

# CDC National Immunization Survey Data

## Updates (2019-2021)



Vaccination coverage in the US and Colorado remains mostly high and stable. However, for many vaccines, the US and Colorado fail to reach the Centers for Disease Control (CDC) Healthy People (HP) 2030 targets. This report provides an overview of data from the National Immunization Surveys, conducted annually by the CDC. These surveys look at coverage rates for the following vaccines: DTaP/DT/DTP, Polio, MMR, Hib, HepB, VAR, PCV, ROT, HepA, Flu, Tdap, MenACWY, and HPV. (8)

### Vaccine Disparities Among Children Under 2 Years Old<sup>(1)</sup>

Nationally, of children age 24 months born in 2018-19, **0.9%** had received no vaccines, compared to just 0.3% in 2001. Vaccine disparities are more prevalent among children who are uninsured, on Medicaid, and/or living in rural areas.

#### UNINSURED

Vaccination rates among uninsured children were **10%-41.5%**

lower than for those covered under private insurance, depending on the vaccine.

#### MEDICAID

Vaccination rates among children insured under Medicaid were **0.8%-24.5%**

lower than for children covered under private insurance.

#### RURAL AREAS

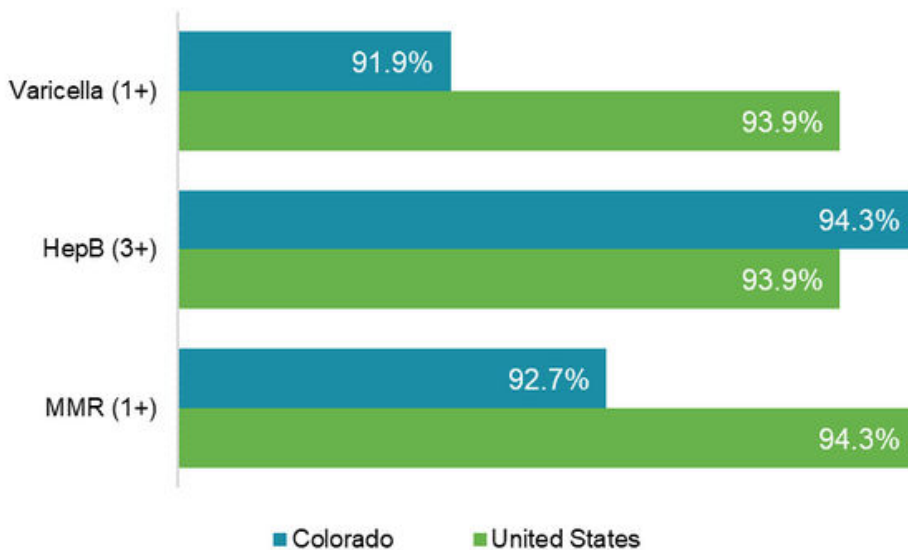
Children living in rural areas were vaccinated for the 7-series vaccine at a rate **6%-7.2%**

lower than children living in urban areas.

The Vaccines for Children (VFC) program is a federally funded program that provides vaccines at no cost to children who are unable to be vaccinated due to financial reasons. Colorado could expand its VFC coverage to further address vaccine disparities in the state.

### Vaccination Coverage Among Children Age 35 Months<sup>(2)</sup>

Of children age 35 months born in 2018-19, immunization coverage in Colorado falls below the national coverage estimates for Varicella and MMR but surpasses the national coverage estimates for HepB.



#### 7 - SERIES VACCINE

The 7-series vaccine, which includes vaccines for diphtheria, tetanus, and whooping cough (pertussis) (DTaP), polio, measles, haemophilus influenzae (Hib), hepatitis B, varicella, and pneumococcal disease (PCV), has a HP 2030 goal of 80% coverage. In Colorado, 74.4% of 35-month-old children born in 2018-2019 were vaccinated with the 7-series vaccine, compared to a 76.3% national coverage rate.

\*Note: For the graphs in this document, the numbers (e.g., 1+, 2+, 3+, 5+) represent the number of doses. Vaccine dose recommendations vary by age and vaccine. For the HPV vaccine, up-to-date means a person has received all recommended doses of the HPV vaccine for their age. For more information on the vaccine schedules and dosage recommendations, visit resource number 9 listed in the reference section.

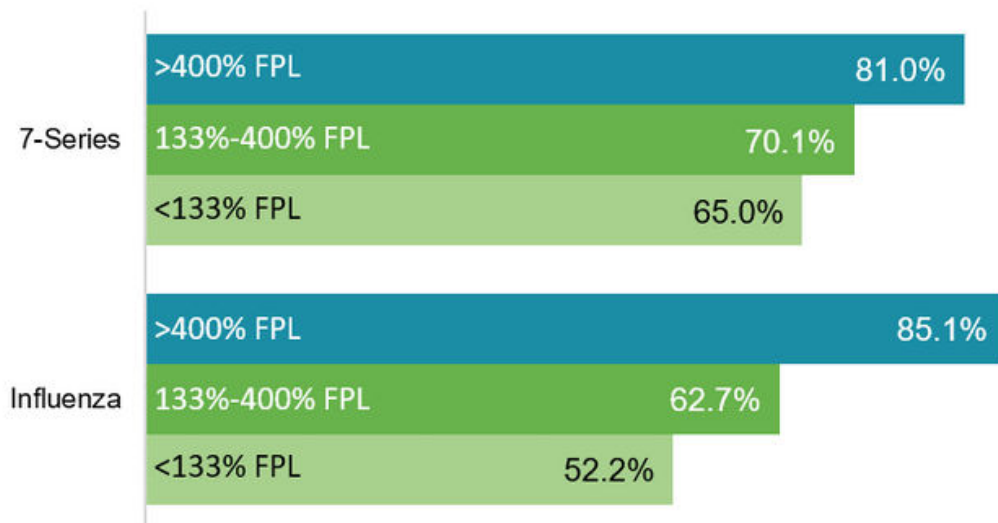
# CDC National Immunization Survey Data

## Updates (2014-2017) cont.

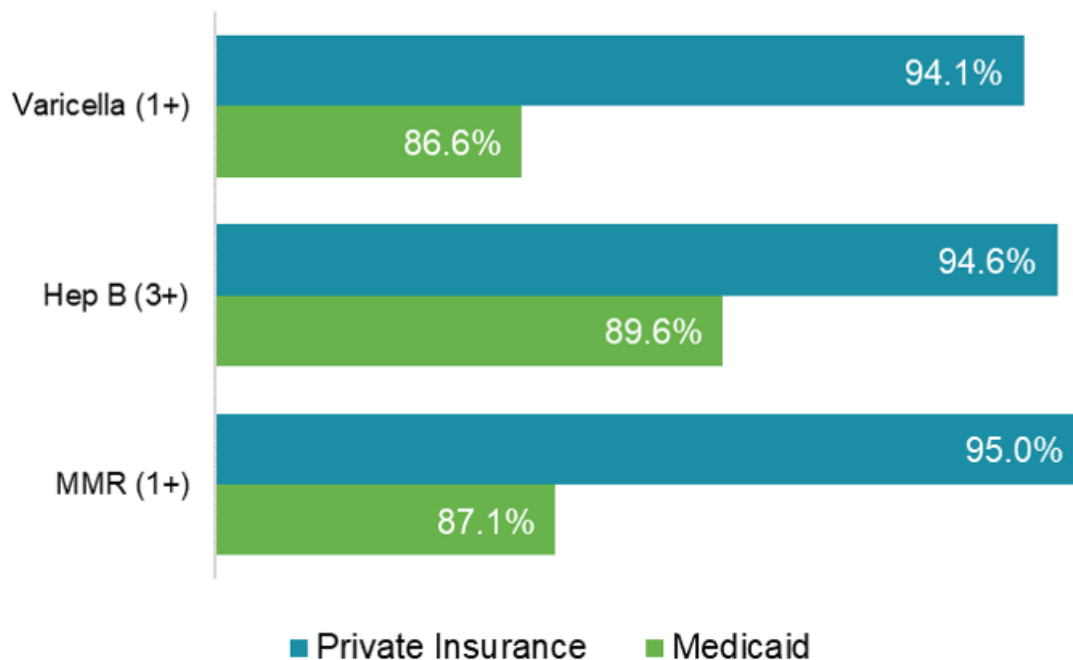


\*Note: The data on this page reflects information gathered from the 2014-2017 birth cohorts and does not reflect data from the 2018-2019 birth cohort.

In Colorado, childhood vaccination rates vary by income for most routine vaccines. Disparities are particularly wide depending on Federal Poverty Level (FPL) for the 7-series vaccine and influenza vaccine in children by age 24 months, born 2014-2017.<sup>(2)</sup>

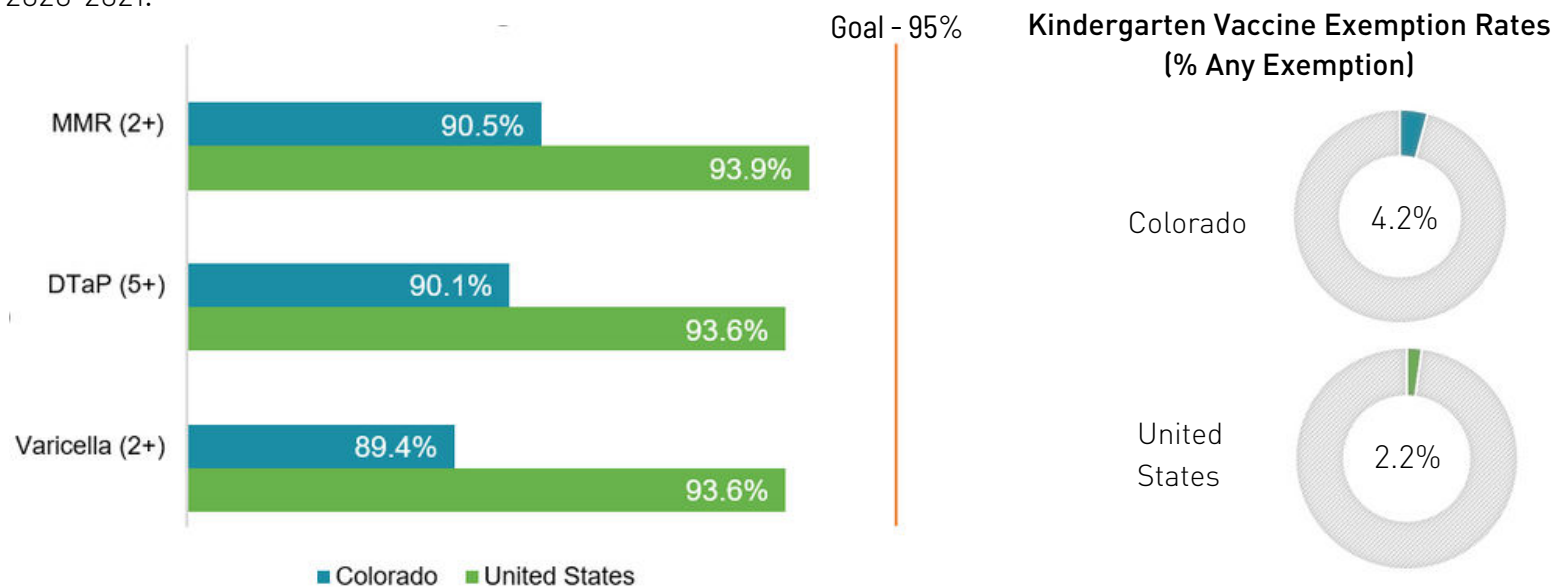


Similarly, Colorado childhood vaccination rates vary based on insurance coverage. The following chart depicts childhood vaccination rates by age 24 months among children born 2014-2017.<sup>(2)</sup>



### Kindergarten Immunization Survey (2020-2021 School Year) <sup>(3, 4)</sup>

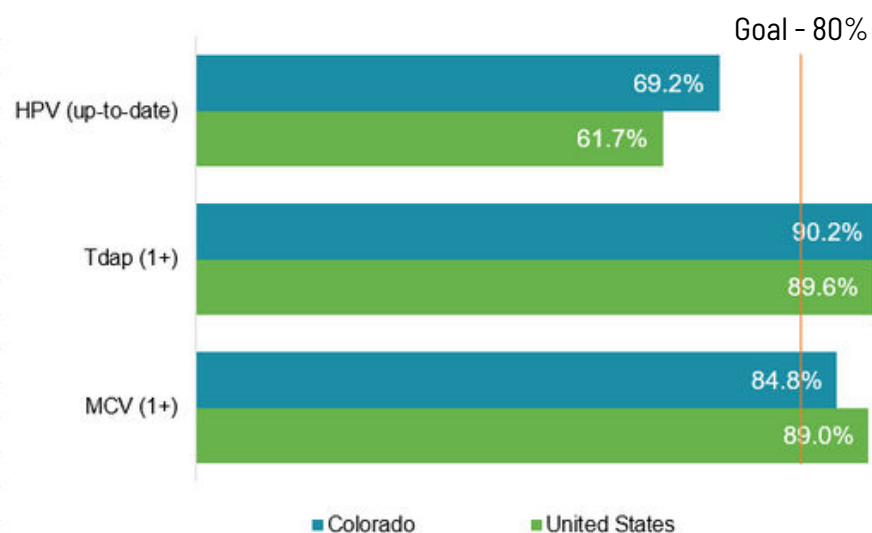
Kindergarten vaccination rates in Colorado consistently fall below national averages, and exemption rates fall above national averages. However, it is important to note that comparing vaccination rates across states is challenging due to varying data collection and reporting methods for kindergarten vaccination records. Through an impressive vaccination effort, Colorado increased its kindergarten MMR rate in 2019-2020 to 91.1%, but the rate fell to 90.5% in 2020-2021.



### Vaccination Coverage Among Adolescents Aged 13-17 Years (2021) <sup>(5, 6)</sup>

Colorado's HPV vaccination rates have increased but are still well below the HP 2030 goal of 80%. However, rates of incomplete HPV vaccinations (1 or more shot of a 2 or 3 dose series) are higher; 80.0% of Colorado adolescents received one or more HPV vaccine doses (compared to 76.9% nationally) exposing a lack of follow through for the HPV vaccine series.

Colorado and the US are well positioned for Tdap and MCV coverage in relationship to the HP 2030 goal of 80% coverage.



### Maintaining Childhood and Adolescent Immunizations During COVID-19

Routine childhood immunization rates have dropped precipitously during the COVID-19 pandemic. VFC programs have reported steep declines in vaccine orders, which has and will likely continue to exacerbate existing vaccine disparities. It is essential to increase efforts to maintain routine childhood and adolescent vaccinations throughout and following the COVID-19 pandemic.

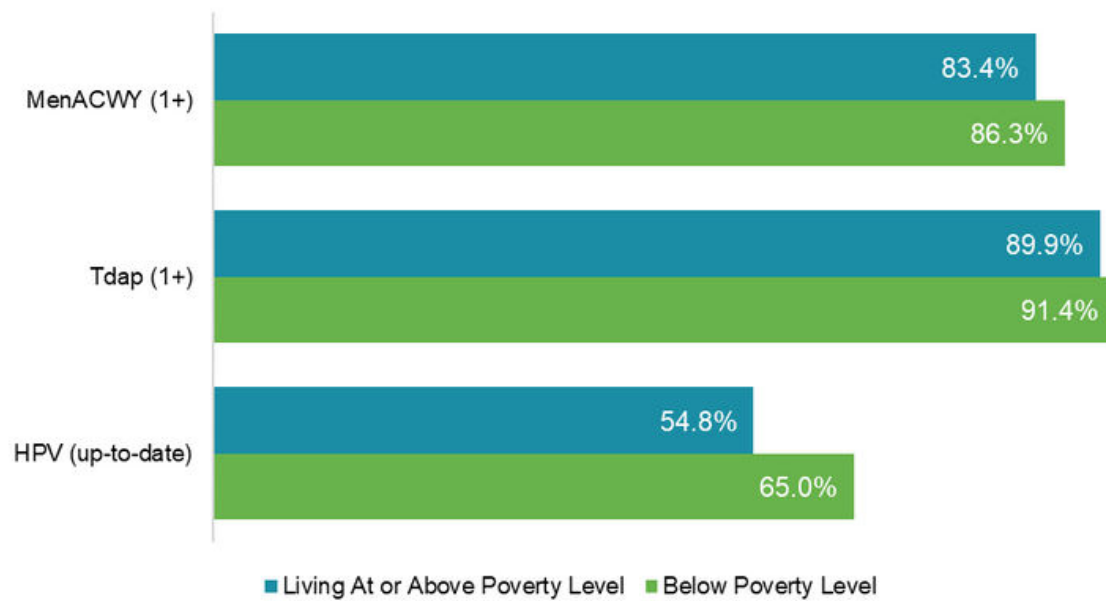
# CDC National Immunization Survey Data

## Updates (2015-2019) cont.

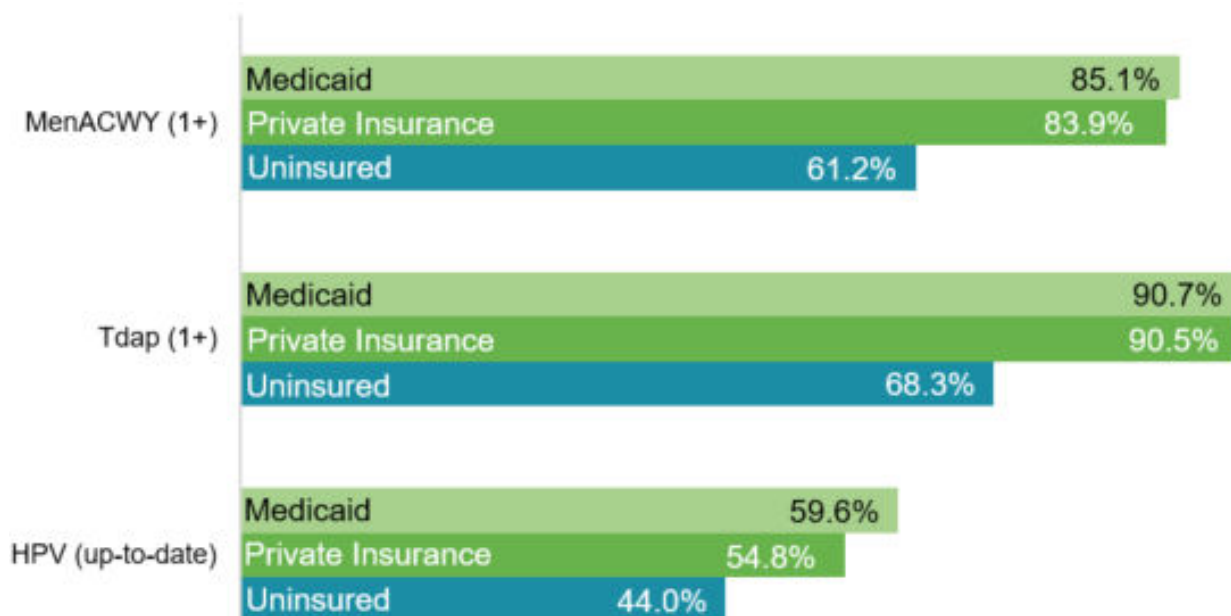


\*Note: The data on this page reflects information gathered during the 2015-2019 survey years and does not reflect data from the 2021 National Immunization Survey.

Routine vaccinations among adolescents in Colorado vary slightly based on their family's income, characterized by below, at, or above the federal poverty level.<sup>(6)</sup>

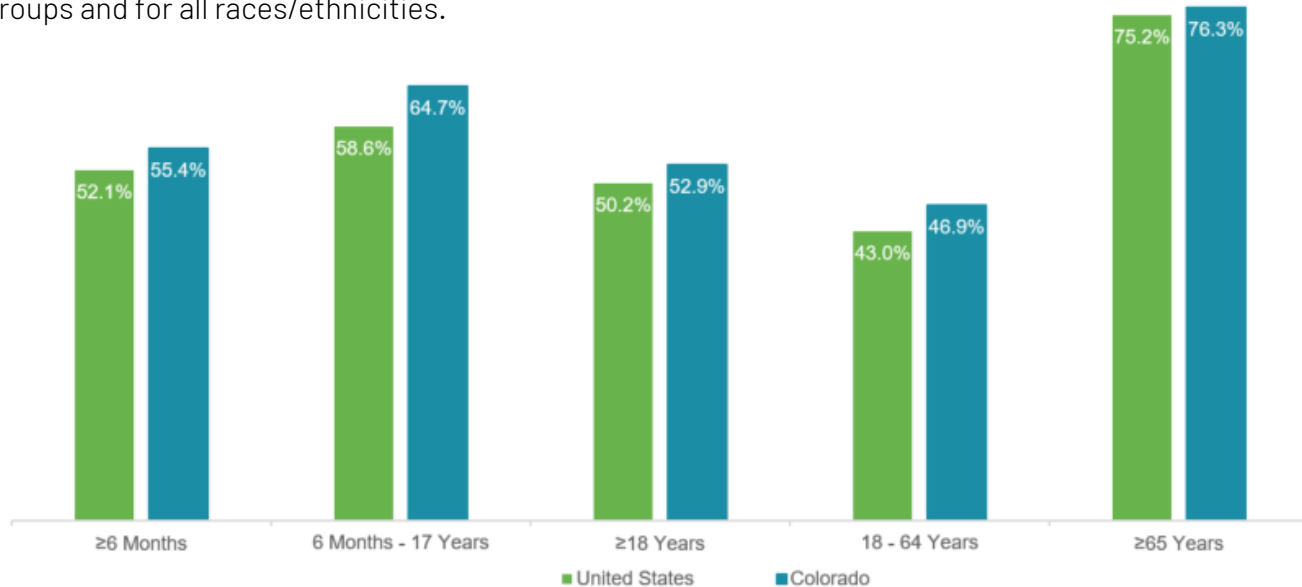


Further, uninsured teens consistently have lower vaccination rates for important routine vaccines in Colorado.<sup>(6)</sup>



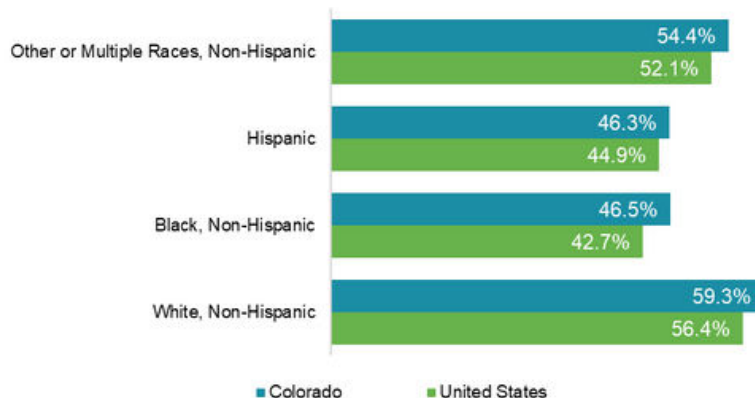
### 2020-2021 End-of-Season Influenza Vaccination Coverage <sup>(7)</sup>

For the past 4 years, Influenza vaccination rates in Colorado have consistently been above national averages for all age groups and for all races/ethnicities.

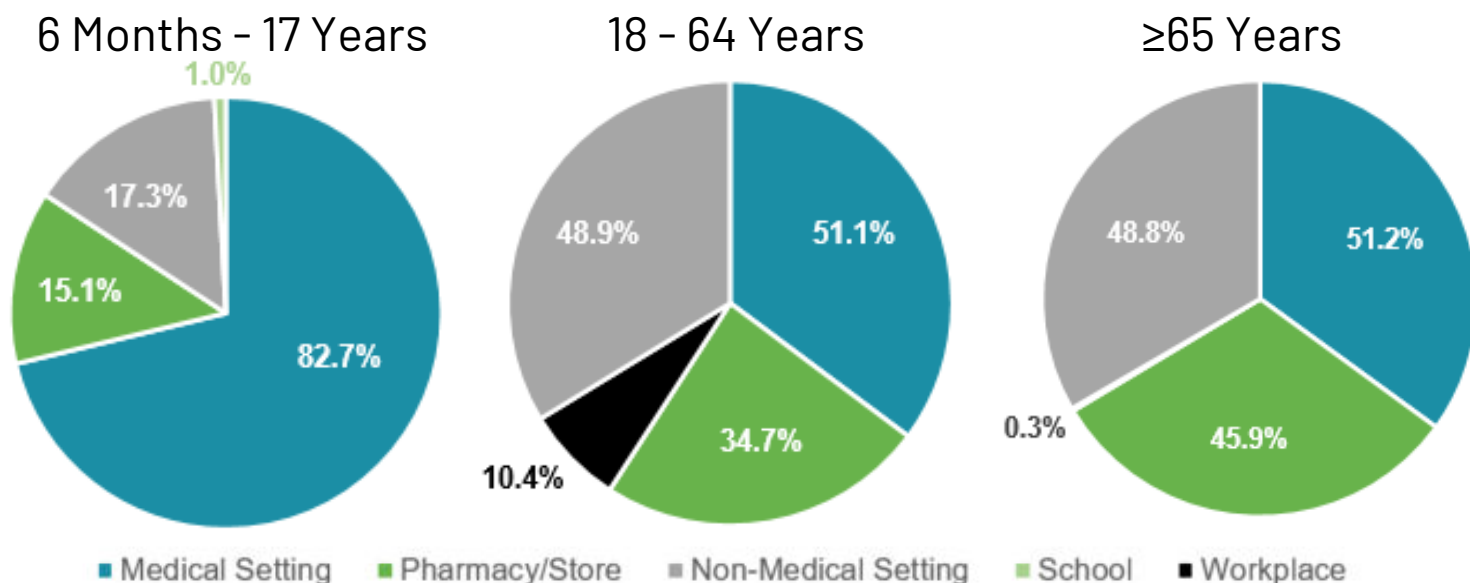


When comparing coverage rates from the 2017-18 season up to the 2020-21 season, Colorado has consistently had coverage rates above national rates for white, non-Hispanic, black, non-Hispanic, and Hispanic races/ethnicities.

More specifically, for the white, non-Hispanic population, Colorado rates are an average of 2.1% higher compared to national rates. For black and non-Hispanic coverage, Colorado rates are an average of 4.65% above national rates, and for the Hispanic population, Colorado rates are an average of 4.4% above national coverage rates.



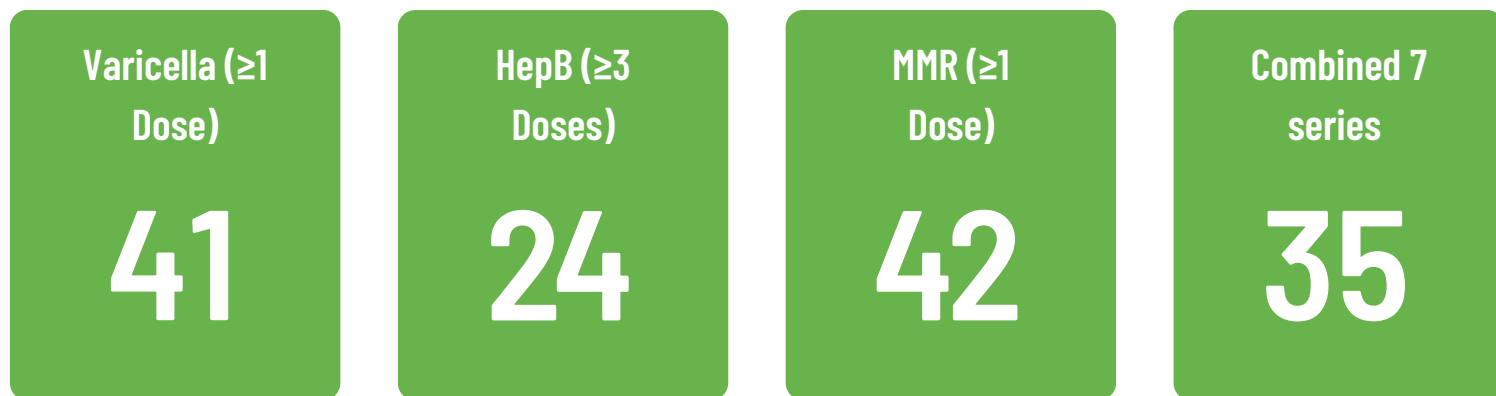
### Influenza Vaccination by Age and Location (2020-2021 Season) <sup>(7)</sup>



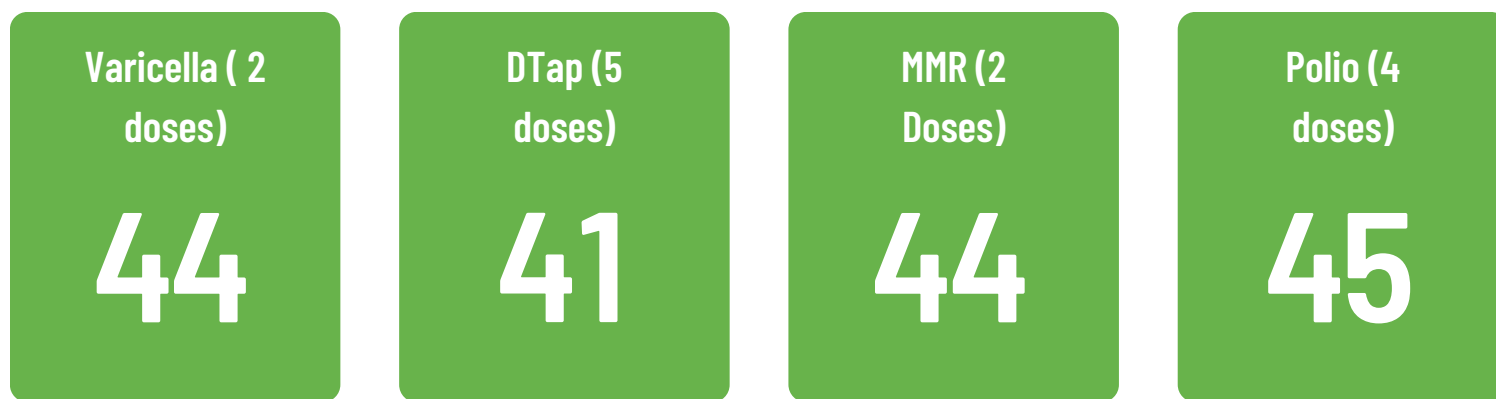
### Colorado Ranking Among 53 Jurisdictions

\*Note: Estimates and rankings include the District of Columbia, Guam and Puerto Rico.

#### Vaccination Coverage Among Children Aged 35 Months (Birth Cohort 2018-2019)<sup>(1, 2)</sup>



#### Vaccination Coverage Among Children in Kindergarten (2021-22 School Year)<sup>(10)</sup>



#### Vaccination Coverage Among Adolescents Aged 13-17 Years (2021)<sup>(5, 6)</sup>



1. Hill HA, Chen M, Elam-Evans LD, Yankey D, Singleton JA. Vaccination Coverage by Age 24 Months Among Children Born During 2018–2019 – National Immunization Survey–Child, United States, 2019–2021. *MMWR Morb Mortal Wkly Rep* 2023;72:33–38. DOI: <http://dx.doi.org/10.15585/mmwr.mm7202a3>.
2. ChildVaxView Interactive Child Vaccination Coverage | CDC. (2020). DOI: <https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/interactive-reports/index.html>.
3. Seither R, Laury J, Mugerwa-Kasujja A, Knighton CL, Black CL. Vaccination Coverage with Selected Vaccines and Exemption Rates Among Children in Kindergarten – United States, 2020–21 School Year. *MMWR Morb Mortal Wkly Rep* 2022;71:561–568. DOI: <http://dx.doi.org/10.15585/mmwr.mm7116a1external> [icon](#).
4. SchoolVaxView Interactive School Vaccination Coverage | CDC. (2021). DOI: <https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/index.html>.
5. Pingali C, Yankey D, Elam-Evans LD, et al. National Vaccination Coverage Among Adolescents Aged 13–17 Years – National Immunization Survey–Teen, United States, 2021. *MMWR Morb Mortal Wkly Rep* 2022;71:1101–1108. DOI: <http://dx.doi.org/10.15585/mmwr.mm7135a1>.
6. TeenVaxView Interactive Teen Vaccination Coverage | CDC. (2021). DOI: <https://www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/data-reports/index.html>.
7. FluVaxView Interactive Flu Vaccination Coverage | CDC. (2021). DOI: <https://www.cdc.gov/flu/fluview/interactive-general-population.html>.
8. National Immunization Surveys (NIS) | CDC. (2018). DOI: <https://www.cdc.gov/vaccines/imz-managers/nis/about.html>
9. Immunization Schedules | CDC. (2023). DOI: <https://www.cdc.gov/vaccines/schedules/index.html>
10. Seither R, Calhoun K, Yusuf OB, et al. Vaccination Coverage with Selected Vaccines and Exemption Rates Among Children in Kindergarten – United States, 2021–22 School Year. *MMWR Morb Mortal Wkly Rep* 2023;72:26–32. DOI: <http://dx.doi.org/10.15585/mmwr.mm7202a2>.