Overview

Vaccines are safe, effective and considered one of the most successful and cost-effective public health interventions of all time.

The majority of parents in Colorado vaccinate their children according to the recommended vaccine schedule; however, vaccination rates vary widely across and within counties and school districts. For example, fully immunized rates at some schools range from 17% to 100%, depending on the vaccine. In Colorado, 63% (545,216) of students attend a school that is not fully protected against all school-required vaccines. Despite the number of national measles cases surpassing 1,200—the highest number in nearly 30 years—Colorado’s kindergarten coverage rate for measles, mumps and rubella (MMR) dropped from 88.7% in 2017 to 87.4% for the 2018-2019 school year. This is the lowest rate in the nation and well below the 95% threshold needed for community immunity. Kindergarten immunization rates dropped and exemption rates increased for hepatitis B, polio and chickenpox as well.

Only two of 64 Colorado counties (Prowers and Kiowa) meet the Healthy People 2020 goal of 80% vaccination coverage for the series of vaccines children aged 19-35 months should receive. Disparities in coverage exist for reasons ranging from vaccine hesitancy to vaccine access barriers, demonstrated by wide gaps in coverage among children in rural versus urban areas, among children living in poverty and among children on Medicaid or with no insurance compared to those with private insurance.

Colorado Quick Facts

- 27 PERCENT of children were missing at least one recommended vaccine by age two.
- 49th Colorado ranks last among the 49 states that reported for kindergarten vaccination rates for MMR and varicella vaccines.
- 9,424 CHILDREN were hospitalized or went to an emergency room with vaccine-preventable diseases in 2017.
- $55.5 MILLION There were more than $55 million in hospital and emergency department charges for treating children for vaccine-preventable diseases in 2017.
- 4.7 PERCENT of kindergarteners (over 3,000 students) claimed a non-medical exemption for at least one vaccine in 2018-2019.

Vaccine Policy in Colorado

Colorado law requires K-12 schools and child care centers to report their immunization and exemption rate information to the Colorado Department of Public Health and Environment (CDPHE) to be made publicly available online each year. Ninety-five percent of public schools, and only 46% of private schools and 75% of child cares reported their data in 2018-19, a decline in the number of facilities reporting the prior year. While overall compliance with vaccine requirements among reporting schools and child cares is high (above 90%), over 30,000 Colorado students are still considered non-compliant due to missing or incomplete vaccination records. Like immunization and exemption rates, compliance rates vary drastically at the individual school or child care level. Research shows that states with lenient exemption policies, like Colorado, have higher exemption rates and higher numbers of cases of vaccine-preventable diseases.

VACCINE EXEMPTIONS IN COLORADO
- Colorado is 1 of only 15 states that allow personal belief exemptions for all school-required vaccines
- Non-medical exemption levels are consistently among the highest in the U.S. at almost 5%
- Exemption rates are higher in private schools than in public schools
- Exemption rates vary widely at the school and child care level, ranging from 0% to as high as 78% for certain diseases like measles, polio, chickenpox, hepatitis B and pertussis

COMMUNITY IMMUNITY is achieved when enough people in the community—roughly 95% for a disease like measles—are vaccinated to protect against the spread of disease. Maintaining high vaccine coverage is especially important for those who cannot be vaccinated for medical reasons or those too young to receive vaccines.
Recent Colorado and national cases and outbreaks of vaccine-preventable diseases highlight the importance of ensuring children are adequately immunized so that they, and the entire community around them, are protected from serious illness.

**HPV Rates Still Leave Too Many At Risk of Cancer Despite Improvement**

The 2018 teen HPV up-to-date rate in Colorado is 62.5% for males and females, a positive increase from 2017 and more than 10 percentage points higher than the national average. Despite improvement, this rate still falls short of the Healthy People 2020 goal of 80% and leaves almost 40% of Colorado teens at risk for preventable cancers.

**HEPATITIS A Outbreaks Increasing Among Vulnerable Populations**

Colorado is one of 30 states across the country experiencing a widespread hepatitis A outbreak in 2019. Colorado’s outbreak is primarily affecting people experiencing homelessness, people with substance use issues, and individuals who are currently or have recently been incarcerated. There have been 209 cases and two deaths reported across 11 Colorado counties as of October 16 with almost three out of every four cases requiring hospitalization.

**MEASLES Outbreaks Across U.S. Elevate Risk to Colorado Communities**

Statewide, almost 50,000 K-12 children would potentially need to be excluded from school in the case of a measles outbreak due to exemptions, missing or incomplete records, or unknown vaccination status for MMR. This is especially concerning as the U.S. is experiencing the largest measles outbreak since 1992, with over 1,200 cases reported across 31 states (including Colorado) in 2019.

In 2016 and 2017, the cost of responding to two separate measles cases in Colorado was estimated to be $18,000 and $49,000 respectively.

**INFLUENZA Vaccination Significantly Underutilized to Prevent Serious Disease**

Only 45% of Colordans got a flu shot during the 2017-18 flu season while Colorado reported its highest number of flu hospitalizations on record with 4,650 hospitalizations and one pediatric death. During the 2018-19 flu season, Colorado reported its second highest number of hospitalizations, along with three pediatric deaths.

Charges to treat influenza totaled over $367 million in Colorado during the 2017-18 flu season, including hospital and emergency department visits for over 15,000 people.

Only one in three pregnant U.S. women receives vaccines for influenza and Tdap, leaving mothers and their babies at risk of serious complications from flu and pertussis.

**ADDITIONAL DISEASE Cases and Outbreaks Result in Economic and Personal Cost**

Intermittent outbreaks of whooping cough (pertussis), chickenpox (varicella) and mumps in Colorado have led to multiple school exclusions and lost wages for families, and have required significant resources for public health investigation and disease control efforts.

**Take Action!**

- **ENSURE** you and your family members are vaccinated with the recommended vaccines across the lifespan from birth to old age, including during pregnancy.
- **BE FAMILIAR** with school, child care and community vaccination rates and what those rates mean for the level of protection against preventable diseases.
- **ENGAGE** with school and community leaders to support and advocate for strengthened vaccine policy and public health infrastructure.

**Immunization Resources**

- **COVax4Kids.org**
  *Find out where to access low- or no-cost vaccines*

- **COVaxRecords.org**
  *Request your child’s vaccine records*

- **COVaxRates.org**
  *View and compare school and child care vaccination rates*

- **COSchoolIZ.org**
  *View customized school district immunization fact sheets*

- **SpreadTheVaxFacts.com, ImmunizeForGood.com, VaccinalosPorSubBien.com; CDC.gov**
  *View vaccine information and answers to vaccine questions*

To access related resources and references, visit **childrensinmumination.org**