

National Center for Immunization and Respiratory Diseases



Adult and Influenza Vaccination Coverage Update

Carla Black, PhD
Immunization Services Division

NAIIS

August 15, 2024

Outline

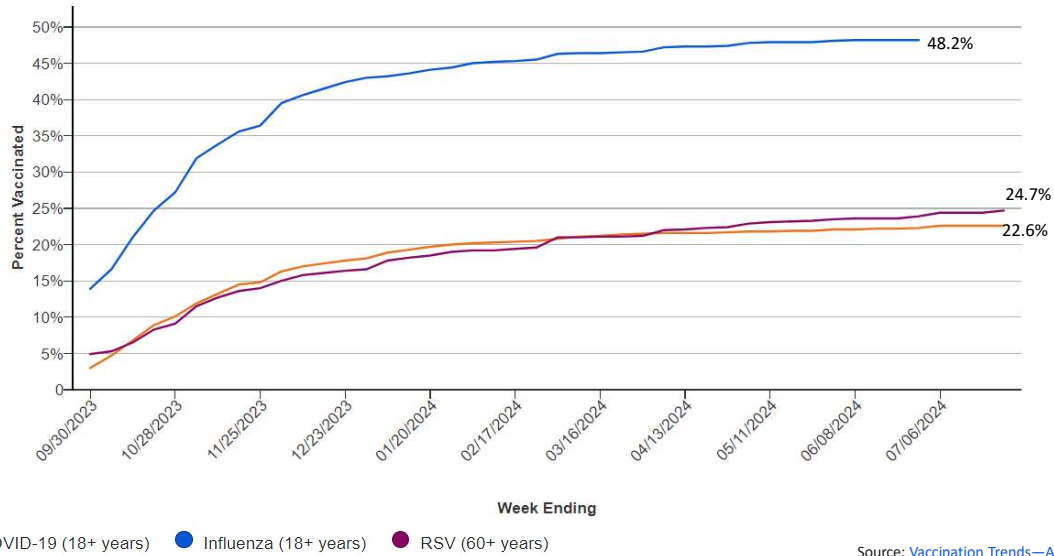
- **Adult respiratory virus vaccination coverage (2023–24 season preliminary data)**
- **Child influenza vaccination coverage (2023–24 season preliminary data)**
- **Maternal influenza and Tdap vaccination**
- **Adult non-respiratory virus vaccination coverage**

Respiratory Virus Vaccination Coverage Update, 2023-24 Season

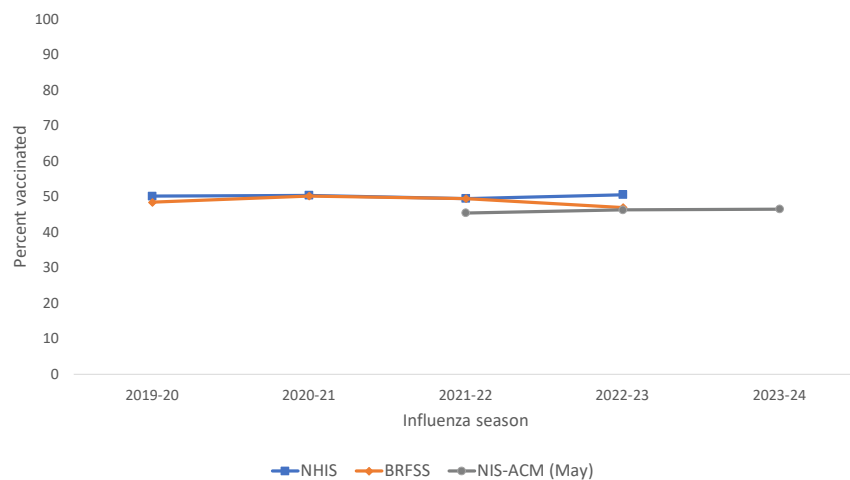
National Immunization Survey-Adult COVID Module (NIS-ACM) Methods

- The NIS-ACM is a random-digit-dial cellular telephone survey of adults age ≥ 18 years in the U.S.
- Respondents are sampled within all 50 states, District of Columbia, five local jurisdictions (Bexar County TX, Chicago IL, Houston TX, New York City NY, and Philadelphia County PA), Guam, Puerto Rico and the U.S. Virgin Islands.
- Data are weighted to represent the non-institutionalized U.S. population.
 - Estimates from the NIS-ACM may differ from estimates based on other data sources, and are subject to errors resulting from incomplete sample frame (exclusion of households without cell phones), selection bias (survey respondents may be more likely to be vaccinated than non-respondents), and errors in self-reported vaccination status. Estimates are weighted to selected sociodemographic characteristics of the U.S. population to reduce possible bias from incomplete sample frame and selection bias.
- All responses are self-reported.
- Additional information available at: [About the National Immunization Surveys](#)

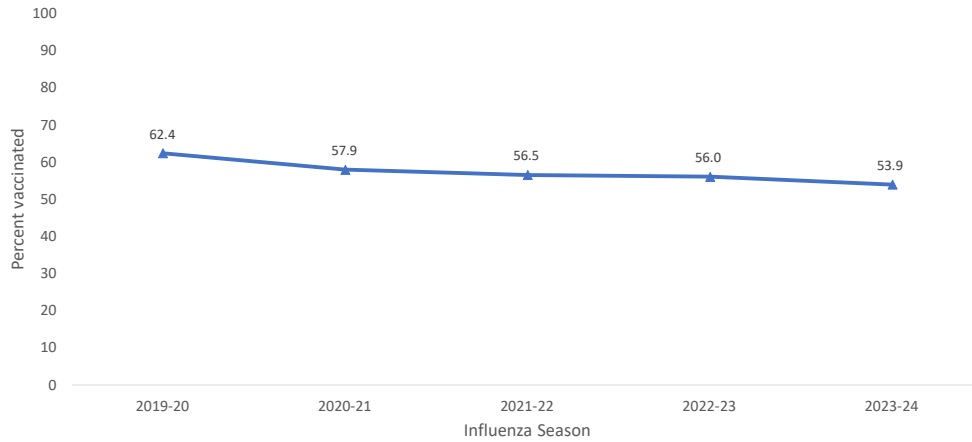
COVID-19, Influenza, and RSV Vaccination Coverage among Adults, 2023-24 Season, National Immunization Survey-Adult COVID Module



Influenza Vaccination Coverage Among Adults ≥18 Years of Age, by Influenza Season and Data Source

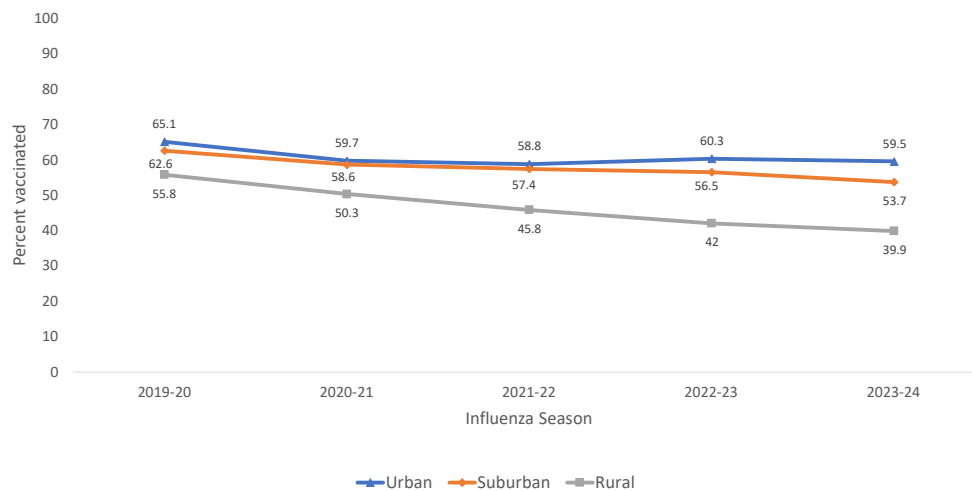


Influenza Vaccination Coverage by Season, Children 6 Months–17 Years, United States, NIS-Flu, through May 11, 2024*



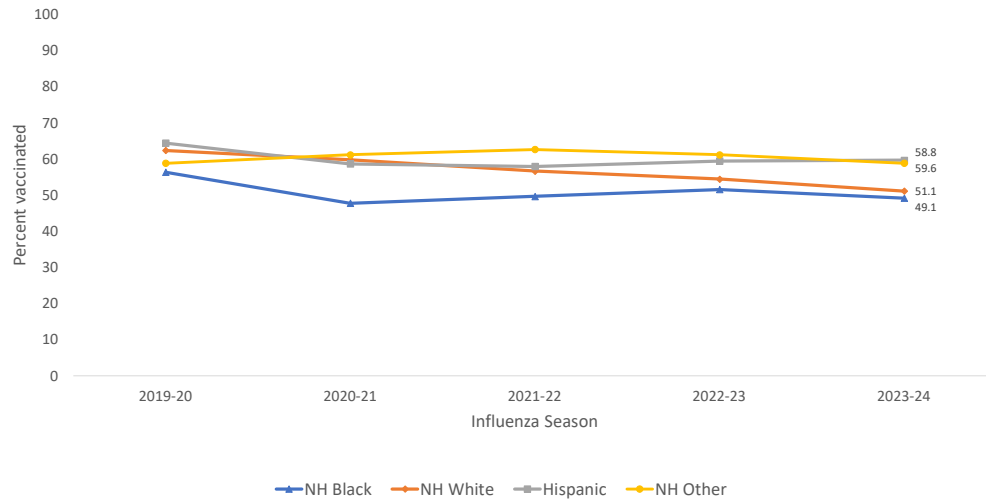
*Through week ending approximately May 11 each season

Influenza Vaccination Coverage, by Season and Urbanicity, Children 6 Months–17 Years, NIS-Flu, United States, through May 11, 2024*



*Through week ending approximately May 11 each season

Influenza Vaccination Coverage, by Season and Race and Ethnicity, Children 6 Months–17 Years, NIS-Flu, United States, through May 11, 2024*



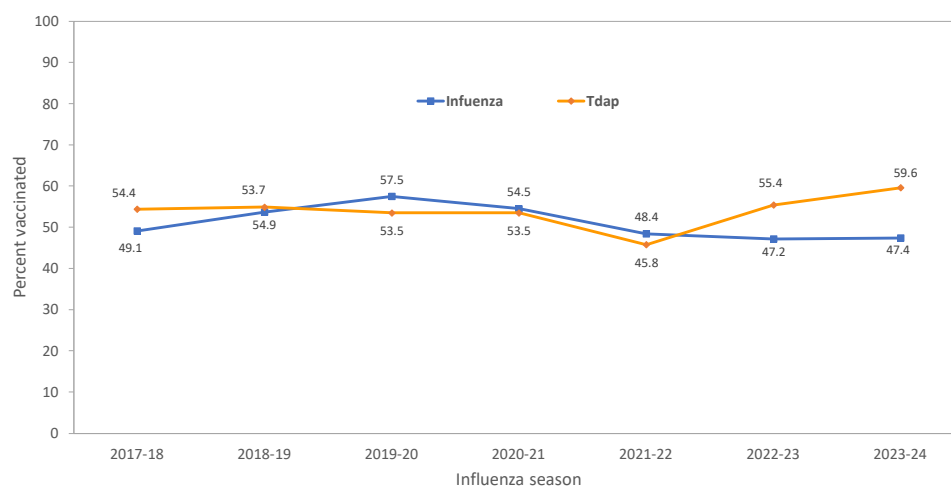
*Through week ending approximately May 11 each season

Maternal Vaccination

Internet Panel Survey Methods

- Opt-in internet panel survey conducted April each year among ~2,000 women aged 18–49 years who reported being pregnant anytime since August 1 of each influenza season
- Sampled women were weighted to represent the national population of pregnant women in the U.S.
- Analysis of influenza vaccination coverage was limited to women pregnant anytime during October-January each season
 - Flu vaccination received before or during pregnancy since July 1 to the time of the survey
- Analysis of Tdap vaccination coverage was limited to women pregnant anytime since August 1 who had a live birth by their survey date
 - Tdap vaccination received during most recent pregnancy

Influenza and Tdap Vaccination Coverage among Pregnant Women*, 2017–18 through 2023–24 Influenza Seasons, Internet Panel Survey



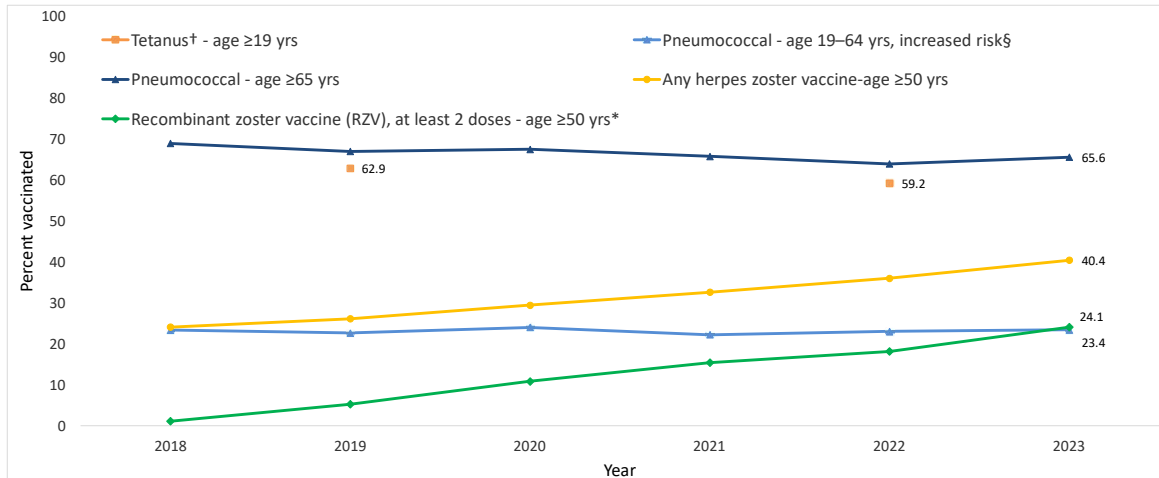
*Data are preliminary

Adult Vaccination Coverage, National Health Interview Survey

National Health Interview Survey (NHIS) Methods

- Continuous, cross-sectional national household survey of the noninstitutionalized U.S. civilian population
- Analysis includes interviews conducted January–December in calendar years 2018 –2023
 - Some vaccines are assessed on rotational basis
 - Tetanus every 3 years
 - Hepatitis B every 2/3 years
 - Sample size 27,376 adults aged ≥ 19 years in 2022; 29,522 in 2023
 - 2022 NHIS response rate 47.7%; 2023 response rate 47.0%
- Data were weighted to produce national vaccination coverage estimates
- T-tests were used for comparisons between data years and groups

Estimated Proportion of Adults Aged ≥19 Years Who Received Selected Vaccines, by Age Group and Risk Status — National Health Interview Survey, United States, 2018–2023

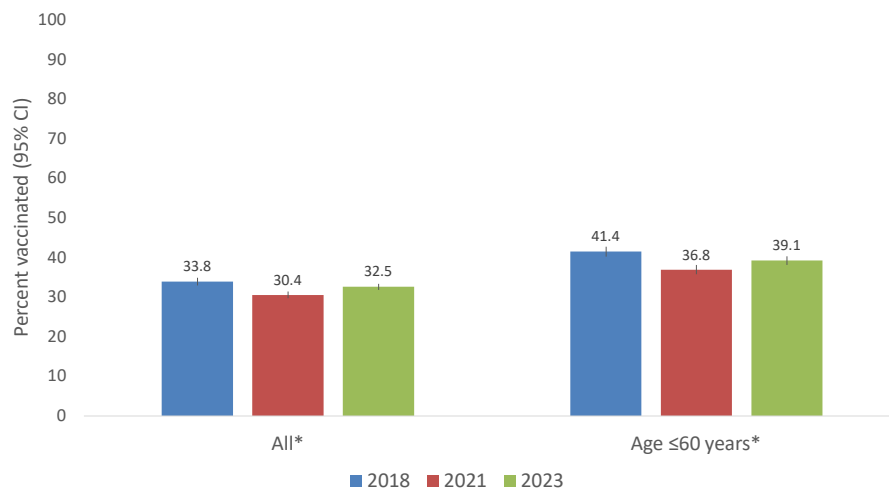


† Received Td or Tdap in past 10 years. Tetanus vaccination is assessed in the NHIS on a 3-year rotation.

§ High risk conditions include diabetes, emphysema, chronic obstructive pulmonary disease, coronary heart disease, angina, heart attack, or other heart condition, cancer (excluding nonmelanoma skin cancer), asthma in past 12 months, chronic kidney or liver disease (not assessed in 2019 and 2022), and current smoker.

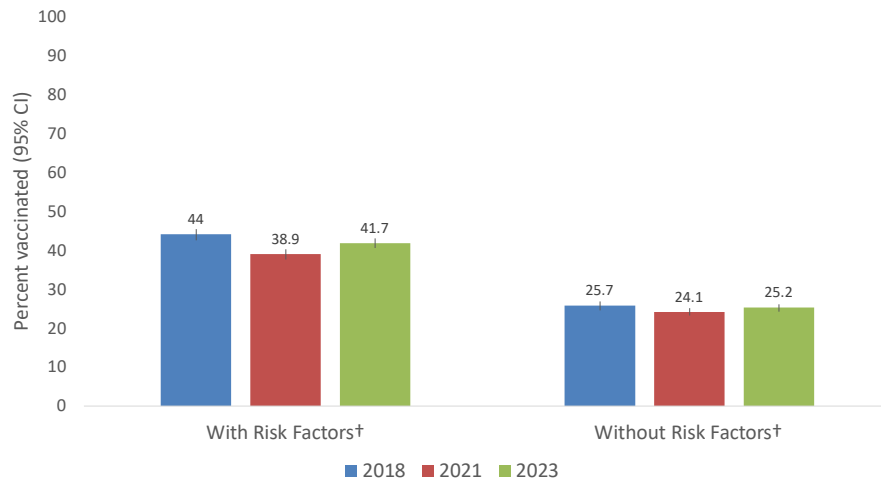
*Two doses of recombinant zoster vaccine (RZV) have been recommended for all adults ≥50 years since 2018.

Hepatitis B Vaccination Coverage among Adults Born Before 1991, National Health Interview Survey, 2018-2023



*Age ≥27 years in 2018, ≥30 years in 2021, and ≥32 years in 2023

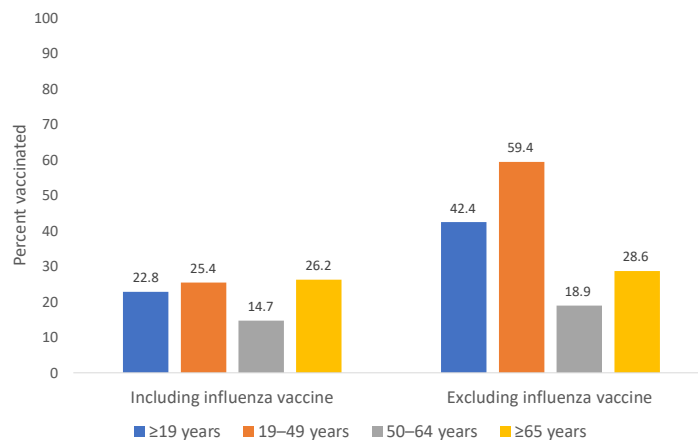
Hepatitis B Vaccination Coverage among Adults Born Before 1991*, With And Without Risk Factors†, National Health Interview Survey, 2018-2023



*Age ≥27 years in 2018, ≥30 years in 2021, and ≥32 years in 2023

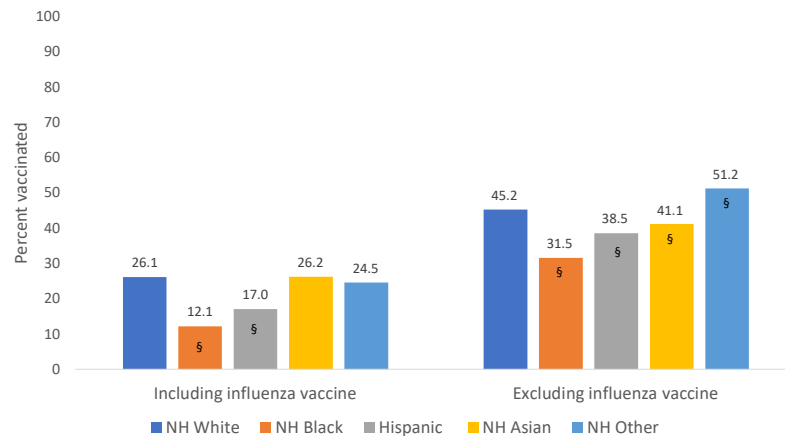
†Travel, history of hepatitis, live with someone with hepatitis

Vaccination Coverage Estimates Using an Age-appropriate Composite* Adult Vaccination Quality Measure, by Age Group — National Health Interview Survey, United States, 2022



*A composite estimate of overall vaccination coverage among adults aged ≥19 years who received the selected vaccines recommended for their age group: for adults aged 19–49 years, (influenza) AND Td or Tdap vaccines; for adults aged 50–64 years, (influenza), Td or Tdap, AND herpes zoster vaccines; for adults aged ≥65 years, (influenza), Td or Tdap, herpes zoster, AND pneumococcal vaccines. Estimates for each age group include adults who have received all of the selected vaccines for that specific age group.

Vaccination Coverage Estimates Among Adults ≥19 Years Using an Age-appropriate Composite* Adult Vaccination Quality Measure, by Race and Ethnicity — National Health Interview Survey, United States, 2022



*A composite estimate of overall vaccination coverage among adults aged ≥19 years who received the selected vaccines recommended for their age group: for adults aged 19–49 years, (influenza) AND Td or Tdap vaccines; for adults aged 50–64 years, (influenza), Td or Tdap, AND herpes zoster vaccines; for adults aged ≥65 years, (influenza), Td or Tdap, herpes zoster, AND pneumococcal vaccines. Estimates for each age group include adults who have received all of the selected vaccines for that specific age group.

[§]p<0.05 compared with Non-Hispanic White.

Summary

- Preliminary vaccination coverage among adults for the 2023–24 season is 48.2% for influenza, 22.6% for COVID-19, and 24.7% for RSV (60+)
- Consistent declines in influenza vaccination coverage since the 2019-20 season among children and pregnant women.
 - Decreases mostly seen among White and rural children
- Coverage for other adult vaccines remains low
 - 22.8% of adults ≥19 years have received age-appropriate doses of influenza, tetanus, zoster, and pneumococcal vaccine
 - Disparities by race and ethnicity persist
- Pneumococcal vaccination coverage among adults ≥65 years decreased from 67.5% in 2020 to 64.0% in 2022
 - Remained similar in 2023
- No evidence of an increase in Hepatitis B vaccination coverage since the universal recommendation in 2022

Acknowledgements

- Mei-Chuan Hung
- Katherine Kahn
- Jennifer Kriss
- Peng-jun Lu
- Suchita Patel
- Hilda Razzaghi
- Tammy Santibanez
- Jim Singleton
- Anup Srivastav

Thank you!
cblack2@cdc.gov

For more information visit: [VaxView Vaccination Coverage | CDC](#)

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

