National Center for Emerging and Zoonotic Infectious Diseases



Centers for Disease Control and Prevention (CDC) Immunization Safety Office (ISO) Update

Advisory Commission on Childhood Vaccines (ACCV) meeting March 1, 2023

Jonathan Duffy, MD, MPH
Immunization Safety Office
Centers for Disease Control and Prevention

Recent CDC vaccine safety publications

Safety Monitoring of JYNNEOS Vaccine During the 2022 Mpox Outbreak - United States, May 22-October 21, 2022

- JYNNEOS vaccine has been used in a real-world setting for the first time during the 2022 monkeypox (mpox) outbreak, including intradermal administration under a Food and Drug Administration (FDA) Emergency Use Authorization.
- During May 22—October 21, 2022, nearly 1 million JYNNEOS doses were administered in the United States.
- The vaccine safety profile was consistent with prelicensure studies. The most common adverse health events reported were nonserious and included injection site reactions.
- Serious adverse events were rare among adults, and no serious adverse events have been identified among persons aged <18 years.

Full citation at: https://pubmed.ncbi.nlm.nih.gov/36480476/

Safety of co-administration of mRNA COVID-19 and seasonal inactivated influenza vaccines in the vaccine adverse event reporting system (VAERS) during July 1, 2021–June 30, 2022

- COVID-19 vaccines may be co-administered with other recommended vaccines, including seasonal influenza vaccines.
- Objective: To describe reports to the Vaccine Adverse Event Reporting System (VAERS) after co-administration of mRNA COVID-19 and seasonal influenza vaccines.
- From July 1, 2021 through June 30, 2022, VAERS received 2,449 reports of adverse events following co-administration of mRNA COVID-19 and seasonal influenza vaccines.
- This review of reports to VAERS following co-administration of mRNA COVID-19 and seasonal influenza vaccines did not reveal any unusual or unexpected patterns of AEs.

Full citation at: https://pubmed.ncbi.nlm.nih.gov/36669964/

CDC COVID-19 vaccine safety publications

- Reports of Guillain-Barré syndrome after COVID-19 vaccination in the United States.
- The v-safe after vaccination health checker: Active vaccine safety monitoring during CDC's COVID-19 pandemic response.
- A broad assessment of COVID-19 vaccine safety using tree-based data-mining in the Vaccine Safety Datalink.
- Tree-based data mining for safety assessment of first COVID-19 booster doses in the Vaccine Safety Datalink.
- A safety study evaluating non-COVID-19 mortality risk following COVID-19 vaccination.
- Reactions following Pfizer-BioNTech COVID-19 mRNA vaccination and related healthcare encounters among 7,077 children aged 5-11 years within an integrated healthcare system.

Recent CDC vaccination coverage publications

How does CDC track vaccination coverage?

- CDC uses several surveys to measure the vaccination rates for vaccines recommended for different groups, including:
 - The National Immunization Survey (NIS) for vaccinations given through 35 months
 - School Vaccination Assessment Reports for vaccinations required to enroll in kindergarten
 - The NIS-Teen for vaccinations given to preteens and teens
 - The Behavioral Risk Factor Surveillance System (BRFSS) for vaccinations given to adults, including flu vaccinations
 - The NIS-Flu for flu vaccinations given to 6 months through 17 years

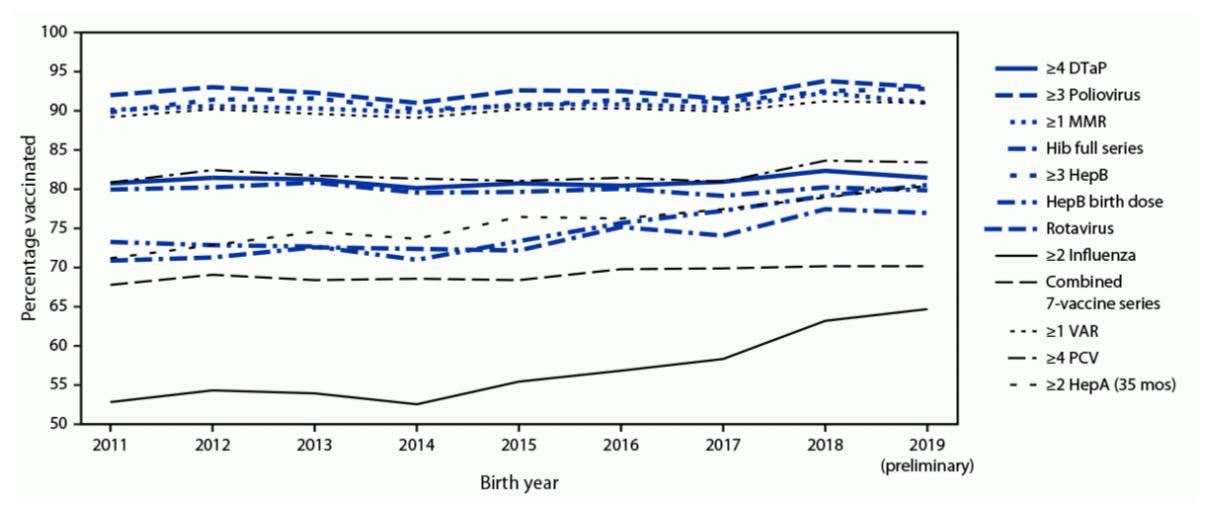
Source: https://www.cdc.gov/vaccines/vaxview/index.html

Vaccination Coverage by Age 24 Months Among Children Born During 2018–2019 — National Immunization Survey-Child, United States, 2019–2021

- The Advisory Committee on Immunization Practices recommends routine vaccination against 14 diseases during the first 24 months of life.
- Vaccination coverage among young children has remained high and stable for most vaccines, although disparities persist.
- The National Immunization Survey—Child identified no decline overall in routine vaccination coverage associated with the COVID-19 pandemic among children born during 2018—2019, although declines were observed among children living below the federal poverty level and in rural areas.

Source: https://www.cdc.gov/mmwr/volumes/72/wr/mm7202a3.htm

Estimated vaccination coverage with selected individual vaccines and a combined vaccine series by age 24 months, by birth year 2011–2019 — National Immunization Survey-Child, United States, 2012–2021



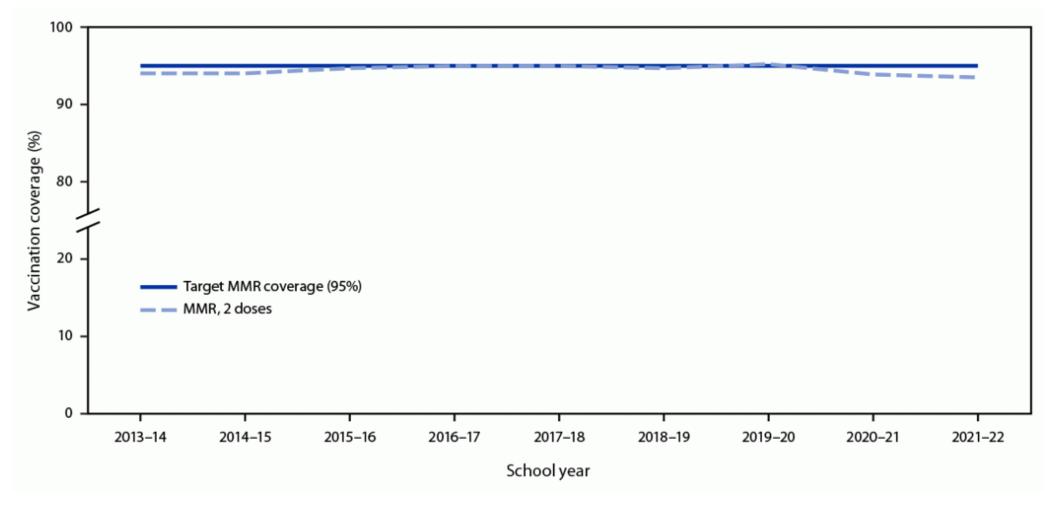
Source: https://www.cdc.gov/mmwr/volumes/72/wr/mm7202a3.htm

Vaccination Coverage with Selected Vaccines and Exemption Rates Among Children in Kindergarten — United States, 2021–22 School Year

- During the 2020–21 school year, national coverage with state-required vaccines among kindergarten students declined from 95% to approximately 94%.
- During the 2021–22 school year, coverage decreased again to approximately 93% for all state-required vaccines. The exemption rate remained low (2.6%). An additional 3.9% without an exemption were not up to date with measles, mumps and rubella vaccine.
- Despite widespread return to in-person learning, COVID-19—related disruptions continued to affect vaccination coverage and assessment for the 2021–22 school year, preventing a return to prepandemic coverage.

Source: https://www.cdc.gov/mmwr/volumes/72/wr/mm7202a2.htm

Estimated national coverage with 2 doses of measles, mumps, and rubella vaccine among kindergartners — United States, 2013–14 to 2021–22 school years



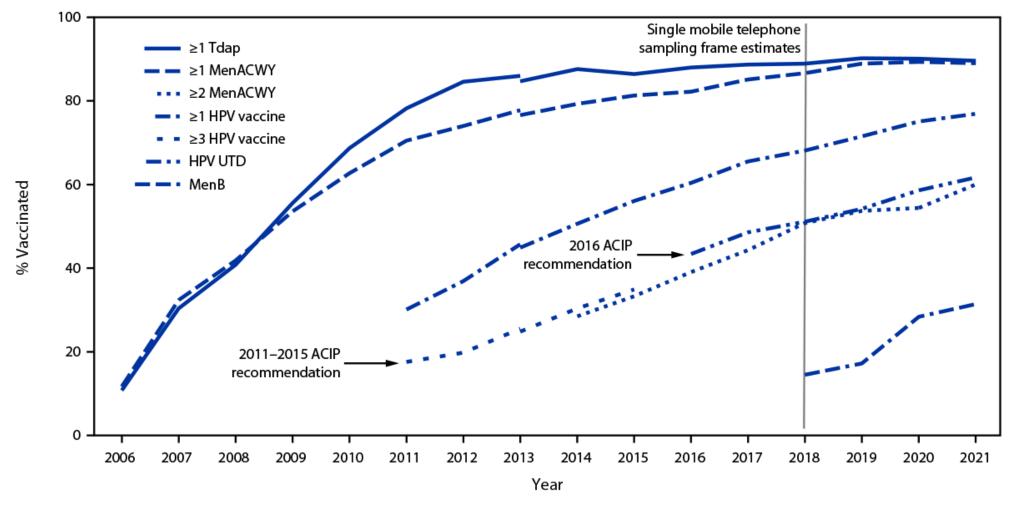
Source: https://www.cdc.gov/mmwr/volumes/72/wr/mm7202a2.htm

National Vaccination Coverage Among Adolescents Aged 13–17 Years — National Immunization Survey-Teen, United States, 2021

- Tetanus, diphtheria, and acellular pertussis vaccine (Tdap), meningococcal conjugate vaccine (MenACWY), and human papillomavirus (HPV) vaccine are routinely recommended for adolescents.
- Among adolescents aged 13–17 years in 2021
 - HPV vaccination coverage (≥1 dose and HPV vaccine up to date) increased.
 - Coverage with ≥1-dose Tdap and ≥1-dose MenACWY remained high.
 - Among age-eligible adolescents, MenACWY booster dose coverage increased.
- Analyses of the potential COVID-19 pandemic effect among adolescents born in 2008 show a concerning decrease in ≥1 MenACWY and ≥1 Tdap dose coverage.
- As more adolescents who were due for routine vaccinations during the pandemic age into the NIS-Teen sample, the full impact of the pandemic can be assessed.

Source: https://www.cdc.gov/mmwr/volumes/71/wr/mm7135a1.htm

Estimated vaccination coverage with selected vaccines and doses, among adolescents aged 13–17 years, by survey year — National Immunization Survey-Teen, United States, 2006–2021



Source: https://www.cdc.gov/mmwr/volumes/71/wr/mm7135a1.htm

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.

