/NEJMoa2213836

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Rare Adverse Events

- Inflammatory neurological events (e.g., GBS, Miller Fisher syndrome, acute disseminated encephalomyelitis)
  - GSK clinical trial – 3 episodes in vaccine group (without a control/placebo comparator group)
  - Pfizer clinical trial – 3 events in vaccine group, 0 cases in placebo group
- Atrial fibrillation (not all events were new-onset A-fib):
  - GSK clinical trial – 10 events (0.1%) in vaccine group vs. 4 events (<0.1%) in control group
  - Pfizer clinical trial – 10 events (<0.1%) in vaccine group vs. 4 events (<0.1%) in control group
- These few rare events occurred out of thousands of trial participants, and it is unclear if events were related to vaccination

https://www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7229a4-H.pdf

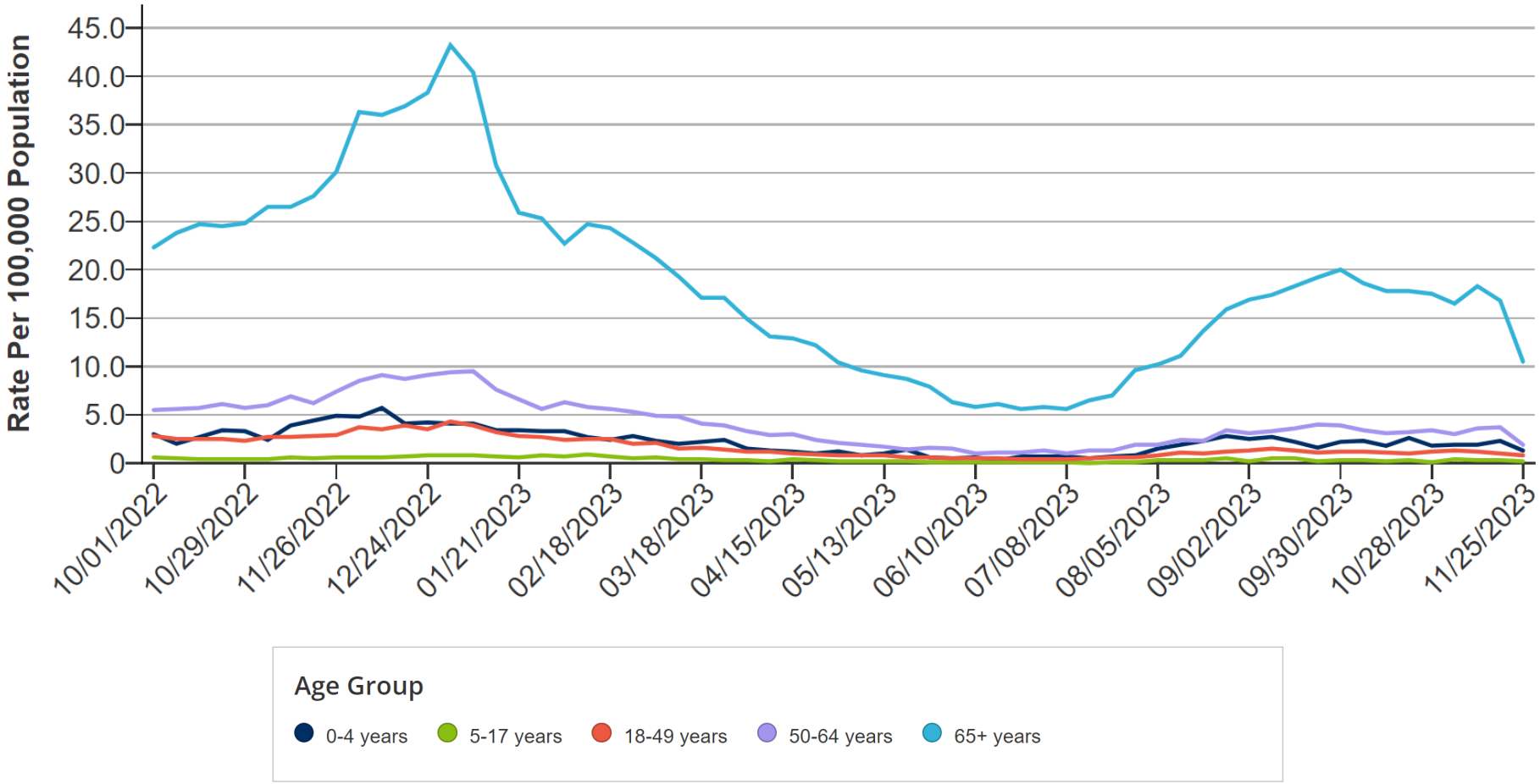
Summary

- ACIP recommends that adults aged 60+ years of age may receive a single dose of an RSV vaccine using shared clinical decision-making
- The RSV vaccines were 80-90% effective at preventing RSV-related lower respiratory tract infection during the first season after vaccination; longer term VE clinical trials are ongoing
- Both GSK and Pfizer are conducting post-marketing study evaluating the risk for inflammatory neurologic conditions (e.g. GBS) and atrial fibrillation
  - 6 cases of inflammatory neurological events reported after RSV vaccination in clinical trials (out of 30,000+ vaccine recipients)
  - A small number of episodes of Atrial Fibrillation occurred after vaccination, many of which were NOT new-onset

https://www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7229a4-H.pdf

COVID-19 Vaccination

COVID-19 Hospitalization Rate by Age Group



https://www.cdc.gov/respiratory-viruses/data-research/dashboard/most-impacted-hospitalizations.html

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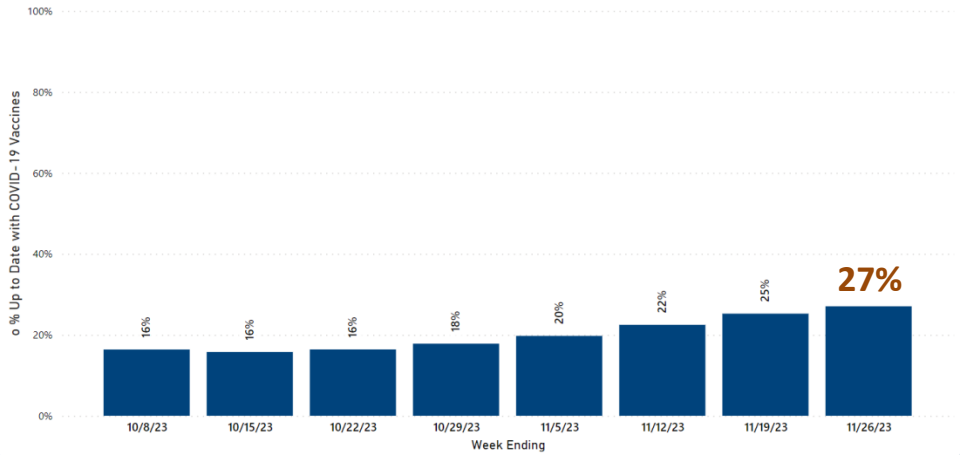
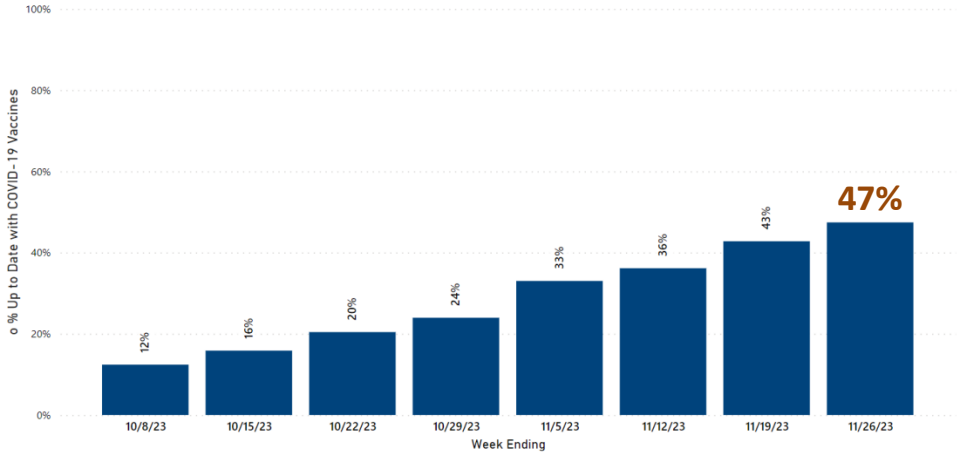
% of Nursing Home Residents and Staff Vaccinated Against COVID-19

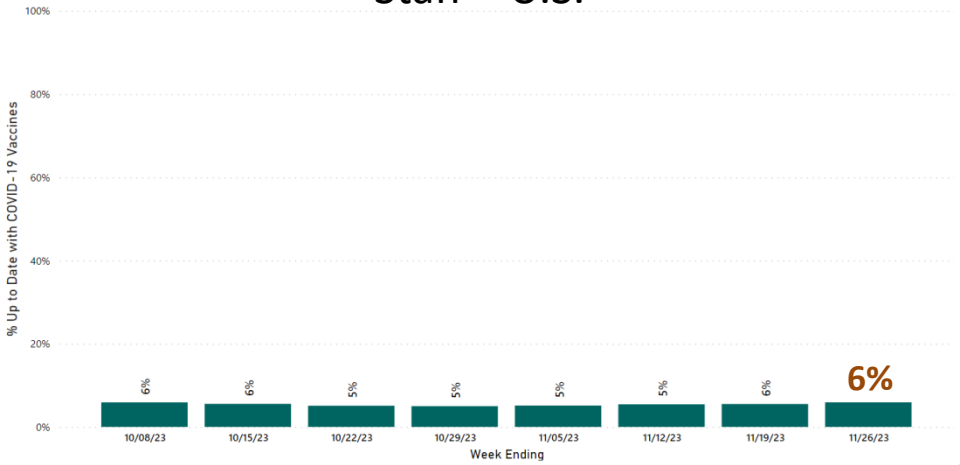
Residents – U.S.



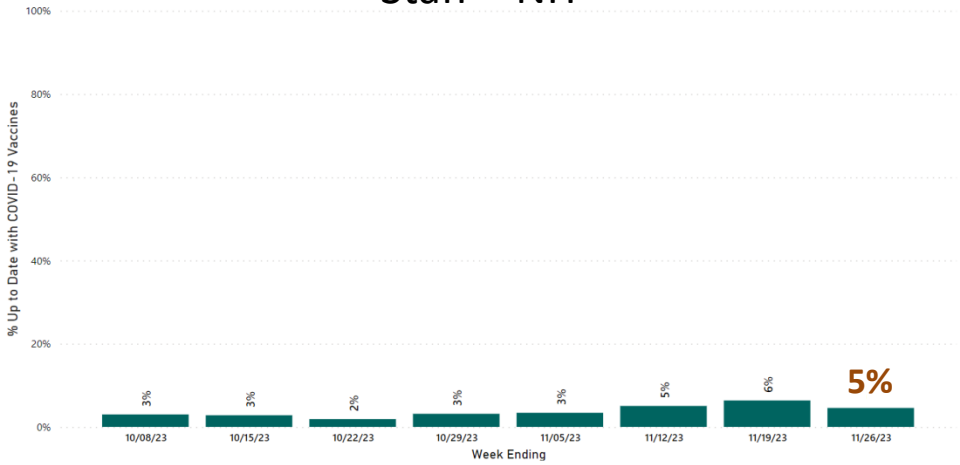
Residents – NH



Staff – U.S.



Staff – NH



https://covid.cdc.gov/covid-data-tracker/#vaccinations-nursing-homes

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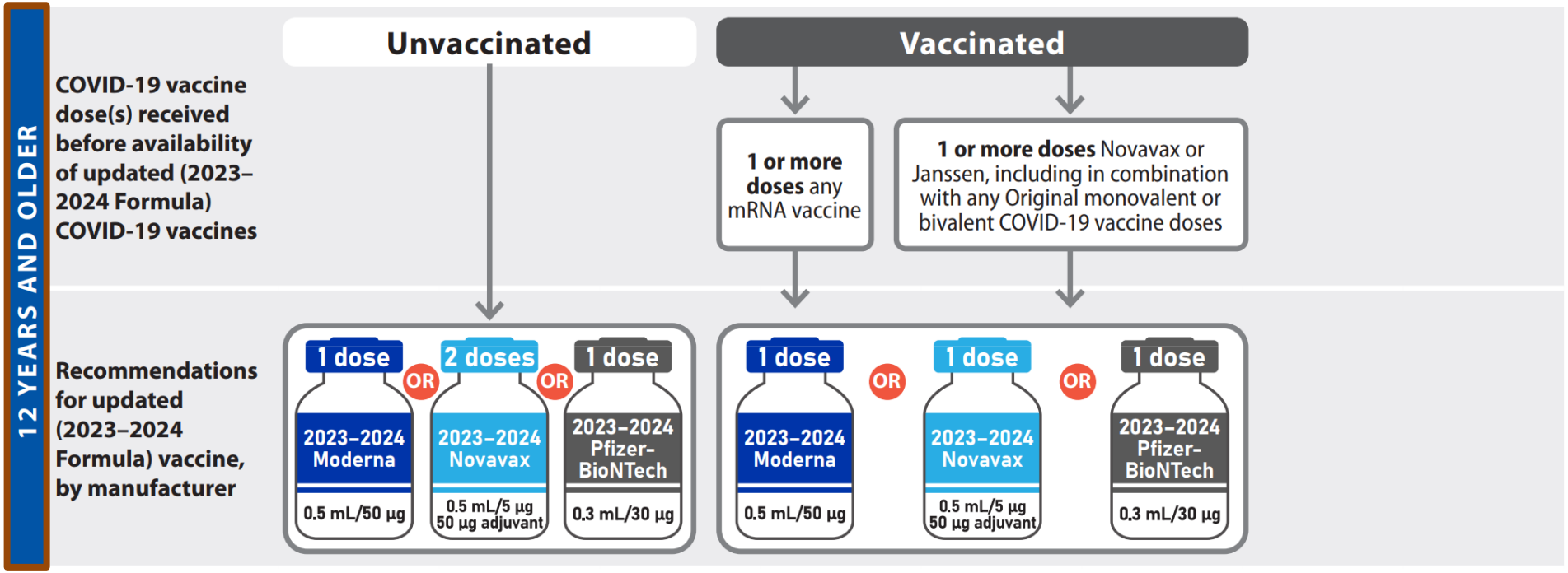
General COVID-19 Vaccine Recommendations

- Children 6 months – 4 years of age should complete a multi-dose initial series (2 doses of Moderna or 3 doses of Pfizer-BioNTech vaccine), including at least one dose of an updated mRNA vaccine
- Children 5-11 years of age should receive one dose of an updated mRNA vaccine, regardless of prior vaccination history
- Persons 12+ years of age should receive one dose of an updated vaccine (Moderna, Pfizer-BioNTech, or Novavax), regardless of prior vaccination history
  - Exception: an unvaccinated person receiving Novavax should receive 2 doses of the updated Novavax vaccine
- People who are moderately or severely immunocompromised have separate recommendations and may receive additional doses

https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html

Recommendations for Persons 12+ Years Old

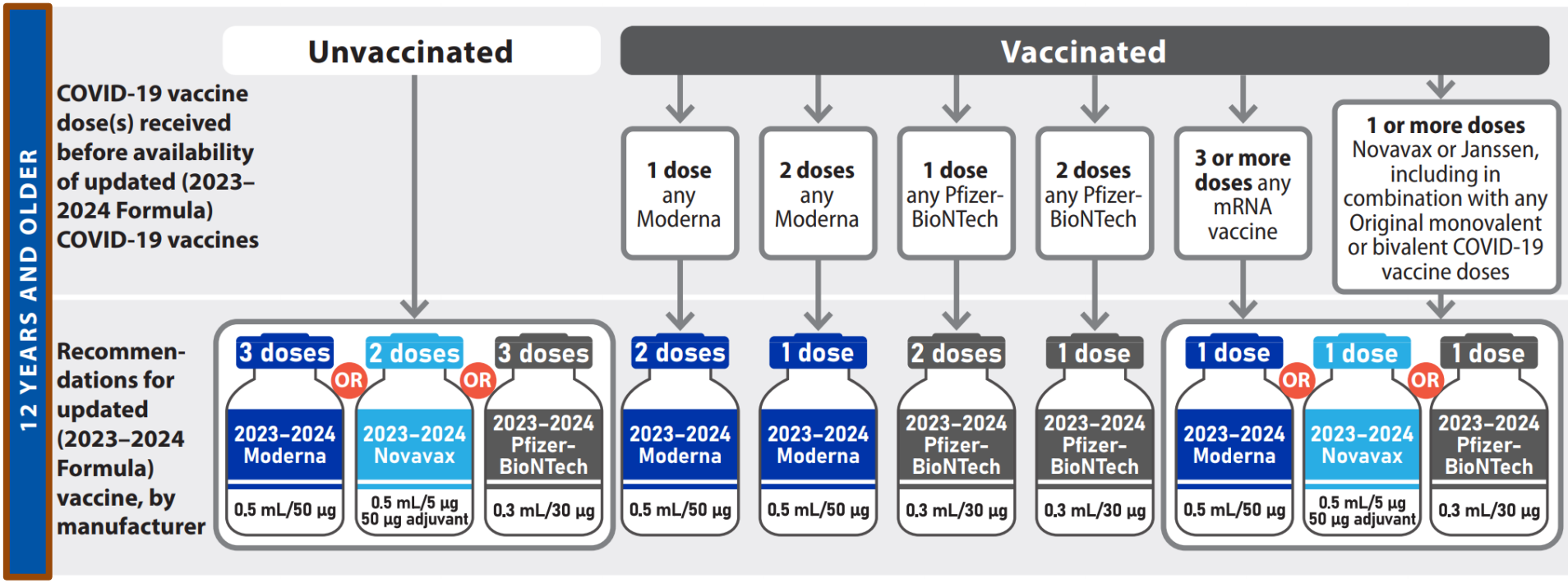
Recommended updated (2023–2024 Formula) COVID-19 vaccines for people who are **NOT** moderately or severely immunocompromised*†



https://www.cdc.gov/vaccines/covid-19/downloads/COVID19-vaccination-recommendations-most-people.pdf

Recommendations for Persons 12+ Years Old

Recommended updated (2023–2024 Formula) COVID-19 vaccines for people who **ARE** moderately or severely immunocompromised*†



https://www.cdc.gov/vaccines/covid-19/downloads/COVID19-vaccination-recommendations-immunocompromised.pdf

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How Effective Are The Updated Vaccines?

- Vaccine Effectiveness (VE) for the updated COVID-19 vaccines is expected to be similar to past versions
- Last season's bivalent COVID-19 vaccines have been shown to reduce the risk of ED/UC visits, hospitalizations, and critical illness by about 50-70% in the few months after vaccination (VE varies based on age group, health outcome measured, and time since vaccination) – data is summarized at the ACIP meetings and on CDC's website
- VE estimates reflect the **additive incremental benefit** of vaccination in populations with already high-levels of prior infection- or vaccine-induced immunity
- Immunity from infection or vaccination has consistently been shown to decrease over time but is more durable at protecting against critical illness
- Vaccination also protects against Long-COVID and other Post-COVID Conditions

Vaccine Effectiveness (VE) Estimates

The publications in the table are organized by date of publication, with the most recent first. Studies that included more than one outcome or multiple age groups are listed more than once and the table can be sorted by these variables.

Outcome
- (●) All outcomes
- ( ) SARS-CoV-2 infection
- ( ) Multisystem inflammatory syndrome
- ( ) Critical illness
- ( ) Emergency department/urgent care visits
- ( ) Hospitalization
- ( ) Invasive mechanical ventilation (IMV) or death

Age Group
- (●) All age groups
- ( ) Adults
- ( ) Adolescents
- ( ) Children
- ( ) Infants

Outcome	Vaccine effectiveness*	Age Group	Vaccine(s)#	Population	Study period	Monitoring System	Publication Date/Journal/First author
Emergency department/urgent care visits	**23%** among children aged 6 months-5 years ≥14 days after 1st dose of original monovalent Moderna, Omicron period **29%** among children aged 6 months-5 years ≥14 days after 2nd dose of original monovalent Moderna, Omicron period	Children	Original monovalent mRNA, Moderna	8 states	July 4, 2022 – June 17, 2023	VISION	8/18/23 MMWR, Link-Gelles, R
Emergency department/urgent care visits	**17%** among children aged 6 months-4 years ≥14 days to 1 month after 1st dose of original monovalent Pfizer, Omicron period **37%** among children aged 6 months-4 years ≥14 days after 2nd dose of original monovalent Pfizer, Omicron period **43%** among children aged 6 months-4 years ≥14 days after 3rd dose of original monovalent Pfizer, Omicron period	Children	Original monovalent mRNA, Pfizer	8 states	July 4, 2022 – June 17, 2023	VISION	8/18/23 MMWR, Link-Gelles, R
Emergency department/urgent care visits	**80%** ≥14 days after ≥1 bivalent dose among children aged 6 months-5 years who received at least a primary series irrespective of manufacturer, Omicron period	Children	Bivalent mRNA	8 states	December 24, 2022 – June 17, 2023	VISION	8/18/23 MMWR, Link-Gelles, R
SARS-CoV-2 infection	**31.2%** among nursing home residents who were up to date with COVID-19 vaccination, Omicron period	Nursing home residents	Bivalent booster, mRNA	U.S. skilled nursing facilities	Nov. 20, 2022 – Jan. 8, 2023	NHSN	6/23/23 MMWR, Wong, E
Hospitalization	**62%** during the first 7–59 days after the bivalent dose among immunocompetent adults, Omicron period **24%** at 120–179 days after the bivalent dose among immunocompetent adults, Omicron period **28%** during the first 7–59 days after the bivalent dose among immunocompromised adults, Omicron period **13%** at 120–179 days after the bivalent dose among immunocompromised adults, Omicron period	Adults	Bivalent booster, mRNA	7 states	Sept. 13, 2022 – April 21, 2023	VISION	5/26/23 MMWR Link-Gelles, R
Critical illness	**69%** during the first 7–59 days after the bivalent dose among immunocompetent adults, Omicron period **50%** by 120–179 days after the bivalent dose among immunocompetent adults, Omicron period **40%** during the first 7–59 days after the bivalent dose among immunocompromised adults, Omicron period **53%** at 120–179 days after the bivalent dose among immunocompromised adults, Omicron period	Adults	Bivalent booster, mRNA	7 states	Sept. 13, 2022 – April 21, 2023	VISION	5/26/23 MMWR Link-Gelles, R

https://covid.cdc.gov/covid-data-tracker/#vaccine-effectiveness

Vaccine Safety and Side Effects

- There are no new safety concerns or side effects identified with the updated vaccines
- Local and systemic side effects that are similar to or lower than previous COVID-19 vaccines
- The updated COVID-19 vaccines use the same vaccine platforms that have been in use since 2020 but with updated strain/variant protection

https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2023-09-12/08-COVID-Priddy-508.pdf

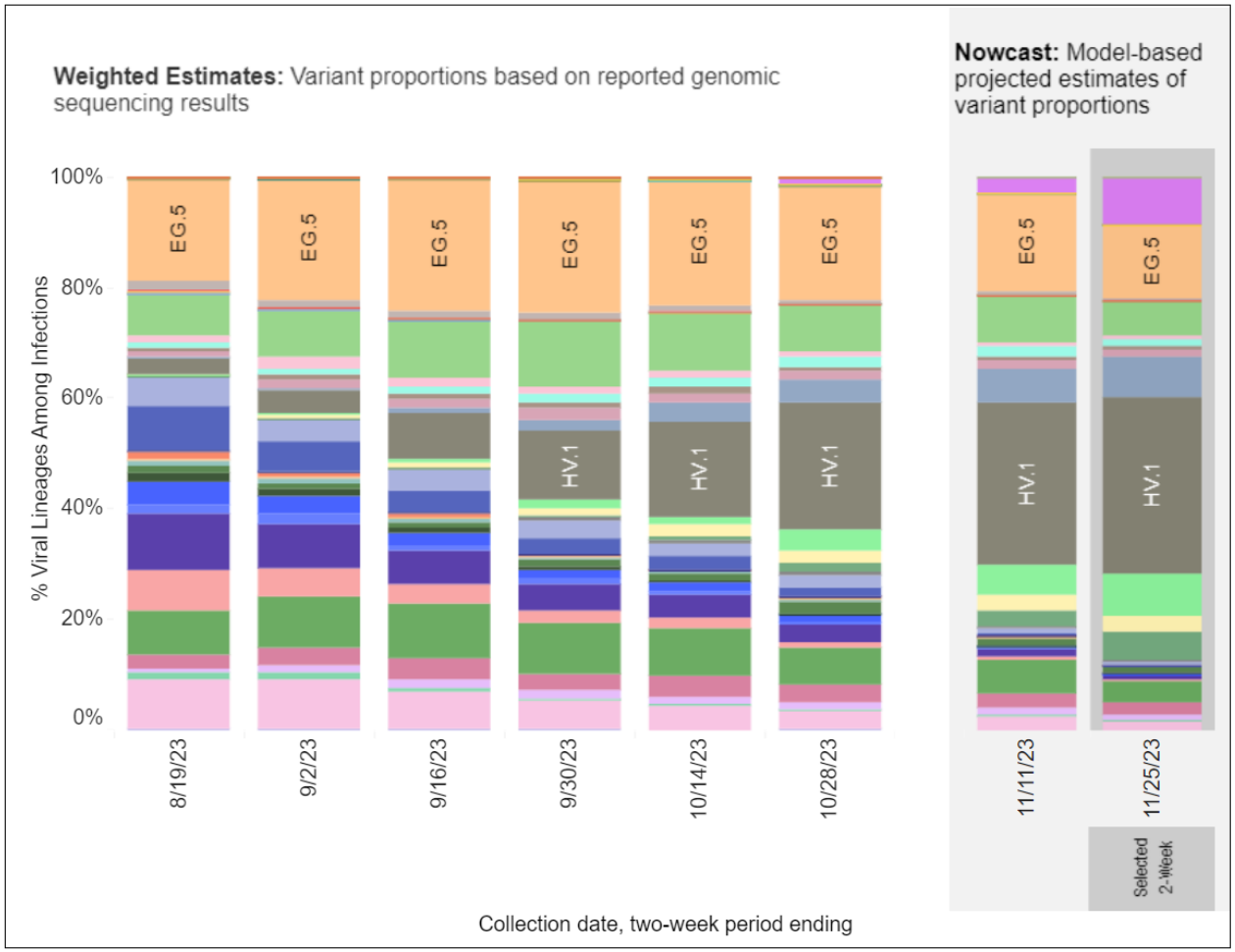
Table Comparing Vaccine Ingredients for Pfizer-BioNTech and Moderna COVID-19 Vaccines: Original 2020 vs. Updated 2023-2024 Vaccines (Differences Highlighted in Orange Text)

	Original 2020 COVID-19 Vaccine	Updated 2023-2024 COVID-19 Vaccine

Pfizer-BioNTech	• Messenger RNA (mRNA)
	• Lipids:
	  ○ (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)
	  ○ 2[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide
	  ○ 1,2-distearoyl-sn-glycero-3-phosphocholine
	  ○ Cholesterol
	• Potassium chloride
	• Monobasic potassium phosphate
	• Dibasic sodium phosphate dihydrate
	• Sucrose
	• Sodium chloride
		• Messenger RNA (mRNA)
		• Lipids:
		  ○ (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)
		  ○ 2[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide
		  ○ 1,2-distearoyl-sn-glycero-3-phosphocholine
		  ○ Cholesterol
		• Tromethamine
		• Tromethamine hydrochloride
		• Sucrose
		• Sodium chloride (diluent)

Moderna	• Messenger RNA (mRNA)
	• Lipids:
	  ○ SM-102 (proprietary to Moderna)
	  ○ Polyethylene glycol [PEG] 2000 dimyristoyl glycerol [DMG]
	  ○ 1,2-distearoyl-sn-glycero-3-phosphocholine [DSPC]
	  ○ Cholesterol
	• Tromethamine
	• Tromethamine hydrochloride
	• Acetic acid
	• Sodium acetate
	• Sucrose
		• Messenger RNA (mRNA)
		• Lipids:
		  ○ SM-102 (proprietary to Moderna)
		  ○ Polyethylene glycol [PEG] 2000 dimyristoyl glycerol [DMG]
		  ○ 1,2-distearoyl-sn-glycero-3-phosphocholine [DSPC]
		  ○ Cholesterol
		• Tromethamine
		• Tromethamine hydrochloride
		• Acetic acid
		• Sodium acetate trihydrate
		• Sucrose

COVID-19 Variant Proportions



USA

WHO label	Lineage #	%Total	95%PI
Omicron	HV.1	31.7%	28.3-35.2%
	EG.5	13.1%	11.8-14.7%
	BA.2.86	8.8%	4.8-15.2%
	JD.1.1	7.7%	5.8-10.0%
	HK.3	7.4%	6.0-9.1%
	FL.1.5.1	6.4%	5.4-7.6%
	JG.3	5.3%	3.7-7.5%
	XBB.1.16.6	4.0%	3.2-5.0%
	JF.1	2.8%	2.2-3.5%
	XBB.1.16.11	2.0%	1.4-2.7%
	XBB.2.3	1.8%	1.4-2.5%
	GK.1.1	1.4%	1.1-1.9%
	HF.1	1.4%	0.9-2.0%
	XBB.1.5.70	1.1%	0.5-2.4%
	XBB.1.16.15	1.0%	0.7-1.5%
	XBB.1.16	0.7%	0.5-1.0%
	XBB	0.6%	0.5-0.8%
	GE.1	0.6%	0.4-0.9%
	XBB.1.16.1	0.4%	0.3-0.6%
	GK.2	0.4%	0.3-0.6%
	EG.6.1	0.3%	0.2-0.4%
	XBB.1.9.1	0.2%	0.1-0.3%
	XBB.1.5	0.2%	0.1-0.2%
	CH.1.1	0.1%	0.1-0.2%
	XBB.1.5.68	0.1%	0.1-0.2%
	XBB.1.42.2	0.1%	0.1-0.2%
	XBB.1.9.2	0.1%	0.0-0.1%
	XBB.1.5.72	0.1%	0.0-0.1%
	XBB.2.3.8	0.1%	0.0-0.2%
	XBB.1.5.10	0.0%	0.0-0.0%
	XBB.1.5.59	0.0%	0.0-0.0%
	FD.1.1	0.0%	0.0-0.0%
	XBB.1.5.1	0.0%	0.0-0.0%
	EU.1.1	0.0%	0.0-0.0%
	FE.1.1	0.0%	0.0-0.0%
Other	Other*	0.1%	0.0-0.2%

https://covid.cdc.gov/covid-data-tracker/#variant-proportions

NH DIVISION OF Public Health Services
Department of Health and Human Services

Summary

- Most people are recommended to receive only a single dose of the updated COVID-19 vaccine this season
- The updated vaccines should provide protection against currently circulating Omicron sub-variants
- Vaccination is estimated to reduce the risk of ED/UC visits, hospitalizations, and critical illness by 50-70% in the first few months after vaccination
- People can expect typical transient local and systemic reactions similar to past COVID-19 vaccines

Vaccine Recommendations

- **RSV vaccines**:
  - Adults 60 years of age and older: https://www.cdc.gov/mmwr/volumes/72/wr/mm7229a4.htm
  - Pregnancy: https://www.cdc.gov/mmwr/volumes/72/wr/mm7241e1.htm?s_cid=mm7241e1_w
- **Nirsevimab monoclonal antibody**:
  - https://www.cdc.gov/mmwr/volumes/72/wr/mm7234a4.htm
- **COVID-19 vaccines**:
  - https://www.cdc.gov/mmwr/volumes/72/wr/mm7242e1.htm?s_cid=mm7242e1_w
  - https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html
- **Influenza vaccines**:
  - https://www.cdc.gov/mmwr/volumes/72/rr/rr7202a1.htm

Q&A