



Thank you for joining

**The presentation will
begin shortly**



Rise to Immunize® Monthly Webinar

Operationalizing CDC's 2024 Adult Immunization Schedule

L.J. Tan, MS, PhD, Chief Policy and Partnerships Officer, *Immunize.org*, Co-chair, *National Adult and Influenza Immunization Summit (NAIIS)*

February 15, 2024

Today's Webinar



Campaign Updates

- RIZE Resources Overview
- RIZE Symposium Meeting Summary
- RIZE Casts
- Annual Conference 2024
- RIZE Meet & Greet Breakfast

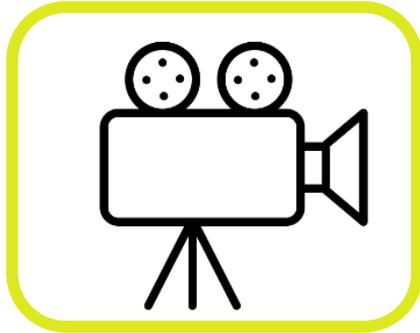
Operationalizing CDC's 2024 Adult Immunization Schedule

- L.J. Tan, MS, PhD, *Immunize.org*

Q&A Session



Webinar Reminders



Today's webinar recording will be available the **week of 02/19**

- Will be sent via email
- Will be available on website



Ask questions during the webinar using the **Q&A feature**

- Questions will be answered at the end of the presentation

(RiseToImmunize.org → "Resources" → "Webinars")

Campaign Resources Overview

Campaign
Toolkit

Community
Listserv

Monthly
Webinars

Success
Stories

Tools for
patients &
providers

Newsletter



[Organization Name] is part of AMGA's national health campaign, Rise to Immunize® (RIZE)!

RIZE is a four-year initiative focused on empowering organizations like ours to increase routine adult immunization rates. The campaign goal is for participants to collectively administer 25 million vaccines by 2025, with a focus on influenza, pneumococcal, Td/Tdap, and zoster vaccines. We are one of 82 medical groups who have joined this quality improvement initiative.

As a participant of the campaign, all employees at our organization have access to the following vaccine resources, which are available at RiseToImmunize.org. To be added to the campaign listserv and receive the newsletter, webinar registration details, and access to the RIZE Community, email RiseToImmunize@amga.org.



Campaign Planks – evidence-based care processes to drive improvement in vaccination rates. Planks fall under one of five domains: Provider & Staff Education, Clinical Support, IT/Documentation, Patient Education, and Financial Management.



Campaign Toolkit – digital resource offering tools from peer medical groups and health systems to support implementation of the "campaign planks."



Provider and patient resources – free, timely educational resources from national partners and corporate sponsors.



Campaign webinars – monthly webinars featuring speakers from leading health organizations sharing best practices to improve vaccination rates and tackle complex immunization challenges.



RIZE Community – 24/7 private listserv to connect directly with campaign participants. These conversations allow for peer-to-peer problem solving and the sharing of best practices.



RIZE Casts – on-demand video series sharing tips for improving immunization rates.



Benchmarking reports – quarterly blinded comparative reports measuring progress and assessing group performance on vaccines administered or documented.



RIZE Monthly – a monthly newsletter to share campaign updates, resources, and opportunities.

Symposium Meeting Summary



Visit RiseToImmunize.org/Symposium and click "*meeting summary*" to learn about the meeting and key takeaways





Navigating the Updated Pneumococcal Vaccine Recommendation

Part 1:
Operationalizing a New Vaccine Model

Matthew Malachowski, PharmD, MHA, BCPS
Systems Director, Population Health and Ambulatory Care
Ochsner Health

"Navigating the Updated Pneumococcal Recommendations" – Ochsner Health

In this three-part series, AMGA Foundation's National Health Campaigns Program Manager, Morgan Drexler, MPH, CPH, PMP chats with Ochsner Health's Systems Director Population Health & Ambulatory Care, Matthew Malachowski, PharmD, MHA, BCPS about navigating the updated pneumococcal recommendation. The interview was filmed during the 2023 RIZE Symposium.

[Part 1: Operationalizing a New Vaccine Model](#)

[Part 2: Educating Providers and Staff on a New Model](#)

[Part 3: Recognizing the Added Value](#)

RiseToImmunize.org/RIZEVideos





2024 AMGA ANNUAL CONFERENCE

April 9–12, 2024

Rosen Shingle Creek | Orlando, FL



The Super Future: Prepare Your Organization to Thrive in the AI Revolution

Jeremy Gutsche

CEO, Trend Hunter &
New York Times Bestselling Author

Leadership: Currency, Change, & Creating a Powerful Presence

The Dr. Scott Hayworth and the Honorable Dr.
Nan Hayworth Lecture

Carla Harris

Senior Client Advisor, Morgan Stanley

Election 2024 Perspectives

John Heilemann

Editor-in-Chief & Co-founder,
Recount Media

Mark McKinnon

Creator, Executive Producer & Cohost,
Showtime's The Circus

amga.org/AC24

RIZE Meet & Greet Breakfast



Friday, April 12
from 7-8 am ET



Free RIZE branded totes available!

Today's Speaker



Litjen (L.J.) Tan, MS, PhD, Chief Policy and Partnerships Officer, *Immunize.org*, Co-chair, *National Adult and Influenza Immunization Summit (NAIIS)*



Operationalizing Adult Immunizations Throughout the Year

Litjen (L.J) Tan, MS, PhD

Chief Policy and Partnerships Officer, Immunize.org
Co-Chair, National Adult and Influenza Immunization Summit



Disclosures

- I have no conflicts of interest.
- I do NOT intend to discuss an unapproved or investigative use of a commercial product/device in my presentation

Disclaimer

- The opinions expressed in this presentation are solely those of the presenter and do not necessarily represent the official positions of Immunize.org, or the National Adult and Influenza Immunization Summit

Outline

- Highlight
 - Burden of disease from adult vaccine preventable diseases
 - Low vaccination coverage rates
- Highlight strategies to improve coverage rates
- Operationalizing vaccination during the autumn/fall season and moving into year-round adult vaccinations

Why Adult Vaccinations?

Burden Of Adult Vaccine-Preventable Disease Among US Adults

- *Streptococcus pneumoniae*¹

- Pneumococcal pneumonia >150,000 hospitalizations per year
- Up to 30% of adult community-acquired pneumonias
- Pneumococcal bacteremia without pneumonia >5000 cases per year
- Pneumococcal meningitis ~2000 cases per year; >50% of bacterial meningitis cases

- Pertussis²

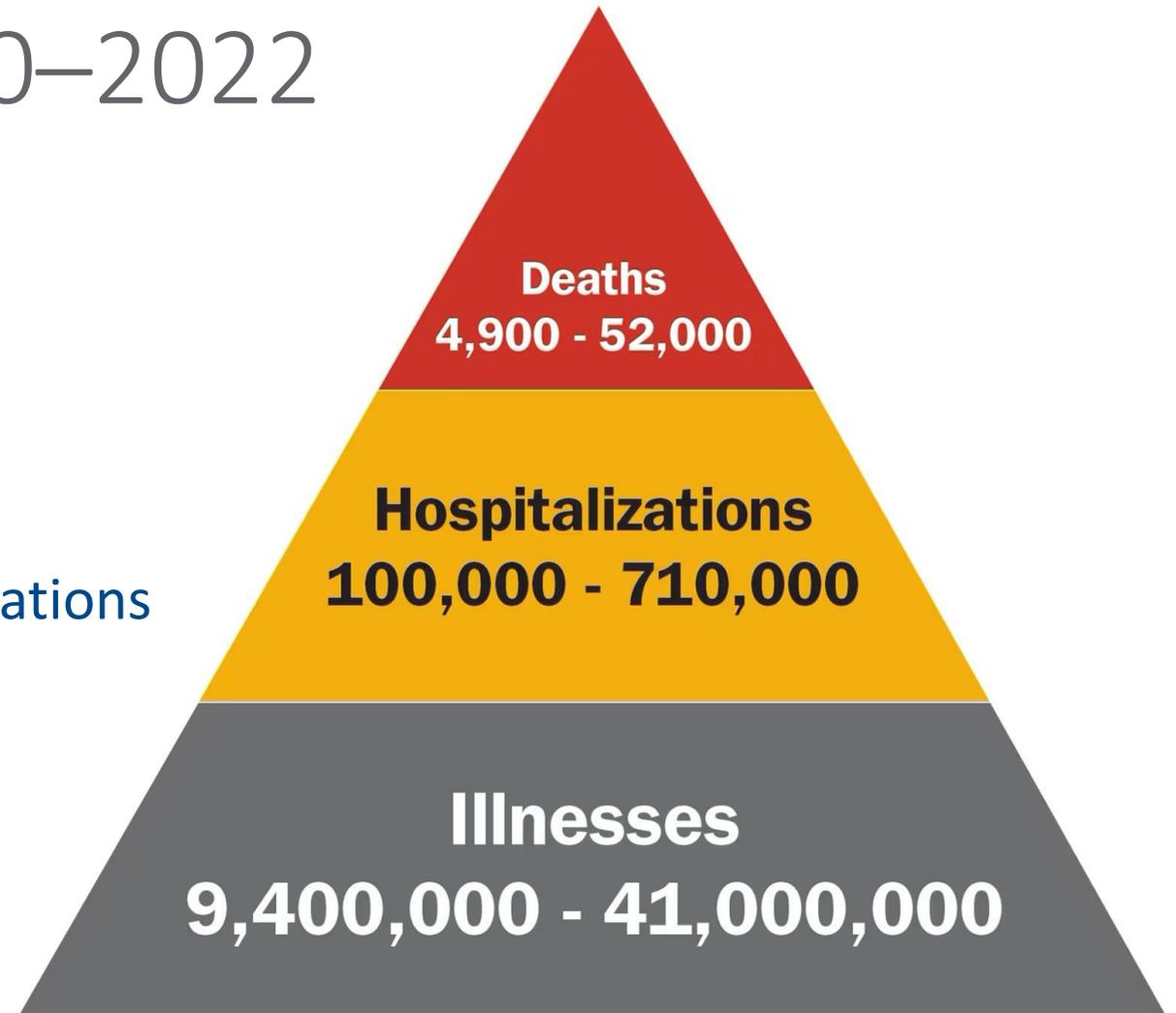
- 2388 total reported cases 2022
- 1089 among adults 20 years of age & older

Burden Of Adult Vaccine-preventable Disease Among US Adults

- Hepatitis B¹
 - 13,300 estimated new infections in 2021
 - 73% among adults 30–59 years of age
 - 14,229 newly reported cases of chronic hepatitis B
- Zoster²
 - 1 in 3 people in the US will develop shingles
 - 1–4% of people with shingles are hospitalized
- Measles³
 - California/multi-state 2015 outbreak: 55% of infections were in adults 20 years of age and older

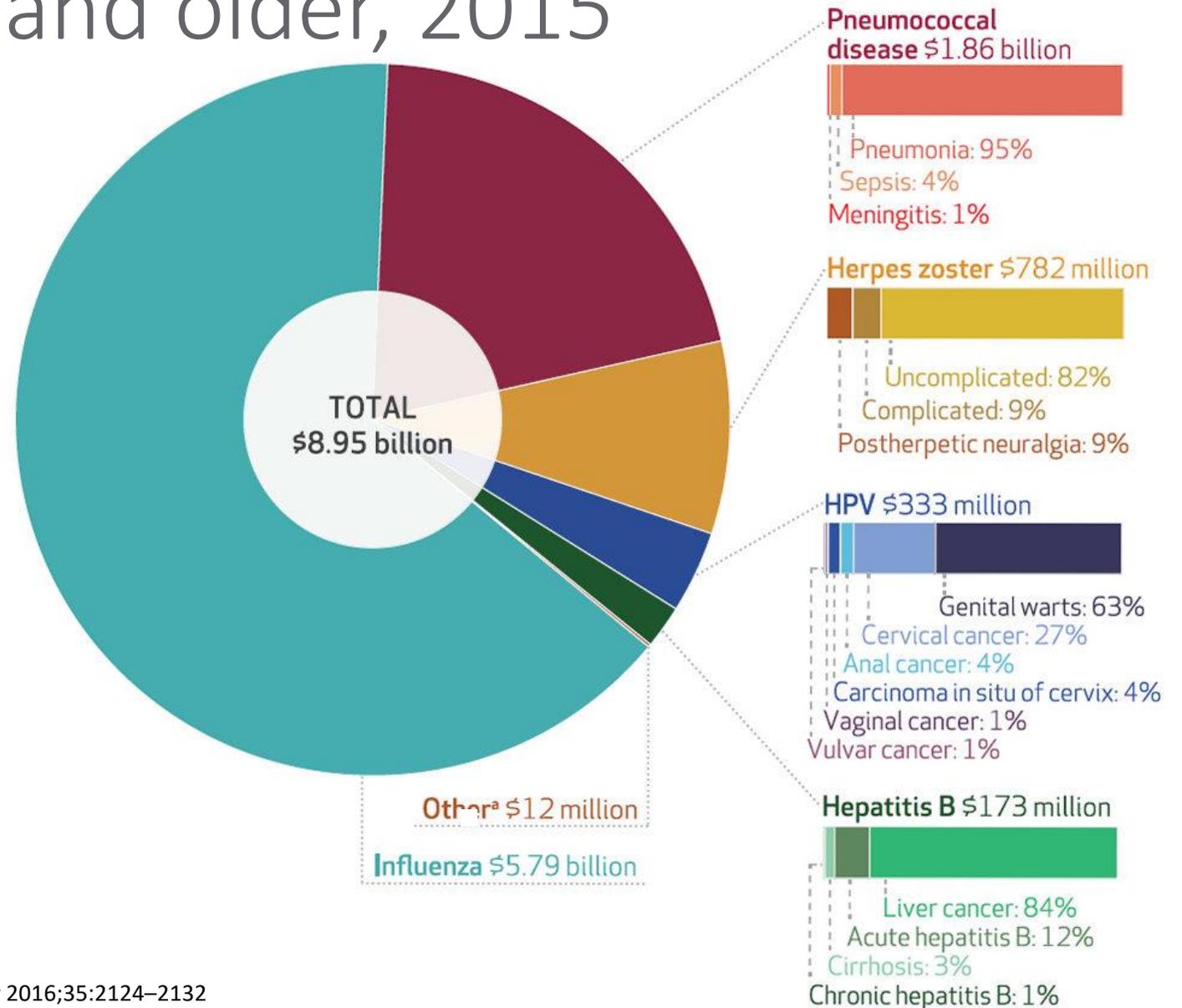
Burden of Influenza, 2010–2022

- For recent seasons, adults aged 65 years and older accounted for:¹
 - 50–70% of influenza-related hospitalizations
 - 70–85% of influenza-related deaths



Cost Burden of Adult Vaccine-Preventable Diseases, 50 years and older, 2015

Unvaccinated individuals are responsible for almost 80 percent of the financial burden!



Estimates of COVID-19 Attributable Deaths, Hospitalizations, and Infections Averted by the U.S. Vaccination Program Between December 12, 2020, and November 30, 2022

	Averted number	95% Credible Interval*
Deaths	3,255,656	3,088,126 to 3,410,112
Hospitalizations	18,585,131	17,780,337 to 19,355,830
Infections	119,851,779	112,698,238 to 127,129,565

 Download data

* Credible Intervals reflect the range of uncertainty associated with estimates.

Source: Meagan C. Fitzpatrick et al., "Two Years of U.S. COVID-19 Vaccines Have Prevented Millions of Hospitalizations and Deaths," *To the Point* (blog), Commonwealth Fund, Dec. 13, 2022. <https://doi.org/10.26099/whsf-fp90>

Burden of Adult Vaccine-Preventable Disease Globally

- Globally, like in the United States, vaccine preventable diseases in adults cause health, economic, and social impacts¹
 - COVID-19 pandemic showed us the importance of a sustainable adult immunisation infrastructure
- For example, respiratory infections (including influenza and pneumonia) resulted in more than 1.5 million deaths in adults aged 50 years or older in 2017, and accounted for 23 million years of life lost due to premature mortality¹
 - Highest incidence was in low-income countries where access to vaccines for adults is almost nonexistent
- And, especially in older adults, vaccine preventable disease can lead to declines in functional ability and quality of life²

1. Privor-Dumm L *et al.* *Vaccine* 2021;39:5240–5250;

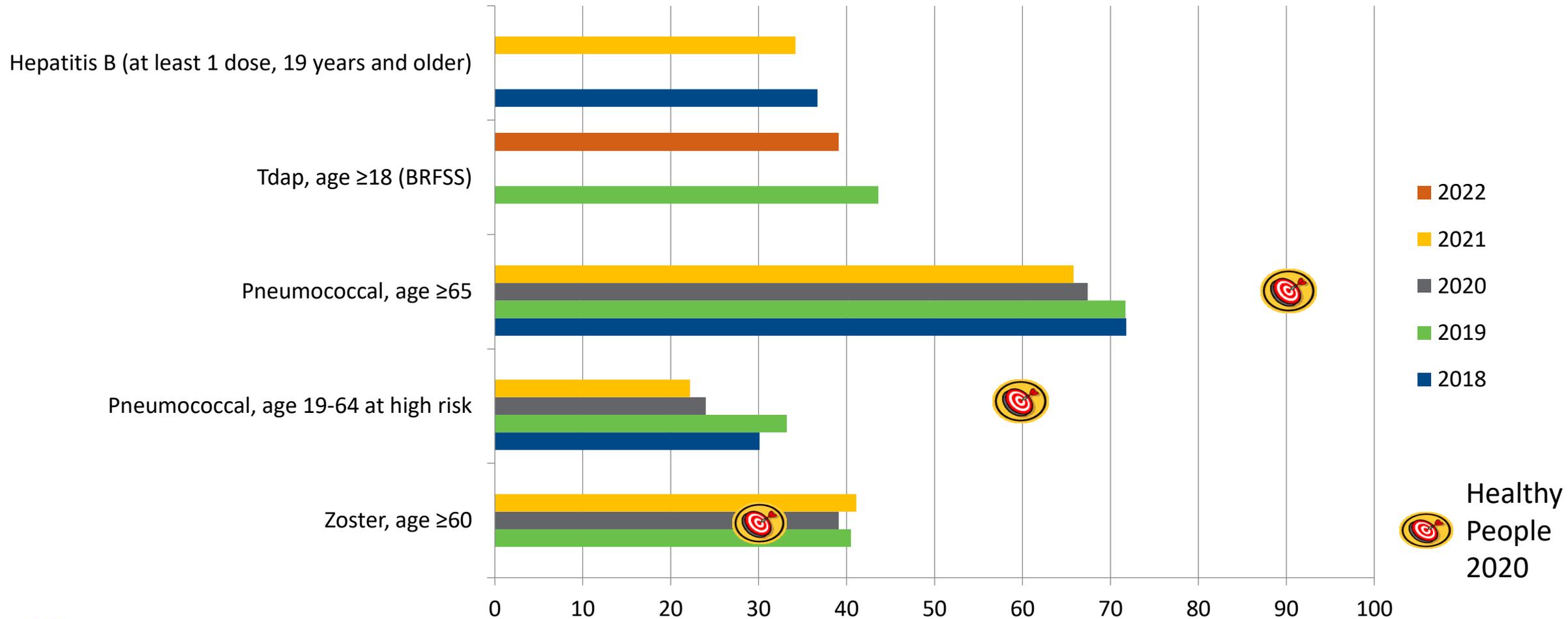
2. Ecartot F *et al.* Strategies to Improve Vaccine Uptake throughout Adulthood. In: *Vaccines for Older Adults: Current Practices and Future Opportunities*, Weinberger B (ed). Interdiscip Top Gerontol Geriatr. Basel, Karger, 2020. pp. 234–248

Adult Vaccine-Preventable Diseases can Exacerbate Existing Chronic Illness

- In a Canadian study of 332 patients, incidence of admissions for acute myocardial infarction was six times as high during the 7 days after laboratory confirmation of influenza infection versus 1 year before and 1 year after this interval¹
- In a US cross-sectional study of >80,000 adults hospitalized with influenza, almost 12% of patients had an acute cardiovascular event²
- A retrospective cohort analysis of wearable digital tracking data from a US health plan (N=167,672 individuals) found that people with diabetes experienced more hyperglycemic events, and substantial increases in pneumonia, sepsis, and coronary heart disease up to 4 weeks after an influenza claim, as compared with a non-influenza period in the same year³
- Pneumococcal pneumonia and shingles may increase the risk of myocardial infarction or stroke, exacerbated chronic obstructive lung disease and cardiovascular disease, potentially leading to a decline in functional ability, loss of independence, or even premature death⁴

Yet we are failing our
adult populations

Adult Immunization Coverage Rates, National Health Interview Surveys and BRFSS, 2018–2022¹



Disparities in routinely recommended vaccines for adults

Vaccination, age group, increased-risk status	% Vaccinated whites	Vaccination difference [§] , blacks	Vaccination differences, Hispanics	Vaccination differences, Asians	Vaccination differences, other
Influenza vaccination, 2017-18 season[†]					
≥19 yrs	49.3	-10.3**	-11.8**	1.4	-7.9**
19-49 yrs	36.5	-6.3**	-6.0**	5.1	-1.4
50-64 yrs	49.4	-3.1	7.4**	2.8	-3.5
≥65 yrs	73.5	-13.8**	-4.6	5.7	-6.7
HCP ^{††} , ≥19 yrs	71.9	0.3	-0.2	0.7	-6.4
Pneumococcal vaccination, ever^{§§}					
19-64 yrs, increased risk	23.6	2.1	-5.1**	1.4	2.2
≥65 yrs	72.6	-12.8**	-18.4**	-17.6**	-6.5
Tetanus vaccination (received in past 10 years)^{§§}					
≥19 yrs	68.3	-18.1**	-14.3**	-13.6**	-6.4**
19-49 yrs	71.2	-18.3**	-15.5**	-12.9**	-7.7**
50-64 yrs	69.1	-22.9**	-18.1**	-20.3**	-10.6**
≥65 yrs	61.9	-15.1**	-13.0**	-12.6**	-3.0
Tetanus vaccination including pertussis vaccine (received in past 10 years)^{***}					
≥19 yrs	36.7	-16.6**	-16.2**	-11.1**	-4.7
19-64 yrs	40.6	-19.6**	-18.9**	-13.1**	-7.5**
≥65 yrs	24.6	-8.8**	-13.0**	-8.9**	0.2
HCP, ≥19 yrs	60.9	-22.9**	-14.1**	2.6	2.1
Hepatitis A vaccination (at least 2 doses)^{†††}					
19-49 yrs	18.2	-5.4**	-2.5	5.8**	3.7
Hepatitis B vaccination (at least 3 doses)^{§§§}					
19-49 yrs	43.6	-8.2**	-10.5**	1.6	-5.8
HCP, ≥19 yrs	70.9	-14.5**	-13.6**	5.8	-9.6
Herpes zoster (shingles) vaccination, ever^{§§§}					
≥60 yrs	38.6	-19.9**	-19.1**	-9.5**	-7.7
60-64 yrs	25.4	-14.6**	-10.2**	-5.7	-7.8
≥65 yrs	44.0	-21.4**	-22.2**	-11.4**	-8.4
HPV vaccination among females (at least 1 dose), ever^{****}					
19-26 yrs	56.5	-11.3	-6.9	-17.2**	1.4

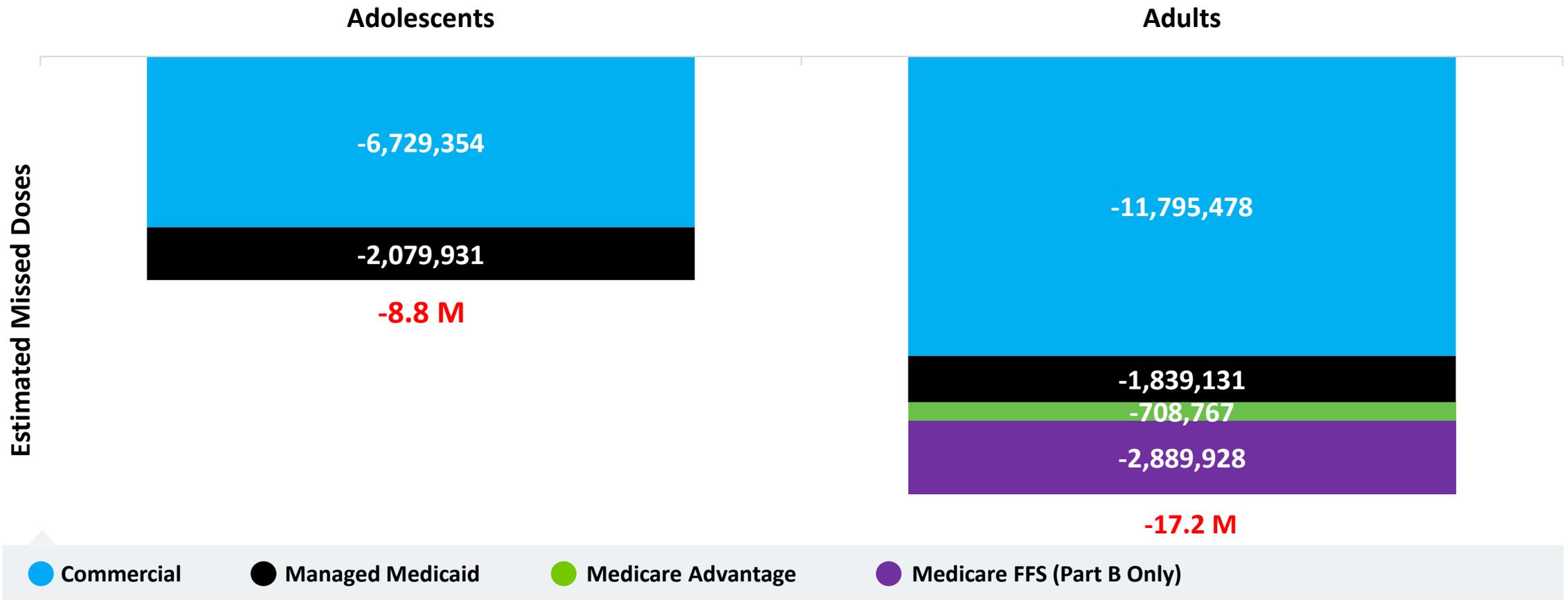
Surveillance of Vaccination Coverage Among Adult Populations — United States, 2018:
<https://www.cdc.gov/mmwr/volumes/70/ss/ss7003a1.htm>

Abbreviations: HCP = Health care personnel; HPV = Human papillomavirus; Td = Tetanus and diphtheria toxoids; Tdap = Tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine.

Adult immunization rates still need to be improved!

- AND...REMINDER
- Routinely recommended vaccinations have fallen further during the COVID-19 pandemic

Adolescents and Adults Missed An Estimated 26M+ Doses of Recommended Vaccines in 2020 vs 2019



FFS: Fee-for-service. Note: Avalere used national enrollment data to extrapolate the difference between observed 2019 and 2020 vaccine claims to estimate the potential number of “missed doses” in 2020 on a national level. Here, “missed doses” refers to the decrease in doses of recommended adolescent and adult vaccines from 2019 to 2020.

Avalere Health, 2021. The COVID-19 Pandemic: Impact on US Adolescent and Adult Vaccine Utilization Across Markets.

https://www.immunizationmanagers.org/content/uploads/2021/08/20210721_Avalere_Impact_of_COVID-19_on_Routine_IZ_AIM_2021_Meeting.pdf (accessed November 2023)

And what about Influenza?

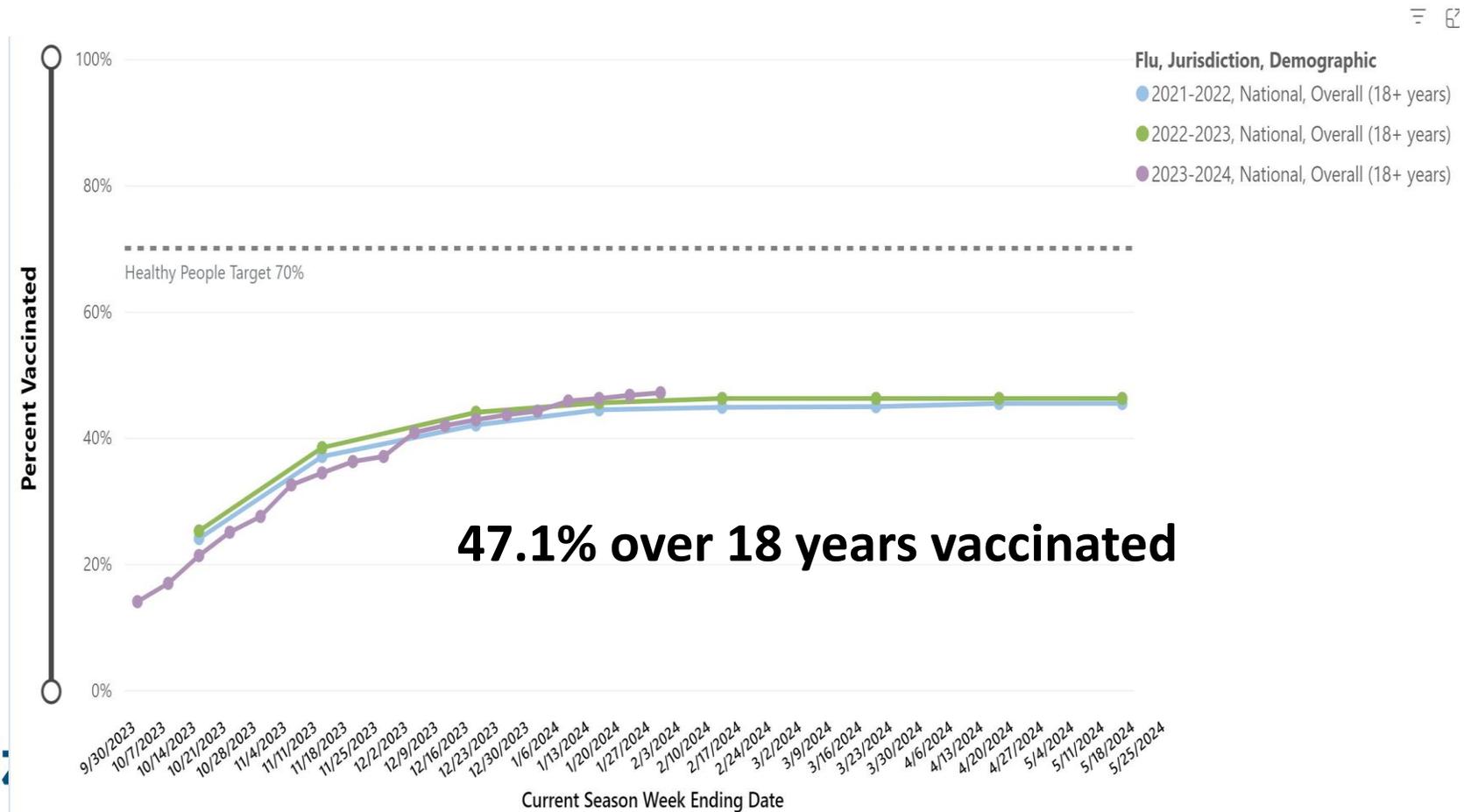
2022-2023 Adult Influenza Vaccination Coverage*

- Coverage similar to the 2021-2022 season. However, that season was about 3-5% lower than pre-COVID coverage levels
 - **46.9%** of all adults over 18 years of age vaccinated
 - **69.7%** of those over 65 years of age vaccinated
 - **50.1%** of adults between 50 -64 years of age vaccinated
 - Only **35.2%** of adults 18-49 years of age vaccinated
 - **40.7%** of high risk vaccinated

2023-2024 Influenza Vaccination Coverage (through January 27, 2024)

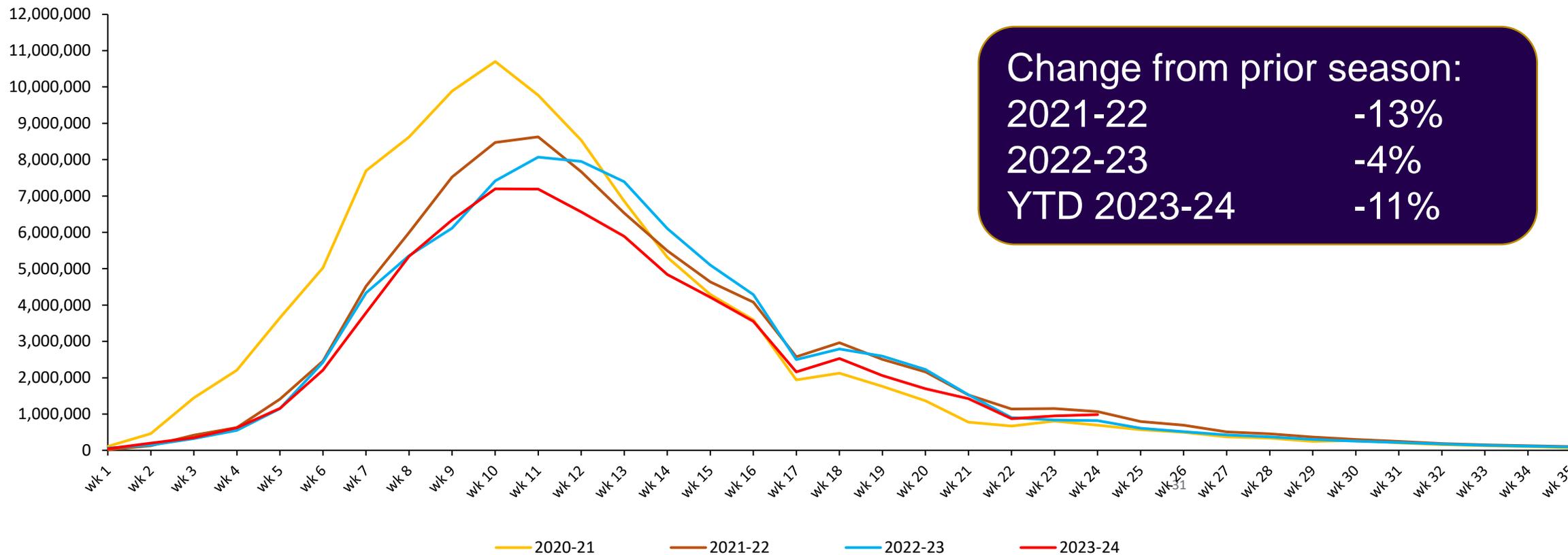
Figure 4A. Influenza Vaccination Coverage, by Selected Demographics, 2023-24 and Jurisdiction
Adults 18 years and Older, United States, *†‡±

Data Source: National Immunization Survey-Adult COVID Module



Historical Medical/Retail Claims by Week

Retail Week Ending January 12, 2024¹
 Medical Week Ending January 13, 2024¹

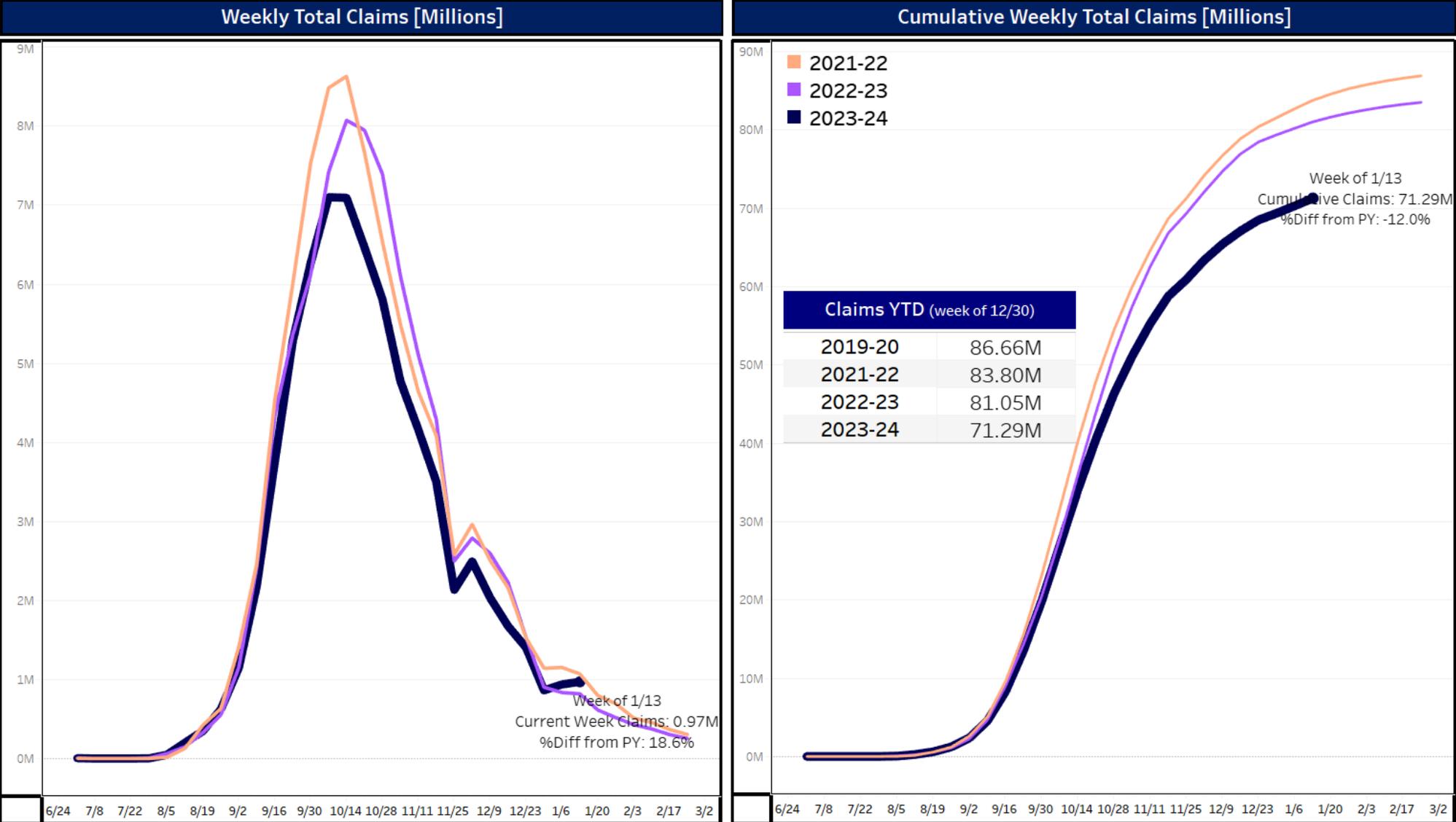


- Flu seasons run for 35 weeks Aug to Mar
- Week 1 represents: Aug 08, 2020; Aug 07, 2021; Aug 06, 2022; Aug 05, 2023

¹ Data only reflects active Flu season, Season to Date (August – March); Medical claims are a week behind Retail claims therefore Retail claim week ending dates are adjusted to be consistent with Medical claims

2023 Private Market Immunizations trending 12.0% behind Previous Year

Claims as of week 01/13

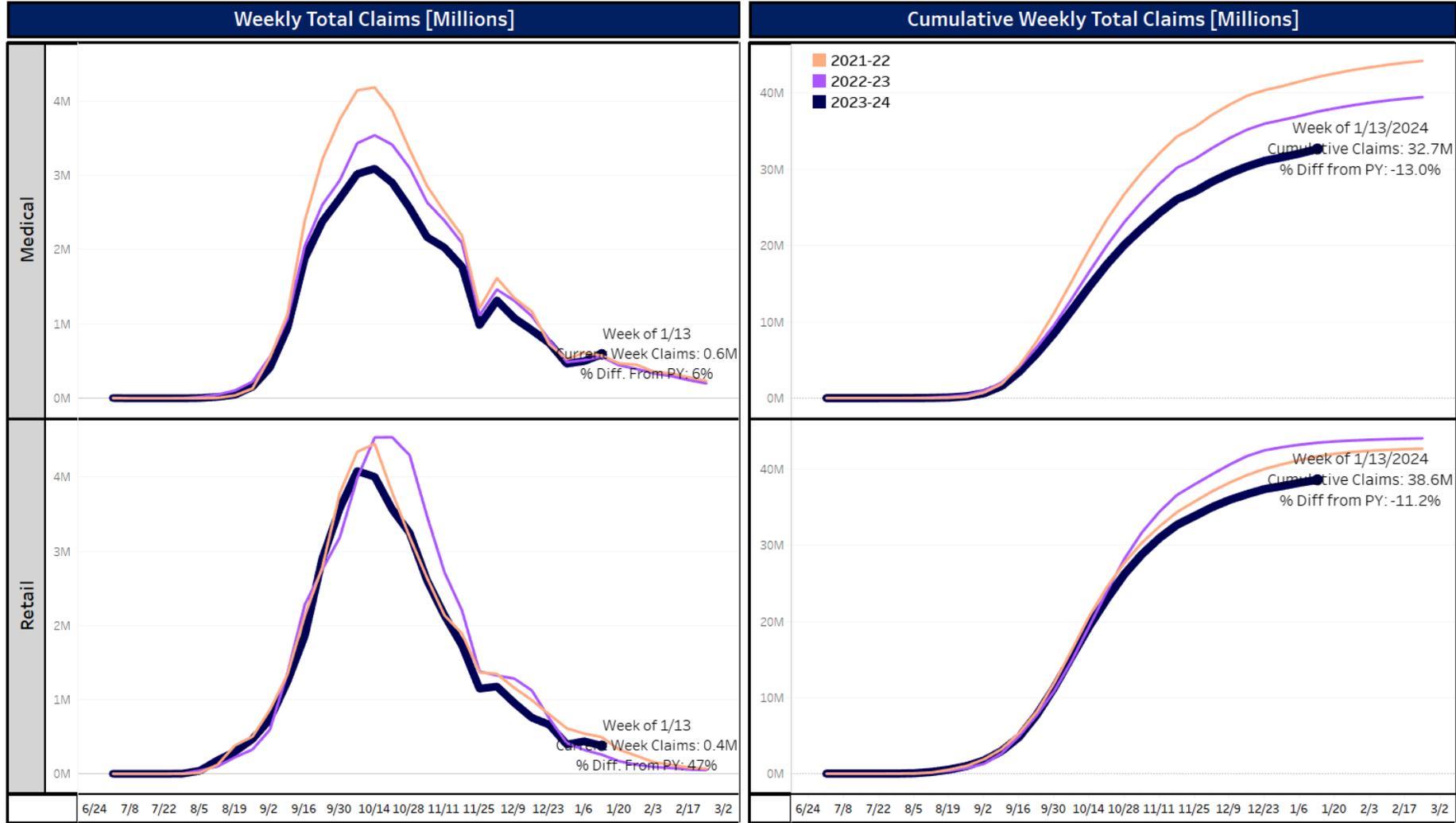


IQVIA NATIONAL CLAIMS DATA

- COVERAGE FOR MEDICAL IS 65%.
- NOT COVERED SEGMENTS – KAISER, VA, CDC ,FQHC, LTC, CASH PAYMENTS, MEDICARE PART A – HOSPITALS, NON-AMA AFFILIATED HCP IMMUNIZATIONS

The Overall Influenza-immunized population continues to decline each year

week Claims as of week 01/13

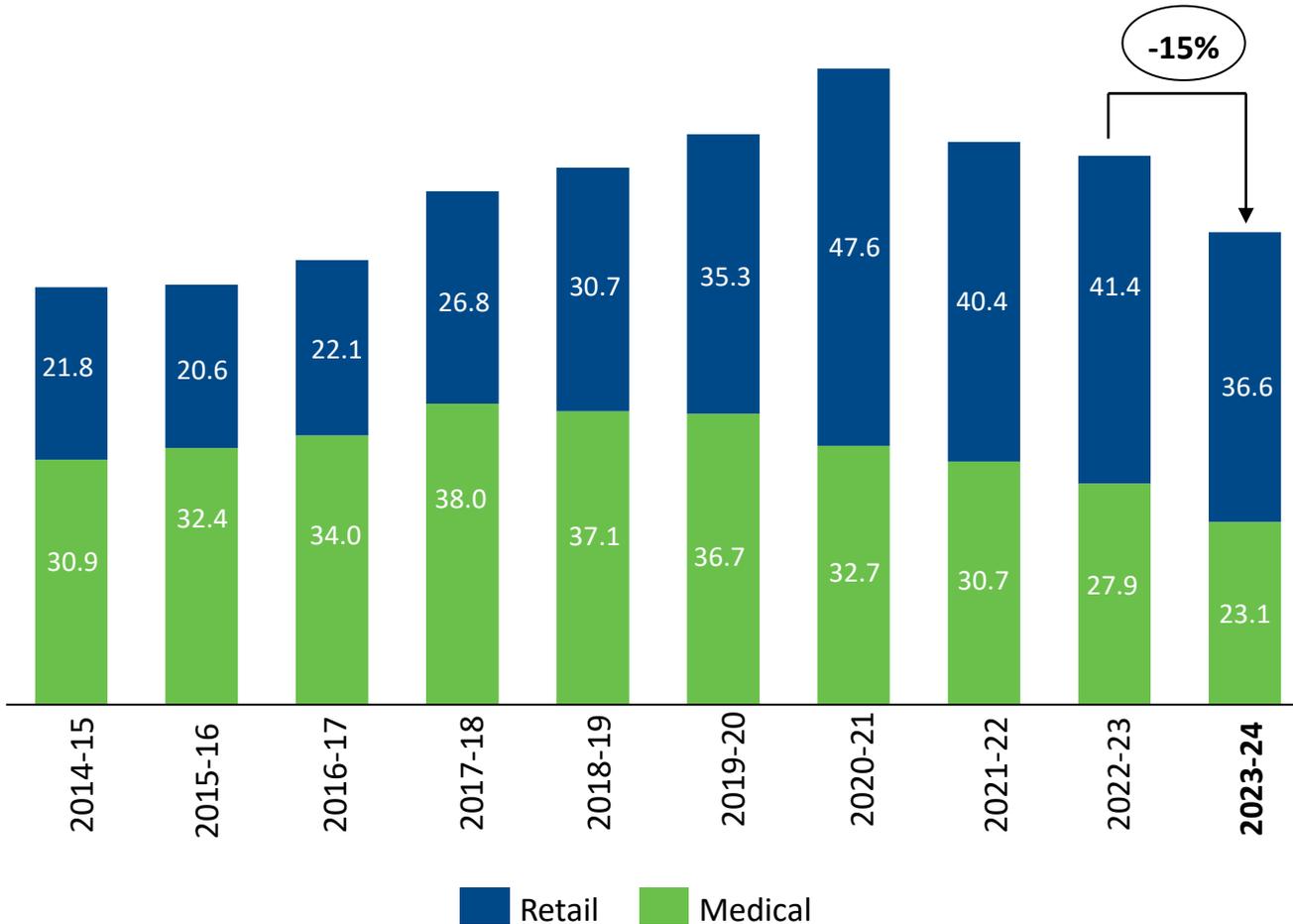


IQVIA NATIONAL CLAIMS DATA

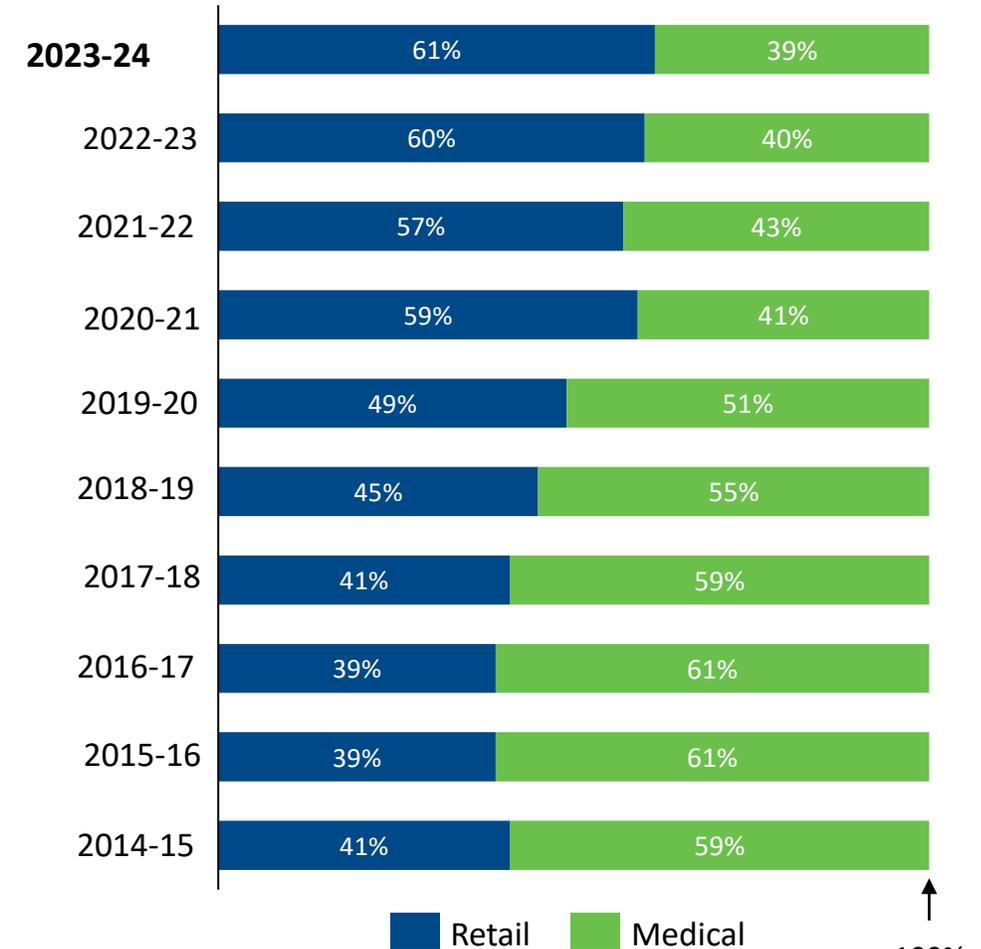
- **COVERAGE FOR MEDICAL IS 65%.**
- **NOT COVERED SEGMENTS – KAISER, VA, CDC ,FQHC, LTC, CASH PAYMENTS, MEDICARE PART A – HOSPITALS, NON-AMA AFFILIATED HCP IMMUNIZATIONS**

18+ Flu season claims in Medical vs. Retail segment

Adult (age 18+) Year-to-Date Claims



Adult (age 18+) Share of Total Year-to-Date Claims



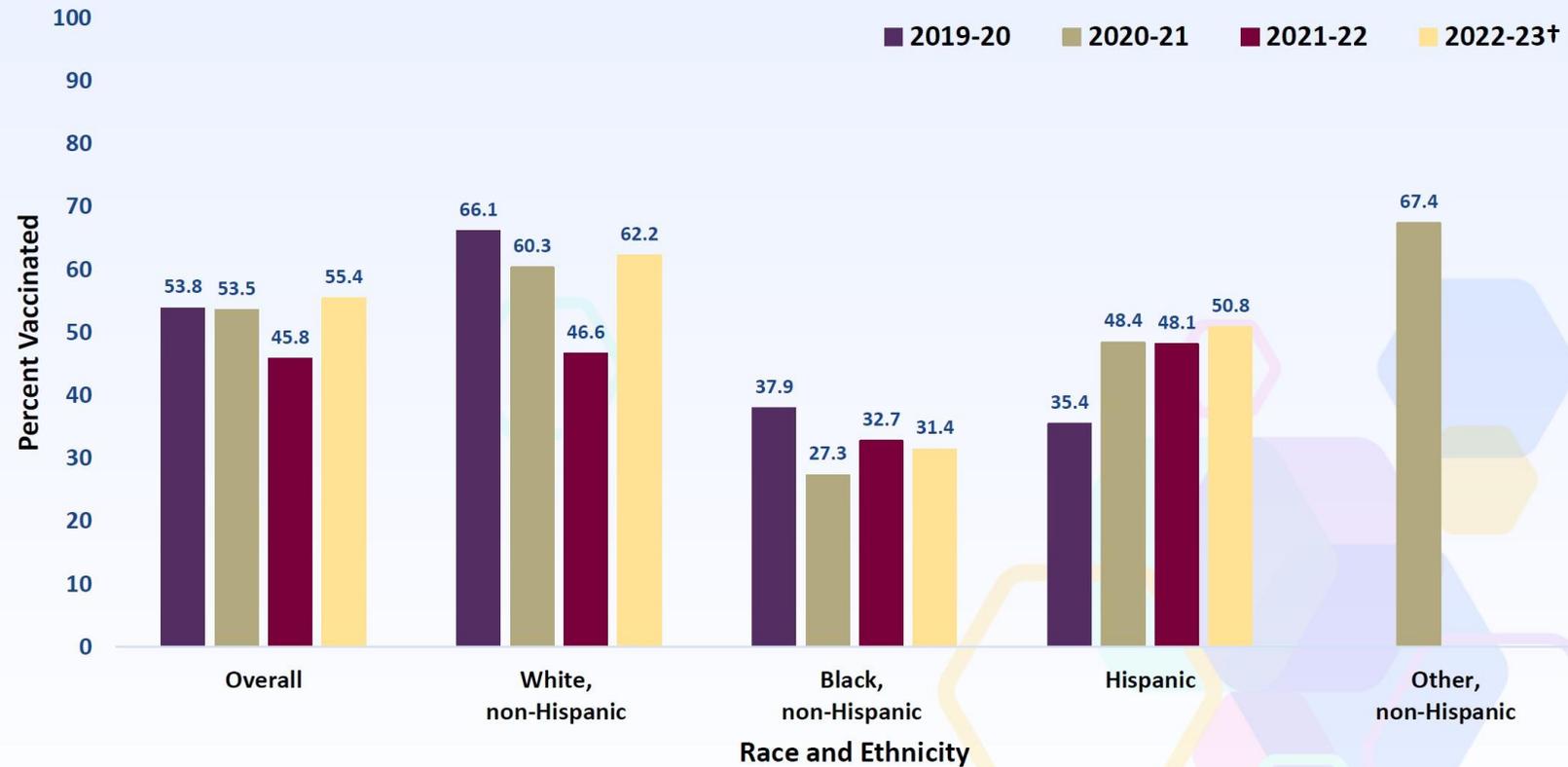
Data Source: IQVIA National Pharmacy Claims Report; Medical (as of 01/13/2024) and Retail (as of 01/13/2024)

**IQVIA national claims at CPT code level. IQVIA doesn't capture claims from Public, Kaiser, VA, LTC, FQHCs, Hospital and Non-AMA affiliated Physicians.

And Maternal Immunization
Coverage Rates remain Low

Tdap vaccination coverage* among pregnant women by race and ethnicity, 2019-20 through 2022-23[†] influenza seasons

Coverage was significantly higher overall and for White women in 2022-23 compared with 2021-22



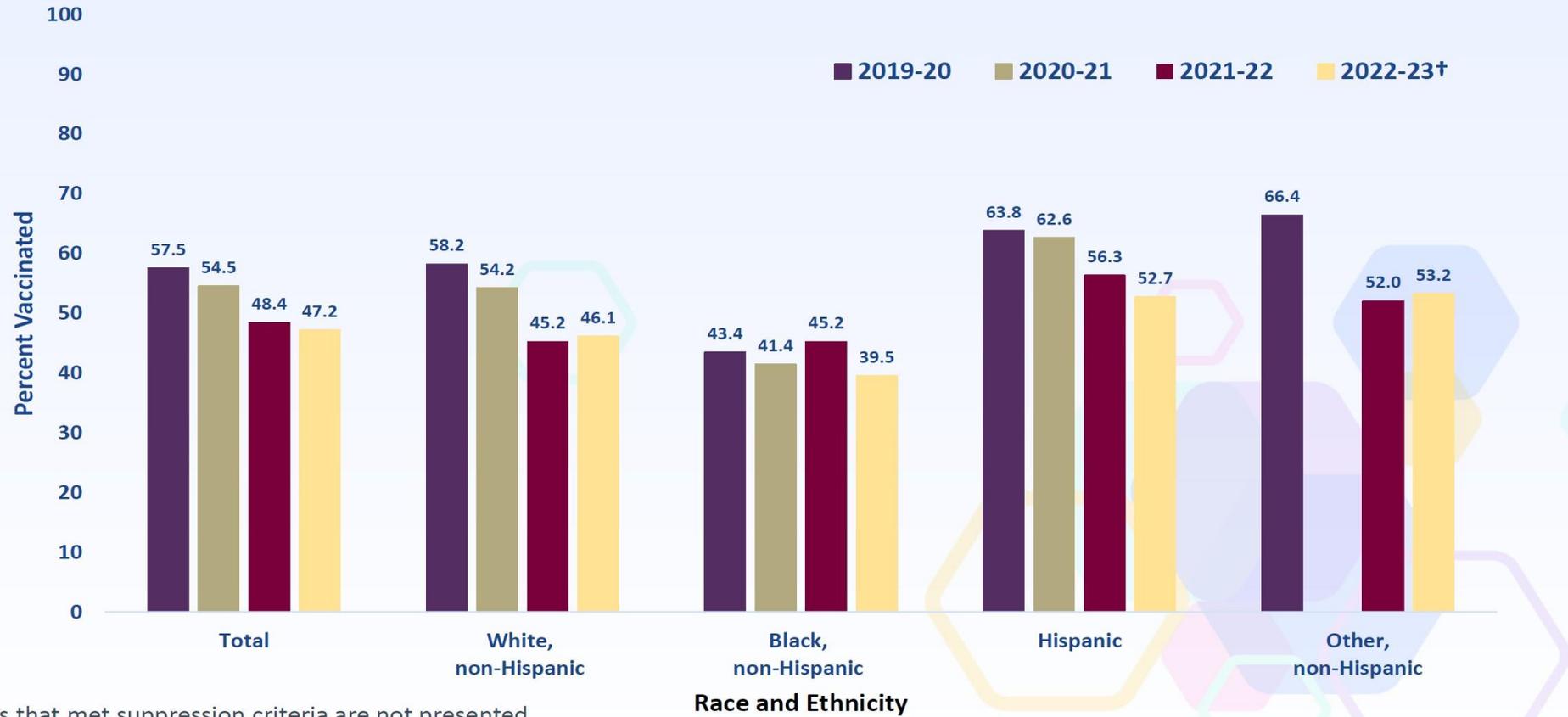
NOTE: Estimates that met suppression criteria are not presented.

*Women who reported a pregnancy since August 1 of each season who had a live birth by the time of the survey and were vaccinated during most recent pregnancy were counted as vaccinated.

[†]The estimates for 2022-23 season are preliminary and have not been published.

Influenza vaccination coverage* among pregnant women by race and ethnicity, 2019-20 through 2022-23† influenza seasons

Coverage for 2022-23 season was similar to that of 2021-22 (Overall and by race and ethnicity)

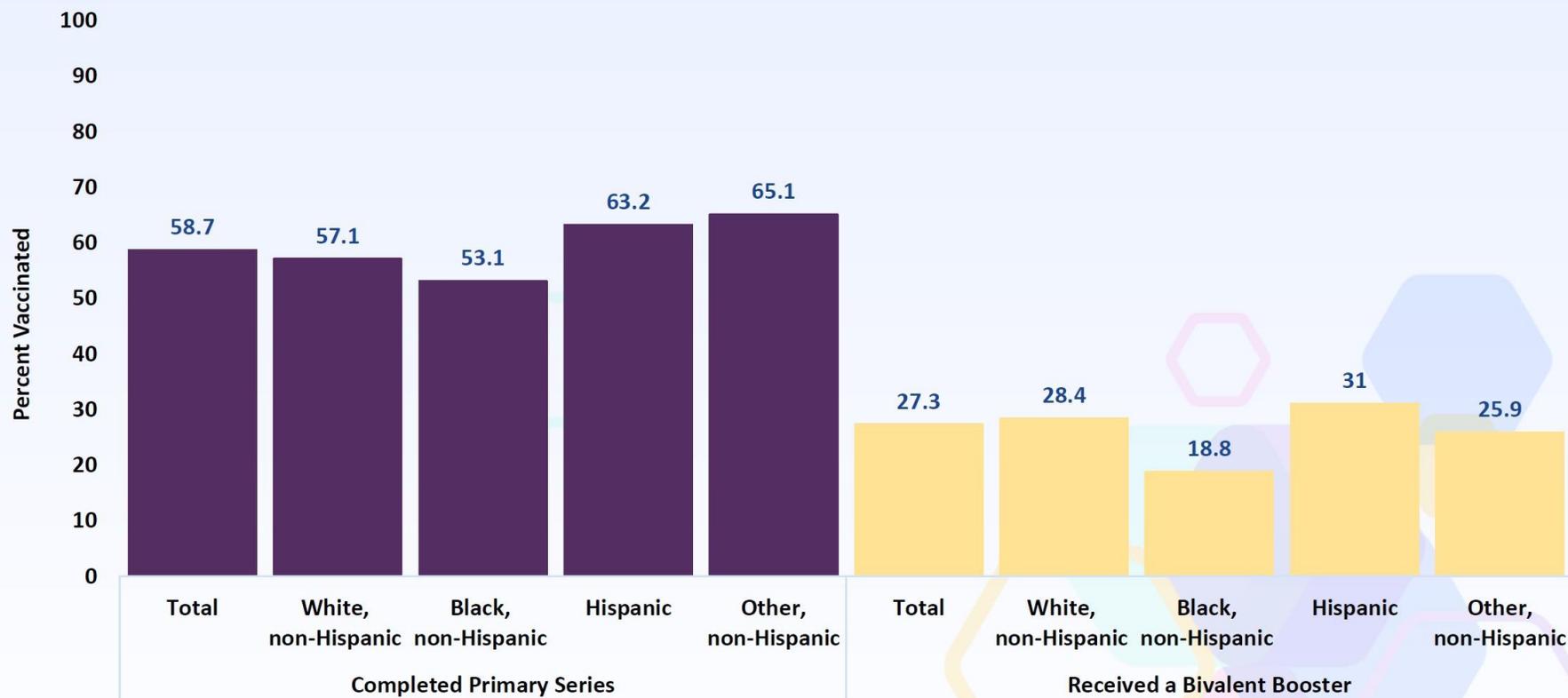


NOTE: Estimates that met suppression criteria are not presented.

*Women pregnant anytime between Oct to January who were vaccinated before/during pregnancy since July 1 were counted as vaccinated.

†The estimates for 2022-23 season are preliminary and have not been published.

COVID-19 vaccination coverage* among pregnant women by race and ethnicity, April 2023[†]



*COVID-19 vaccination coverage was assessed among women who reported being pregnant at the time of the survey. If a woman reported receiving two doses of the Moderna, Pfizer-BioNTech, or Novavax vaccines or a single dose of the Janssen vaccine, she was considered to have completed the primary series. An additional dose was required for women who reported being immunocompromised.

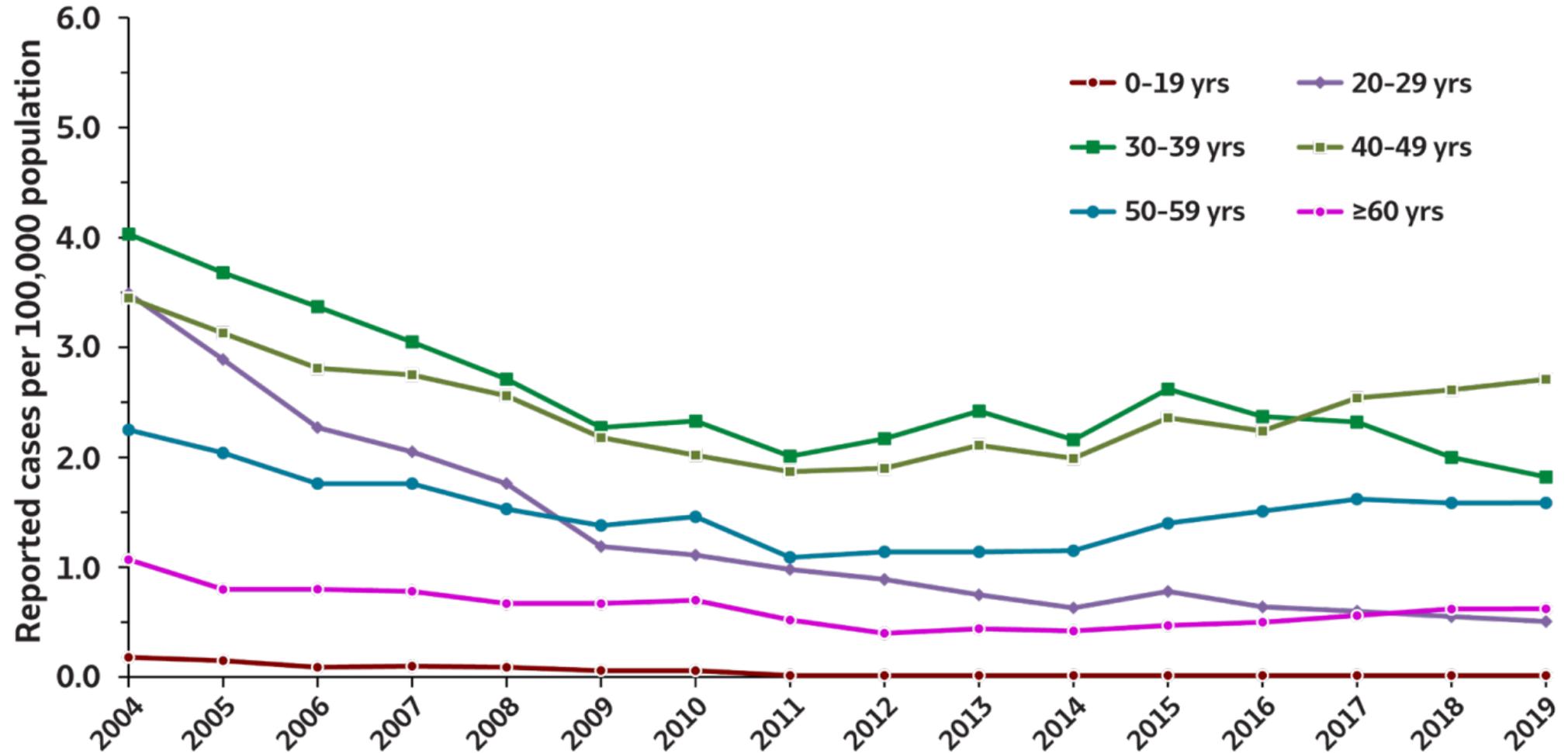
[†]The estimates are preliminary and have not been published.

Impact of the Provider Recommendation*

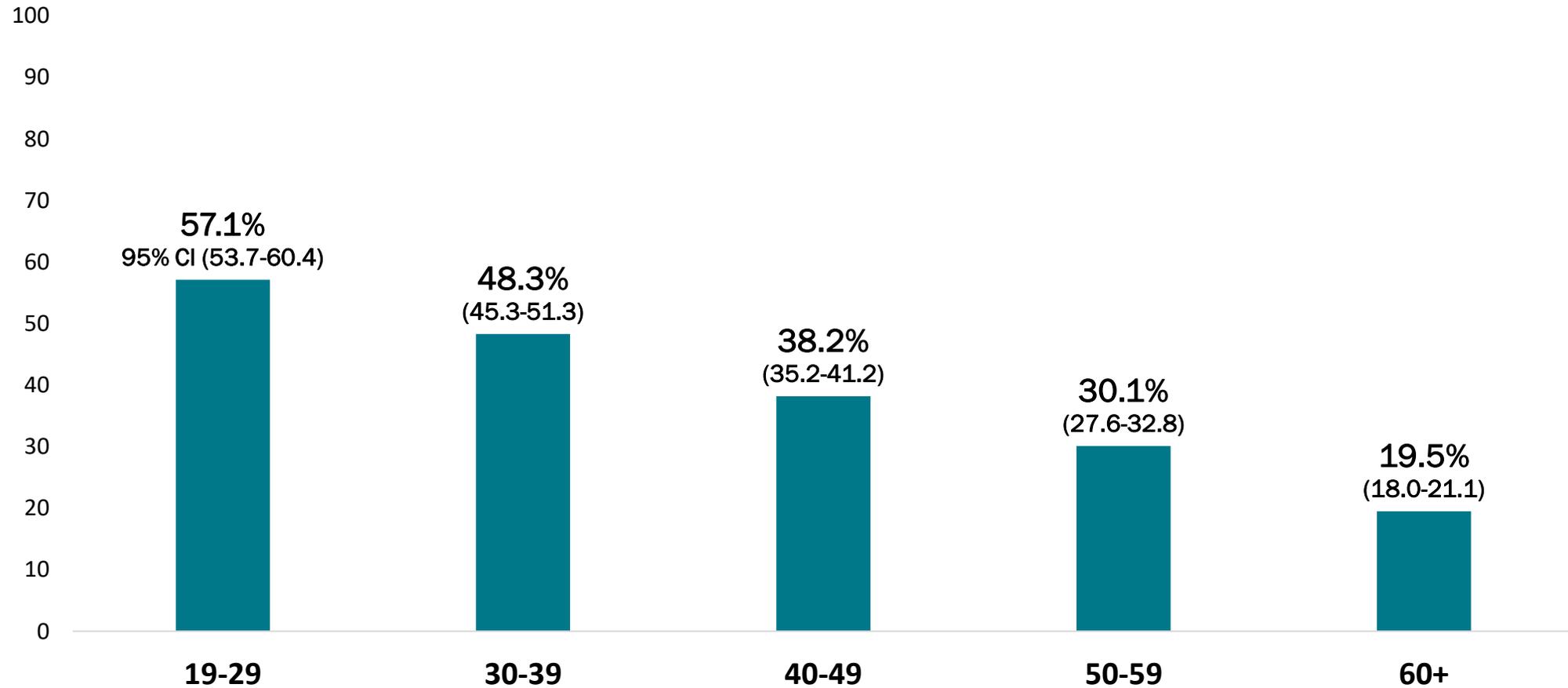
Provider Recommendation /Offer	Influenza		Tdap		Both Vaccines	
	N (weighted %)	Vaccinated, weighted % (95% CI)	N (weighted %)	Vaccinated, weighted % (95% CI)	N (weighted %)	Vaccinated, weighted % (95% CI)
Offered or referred (Ref)	1427 (70.2)	62.3 (58.6–65.9)	573 (70.1)	63.7 (59.2–68.0)	466 (57.7)	35.2 (30.4–40.3)
Recommended, no offer or referral	121 (6.4)	31.8 (20.9–44.3) [§]	45 (5.8)	—	276 (31.4)	7.3 (3.7–12.7) [§]
No recommendation	451 (23.3)	12.2 (8.5–16.7) [§]	220 (24.1)	1.2 (0.1–4.2) [§]	93 (10.9)	0.0 (0.0–3.9) [§]

The “Orphan” vaccine – Hepatitis B

New hepatitis B virus infections are in adults 19 years and up



Hepatitis B vaccination coverage in adults with ≥ 1 risk factor decreases with increasing age



Limitations of previous risk-based testing approach



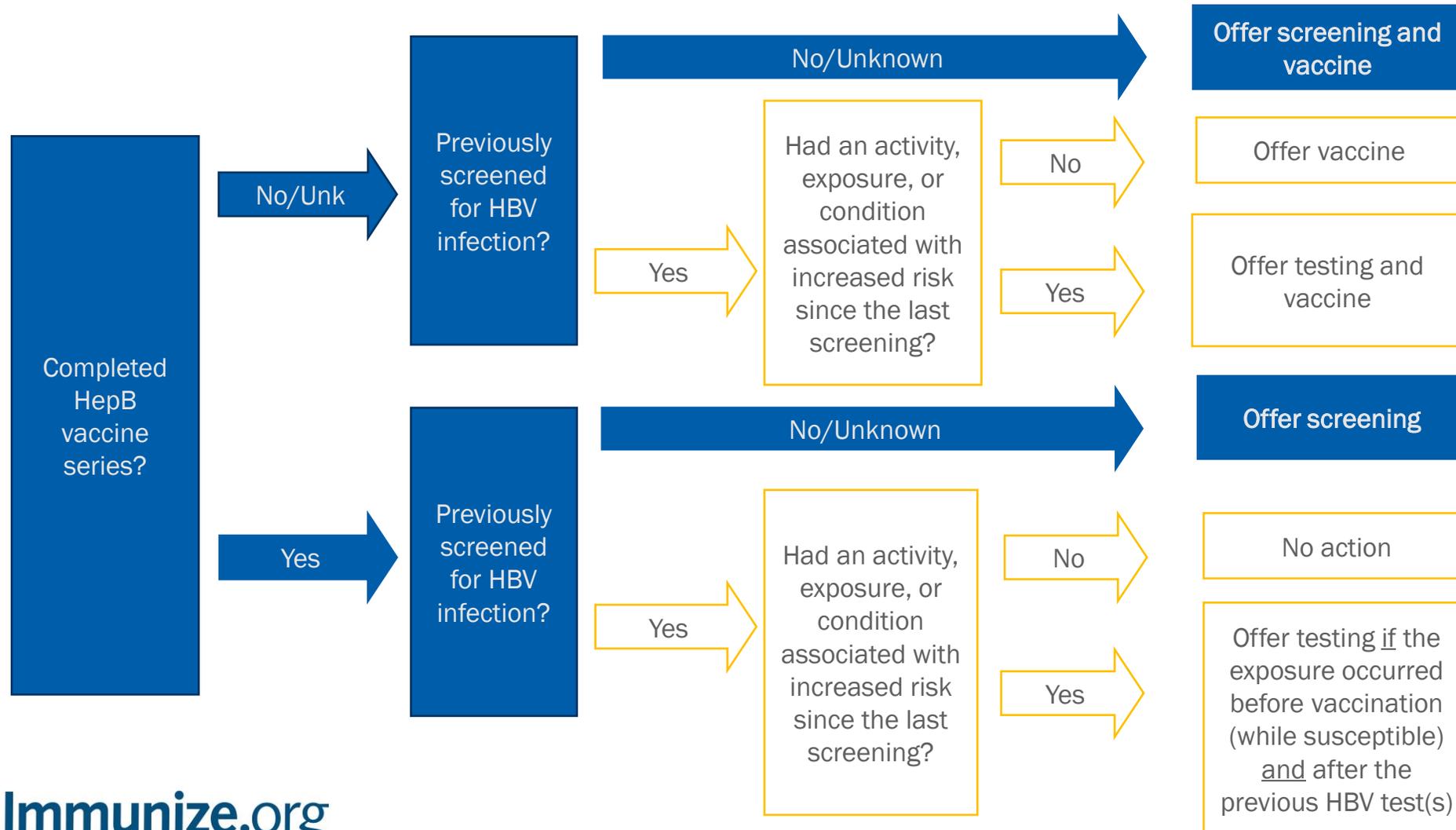
Over 2/3 of reported acute cases were either missing risk data or reported no identified risk

Hepatitis B Routine Vaccination Recommendation

- The following groups are recommended to receive hepatitis B vaccines:
 - Adults aged 19 - 59 years
 - Adults aged > 60 years with risk factors for hepatitis B
- The following groups may receive hepatitis B vaccines:
 - Adults aged > 60 years without known risk factors for hepatitis B
- **Screening should not be a barrier to vaccination**
 - Screening is recommended for all adults aged >18 years at least once in a lifetime
 - Anyone who requests hepatitis B testing should receive it, regardless of disclosure of risk

Integrating the Hepatitis B Routine Vaccination Recommendation with the Routine Screening Recommendation

Nonpregnant adults ≥ 18 years without a known history of HBV infection



Conners EE, et al.
MMWR Recomm Rep.
2023 Mar 10;72(1):1-25. doi:
10.15585/mmwr.rr7201a1. PMID: 36893044;
PMCID: PMC9997714.

Operationalizing adult vaccination uptake!

Everyday readiness IS pandemic preparedness

ACIP recommended vaccinations for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection

- **COVID-19**
 - 1 updated Pfizer-BioNTech or updated Moderna COVID-19 vaccine, OR
 - 2 doses of updated Novavax COVID-19 vaccine
 - People aged 12 years and older who got COVID-19 vaccines before September 12, 2023, should get 1 updated Pfizer-BioNTech, Moderna, or Novavax COVID-19 vaccine
- **Hepatitis B**
 - For adults less than 60 years of age, one primary series of vaccination
 - Adults 60 years and older may get hepatitis B vaccine
- **HPV**
 - 15 through 26 years of age, 2- or 3-dose series
 - SCDM for those 27-49 years of age
- **Influenza**
 - 1 dose annually
- **Mumps, measles, and rubella**
 - 1 dose

ACIP recommended vaccinations for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection

- **Pneumococcal Disease**

- 1 dose PCV15 followed by PPSV23; OR 1 dose PCV20, for those over 65 years

- **RSV**

- A single dose of RSV vaccine, by shared clinical decision-making for those ≥ 60 years
- Pregnant people should get a single dose of Pfizer's bivalent RSVpreF vaccine (Abrysvo) during weeks 32 through 36 (+ 6 days) of pregnancy during September through January.

- **Tdap/Td**

- 1 dose Tdap, then Td or Tdap booster every 10 years

- **Zoster**

- For those ≥ 50 years, 2-dose series of recombinant zoster vaccine

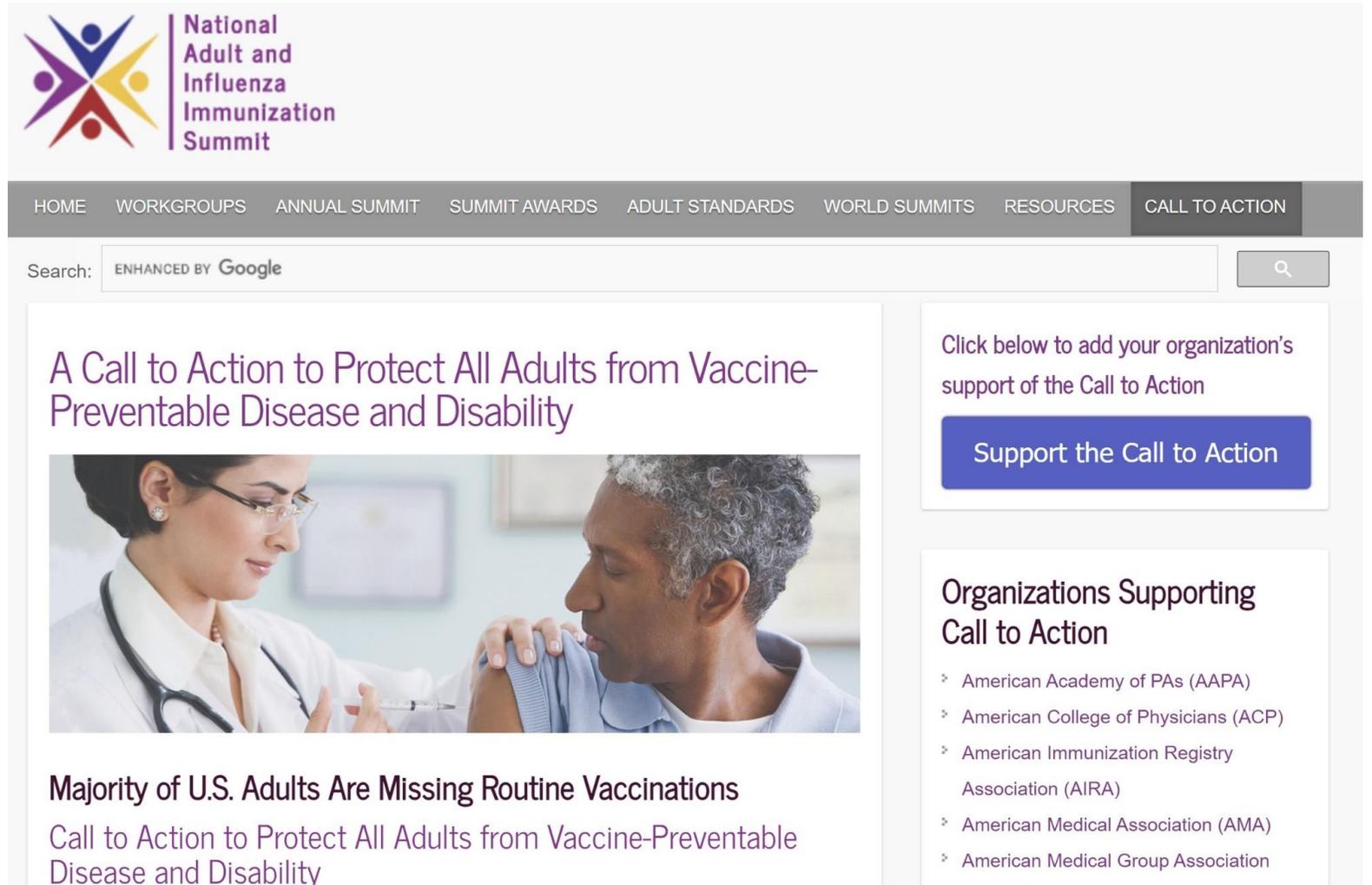
Standards for Adult Immunization Practice*

- In response to low adult vaccination rates, multi-sector partners from NAIIS developed and National Vaccine Advisory Committee updated and published standards in 2014
 - <https://www.cdc.gov/vaccines/hcp/adults/for-practice/standards/index.html>
- Acknowledges that:
 - Not all medical providers choose to stock all recommended vaccines;
 - The providers' recommendation is critical; and
 - The need to accurately track patients' vaccinations, including in immunization information systems (i.e. vaccine registries)
- Further reductions in already low adult vaccination prompted the Summit, CDC and partner organizations to develop Call to Action on Adult Immunizations released on Aug. 23, 2021



National Adult and Influenza Immunization Summit (NAIIS) Call to Action*

<https://www.izsummitpartners.org/call-to-action-adult-immunizations/>



The screenshot shows the website for the National Adult and Influenza Immunization Summit. At the top left is the logo, which consists of a colorful starburst of human figures in purple, blue, yellow, and red, with the text 'National Adult and Influenza Immunization Summit' to its right. A navigation bar below the logo contains links for HOME, WORKGROUPS, ANNUAL SUMMIT, SUMMIT AWARDS, ADULT STANDARDS, WORLD SUMMITS, RESOURCES, and CALL TO ACTION. Below the navigation bar is a search bar with the text 'Search: ENHANCED BY Google' and a magnifying glass icon. The main content area features a headline: 'A Call to Action to Protect All Adults from Vaccine-Preventable Disease and Disability'. Below the headline is a photograph of a female healthcare professional in a white lab coat and glasses, holding a syringe and talking to an elderly male patient. To the right of the headline and photo is a blue button that says 'Support the Call to Action'. Below the photo is the text 'Majority of U.S. Adults Are Missing Routine Vaccinations' and 'Call to Action to Protect All Adults from Vaccine-Preventable Disease and Disability'. On the far right, there is a section titled 'Organizations Supporting Call to Action' with a list of organizations: American Academy of PAs (AAPA), American College of Physicians (ACP), American Immunization Registry Association (AIRA), American Medical Association (AMA), and American Medical Group Association.

National Adult and Influenza Immunization Summit (NAIIS) Call to Action*



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30329-4027

August 23, 2021

Majority of U.S. Adults Are Missing Routine Vaccinations

A Call to Action to Protect All Adults from Vaccine-Preventable Disease and Disability

Dear Colleague,

Vaccinations are critical components of routine healthcare for adults. They provide protection against severe illness, disability, and death from 15 different infectious diseases such as influenza, pneumococcal disease, herpes zoster (shingles), hepatitis A, hepatitis B, HPV-related cancers, tetanus, and pertussis (whooping cough). The enormous impact of COVID-19 vaccines on reducing illnesses, hospitalizations, and deaths further demonstrates the immense value of vaccines.

Despite the tremendous benefit of vaccines, at least 3 out of every 4 adults are missing one or more routinely recommended vaccines. Given the recognized health benefits of adult vaccinations and low rates of adult vaccination, made worse by the COVID-19 pandemic, the National Adult and Influenza Immunization Summit (NAIIS) members call on providers across the healthcare spectrum to take actions to improve vaccination of adults.

Specifically, NAIIS calls on all clinicians and other healthcare providers, such as pharmacists, occupational health, and clinical subspecialists, to follow the National Vaccine Advisory Committee's (NVAC) Standards for Adult Immunization Practice including:

- Assess the vaccination status of patients at all clinical encounters, even among clinicians and other providers who do not stock vaccines.
 - Utilize a jurisdiction's immunization information system (IIS) to view patients' prior vaccinations to support vaccine needs assessment.
- Identify vaccines patients need, then clearly recommend needed vaccines.
- Offer needed vaccines or refer patients to another provider for vaccination.
- Document vaccinations given, including in the jurisdiction's IIS.
 - Many electronic health record (EHR) systems already link to jurisdictions' IISs – providers should check with their EHR administrators.
 - Providers not already utilizing an IIS should contact their local or state immunization program to inquire about enrolling in their jurisdiction's IIS.
- Measure vaccination rates of providers' patient panels; making changes to clinic patient flow and taking other steps to address barriers to patient vaccination.

Taking these actions will help protect adults across the U.S. against preventable illness, disability, and death.

Resources for implementation of the Standards for Adult Immunization Practices can be found at <https://www.cdc.gov/vaccines/hcp/adults/for-practice/standards/index.html>.

For a list of NAIIS members supporting the Standards, visit <https://www.izsummitpartners.org/adult-immunization-standards/>.

Standards for Adult Immunization Practice

- **Assess** the vaccination status of patients at all clinical encounters
- **Identify** vaccines patients need, then clearly **recommend** needed vaccines.
- **Offer** needed vaccines or refer patients to another provider for vaccination.
- **Document** vaccinations given.
- **Measure** vaccination rates of providers' patient panels.

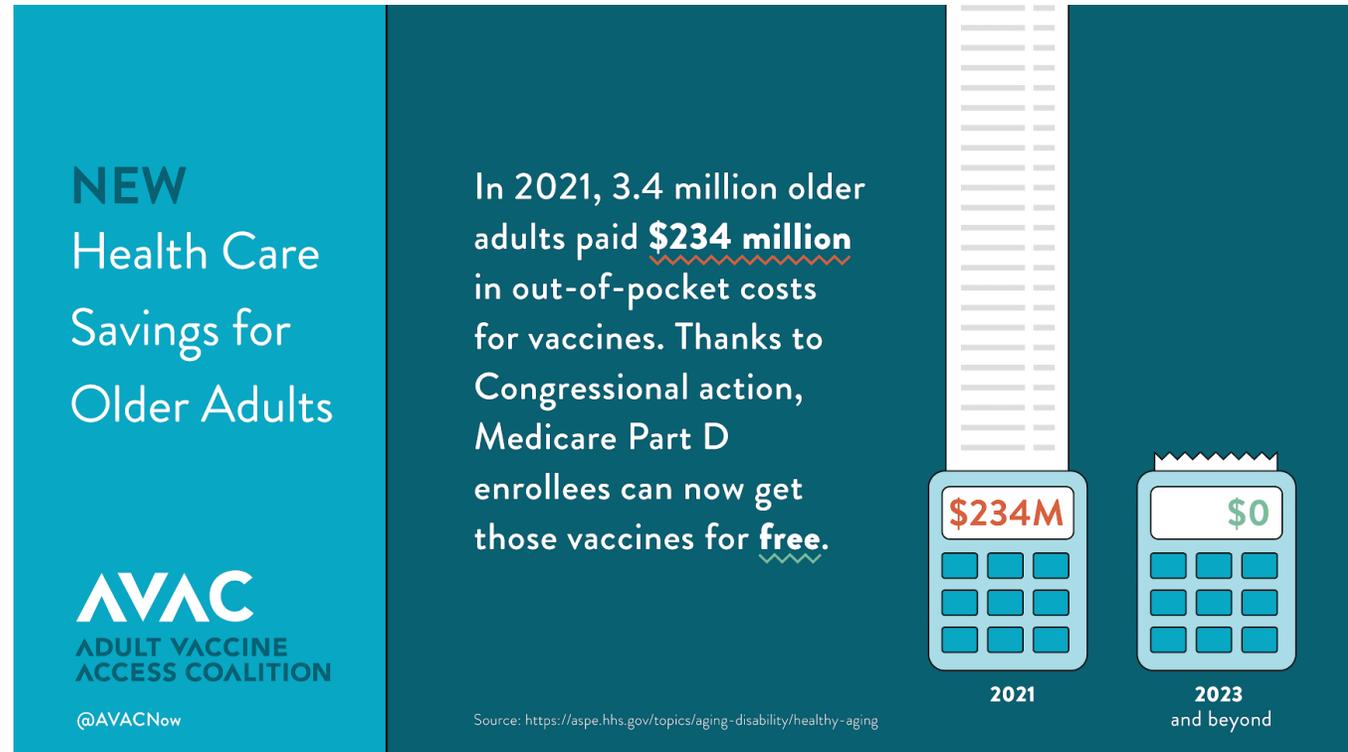
<https://www.cdc.gov/vaccines/hcp/adults/for-practice/increasing-vacc-rates.html>



*<https://www.izsummitpartners.org/call-to-action-adult-immunizations/>.

Impact of the Inflation Reduction Act

- The IRA has eliminated deductibles and imposed a maximum beneficiary cost sharing of \$0 for all adult vaccines recommended by the ACIP. This includes vaccines for shingles, whooping cough, tetanus, and COVID-19.
- The IRA also expands cost-sharing assistance for low-income people with Medicare. For example, starting October 1, 2023, most adults with coverage from Medicaid and CHIP will be guaranteed coverage of ACIP-recommended vaccines at no cost.



COVID-19 Vaccination Efforts That Can Benefit Routine Adult Vaccination

- **Infrastructure improvements**
 - Including expanded use of immunization information systems
- **New or expanding partnerships**
 - CDC funded partnerships focusing on equity, Area Agencies on Aging and Disability-focused organizations, HUD-HRSA collaboration for persons in HUD-supported housing, rural health association, others
- **Greater awareness of barriers for adults**
 - E.g., among persons with disabilities, in rural areas, homebound, other disproportionately impacted populations
- **Leveraging experience with increasing access to COVID-19 vaccination to all adult vaccinations**

Harnessing the adult provider network established from COVID-19

- 38,000 participating providers in jurisdictions
- 138,000 locations administering COVID vaccine
- 41,000 pharmacy locations administering COVID vaccine
 - 43% of COVID doses have been administered at a retail pharmacy
 - 54% received their flu vaccine at a pharmacy in 2021-2022 flu season

Strategies from the Community Preventive Services Task Force

From the Community Guide

- Enhance Access to Vaccines
 - Innovative access points
 - Eliminate out-of-pocket costs
- Increase Community Demand for Vaccines
 - Patient reminder recalls
 - Family incentives
- Leverage your Healthcare Provider
 - Concise consistent confident recommendation
 - Presumptive
- Healthcare system/practices are crucial
 - Systems-based change: provider reminders, assessment and feedback, standing orders, health IT

WHAT WORKS

The Community Guide
Increasing Appropriate Vaccination
Evidence-Based Interventions for Your Community

CPSTF FINDINGS ON VACCINATIONS

The Community Preventive Services Task Force (CPSTF) has released the following findings on what works in public health to improve vaccination rates. These findings are compiled in The Guide to Community Preventive Services (The Community Guide) and listed in the table below. Use the findings to identify intervention strategies you could use for your community.

Legend for CPSTF Findings:  Recommended  Insufficient Evidence  Recommended Against (See reverse for detailed descriptions.)



Is Your Community Up to Date on Vaccinations?

Check out the CPSTF recommendations to increase vaccination coverage using different intervention approaches.

[View the Findings >](#)

Adult Immunization Needs to be a Year-Round Effort

Big Picture: Operationalizing adult vaccinations

- Maintain year-round approach to assessing and offering vaccinations for adult patients
- Operational aspects of adult vaccinations must be brought into alignment as much as possible
 - COVID-19, influenza and pneumococcal
- Facilitation of co-administration through advance planning should be encouraged to ensure that vaccines are available in clinics attended by people eligible for both vaccines
- Facilitating co-administration by improving compatibility of IT systems, will help ensure availability of critical patient data across sites

Preparing for the fall respiratory viral season

- Autumn/Fall 2023 presented unique challenges for immunizations
 - Introduction of RSV immunizations for the older adult, infants, and pregnant persons
 - New COVID-19 2023–2024 booster vaccine
 - Continued impact of low influenza vaccination coverage rates
- Summit organized a meeting on August 2nd to discuss with partners best ways to implement three vaccines against respiratory pathogens
 - Developed three educational products to assist providers and consumers
 - Launched early September
 - Still relevant for the next fall season – updates being planned

RSV Observations

- **Coordination of Care Important**
 - Between OB-GYNs, birthing hospitals, and pediatricians
- **Role of the pharmacist**
 - SCDM
 - Pregnant persons often turned away, despite being referred from OB-GYN
- **Inadequate use of IIS**
- **Window period between vaccination during pregnancy and birth**
- **Delayed payment processes**
- **Administration Errors**

Summit - Tools created

- A personalized immunization action plan, completed jointly by the provider and patient, to help patients plan when and where they will get recommended vaccines for the coming year, ideally in conjunction with other routine or planned care
- A flyer about operationalizing adult immunizations **specifically for autumn/fall 2023** that includes education about billing and presumptive vaccine recommendations and highlights suggestions
- A one-page document that offers education on making presumptive vaccine recommendations and key information for providers about COVID-19, RSV, and influenza, with links to authoritative sources of information
- All available for free at: <https://www.izsummitpartners.org/2023-naiis-august-2/>

Operationalizing Adult Immunizations in the 2023 Fall Season and Beyond Workshop



NAIIS Workshop: Operationalizing Adult Immunizations in the 2023 Fall Season and Beyond

National Adult and Influenza Immunization Summit • August 2, 2023

Fall 2023 will provide a unique challenge as providers will have to find ways to accelerate success in providing multiple ACIP-recommended adult vaccines to their patients. It is essential to prepare providers and health and COVID-19 vaccines in the the other adult vaccines through workshop on August 2nd to de

[View Agenda](#)

[Executive Summary](#)

[Full Report](#)



Fall 2023 Respiratory Season Vaccination Decision Making for

Vaccines You Currently Have in Stock

If vaccines are not available at your location, identify and refer to providers who can administer those vaccines. *If you do not have the RSV vaccine, proceed with current ACIP recommendations for the other vaccines. Counsel and refer patient out for RSV vaccination.*

Vaccine	Scenario A	Scenario B	Scenario C	Scenario D
RSV (see 1)	✓	✓	✓	✓
Flu	✓	✓	✓	✗
COVID-19	✓	✓	✗	✓
Pneumococcal (see 2)	✓	✗	✓	✓

Vaccine Coadministration (see 3) Strategies for People 60 and Over

Vaccine	Scenario A	Scenario B	Scenario C	Scenario D
Vaccine Coadministration Strategies	Today give all 4 vaccines if patient agrees or Today give flu and COVID, and at next visit give RSV and pneumococcal	Today give all 3 vaccines if patient agrees. If not, see below Today give flu and COVID-19 and At next visit give RSV and refer out for pneumococcal	Today give flu and pneumococcal and At next visit give RSV and refer out for COVID-19	Today give COVID-19 and pneumococcal and At next visit give RSV and refer out for flu



National Adult and Influenza Immunization Summit

For CDC [Influenza recommendations](#)
For CDC [COVID-19 recommendations](#)

* Melgar M, Britton A, Roper LE, et al. Use of Respiratory Syncytial Virus Vaccines in Older Adults: Recommendations of the Advisory Committee on Immunization Practices — United States, 2023. *MMWR Morb Mortal Wkly Rep* 2023;72:793–801. DOI: <http://dx.doi.org/10.15585/mmwr.mm7229a4>



Talking with Adults about Vaccines to Prevent Respiratory Illnesses During Cold and Flu Season

Several vaccines are available to prevent common respiratory diseases we expect to see this fall and winter: COVID-19, influenza (flu), pneumococcal pneumonia, and respiratory syncytial virus (RSV). Use the Centers for Disease Control and Prevention's SHARE approach and the key points below to help you discuss these vaccines with your patients and make recommendations.

- Flu vaccine is recommended for everyone 6 months and older.
- COVID-19 vaccine is recommended for everyone 6 months of age and older.
- RSV vaccine is recommended for people 60 years and older based on shared clinical decision making.
- Pneumococcal vaccine is recommended for everyone 65 and older and for people younger than 65 who have certain medical conditions.

SHARE*

Share the reasons with patient.

Highlight positive examples.

Address patient questions.

Remind patients that and their loved ones.

Explain the potential benefits.

1. As of June 21, 2023, the Centers for Disease Control and Prevention (CDC) recommends people age 60 and older receive a dose of respiratory syncytial clinical decision making. This includes those with chronic cardiovascular diseases; mod diabetes mellitus; neurologic disorders, liver disorders, and are frail; persons of advanced conditions or factors that the risk for severe RSV-associated conditions, recommend pneumococcal vaccine if not previously vaccinated. **High-risk factors** for people age 60–64 years include alcoholism, cerebrospinal fluid (CSF) leak, cochlear implant, heart disease, lung disease (including asthma), diabetes, immunocompromising conditions, and smoking. Check out CDC's [PneumoRecs VaxAdvisor Mobile App](#).
2. Administering RSV vaccine with one or more other vaccines at the same visit might increase local or systemic reactogenicity. Data are only available for coadministration of RSV and influenza vaccines, and evidence is mixed regarding increased reactogenicity. Data are lacking on the safety of RSV coadministration with other vaccines that might be recommended for people age 60 and over, such as COVID-19 and pneumococcal vaccines.* Discuss safety related concerns with patient before suggesting co-administering RSV with other vaccines.
 - For additional information, please see the [Adult Vaccination Schedule](#).

Billing and Coding Information

- Most private insurance covers all vaccines. However, check your approved provider network status.
- Medicare Part B covers influenza, pneumococcal, and COVID-19 vaccines.
- Medicare Part D covers RSV vaccines.
- Beginning October 1, 2023, Medicaid and the Children's Health Insurance Program (CHIP) will cover most adults for all ACIP-recommended vaccines.
- CDC's Bridge Access Program covers COVID-19 vaccines for uninsured and underinsured adults from fall 2023 through December 2024. For more information, visit <https://www.cdc.gov/vaccines/programs/bridge/index.html#vaccines>.



My One-Year Vaccination Action Plan

The checked vaccines are recommended for you by your healthcare provider to be given during the next year:

- | | |
|--------------------------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> COVID-19 | <input type="checkbox"/> Meningococcal |
| <input type="checkbox"/> Hepatitis A | <input type="checkbox"/> ACWY |
| <input type="checkbox"/> Hepatitis B | <input type="checkbox"/> B |
| <input type="checkbox"/> 2-dose product | <input type="checkbox"/> Mpxv |
| <input type="checkbox"/> 3-dose product | <input type="checkbox"/> Pneumococcal disease |
| <input type="checkbox"/> Human papillomavirus (HPV) | <input type="checkbox"/> PCV15 + PPSV23 |
| <input type="checkbox"/> Influenza | <input type="checkbox"/> PCV20 |
| <input type="checkbox"/> Measles, mumps, rubella (MMR) | <input type="checkbox"/> Polio |

PATIENT NAME _____ DATE _____

HEALTHCARE PROVIDER NAME _____

- | |
|-------------------------------------------------|
| <input type="checkbox"/> RSV |
| <input type="checkbox"/> Shingles (zoster) |
| Tetanus, diphtheria, pertussis |
| <input type="checkbox"/> Td |
| <input type="checkbox"/> Tdap |
| <input type="checkbox"/> Varicella (chickenpox) |
| <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Other: _____ |

VACCINE ACTION PLAN (to be completed with your healthcare provider or pharmacist)

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER

Instructions and Tips

1. Start by writing in the year next to each month. Start with today's month and then fill in the rest.
2. Fill in any upcoming appointments you already have.
3. Add vaccines based on your provider's recommendations. Note: vaccines may require multiple doses.
4. Schedule appointments as needed, and note them in your calendar.
5. Remind your health care team to report your vaccinations to your local or state immunization information system (registry).

Sample Scenario for a 52-year-old woman with diabetes.

It is September 2023 and she needs vaccines for COVID-19, hepatitis B, influenza, and shingles.

JANUARY 2024	FEBRUARY 2024	MARCH 2024	APRIL 2024	MAY 2024	JUNE 2024
2 nd HepB vaccine (pharmacy)	Get 1 st shingles vaccine - 3 rd pharmacy				Annual check-up Get 2 nd shingles vaccine
JULY 2024	AUGUST 2024	SEPTEMBER 2023	OCTOBER 2023	NOVEMBER 2023	DECEMBER 2023
		Make vaccine plan!	Get flu and COVID vaccines after immunogram on 21 st		Schedule 1 st HepB vaccine

See back for Vaccine-Preventable Adult Diseases ▶

Personalized Year-Round Vaccination Action Plan



My One-Year Vaccination Action Plan

The checked vaccines are recommended for you by your healthcare provider to be given during the next year:

- COVID-19
- Hepatitis A
- Hepatitis B
 - 2-dose product
 - 3-dose product
- Human papillomavirus (HPV)
- Influenza
- Measles, mumps, rubella (MMR)

- Meningococcal
 - ACWY
 - B
- Mpox
- Pneumococcal disease
 - PCV15 + PPSV23
 - PCV20
- Polio

- RSV
- Shingles (zoster)
- Tetanus, diphtheria, pertussis
 - Td
 - Tdap
- Varicella (chickenpox)
- Other: _____
- Other: _____

PATIENT NAME _____ DATE _____

HEALTHCARE PROVIDER NAME _____

VACCINE ACTION PLAN (to be completed with your healthcare provider or pharmacist)

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER

Instructions and Tips

- Start by writing in the year next to each month. **Start with today's month** and then fill in the rest.
- Fill in any upcoming appointments you already have.
- Add vaccines based on your provider's recommendations. **Note:** vaccines may require multiple doses.
- Schedule appointments as needed, and note them in your calendar.
- Remind your health care team to report your vaccinations to your local or state immunization information system (registry).

Sample Scenario for a 52-year-old woman with diabetes.

It is **September 2023** and she needs vaccines for COVID-19, hepatitis B, influenza, and shingles.

JANUARY 2024	FEBRUARY 2024	MARCH 2024	APRIL 2024	MAY 2024	JUNE 2024
2 nd HepB vaccine (pharmacy)	Get 1 st shingles vaccine - 9 th pharmacy				Annual check-up Get 2 nd shingles vaccine
JULY 2024	AUGUST 2024	SEPTEMBER 2023	OCTOBER 2023	NOVEMBER 2023	DECEMBER 2023
		Make vaccine plan!	Get flu and COVID vaccine after mammogram on 21 st		Schedule 1 st HepB vaccine

See back for Vaccine-Preventable Adult Diseases ▶



Personalized Year Round Vaccination Action Plan

Vaccine-Preventable Adult Diseases*

COVID-19 (coronavirus disease 2019) can be very contagious and spreads quickly.† COVID-19 most often causes respiratory symptoms that can feel much like a cold, the flu, or pneumonia.

Hepatitis A can cause fever, tiredness, loss of appetite, nausea, abdominal discomfort, dark urine, and jaundice (yellowing of the skin and eyes). An infected person may have no symptoms, mild illness, or severe illness that requires hospitalization. Hepatitis A is often spread through contaminated food.

Hepatitis B is a blood-borne disease that causes a flu-like illness with loss of appetite, nausea, vomiting, rashes, joint pain, and jaundice. Hepatitis B can cause severe diseases, including cancer.

Human papillomavirus (HPV) is common, especially among young adults and teens, and many people don't know they have it. HPV is the major cause of cervical cancer in women, as well as anal cancer and genital warts in both women and men and other types of cancer.

Influenza can cause a sudden high fever, chills, a dry cough, headache, runny nose, sore throat, and muscle and joint pain. Extreme fatigue can last for days or weeks. Influenza may lead to hospitalization or even death.

Measles is a very contagious respiratory disease. Measles can cause persistent fever, rash, and coughing. Measles can also cause pneumonia, seizures, brain damage, or death.

Mumps causes fever, headaches, painful swelling of the salivary glands under the jaw, fever, muscle aches, tiredness, and loss of appetite. Mumps can lead to meningitis (infection of the covering of the brain and spinal cord), encephalitis (inflammation of the brain), permanent hearing loss, or swelling of the testes.

Rubella disease usually causes a mild illness with fever, swollen glands, and a rash. It can lead to encephalitis (brain infection) in adults. Rubella during pregnancy can cause miscarriage or serious birth defects.

Meningococcal disease causes bacterial meningitis (infection around the brain and spinal cord). It can cause nausea, vomiting, sensitivity to light, confusion, and sleepiness. Meningococcal disease also causes blood infections. About one out of every 10 people who get the disease dies from it. Survivors of meningococcal disease may lose their arms or legs, become deaf, have problems with their nervous systems, become developmentally disabled, or suffer seizures or strokes.

Mpox, caused by the Monkeypox virus, can be spread through close, personal, often skin-to-skin contact.‡ Mpox causes a range of symptoms, including a rash and flu-like symptoms, that start within 3 weeks of exposure to the virus.

Pneumococcal disease is caused by bacteria and can range from ear and sinus infections to more serious lung and blood infections. In some cases pneumococcal disease can be life-threatening or result in long-term problems, like brain damage, hearing loss, or loss of arms or legs.

Polio is a disabling and life-threatening disease that spreads from person to person.§ Most people who get infected do not have any visible symptoms. Some people will have flu-like symptoms like sore throat, fever, tiredness, nausea, headache, and stomach pain that go away on their own. Some people develop more serious symptoms that can result in meningitis or paralysis.

Respiratory syncytial virus (RSV) usually causes mild, cold-like symptoms that resolve in a week or two. RSV can cause fever, coughing, wheezing, sneezing, runny nose, and a decrease in appetite in both children and adults. Adults usually have mild or no symptoms. Older adults and adults with certain chronic medical conditions are at highest risk of more severe disease, which can lead to hospitalization or death.

Shingles (zoster) is a painful skin rash caused by the same virus that causes chickenpox. A person with shingles will have a rash on one side of the face or body, which blisters and then typically scabs over, then clears up. Other symptoms include fever, headache, chills, and upset stomach. Shingles can affect the eye and cause loss of vision.

Tetanus causes serious, painful spasms and stiffness of all muscles in the body. You can get tetanus from a cut or wound, even a needle prick. Tetanus can cause "locking" of the jaw so a person cannot open his or her mouth, swallow, or breathe.

Pertussis (whooping cough) can cause prolonged cold symptoms, with spells of violent coughing and choking that make it hard to breathe, drink, or eat. Babies too young to get vaccinated are most at risk of severe illness and sometimes death. Babies often get the disease from a parent, caregiver, or relative.

Diphtheria can cause weakness, sore throat, low-grade fever, and swollen glands in the neck. It can also lead to swelling of the heart muscle and, in some cases, heart failure. In severe cases, the illness can cause coma, paralysis, and even death.

Varicella (chickenpox) causes an itchy rash with blisters, tiredness, headache, and fever. It is usually mild but can lead to severe skin infections, pneumonia, encephalitis (brain swelling), or even death.

For more information about vaccines for adults, visit CDC's website.
www.cdc.gov/vaccines/adults/vpd.html

* Adapted from Centers for Disease Control and Prevention. Vaccine-preventable adult diseases. www.cdc.gov/vaccines/adults/vpd.html Some of these diseases are prevented by vaccines routinely given in childhood.

† Centers for Disease Control and Prevention. About COVID-19. www.cdc.gov/coronavirus/2019-ncov/your-health/about-covid-19.html

‡ Centers for Disease Control and Prevention. Monkeypox vaccines. www.cdc.gov/vaccinesafety/vaccines/monkeypox-vaccine.html

§ Centers for Disease Control and Prevention. What is polio?
www.cdc.gov/polio/what-is-polio/index.htm



National Adult and Influenza Immunization Summit
August 2, 2023 | www.izsummitpartners.org



Summit Tip Sheet for implementing new ACIP recommendations

Get Adults' Vaccinations Back on Track

Tip sheet for providers on new CDC adult vaccine recommendations and tools to help adults catch up on needed vaccinations



At least 3 out of every 4 adults are behind on routine vaccines like influenza (flu), tetanus (Td/Tdap), hepatitis A, and HPV. In addition, COVID-19 vaccine recommendations continue to evolve, and new changes were made to hepatitis B, shingles, pneumococcal, and flu vaccine recommendations since 2021.

VACCINE	NEW RECOMMENDATION	DOSING
Hepatitis B	Everyone 19-59 years. ≥60 years who want vaccination or have high-risk indication.	2- or 3-dose series depending on brand
Zoster (shingles)	Everyone ≥50 years. ≥19 years immunocompromised.	2-dose series
Pneumococcal	Everyone ≥65 years. ≥19 years immunocompromised or high-risk medical condition.	Either PCV15 then PPSV23 one year later or one dose PCV20
Preferred flu vaccines for adults ≥65 years	≥65 years: give flu vaccines preferred by CDC for this age group. If not available, give any age-appropriate flu vaccine.	Annual vaccination

Tip: Utilize available resources for determining patients' vaccination needs

- CDC Adult on-line vaccination quiz
www2.cdc.gov/nip/adultimmsched
- CDC vaccine schedule app for all adult vaccines
www.cdc.gov/vaccines/schedules/hcp/schedule-app.html#download

Recently passed legislation
(Inflation Reduction Act, 2022)



ACIP, Advisory Committee on Immunization Practices; PCV, pneumococcal conjugate vaccine; PPSV, pneumococcal polysaccharide vaccine; Tdap, tetanus, diphtheria and acellular pertussis; Td, tetanus and pertussis; National Adult and Influenza Immunization Summit (NAIIS). Get Adults' Vaccination Back on Track. Available at: <https://www.izsummitpartners.org/content/uploads/Tip-Sheet-on-New-Adult-Vaccine-Recommendations-and-Implementation-Resources.pdf> (accessed November 2023)

Co-administration of influenza vaccines with COVID-19 vaccines

How to Administer Multiple Intramuscular Vaccines to Adults During One Visit

It is not unusual for adults to need more than one vaccination at an office visit. When that occurs, CDC recommends giving all needed vaccines at the same visit to reduce missed opportunities.

These vaccines commonly administered to adults* are administered via the intramuscular route:

COVID-19	Influenza
Hepatitis A (HepA)	Pneumococcal
Hepatitis B (HepB)	Tdap and Td
Human papillomavirus (HPV)	Zoster

Determine vaccines to be administered.

- ▶ Review each patient's vaccine history and determine needed vaccines (see CDC's recommended schedule of immunizations for adults at www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf).

Determine which vaccines to give in separate limbs.

- ▶ Administer vaccines more likely to cause a local reaction in separate limbs, if possible. Vaccines that cause injection site pain in at least half of recipients include COVID-19, zoster, HepA, HPV, pneumococcal (PCV, PPSV), and tetanus-containing vaccines (Tdap, Td).[†]
- ▶ If administration in separate limbs is not feasible or desired, administration in the same limb, separated by at least 1" (inch), is appropriate.

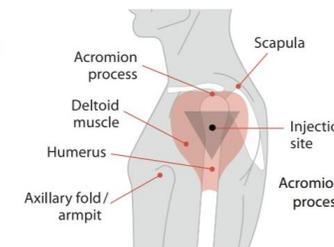
Select the injection site(s) for intramuscular injections.

- ▶ Determine which vaccine(s) will be administered in each limb (see options in diagrams at right). You can administer 1, 2, or 3 injections per deltoid, spaced at least 1" apart.
- ▶ *Deltoid muscle*: Locate the central and thickest portion of the deltoid

The diagrams below illustrate options for administering one, two, or three vaccinations in a single arm, spaced at least 1" apart. Additional injections can also be administered in the opposite arm.

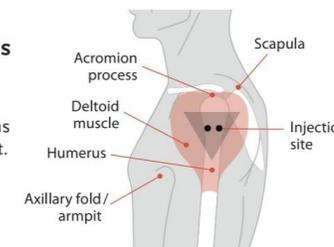
Use anatomical landmarks to determine the injection site in the deltoid muscle (a large, rounded, triangular shape). Find the acromion process, which is the bony point at the end of the shoulder. Then, locate the injection site which will be approximately 2" below the bone and above the axillary fold/armpit.

Single IM injection in deltoid



Two IM injections in deltoid

Space injections at least 1" apart.



Three

Make the immunization experience as stress-free as possible!

Addressing Vaccination Anxiety in Adolescents and Adults Strategies for Healthcare Professionals



Anxiety about injections is common among adolescents and adults, and can contribute to dreading, delaying, or even refusing vaccination. However, anxiety and pain are subjective feelings: what you do and say can help an anxious patient gain confidence and more readily accept vaccinations in the future.

Below are strategies that can improve the vaccination experience for adolescents and adults. Consider what is practical. Simply acknowledging the patient's feelings and letting them know you care can help.

Before the Visit

Pre-registration may minimize time in the waiting room where anxiety can mount.

Establish expectations. If possible, let patients know they will be offered any needed vaccinations and that you'll work with them to make the experience comfortable.

Set up the vaccination room/area so it's comfortable and private. Keep needles out of sight until necessary.

Consider topical analgesia (e.g., 5% lidocaine cream, spray, or patch). This may help with pain but needs to be applied to the vaccination site 30 to 60 minutes ahead of time. With guidance, some patients may accomplish this before arriving.¹

During the Visit

Screen for vaccination-related anxiety. Immunize.org's screening checklists for contraindications to vaccines now ask about anxiety.²

Invite patients to ask questions about the vaccination process so they feel prepared.

Watch your words! Use words that help the patient cope during vaccination. Using fear-provoking words (e.g., "shot," "sting") or false reassurances ("It won't hurt a bit") can increase distress and pain.

Ask each patient what helps them feel comfortable. Make suggestions, if needed. Slow deep breaths can be calming. A lot of people like to be distracted (some don't) and they can be encouraged to chat or use their mobile devices. Posters can serve as distractions, too. Offer pain management options, if feasible (see below).

KEY IDEA: Asking patients how they prefer to manage their anxiety is essential.

Non-pharmacological Pain Management Options (to minimize pain signals from the skin)

Cooling the injection site with a vapocoolant spray immediately before injection.

Using injection techniques that diminish the pain experience: Don't aspirate before intramuscular injections. Inject quickly. If giving multiple injections, give the most painful vaccine last.

Placing a vibrating case with optional ice pack (e.g., Buzzy by Pain Care Labs) proximal to the injection site (closer to the trunk).

Placing a plastic device with several short, blunt contact points (e.g., ShotBlocker by Bionix, pictured right) on the patient's skin before injection. These are non-prescription, inexpensive and can be cleaned and reused.



After the Visit

Use of pain-reducing medicines (e.g., ibuprofen or acetaminophen) before vaccination is not recommended because it might diminish the immune system's response to vaccination. They may be used to treat pain or fever after vaccination.

For more information, see Immunize.org's resources on Addressing Vaccination Anxiety, available at www.immunize.org/handouts.



FOR PROFESSIONALS www.immunize.org / FOR THE PUBLIC www.vaccineinformation.org

www.immunize.org/catg.d/p4270.pdf
Item #P4270 (8/8/2023)



Scan for PDF

Addressing Vaccination Anxiety in Adolescents and Adults Strategies for Vaccine Recipients and Caregivers



Anxiety about injections is common for people of all ages, including adolescents and adults. Some feel so anxious that they dread, delay, or even avoid vaccination...even when they know vaccines are important. You can do simple things to make yourself (or the person you are with) feel better about the vaccination visit while being protected from serious diseases.

Before the Visit

Pre-register for your visit, if possible, so your wait time is shorter.

Know what to expect. When setting up the visit, ask if vaccinations are expected. If you are a caregiver of an anxious person, do not reassure them falsely. For example, don't promise "no shots today" in case their healthcare provider recommends that they need one or more vaccinations.

Consider a numbing medicine that you can put on the skin. It may be a 5% lidocaine cream, spray, or patch. This can help with injection pain. To take effect, these medicines need to be put on the skin 30 to 60 minutes ahead of time. Many clinics do not have time to do this. Consider asking the clinic or a pharmacist how to do this before you arrive, using a numbing medicine you can get without a prescription.¹

During the Visit

Ask questions about the vaccination process so your feel prepared.

Tell the person vaccinating you what helps you feel better. Do you prefer sitting (most do) or lying down? Do you prefer to look away or to watch what is happening?

Relax. For example, taking a few slow deep breaths before, during, and after vaccination can be calming.

Distract. Most people prefer to be distracted during vaccination. Consider using an app or game on your mobile device or simply talking about something else.

(For caregivers) Your words, tone, and attitude are important. The person getting the vaccine will be less anxious if you act calm, positive, and confident. On the other hand, using fear-provoking words (like "shot" or "sting") or giving false reassurances ("I promise it won't hurt a bit") may increase distress and pain.²

KEY IDEA: Let the person vaccinating you know if you are anxious and what helps you feel calmer. They want to help!

Options for Making Shots Less Painful without Medicine

In addition to numbing medicines described in "Before the Visit," there are other ways to distract pain sensors in the skin so the person getting the vaccine won't notice it as much. Options include:

Cooling the injection site. The person giving the vaccine may use a "freezing" spray just before injection.

A vibrating case with optional ice pack (such as Buzzy by Pain Care Labs) can be held against the shoulder or thigh above the injection site.

Before the injection, a **plastic device with several short, blunt contact points can be placed on the skin around the injection site.**

One brand is ShotBlocker by Bionix (pictured right). This is non-prescription and inexpensive. It can be cleaned and reused.



After the Visit

Experts do not recommend pain medicines (such as ibuprofen or acetaminophen) before vaccination because they might lower the body's response to vaccines. You may use these medicines to help with pain or fever that develops after vaccination, if needed.

1. Guide to Topical Anesthetics and Numbing Cream from the Meg Foundation: www.megfoundationforpain.org/2022/07/22/topical-anesthetics-infographic/
2. Improving the Vaccination Experience: What Health-Care Providers Can Say from AboutKidsHealth (Canada): assets.aboutkidshealth.ca/AKHAssets/CARD_HCP_WhatYouCanSay.pdf?hub=cardcommvac#card



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Upcoming Webinar



Topic: Leveraging Artificial Intelligence to Increase Immunization Rates



Date/ Time: Thursday, March 21 at 2pm ET



Presenters: Brisa Urquieta De Hernandez, PhD, Karen O'Connor, RN, and Shawna Sharp, *CommonSpirit*

Questions?



Submit your questions using the **Q&A feature** at the bottom of the screen

