

# SNAPSHOT OF RURAL HEALTH IN COLORADO

- 2023 -

 COLORADO  
RURAL HEALTH  
CENTER

*The State Office of Rural Health*



# COLORADO RURAL HEALTH CENTER

## *The State Office of Rural Health*

*The Snapshot of Rural Health is prepared as a resource to highlight and advance interest in the rural health issues in Colorado.*

### Our Mission and Vision

The Colorado Rural Health Center (CRHC) was established in 1991 as Colorado's State Office of Rural Health. As a 501(c)(3) nonprofit organization, CRHC serves dual roles as the State Office of Rural Health with the mission of assisting rural communities in addressing healthcare issues; and as the State Rural Health Association, advocating for policy change on behalf of its members and all rural healthcare providers.

Our mission is to enhance healthcare services in the state by providing information, education, linkages, tools, and energy toward addressing rural health issues. Our vision is to improve healthcare services available in rural communities to ensure that all rural Coloradans have access to comprehensive, affordable, high quality healthcare.

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# Table of Contents

## DEMOGRAPHICS

People.....	4
Education.....	10
Income and Poverty.....	12
Healthcare Coverage.....	14

## THE HEALTH OF RURAL

Access.....	16
Rural Health Information Technology.....	18
Women’s and Maternal Health.....	20
Oral Health.....	24
Prescription Drugs.....	28
Substance Use Disorder.....	29
Mental and Behavioral Health.....	30
The Climate Crisis.....	32
Chronic Disease.....	34
Public Health.....	38

## RURAL HEALTH INFRASTRUCTURE

The Rural Economy.....	40
Emergency Medical Services (EMS).....	44
Workforce Shortages.....	46
Case Study: Clinic Profiles.....	48
Cost to Patient Case Studies.....	49

## APPENDIX

Maps.....	50
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## CRHC’s Organizational Equity Statement

The Colorado Rural Health Center recognizes that many factors impact the health of individuals and communities, including geography, income, and race. We recognize the existence and power of historical and ongoing systematic structures that have excluded individuals from leading their most healthy lives.

We are committed to repairing injustices by championing policies that recognize these inequities and foster community-led solutions. We are actively working to include diverse opinions and perspectives in our decision making processes and advocacy work and recognize that we all live better lives when everyone has a seat at the table.



# Demographics

PEOPLE

Colorado is a rural state

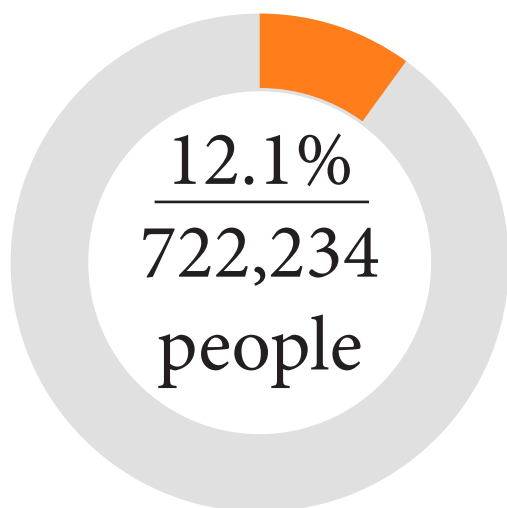
47 of Colorado's 64 counties are rural or frontier

77% of Colorado's landmass (square miles) is considered rural or frontier



- Urban (17)
- Rural (24)
- Frontier (23)

Rural Las Animas County is roughly the size of Connecticut, yet has only 1 hospital



The estimated Colorado population in 2023 is 5,963,962. The rural population is 722,234 - 12.1% of the total state population.

From 2010 to 2020, 95% of the population growth was along the Front Range, compared to the previous decade where it was 78%. Denver led the growth over the decade increasing by over 112,000. Broomfield County had the fastest growth rate of 32.7%.

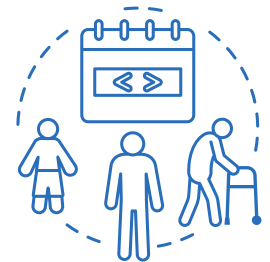
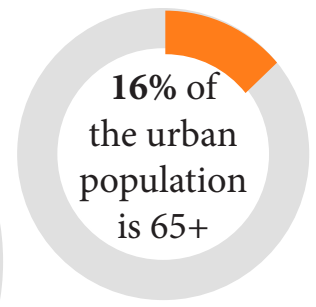
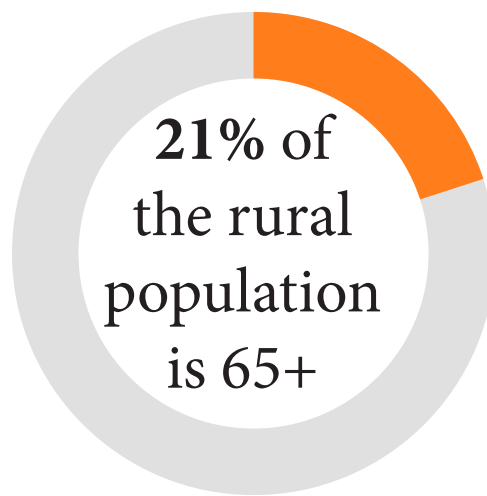


★ DENVER ★  
COLORADO



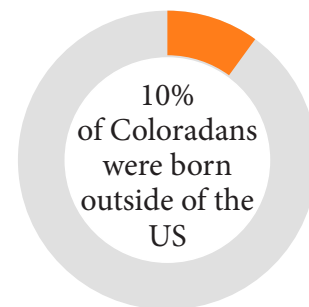
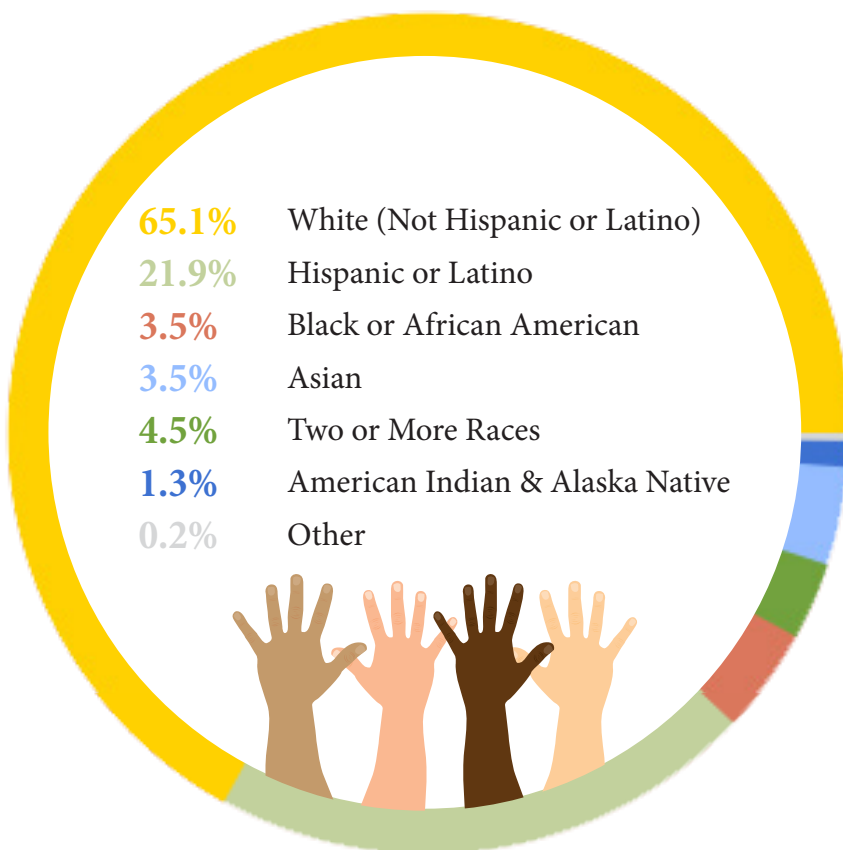
## An Aging Population

*The top 5 counties with the highest rate of 65+ residents are all rural/frontier: Custer, Mineral, Huerfano, Ouray, and Hinsdale.*



## Race and Origin of Coloradans

*Colorado is becoming an increasingly multiracial state. In 2020, about 744,518 or 14.8% of the population were people of color. It is estimated that by 2040, this will increase to 45% of the population.*



A large portion of Colorado's immigrant population comes from Latin America, but there are also high rates of immigrants born in Asia. 61% of foreign-born Coloradans are not US citizens while 39% are naturalized citizens.

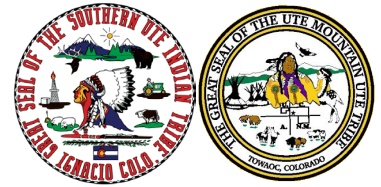


*In rural areas of the state, people of color comprise about 26% of the population and 31% in urban areas.*



### American Indians in Colorado

The Southern Ute Indian Tribe and the Ute Mountain Ute Tribe are the two federally recognized tribes residing in Colorado. Each are governed by their own constitution, laws, and court systems that function independently of both the state and local governments. About 1.3% of the Colorado state population is American Indian and Alaska Native, about 75,058 people.



### American Indian Health Access and Disparities



Indian Health services (IHS), an agency within the Department of Health and Human Services, provides comprehensive health services for approximately half (2.56 million) of the nation's American Indians and Alaska Natives.

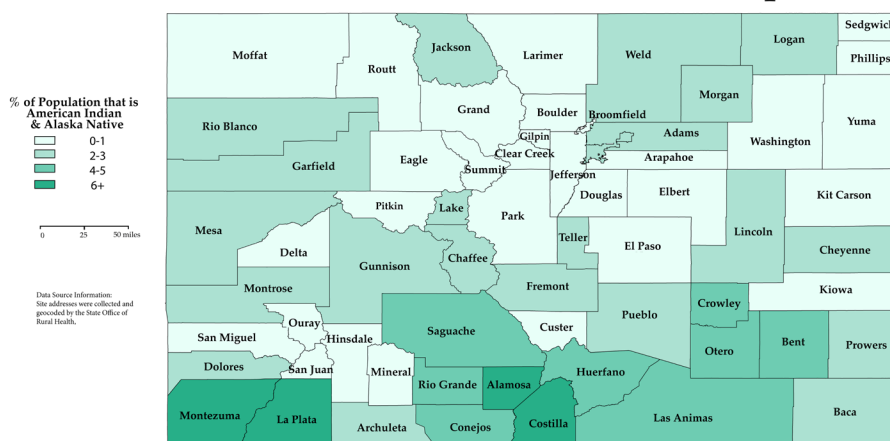
There are 2 locations for Indian Health Services in Colorado: Ute Mountain Health Center and White Mesa Health Station. Both locations are in rural Towaoc, CO.

The life expectancy of American Indians and Alaska Natives born today have a life expectancy that is 5.5 years less than the life expectancy of U.S. all races population (73 years versus 78.5 years).

American Indians and Alaska Natives continue to experience higher rates of death affiliated with heart disease, cancer, diabetes, stroke, liver disease, suicide, Alzheimer's, influenza and pneumonia.



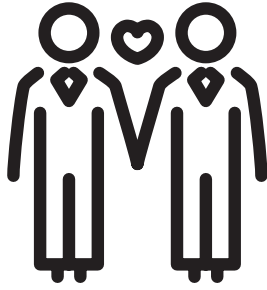
### American Indian & Alaska Native Population



American Indians and Alaska Natives mainly live on or near reservations and in rural communities in the western United States and Alaska. They have long experienced lower health status when compared with other Americans.



5%  
of the  
workforce is  
LGBTQ

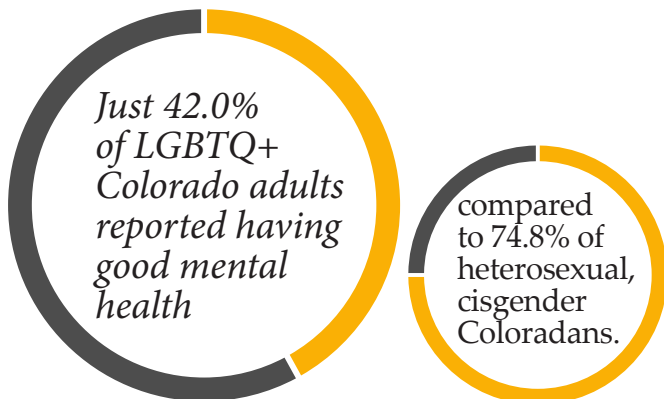


*CHAS data from 2019 and 2021 indicate that the majority (87.1%) of Colorado's LGBTQ+ population lived in urban areas.*



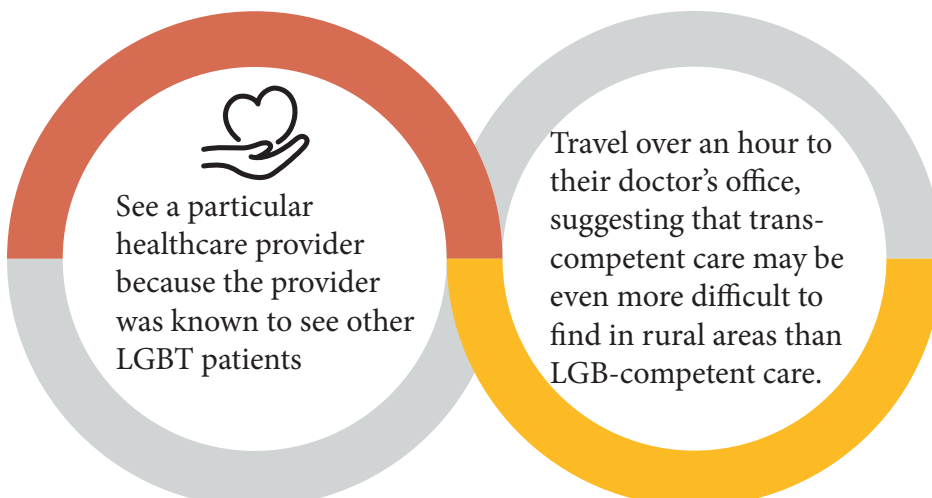
In a survey of physicians in Colorado, physicians in rural Colorado were less likely than those in the Denver metro area to say it was important to take steps to show LGBT patients they should feel comfortable in medical settings. They were also less likely to ask their patients about their sexual orientation or gender identity.

*Colorado is 1 of 15 states considered to have a high overall equality tally.*



*“According to the 2020 Healthcare Equality Index by the Human Rights Campaign, **just six health facilities in Colorado score 80% or higher on measures of equity and inclusion of LGBTQ patients and employees.**”*

*Transgender and non-binary people in rural areas are over three times more likely than cisgender LGB people to:*



According to the Stanford University School of Medicine, 33% of responding medical schools reported that they spent zero hours on LGBTQ health-related content during clinical training. Of the doctors who did receive training on LGBTQ issues, the average time reported on the subject was five hours.

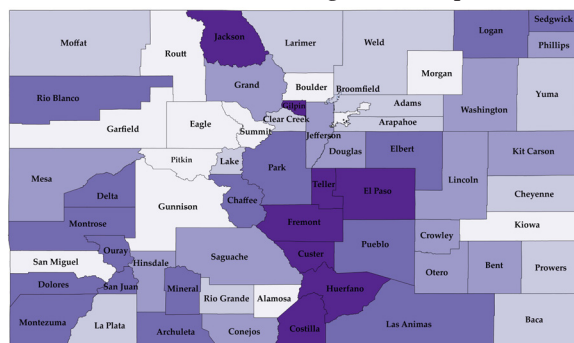
Note: CRHC is using the following LGBTQIA+ definition from “The Center” and has left the sources’ abbreviations in place on this page: LGBTQIA+ is an abbreviation for lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, and more.



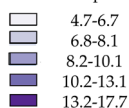
# Demographics

## Veterans

Colorado Veterans as a Percentage of the Population



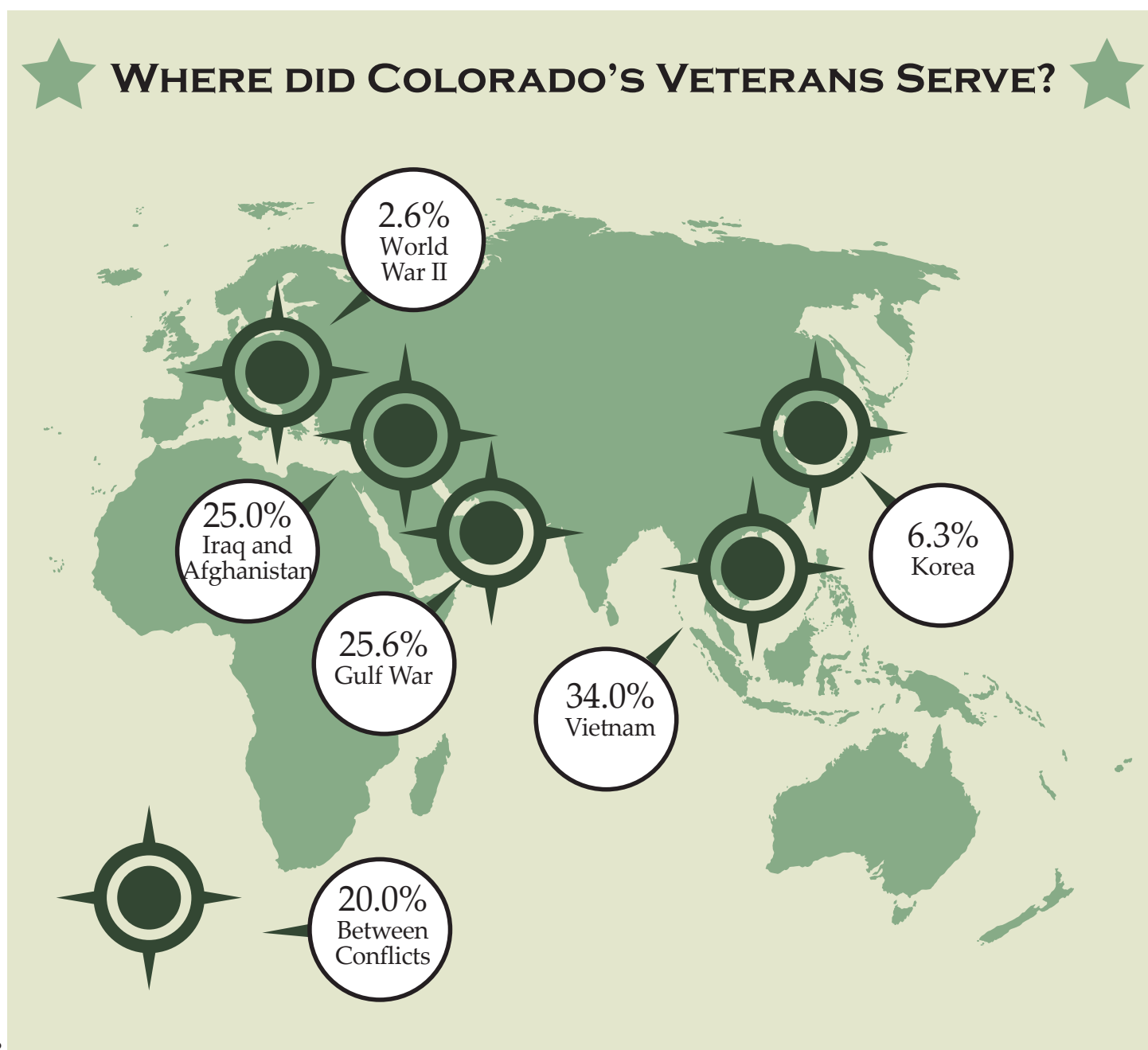
% Veteran Population



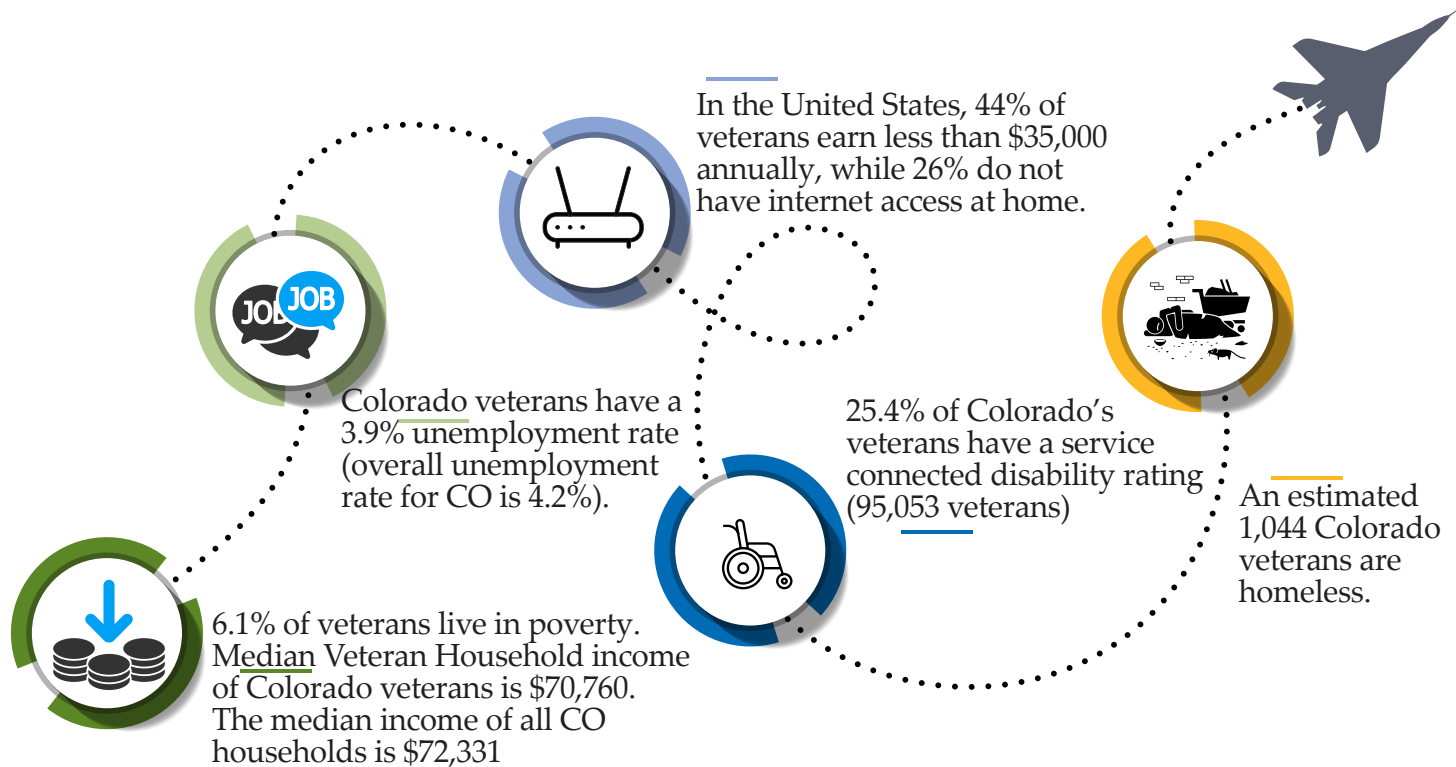
An estimated 373,795 veterans currently live in Colorado (8.7% of the population).

There are 42 locations in Colorado that accept VA Healthcare. Compared to the general civilian population, those who serve experience higher rates of access to health care and are less likely to report avoiding care due to cost.

## WHERE DID COLORADO'S VETERANS SERVE?

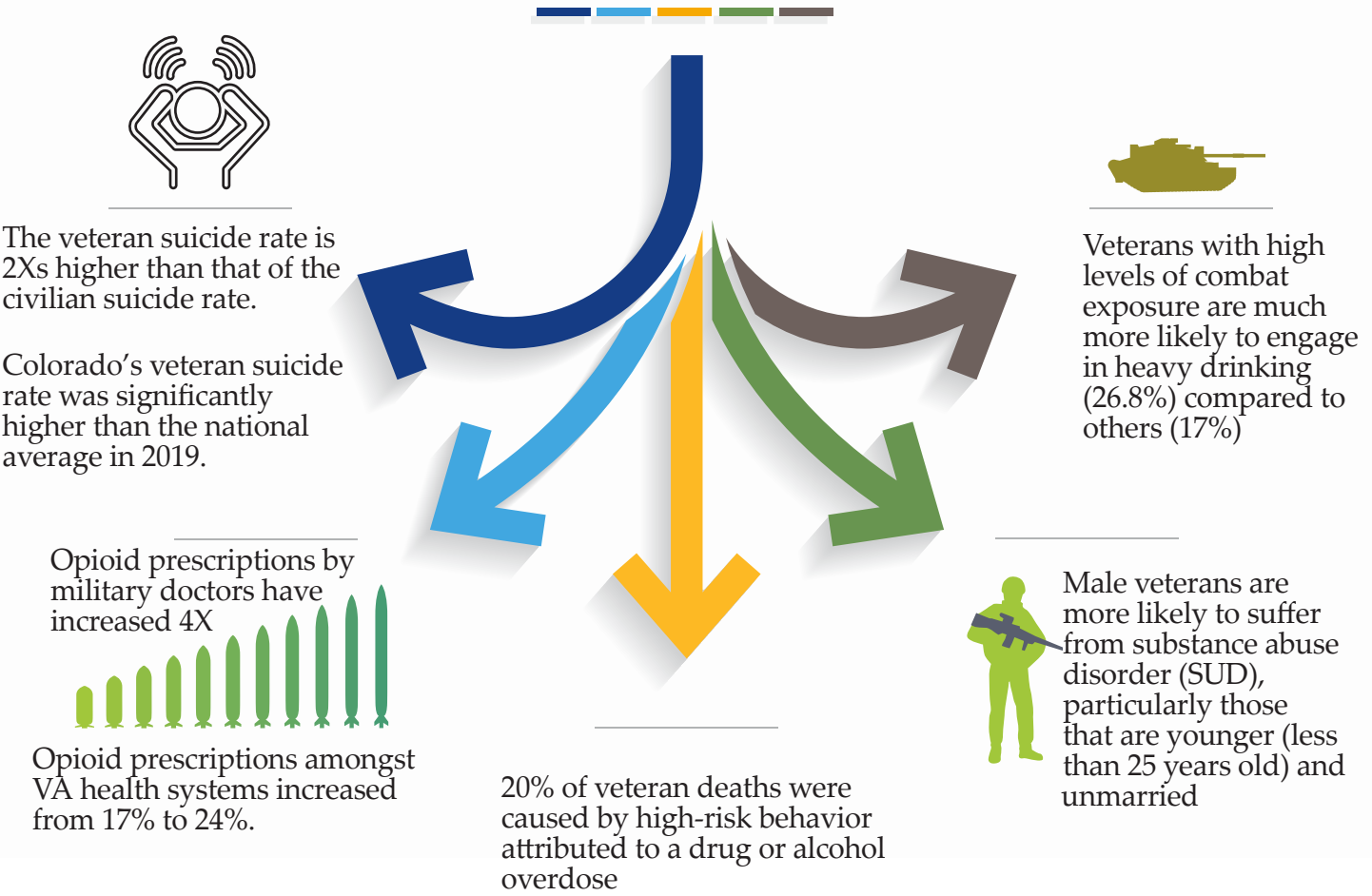






### Veteran Mental and Behavioral Health

*Compared to the general civilian population, those who have served experience almost twice the rates of increase in mental health challenges, including depression, frequent mental distress, mental illness, and suicidal thoughts than civilians.*





## Demographics

A Colorado school district is determined to be rural by the size of the district, the distance from the nearest large urban/urbanized area and having a student enrollment of 6,500 students or less. Small rural districts have a student population of fewer than 1,000 students

### Colorado has 178 School Districts

40 Districts are defined as 'rural' (22%)

107 Districts are defined as 'small rural' (60%)

31 Districts are urban (18%)

#### Definitions:

Small Rural: K-12 <1000

Rural: K-12 1,001 - 6,500



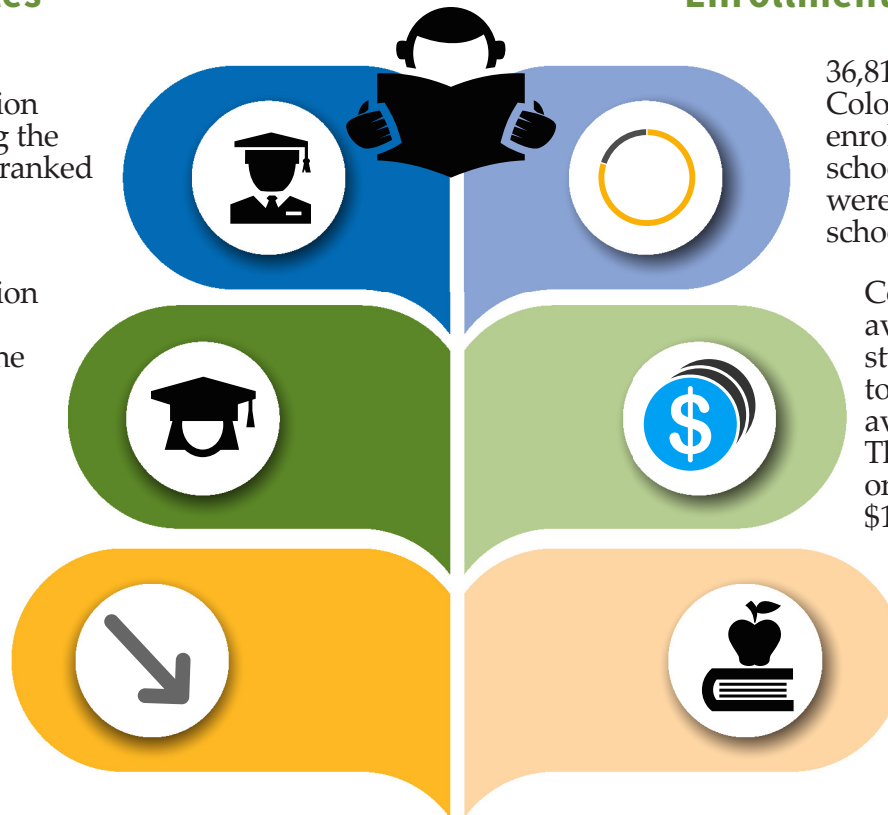
*89 rural districts have fewer than 500 students*

## Graduation Rates

High school graduation in Colorado is among the lowest in the nation, ranked 42 out of 50.

High school graduation racial disparity in Colorado is among the worst in the nation, ranked 42 out of 50. State value 20.9% compared to the US value of 15.1%

91% of the population over 25 in rural has completed high school.



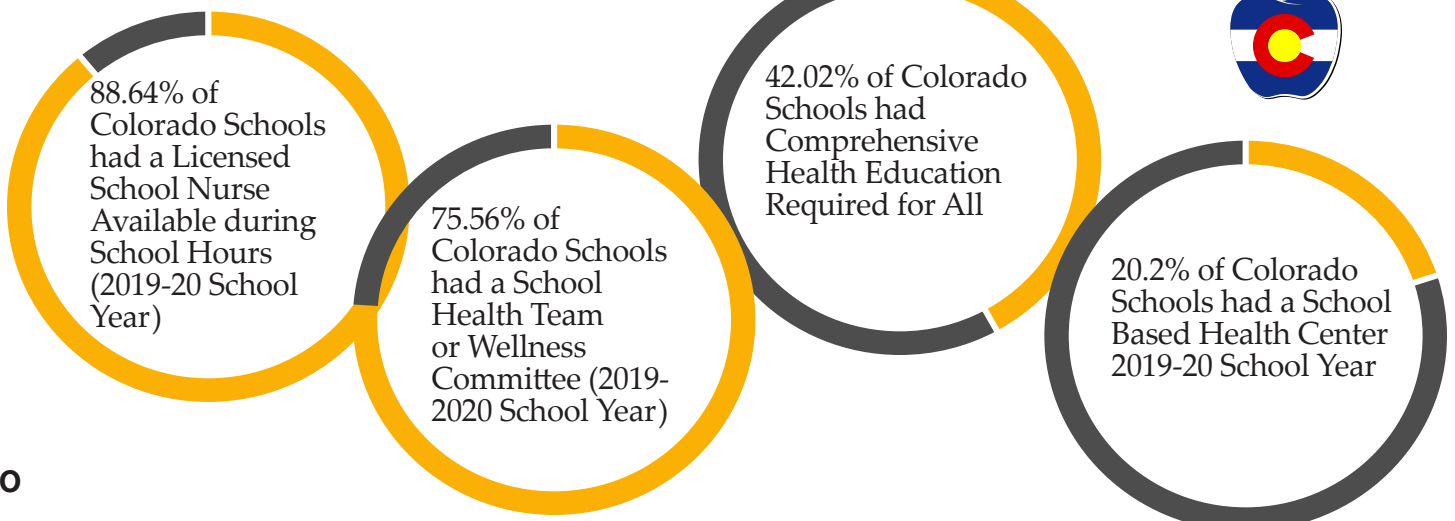
## Enrollment and Spending

36,816 or 4% of Colorado students were enrolled in small rural schools. 102,056 or 12% were enrolled in rural schools

Colorado spends on average \$10,202 per student compared to the national average of \$12,612. The western region on average spends \$11,582 per student.

In 2021-2022, there were a reported 886,517 pupils enrolled in the Colorado School System.

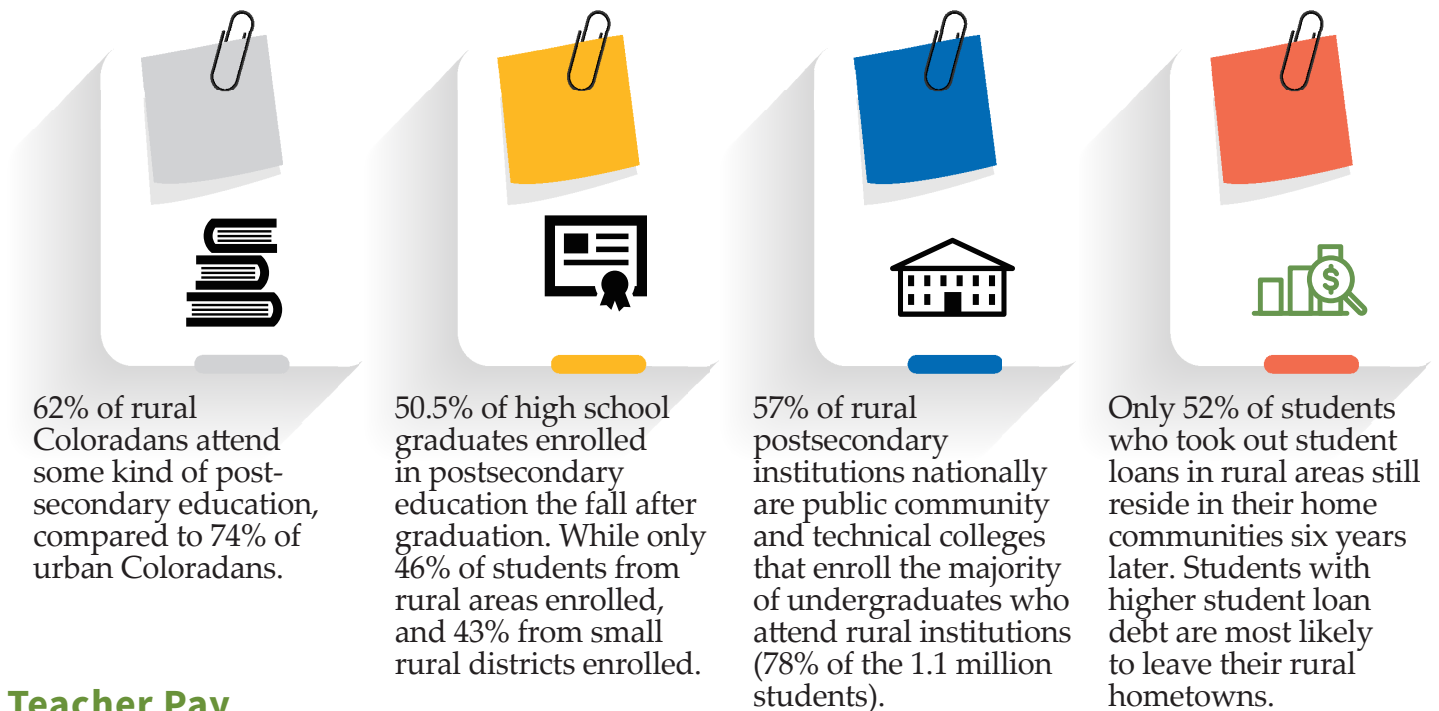
## Access to Care at School





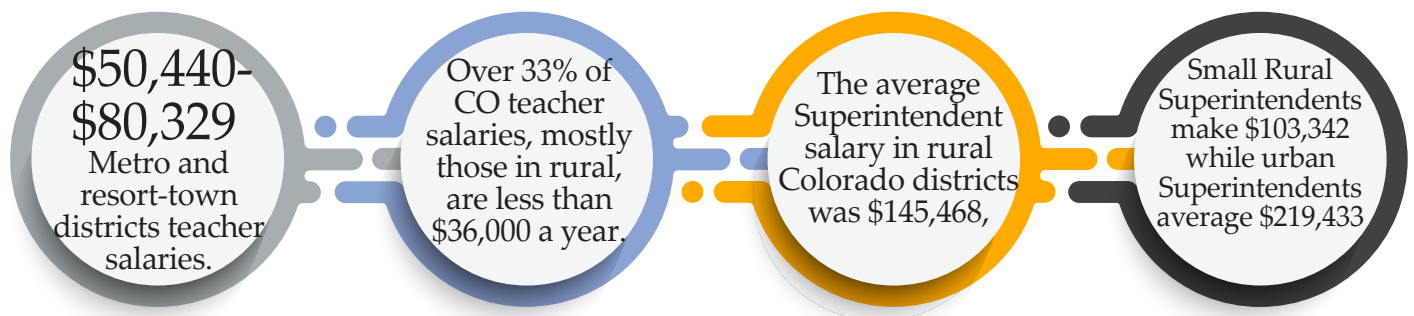
## Post Secondary Education

*Across Colorado, there remains a deficit of college-educated workers and a surplus of jobs that require college degrees*

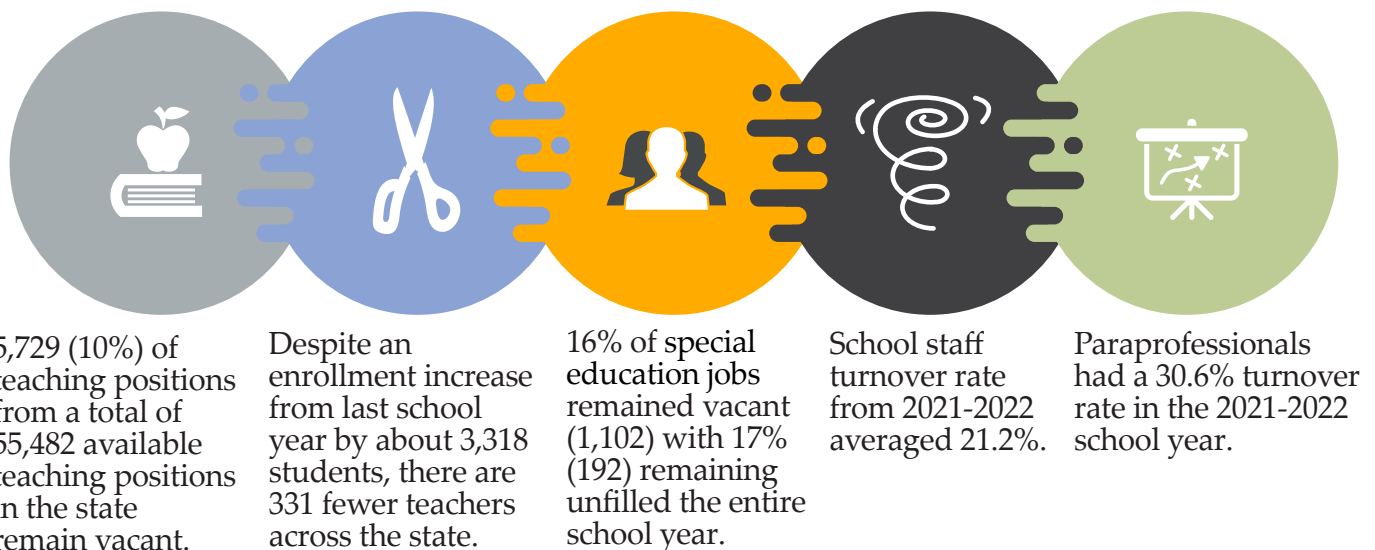


## Teacher Pay

*The 10 districts with the lowest average teacher salaries resided in rural counties. The average salaries for those 10 districts fell below \$36,000.*



## School Employee Turnover



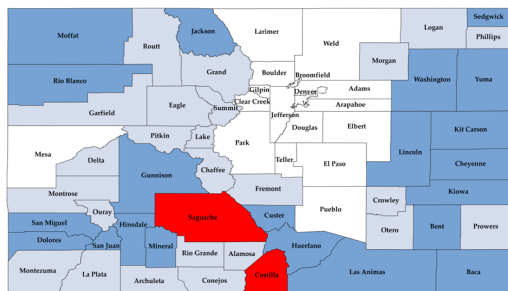


# Demographics

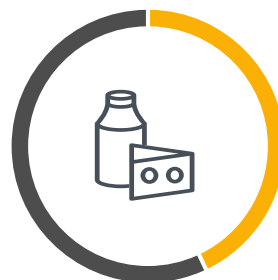
## Poverty and Hunger

## POVERTY

2022 Poverty Guidelines for the 48 Contiguous States:  
\$27,500 for a family of four.



17% of rural kids live in poverty defined as income of \$27,500 per family of four, compared to 10% of urban kids. In Costilla and Saguache Counties, 32% of children are living in poverty. 83% of children in Saguache County are eligible for free or reduced lunch. The state average is 41%.



43% of households receiving SNAP benefits have children.

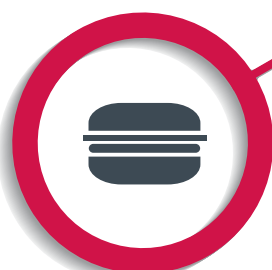


Supplemental  
Nutrition  
Assistance  
Program

Percent of households on SNAP:  
Colorado 7.5%(+0.5%)  
Metro: 7.2% (+0.5%)  
Rural 12.6%(+2.8%)

44% of students in small rural schools are eligible for free or reduced lunch

People in rural Colorado were more likely to struggle with food access: 12.0% of Coloradans in rural areas reported experiencing food insecurity, compared with 9.3% of Coloradans in urban



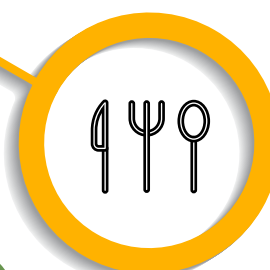
Within rural Colorado, rates of food insecurity varied widely. In Southeast Colorado (Huerfano, Otero, Las Animas, Bent, Crowley, Kiowa, Prowers, and Baca counties), 18.1% of residents experienced food insecurity last year — four times the rate of the central plains (Kit Carson, Cheyenne, Elbert, and Lincoln counties) where 4.7% of residents experienced food insecurity.



1 in 3 Coloradans are struggling with hunger.

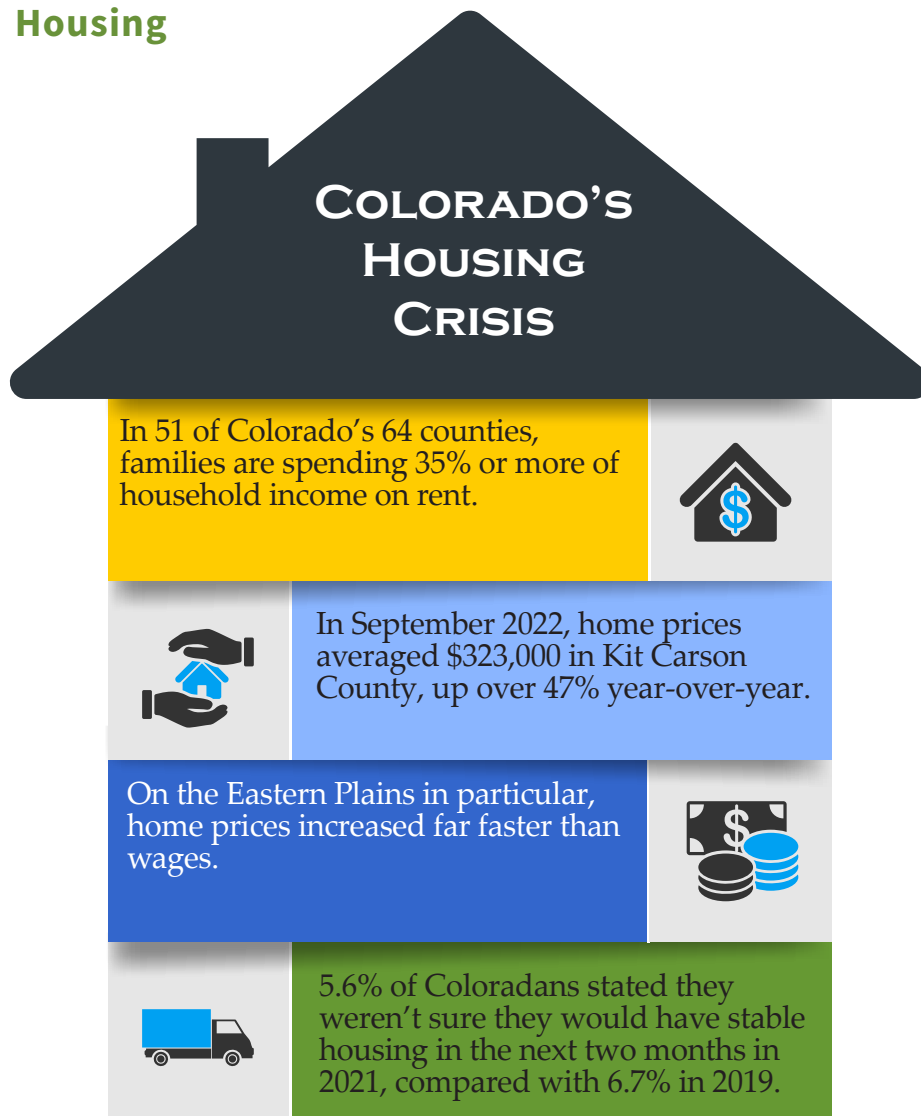


There are over 474,000 people facing hunger in Colorado with just under 142,000 of them being children.

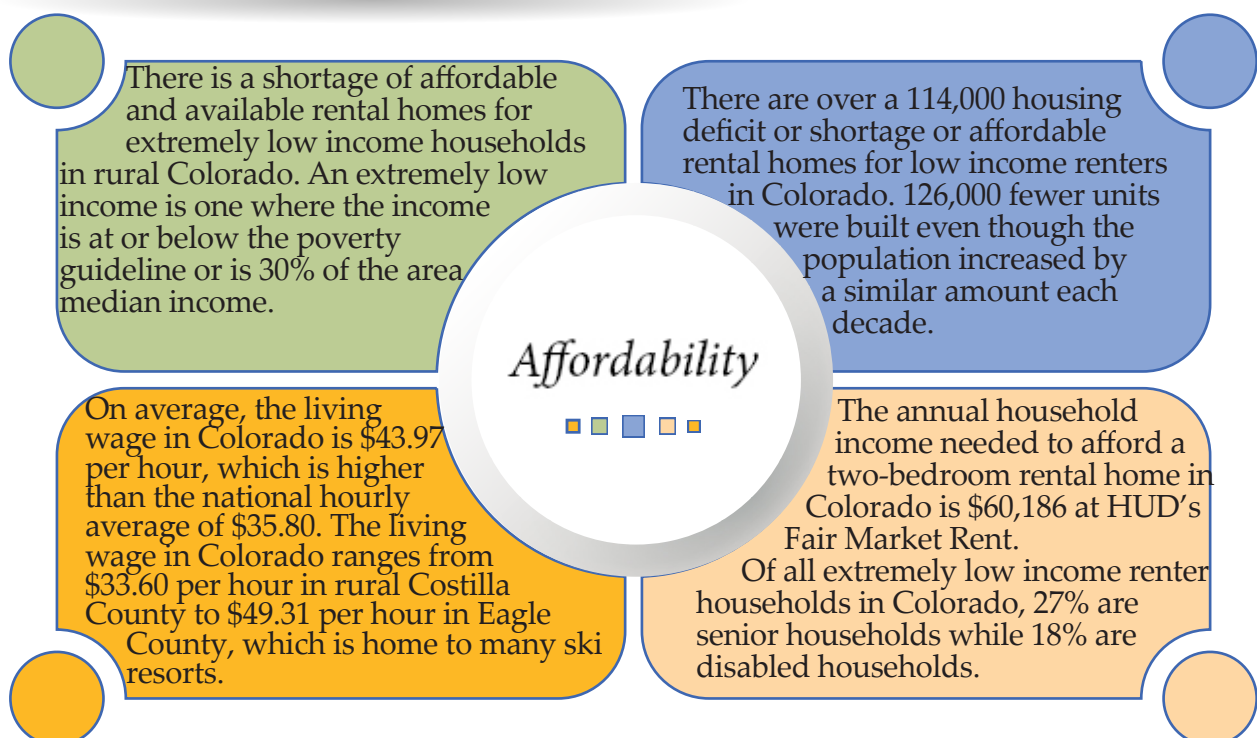


Costilla and Crowley are the rural counties with the highest percentage of people facing food insecurity at 17%. The state rate of food in security is 8%.





*22% of renter households in Colorado are considered extremely low income.*

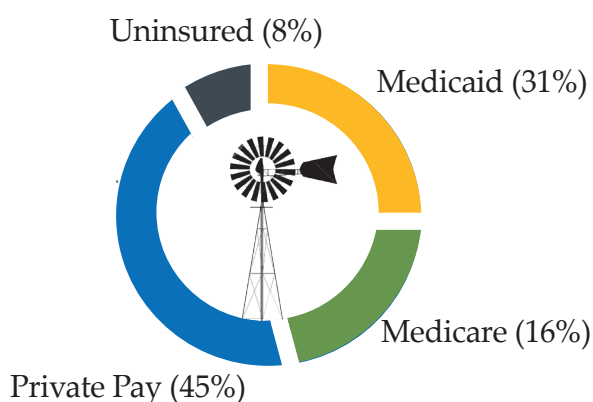




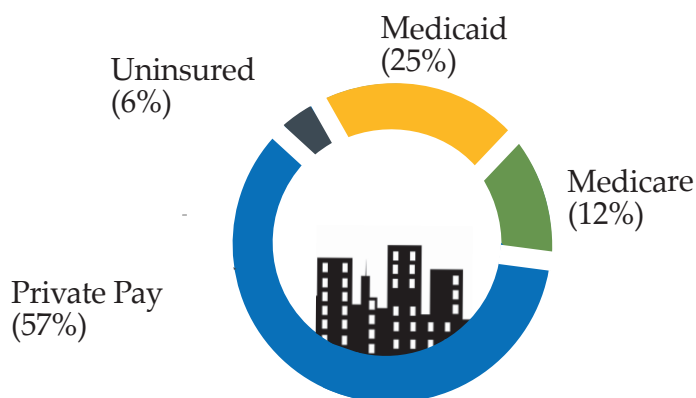
*Access to healthcare means having the timely use of personal health services to achieve the best health outcomes. This is multi-faceted and determined by:*

1. Gaining entry into the healthcare system
2. Receiving needed services that are affordable from the appropriate providers at accessible sites
3. Development of relationships between a patient and provider based on mutual communication and trust

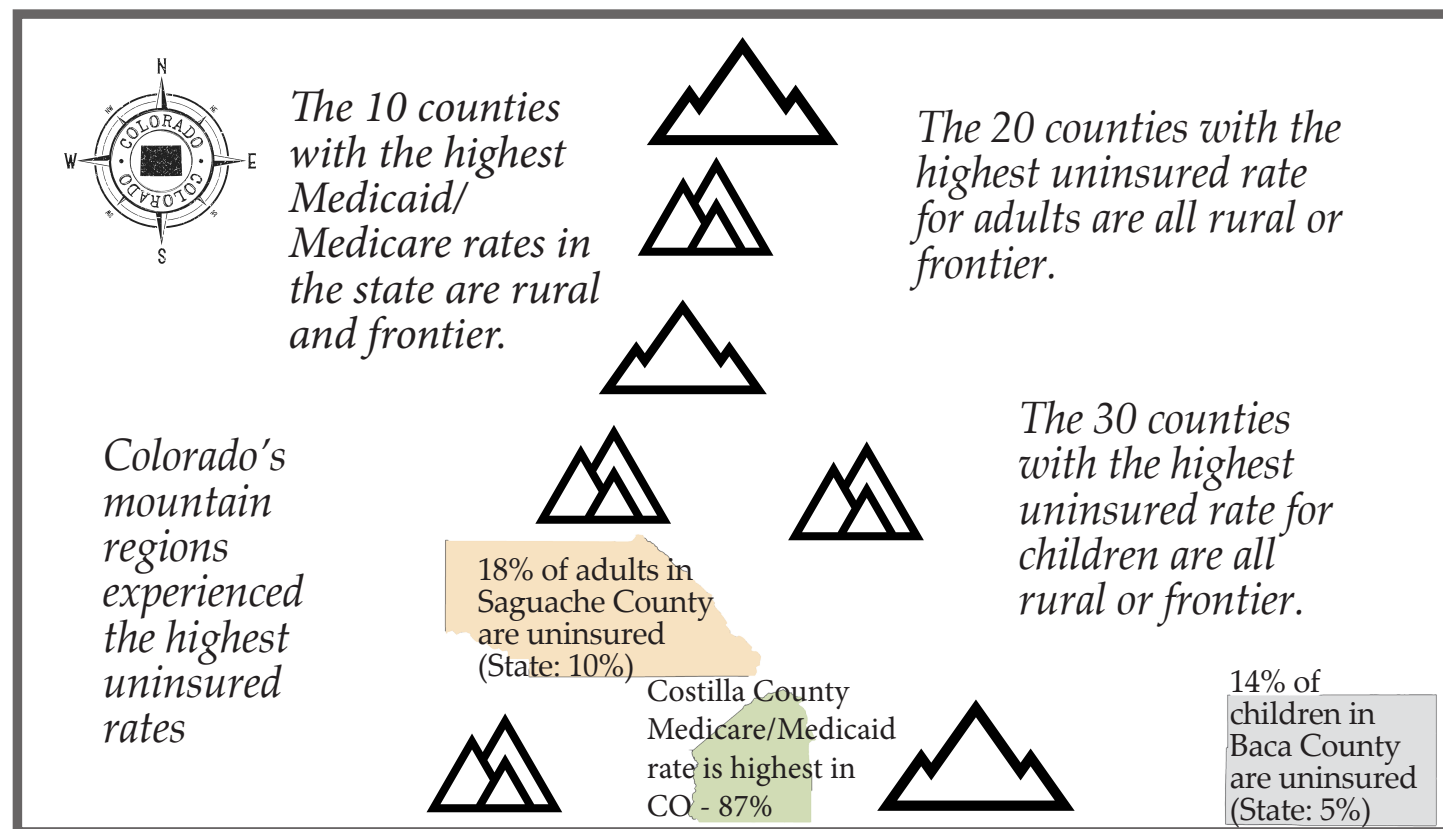
**Rural Payer Mix**



**Urban Payer Mix**



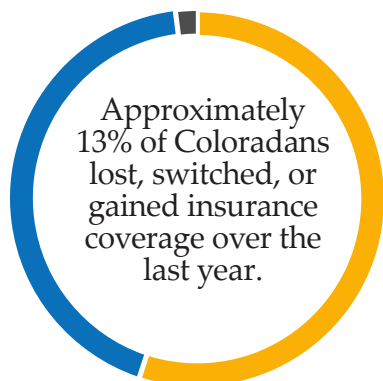
### Healthcare Coverage - A Geographic View





*Rural areas have the fewest insurance options, the highest premiums, and are marked by more volatile and vulnerable insurance markets when compared to their urban counterparts.*

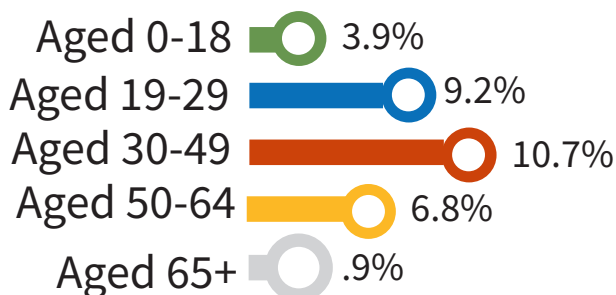
43% reported **uninsurance** caused by lost employment or changed employment by a family member who previously was insured.



55% lost prior employer coverage.



## *Who are uninsured Coloradans?*



## *What prevents uninsured Coloradans from having coverage?*

The person who had health insurance lost their job or changed employers



"The cost is too high"



"I lost eligibility for the Child Health Plan Plus or Medicaid"



11.3% of Coloradans had problems paying medical bills in the past 12 months.



19.6% of Coloradans had a surprise medical bill in the past 12 months.





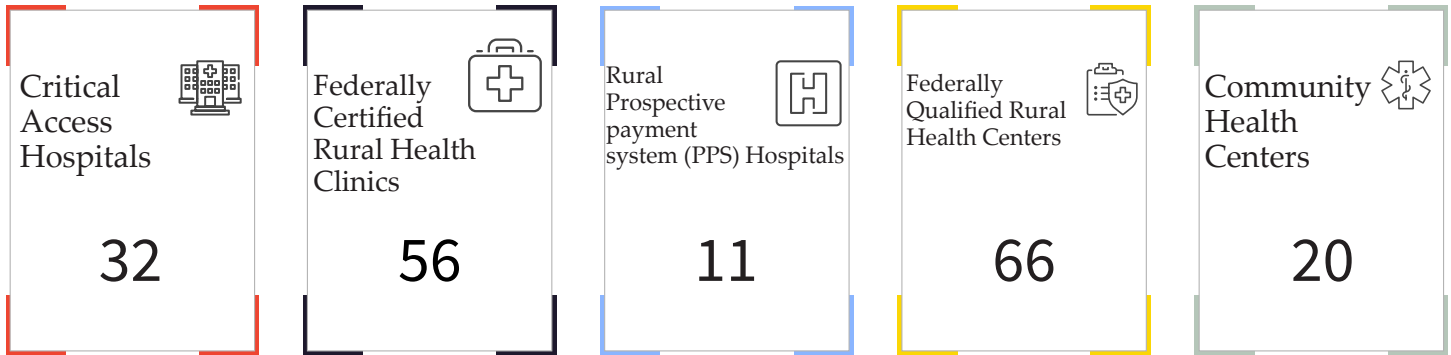


# The Health of Rural

## ACCESS

*Rural areas have insufficient access to primary care and other healthcare services which results in poorer health outcomes, higher costs and, higher acuity conditions at time of treatment.*

### Facility Types



### Definitions

#### CRITICAL ACCESS HOSPITALS

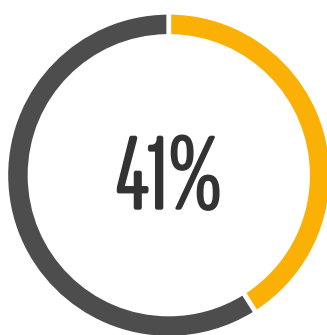
Critical Access Hospitals (CAHs) were created by Congress in 1997 to support the fragile rural healthcare system. CAHs have 25 or fewer inpatient beds and are located in a designated rural area more than 35 miles from another hospital. CAHs receive cost-based reimbursement from Medicare plus 1%. The 32 CAHs across Colorado improve access to care by keeping essential services in rural communities.

#### Federally Certified RURAL HEALTH CLINICS

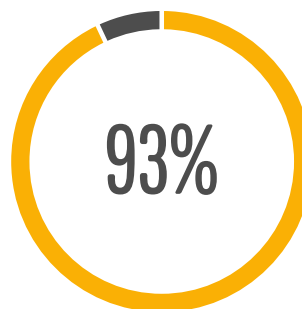
The 56 RHCs across Colorado provide primary and preventative health services to an estimated 130,000 Coloradans annually. Independent RHCs are paid an all-inclusive rate of \$126 per visit by an eligible practitioner. Provider-based RHCs, or meaning those associated with a hospital, are paid cost-based reimbursement with an annual increase not to exceed annual medical inflation. In either case, payments to RHCs often do not cover the cost of a visit, which impacts the clinic sustainability and leaves these facilities dependent on a patchwork of other funding sources such as grants, donations, or local support.

## RURAL HEALTH INFORMATION TECHNOLOGY

### Broadband Access



Only 40.8% of Coloradans have broadband access through a fiber-optic service



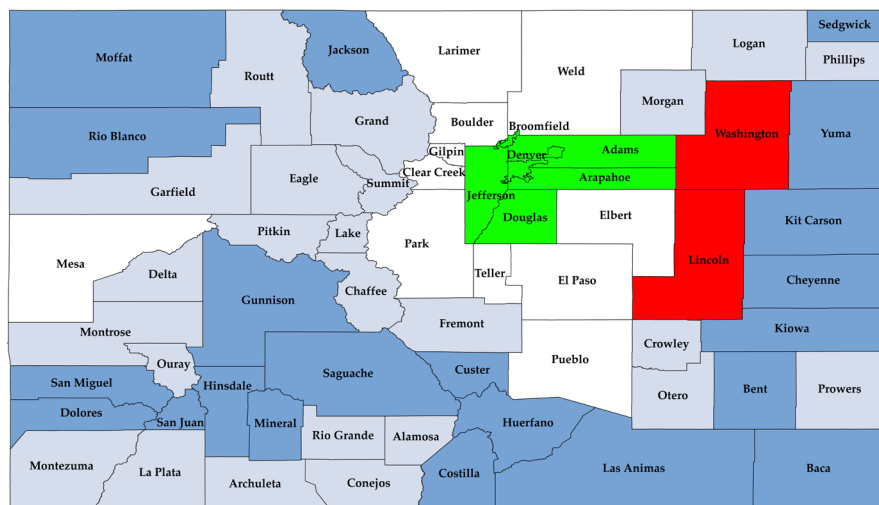
93% of rural Colorado had broadband access in April 2022, up from 70% in 2017.



The Colorado Broadband Office has a goal to connect 99% of households to broadband by 2027.



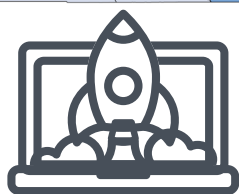
## County Broadband Leaders and Follower



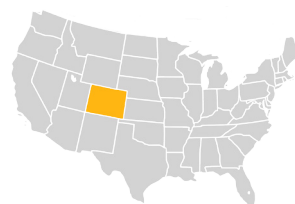
The 2 counties with the worst broadband coverage are rural or frontier with less than 50% coverage and include **Lincoln and Washington**. The county with the worst broadband coverage is Lincoln with 45.8% broadband coverage.

The 6 counties with the best broadband coverage are urban with greater than 96% coverage and include **Adams, Douglas, Jefferson, Arapahoe, Denver, and Broomfield**.

The county with the best broadband coverage is Denver with 99.2% broadband coverage.

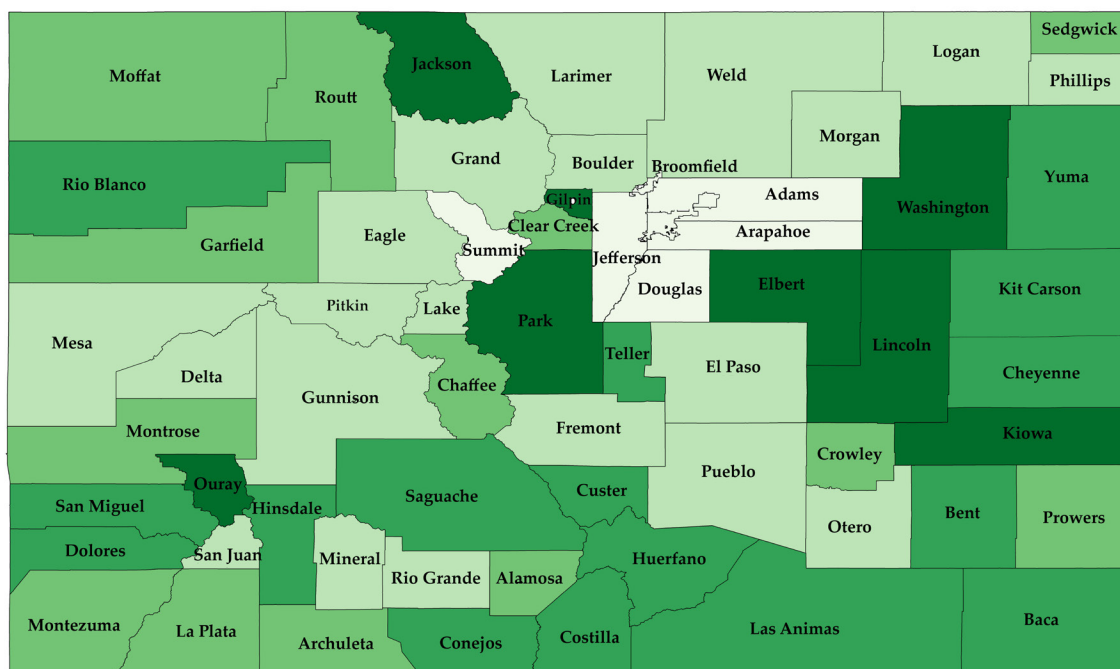


*The expansion of broadband in Colorado is expected to support and strengthen economic opportunity, specifically in our growing rural communities.*

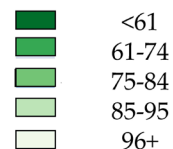


*Colorado ranks 15th of all states for 1 GB broadband access - 79.8% of people have access. Last year, only 4.0% of Coloradans had this access.*

## Broadband Access by County, 2021



% Broadband Coverage







# The Health of Rural

## HEALTH INFORMATION TECHNOLOGY (HIT)

### Electronic Medical Records (EMR) Costs

There are 2 main types of EMR Pricing Models: Perpetual License or Subscription License.  
Costs for one rural healthcare facility:

#### Perpetual License



*One time license fee of \$1,200-\$500,000+ with additional costs for hardware, ad hoc and maintenance costs (patches, upgrades, etc.), plus hidden costs affiliated with customization, system integration, and staff overtime to maintain servers.*

#### Subscription Monthly License



*\$200-\$35,000 with hidden costs affiliated with customization, system integration, storage.*

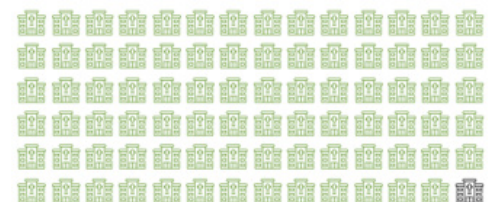


### Rural Connectivity Program, 2021-2022

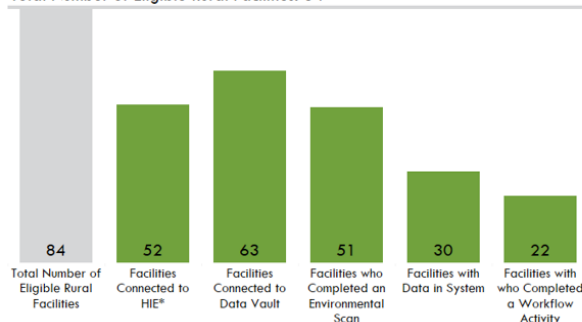
The Rural Connectivity Program is a program funded by the Office of eHealth Innovation, in partnership with Colorado Rural Health Center, Department of Health Care Policy and Financing, and in partnership with the Colorado Community Managed Care Network (CCMCN).

The goals are to establish a sustainable model for rural connectivity, including connecting providers to Colorado's Health Information Exchanges, supporting rural providers to adopt health information, data sharing, and analytics/tools to support care coordination and quality measurement.

**99%** (83 out of 84) of Rural Health Facilities are **Connected** with Health Information Exchange



Total Number of Eligible Rural Facilities: 84



*Dedicated Funds: 4*

*Percent Increase in Connected Facilities: 167.7%*

*Total Number of Cases in the CRHC Data Vault: 1.6 Million*

### Telehealth

- Federal policy changes paved the way for payers loosening restrictions on telemedicine access and reimbursement at the start of the pandemic.
- Although telemedicine is seen as expanding access, some rural patients experience greater access challenges with telemedicine due to poor internet services/broadband.
- Services delivered via telehealth increased under all provider types, with mental and behavioral health increasing the most





## Telehealth in Colorado

Among the 33% of Coloradans who used telemedicine in 2021, 80% indicated that the quality was equal to in-person care.



Urban Telehealth Users 39%  
Rural Telehealth Users 33%

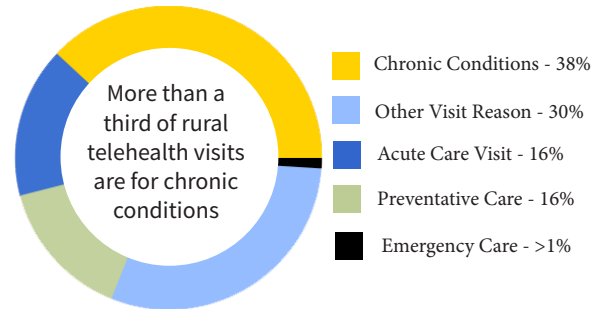
Over 33% of Coloradans expressed that they are not likely to use telemedicine in the future for fear that their needs would not be met and/or the quality of care would be lower.



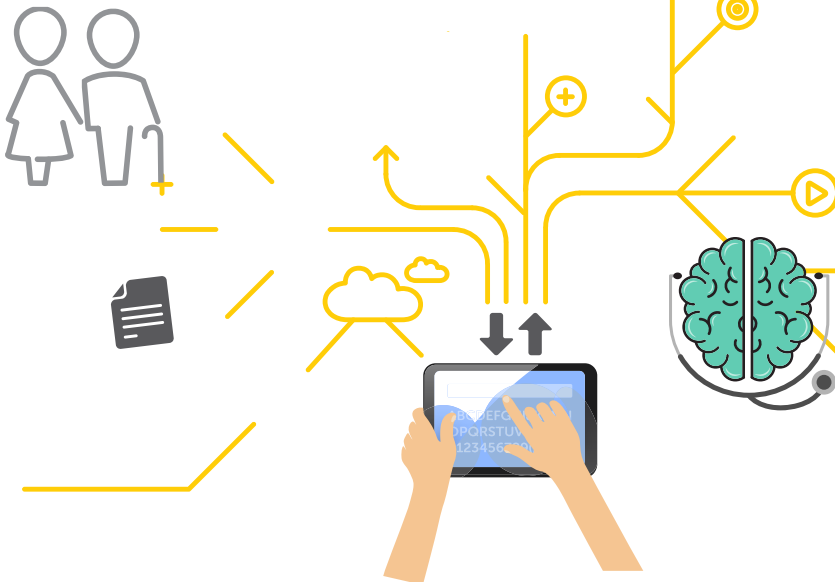
*Nearly 30% of rural telehealth visits in 2022 were for primary care.*

## Surveying Rural Colorado Telehealth Patients

In a survey conducted by the COVID-19 Healthcare Coalition, 2,007 persons across the US who received at least one telehealth service during the pandemic answered a 20 question survey. Of respondents that identified as rural residents:



*Coloradans aged 65+ have the lowest rates of telemedicine use.*



*Office visits and psychotherapy were the most common services delivered via telehealth, at about 80% of total telehealth services.*

*Poor internet connections (8%) and issues with provider telemedicine portals (8%) were some issues reported, however these issues affected rural and urban areas equally.*





# The Health of Rural

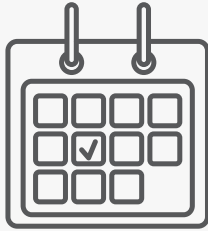
## WOMEN'S AND MATERNAL HEALTH

### Women's Health

In 2020, there were 58.4 million women of reproductive age (18-44) and 72.8 million children under the age of 18 in the US.

40%

Women of reproductive age and children make up roughly 40% of the nation's population



36% of rural women had their first prenatal care visit at 3 months.



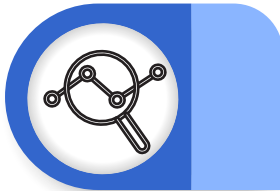
In 2020, 75.4% of Colorado Females aged 21-65 reported having a pap within the past 3 years. In rural Colorado 73.9% of women report being up to date compared to 75.6% in urban.



According to the 2022 American Health Rankings Health of women and children report, Colorado's strengths included low prevalence of obesity among women, low prevalence of physical inactivity among women, and high prevalence of neighborhood amenities.

### Birth Rates

*Rural Colorado has a 40% higher teen pregnancy rate than urban parts of the state.*

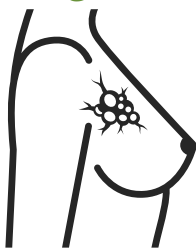


The number of births in rural areas have decreased overtime, declining from 8,000 births annually in 2000 to 6,596 in 2022.



25% of rural births listed maternal marital status as not married. 17% of rural births had a maternal annual income of less than \$15,000. 40% of rural births had a maternal educational attainment of a highschool diploma or less (compared to 13% in urban).

### Mammograms



In 2020, 72% of Colorado Females 50-74 reported having a mammogram within the past 2 years.



*Rural women have consistently been more likely to be out of date with mammogram screenings with 65.6% of rural women being up to date in 2020 compared to 73.9% of urban women.*



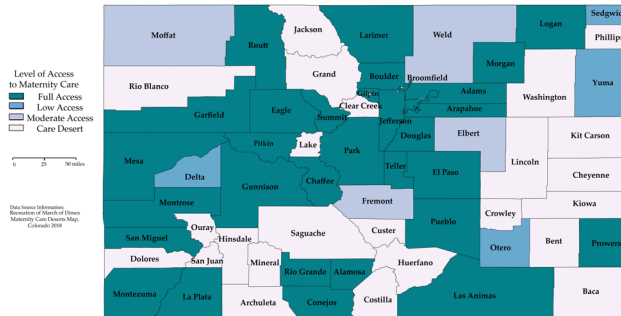
The percent of rural women up to date with their mammogram has remained flat since 2012 when 64.6% of women reported being up to date.



## Access to Obstetric Care

### Access to Maternity Care

54% of rural Colorado counties lack OB services.



In the US, the number of maternity care deserts has increased by 2% since the 2020.

24 counties in Colorado are considered "Maternal Care Deserts" - areas where there are no OB providers and no hospitals or birthing centers offering OB care.

In the United States, 7 million women live in counties with limited or no access to maternity care. This affects approximately 500,000 births per year.

25% of rural deliveries were performed by midwives.

### Who Delivers Rural Babies?

Family Medicine Physicians provide essential maternity care in rural areas of the US. In one study consisting of 185 rural hospitals, 67% of babies at these hospitals were delivered by family physicians and 27% of babies were only delivered by those physicians at these hospitals.

Only 8% of all obstetric providers in the United States reported that they practiced in rural areas. 6% of rural Colorado births in 2021 happened at birthing centers and homes.

On average, patients were required to drive 86 miles round-trip to access care if these family physicians were to stop delivering.







# The Health of Rural

## Maternal Mortality

*60% of maternal deaths in Colorado are preventable.*



Rural areas experience a higher pregnancy-related mortality ratio. In 2015, rural areas in the United States observed a pregnancy-related mortality rate of 29.4 per 100,000 live births compared to 18.2 in urban areas.



Over half of pregnancy-related maternal deaths occur between the date of delivery and up to 1 year after delivery.



According to the Maternal Mortality Review Report released in July 2021, mental health conditions contributed to 25% of maternal deaths.



A Colorado State report indicated that between 2014 and 2016, there were 94 maternal deaths during the year following pregnancy. Of those, 17% (16) were suicides.

*The United States has the highest maternal mortality rate of all developed countries in the world.*



For black women in Colorado, risks are 3-4Xs higher than white women at all levels of income or education.

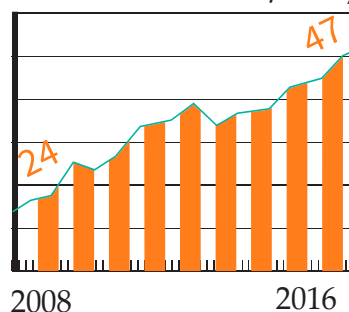
Rates of maternal death are not evenly distributed across the population. In the US, individuals of color and those with low socioeconomic status experience higher rates of maternal death.

## Top Causes of Maternal Deaths in Colorado

1. Suicide
2. Unintentional drug overdose
3. Injuries, including motor vehicle accidents
4. Homicide, over 50% of which were committed by an intimate partner
5. Cardiac conditions



## Maternal Deaths/100,000



The pregnancy-associated mortality rate in Colorado nearly doubled from 24 per 100,000 live births in 2008 to 47 per 100,000 live births in 2016.



## Disparities

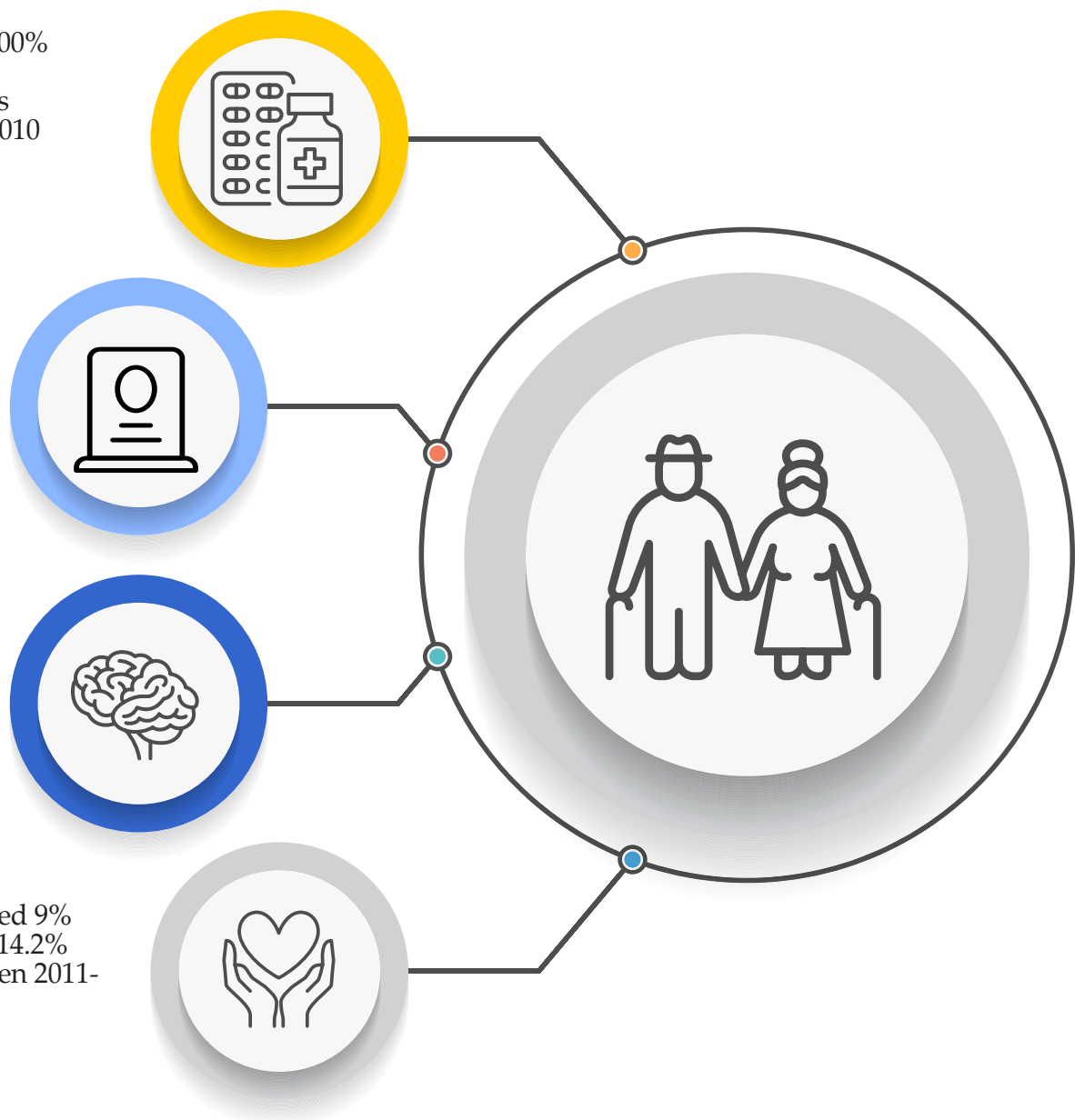
## OLDER AMERICAN'S HEALTH

Drug deaths increased 100% in the US from 4.2 to 8.4 deaths per 100,000 adults ages 65+ between 2008-2010 and 2018-2020

Early deaths increased 17% in the US from 1,764 to 2,072 deaths per 100,000 adults ages 65-74 between 2019 and 2020

Suicide rates increased 13% in the US from 15.0 to 16.9 deaths per 100,000 adults ages 65+.

Depression rates increased 9% in the US from 13.0% to 14.2% of adults ages 65+ between 2011-2020







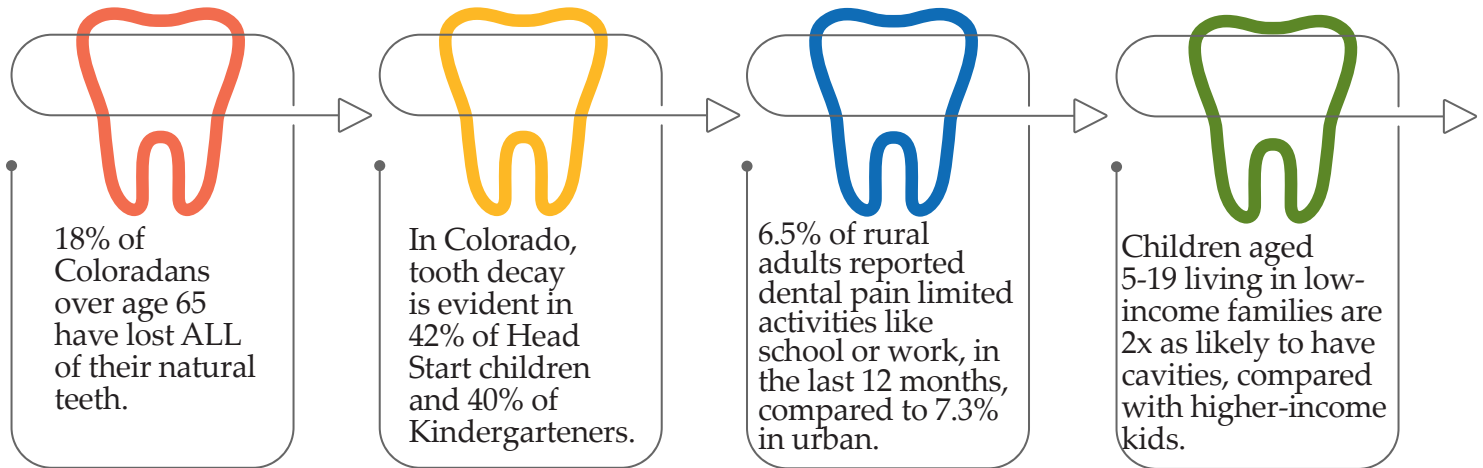
# The Health of Rural

## ORAL HEALTH

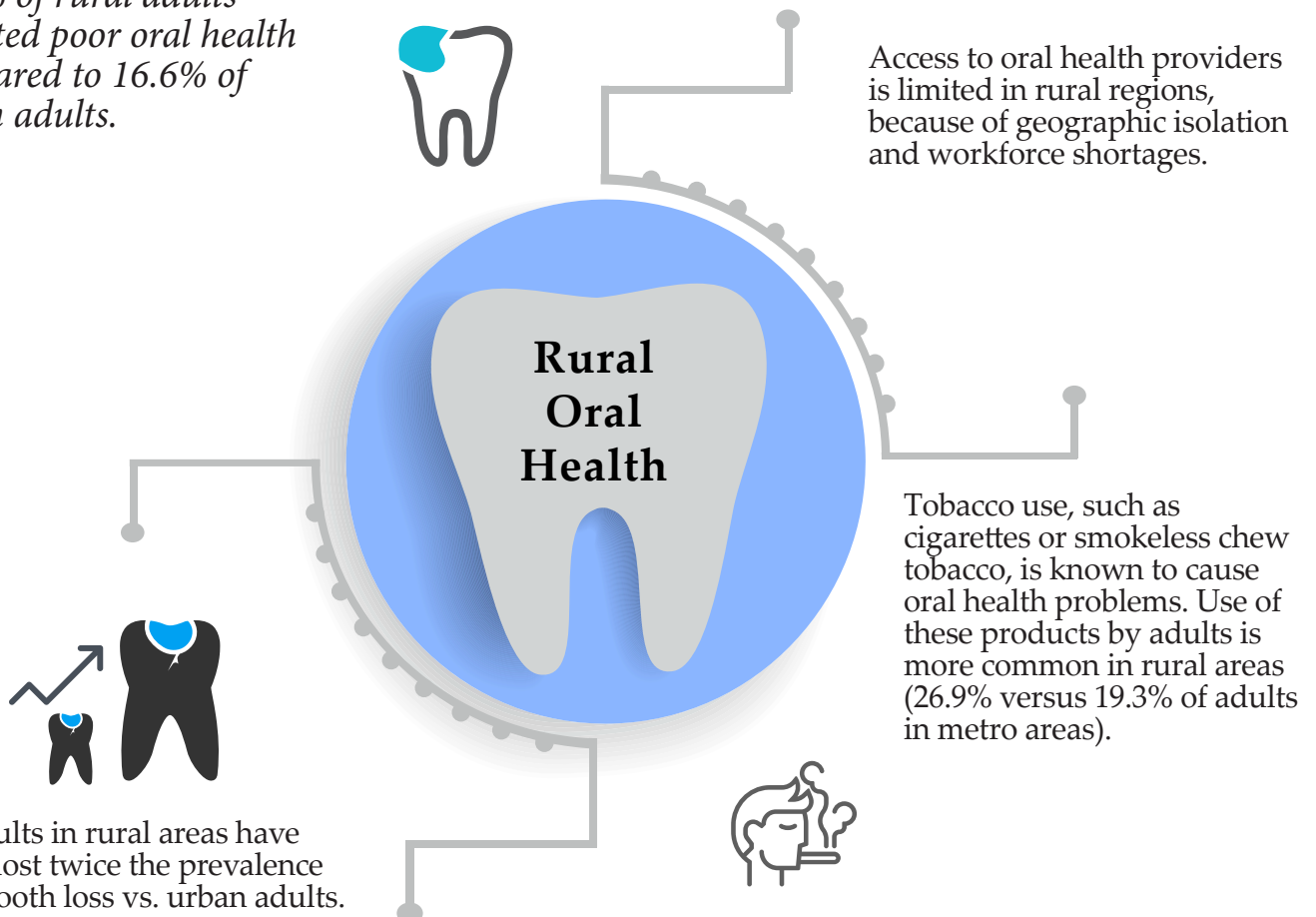


### Dental Outcomes

*Physical, oral, and mental health are all interconnected. People who reported better health also indicated that their mental and oral health were good. Coloradans experiencing poor oral health were more likely to experience fair or poor overall health.*



*20.2% of rural adults reported poor oral health compared to 16.6% of urban adults.*





## Dental Access

*People who live in rural areas and black and hispanic/latinx Coloradans were less likely to get dental care.*



In 2021, over 67% of Coloradans reported seeing a dentist or dental hygienist in the past year compared to 74% in 2019.



Only 19 of 47 rural counties (40%) have at least one low fee dental clinic that offer dental care on a sliding fee scale to individuals who are unable to afford treatment.

## Barriers to Care

*64.3% of adults in rural report visiting a dentist or hygienist in the last 12 months compared to 67.6% of adults in urban areas. Urban areas have consistently reported a higher rate of dentist visits over time compared to rural areas.*



*Cost of dental healthcare is a larger barrier in rural.*



7.4% of adults in rural (compared to 6.2% in urban) report they did not get dental care in the last 12 months because it was challenging to find a dentist or hygienist that they could relate to.



*Rural areas have lower health literacy, including oral health literacy.*



Low health literacy can cause poor oral health outcomes due to poor oral hygiene, difficulty navigating the oral healthcare system, and a higher likelihood of consuming sugar-sweetened beverages and are more prone to cavities.



## ORAL HEALTH



**11 rural counties** do not have an active licensed dentist. This contributes to a disparity in access: In rural areas, just 67.0% of residents saw a dental professional in the past year, compared with 75.0% of Coloradans in urban areas.

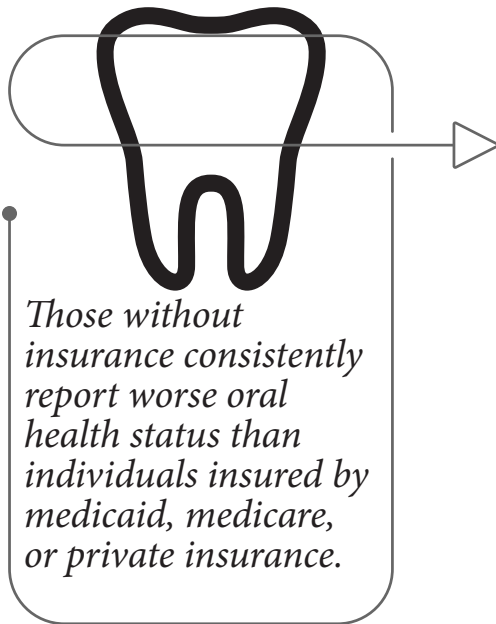




# The Health of Rural

## Dental Coverage

*Dental insurance coverage has increased for all Coloradans. In rural Colorado, the rate of insurance coverage increased from 50.1% in 2013 to 67.4% in 2021. Still, rural Coloradans remain under insured, lagging behind the 80% of urban adults reporting they have coverage.*



*Those without insurance consistently report worse oral health status than individuals insured by medicaid, medicare, or private insurance.*

Coloradans who did not have dental insurance or were enrolled in Health First Colorado, the state's Medicaid program, used significantly less dental services than those with private insurance.

Young children enrolled in Medicaid were less likely to see a dental professional in 2019 than in 2017.

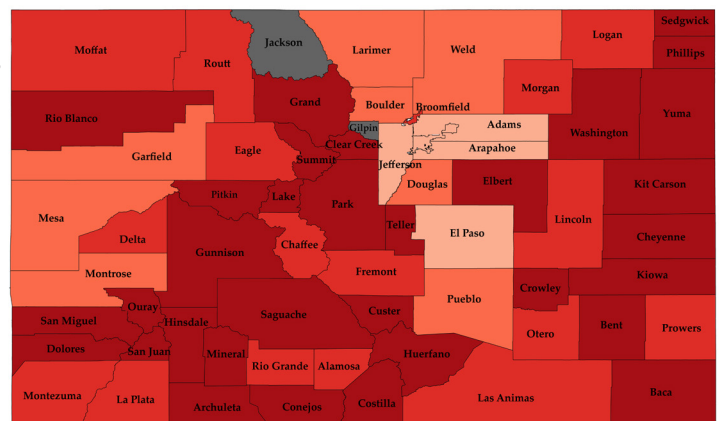
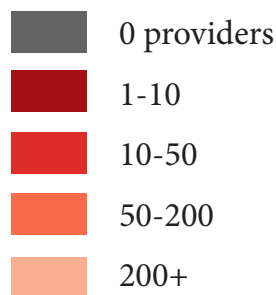
Although more people were insured in 2021, fewer people saw a dentist. 23% of Coloradans cited fears about contracting COVID-19 for not receiving dental care.

Coloradans with dental insurance were more likely to utilize dental services in the past year compared with those without dental insurance. However, Coloradans enrolled in Medicaid utilized dental services at lower rates than those with private insurance.



*People in rural and frontier areas of the state face provider shortages, which can make it difficult to receive dental care. The majority of dental offices who accept Medicaid are located along the Front Range. And in many parts of the state, there is no dentist within a 15-minute drive.*

## Number of Dental Providers That Accept Medicaid





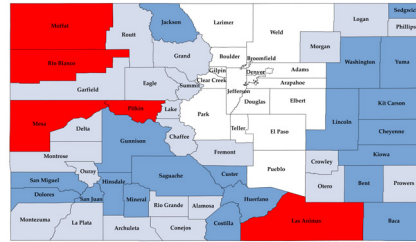
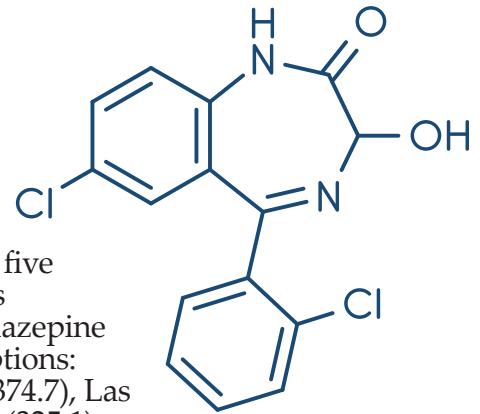
# PRESCRIPTION DRUGS

## Benzodiazepines

The Annual age-adjusted rate of benzodiazepine prescriptions dispensed per year has declined significantly since 2014 from 329.1 per 100,000 to 211.0 per 100,000

*Opioids are still heavily prescribed throughout Colorado but higher rates are seen in rural Colorado.*

Significantly more females had a benzodiazepine prescription filled - Female (259.1) Male (160.8).

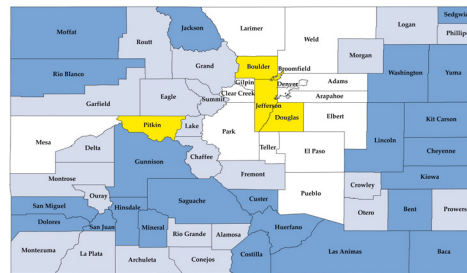


The top five counties benzodiazepine prescriptions: Pitkin (374.7), Las Animas (325.1), Rio Blanco (313.9), Moffat (309.5), and Mesa (305.3).

## Stimulants



Males were significantly more likely to have a prescription for stimulants dispensed - Females 161.8 Males 180.2



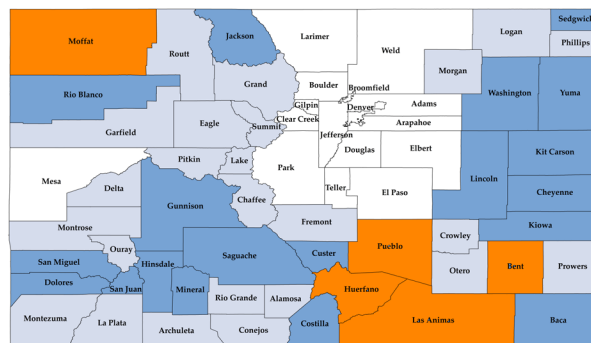
There is a significantly higher rate of stimulants dispensed in urban areas compared to rural. Top five counties for stimulants dispensed: Pitkin (323.1), Douglas (259.3), Broomfield (233.2), Boulder (199.1), Jefferson (198.0).

The annual age-adjusted rate of stimulant prescriptions dispensed has significantly increased since 2014. 2014 (147.8), 2015 (157.0), 2016 (165.4), 2017 (175.2), 2018 (182.6), 2019 (171.4)

## Opioids

Since 2014, the rate of opioid analgesic prescriptions dispensed per 1000 residents has decreased significantly. 2014 (739.6), 2015 (766.6), 2016 (723.1), 2017 (637.8), 2018 (549.4), 2019 (489.0)

*In 2021, 6% of youth reported using prescription pain medicine without a prescription in the past 30 days*



Throughout Colorado, the highest rate of opioid prescriptions dispensed is seen within SE Colorado. The top five counties, with their prescribing rates, are Pueblo (790), Las Animas (755.7), Huerfano (750), Moffat (662), and Bent (649).

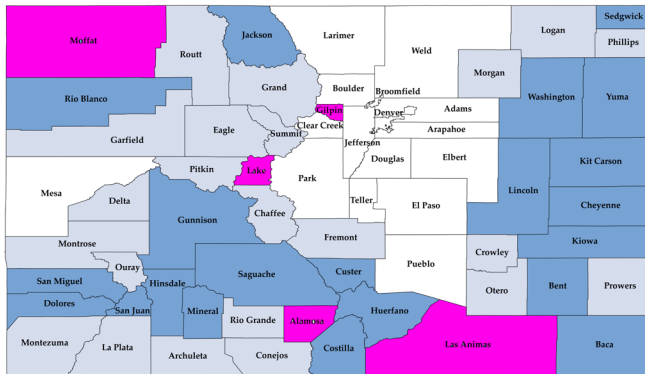




# The Health of Rural

## DRUG USE DISORDER

### Overdoses



The top five counties with the highest rates of drug overdose deaths were: Las Animas (92.8 per 100,000), Alamosa (78.9 per 100,000), Lake (63.5 per 100,000), Gilpin (51.9 per 100,000), and Moffat (58.8 per 100,000).

The top five counties with the highest rates of any opioid overdose death: Las animas (69.5), Alamosa (50.6 per 100,000), Moffat (45.1), Gilpin (45.5 per 100,000), Rio Grande (39.5)

2020-2021 Age-Adjusted rates of drug overdose deaths due to methamphetamine in Colorado: 10.7 per 100,000. Rates are significantly higher among male (15.4) compared to female (6.0)

2020-2021 Average annual age-adjusted rate of drug overdose suicide : 2.6 per 100,000. Drug overdose suicides were higher among females(2.9) compared to males (2.4)

2020-2021 Age-adjusted rate of drug overdose deaths due to any opioid in Colorado: 18.9. Rate is significantly higher among males (25.6) compared to Females (11.9)

2020-2021 Average annual age-adjusted rate of drug overdose deaths per 100,000 residents: 28.3

US law enforcement seized more than enough fentanyl to kill all Americans in 2022

### Hospitalizations



ED Visits for any opioid overdose have significantly increased since 2016.



From 2019 -2021, the average annual age-adjusted rate of ED Visits for overdose involving all drugs per 100,000 residents: 199.7



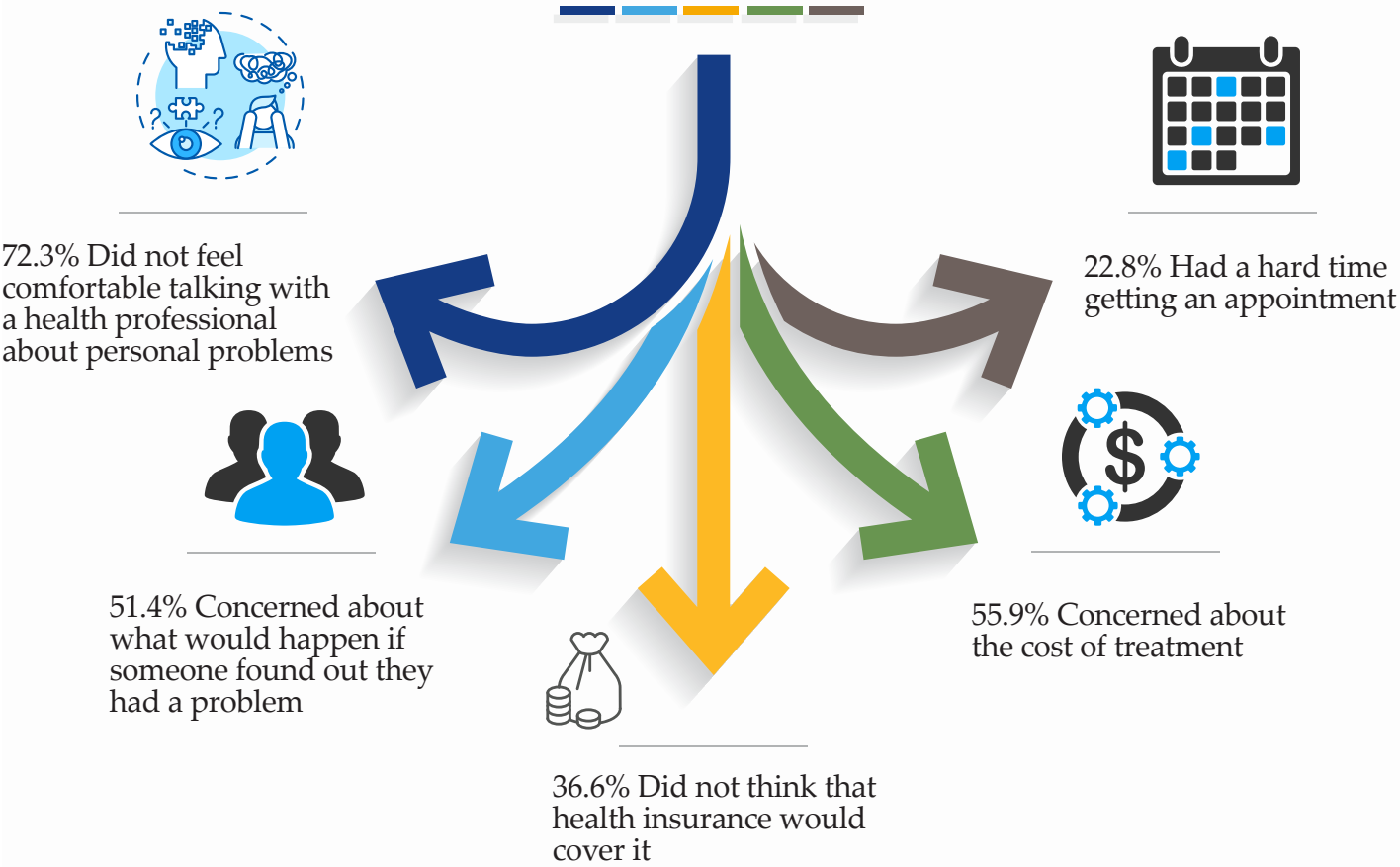
Hospitalization was significantly higher per 100,000 among Females (225.3) compared to Males (175.6)."



# SUBSTANCE USE DISORDER

## Substance Use Treatment

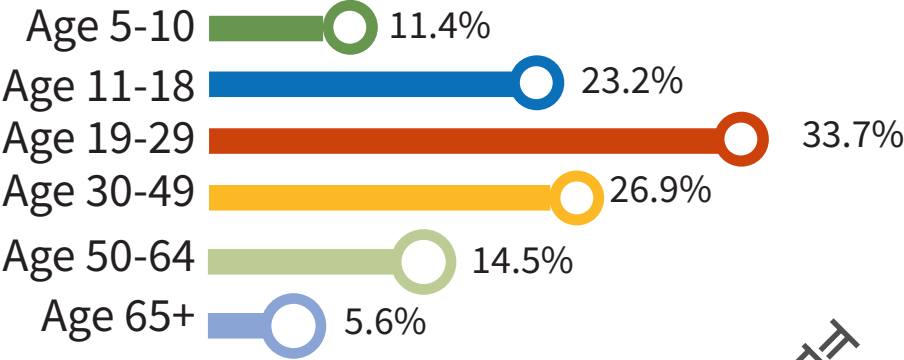
About 80,000 Coloradans didn't get needed substance use treatment in 2021. Stigma and cost were cited as common reasons why.



Younger adults were more likely to report needing behavioral health services in the next year. Age groups reporting needing behavioral health services in the next month:

## Narcan

From July 2019 through June 2020, the Colorado Department of Public Health and Environment purchased 10,454 doses of Narcan to distribute to harm reduction organizations, law enforcement agencies, public health departments and schools.



51,631

July 2020 through June 2021, 51,631 doses

124,000

July 2021 through June 2022, 124,000 doses





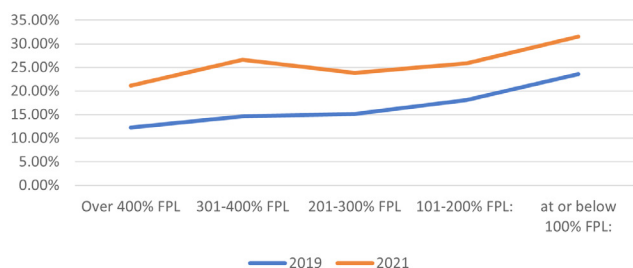
# The Health of Rural

## MENTAL AND BEHAVIORAL HEALTH

### Mental Health

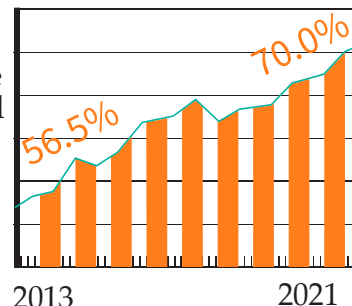
*In 2021, more than a quarter of Colorado youth felt they didn't have an adult to go to for help with a serious problem. Over 19% of youth reported having a longterm emotional or learning disability.*

Percentage reporting eight or more poor mental health days in the past month by income, 2019-2021



*Percentage reporting they did not think their health insurance would cover mental healthcare services*

Concerns about adequate insurance coverage prevented many Coloradans from getting mental health services

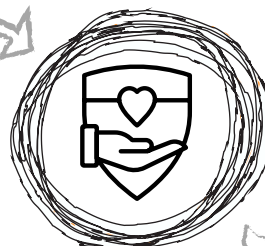


### Dig Deeper

Visit [coruralhealth.org/snapshot2023](https://coruralhealth.org/snapshot2023) to view our interactive mental health dashboard.



Anxiety among children ages 3-17 increased 23% between 2017-2018 and 2020-2021, from 7.5% to 9.2%, while depression increased 27%, from 3.3% to 4.2%.



In 2018, 15.4% of rural adults reported having anxiety disorder compared to 19.5% in urban and 18.9% in Colorado.

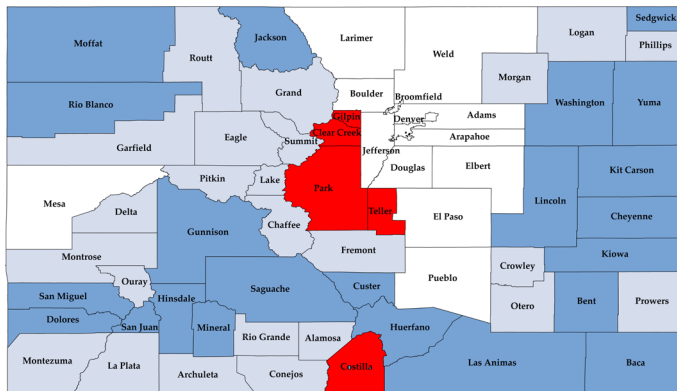


The percentage of adults in rural reporting being depressed has increased since 2012 with 14.3% reporting being depressed in 2012 compared to nearly 1/5 of adults in 2021

### Rural Suicide

*Rates of suicide in Rural Colorado are significantly higher than in urban. Suicides have significantly increased in rural, rising from 19.52 per 100,000 (134) in 2010 to 28.2 per 100,000 (202) in 2021.*

*Suicide rates as in Costilla County as as high as 48.4 per 100,000*



7.2% of youth reported a suicide attempt in the past year with the greatest burden being in Park, Teller, Clear Creek, and Gilpin Counties. 13.1% of youth reported a past year attempt in this region.



## Alcohol Use

15%

In 2021, 15% Of Colorado youth reported having their first drink of alcohol, before the age of 13. These percentages are higher in rural areas of Colorado compared to urban.



12.5%

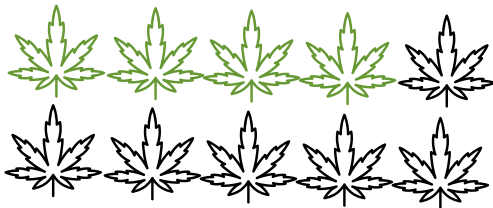
12.5% of rural Colorado youth reported binge drinking on one or more of past 30 days. Prevalence of binge drinking among youth was significantly higher in rural compared to urban areas.



In 2021, heavy drinking was higher in rural Colorado (7.7%) compared to urban (7.2%). Prevalence of heavy drinking has increased throughout the state since 2012, Increasing from 6.5% in 2012 to close to 7.3% in 2021 . Prevalence has been consistently higher in rural compared to urban.



## Marijuana



In 2021, 40.3% of Colorado youth thought it would be sort of easy or very easy to get marijuana. Rural areas were significantly higher than urban. The highest prevalence was in Park, Teller, Clear Creek, and Gilpin counties where 53.8% of youths perception of access was easy.

In 2021, 13.3% of Colorado youth reported using marijuana one or more times in the past 30 days. The prevalence of marijuana use is highest in Park, Teller, Clear Creek, and Gilpin counties where 21.4% of youth report past 30 day marijuana use.



13%

### Dig Deeper

Visit [coruralhealth.org/snapshot2023](https://coruralhealth.org/snapshot2023) to view our interactive substance use dashboard.

## Tobacco Use

*In 2021, 30.4% of youth reported using an e-vape product, and 20.8% reported ever smoking a cigarette*

**\$1.89 Billion/Yr**  
Smoking-related healthcare costs

**\$1.27 Billion/Yr**  
Smoking-related losses in productivity

**5,100** Colorado deaths caused by smoking each year

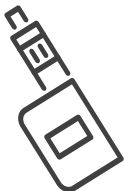
**25.7%** Portion of cancer deaths attributable to smoking

*Rural Coloradans smoke more than urban residents. Grand county lads the state with 25.5% of th population over 18 who identify as curent smokers.*

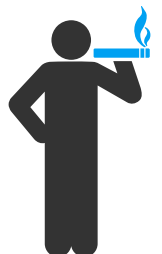
In 2020, 12.4% of Colorado adults smoked. Nationally, the rate was 15.5%.



Cigarette smoking is down 34%. From 18.4% to 12.1% of women ages 18-44 between 2013-2014 and 2019-2020



In 2021, among those underage youth who tried to buy tobacco or vaping products in a store, 72.7% were not refused because of age. This estimate was highest in Douglas county where 87.5% reported not being refused.







# The Health of Rural

## THE CLIMATE CRISIS

### Rising Temperatures

*Six of the 8 warmest years on record for Colorado have occurred since 2012.*



Since 1985, Colorado has experienced some of its highest springtime average temperatures, and since 2000, summer average temperatures have been even higher than the extreme heat of the 1930s Dust Bowl era.



Temperatures in Colorado have risen about 2.5°F since the beginning of the 20th century and have remained consistently higher than the long-term (1895–2020) average since 1998.

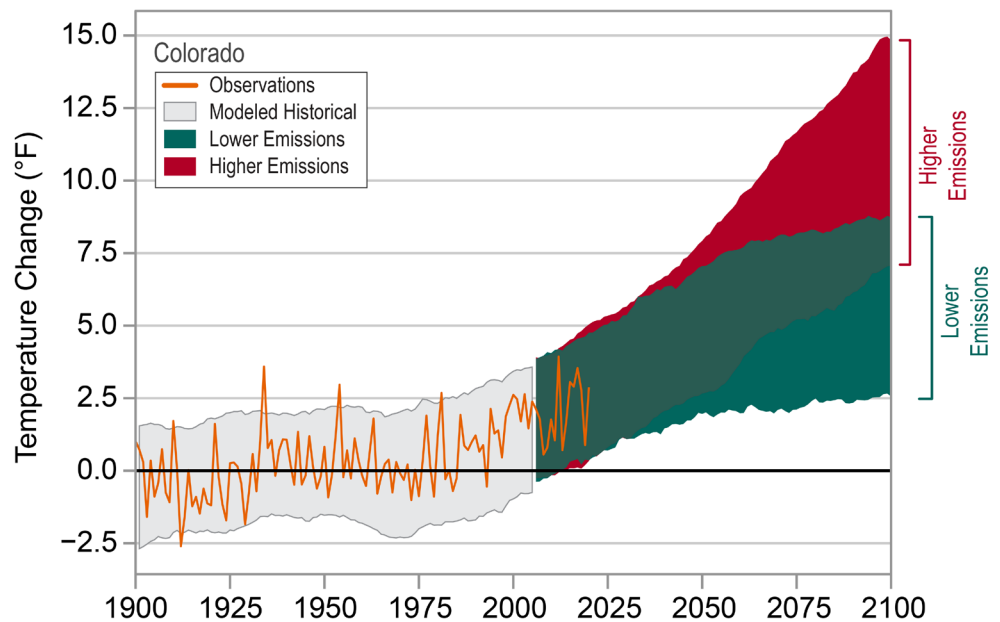


In addition to the overall trend of higher average temperatures, the number of very hot days has been above average since 2000, and the number of very cold nights has been near or below average since 1990.

Under continued climate change, projected increases in hot days and extreme heat events in the Southwest will increase the risk of heat-associated deaths. Under the higher scenario (RCP8.5), the Southwest would experience the highest increase in annual premature deaths due to extreme heat in the country, with an estimated 850 additional deaths per year by 2050.

Map: NOAA State Climate Summaries 2022 - Colorado

### Observed and Projected Temperature Change



With increasing temperatures come shifts in snowmelt runoff, water quality concerns, stressed ecosystems and transportation infrastructure, impacts to energy demands, and extreme weather events that can impact air quality and recreational opportunities.



3.5 million Coloradans live in areas where the air is considered unhealthy and which causes negative health outcomes. Poor air quality can severely affect those individuals with asthma and even diabetes.



## Historic Drought

Since 2000, annual and spring precipitation totals have been generally below average. Fall precipitation was near to above average since the 1980s, until the 2015–2020 period.

Since Colorado is a headwaters state, changes in precipitation can impact a much larger area than just the state itself. Four major US rivers have their source in Colorado: the Colorado, the Rio Grande, the Arkansas, and the Platte.

Yearly variations in snowpack depths have implications for water availability across the West and the Plains, as snowmelt from the winter snowpack feeds many rivers and streams. In years with heavy snow cover, a combination of snowmelt and widespread spring rains has the potential to cause spring flooding.

The Colorado River basin is experiencing a severe 22-year drought with extensive impacts throughout the West. This includes water for homes and crops to the generation of electricity. Drought impacts everything within the basin.



## Colorado Drought Monitor, January 2023

### Intensity:

None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

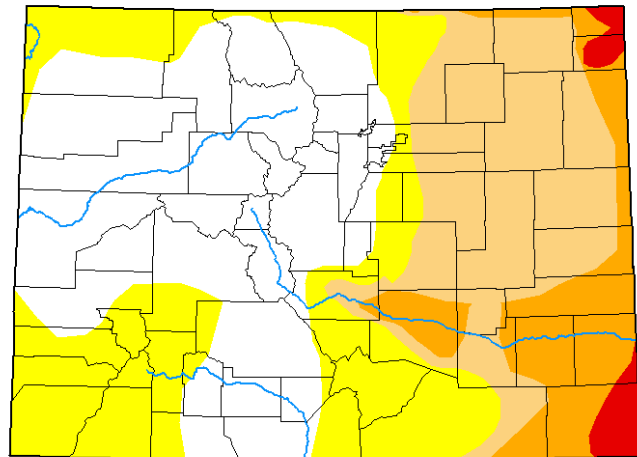
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

### Author:

Brad Pugh  
CPC/NOAA



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



## Spruce Beetle Kill



- In 2019, spruce beetle affected 89,000 acres of high-elevation Engelmann spruce across Colorado. Although the number of acres affected by this beetle declined for the fifth year in a row, it continues to expand its footprint by spreading to previously unaffected areas. Last year, it affected 25,000 new acres of forest.

- Primary areas impacted by spruce beetle include forestlands in and around Rocky Mountain National Park and portions of the San Juan Mountains, West Elk Mountains and Sawatch Range.

- The insect affected 147,000 acres of Douglas-fir and spruce trees in 2019, mostly in central and southern areas of the state. This is up from the 131,000 acres impacted by the western spruce budworm in 2018. Defoliation that occurs over several years may weaken a tree to the point where bark beetles can easily overcome the tree and kill it.



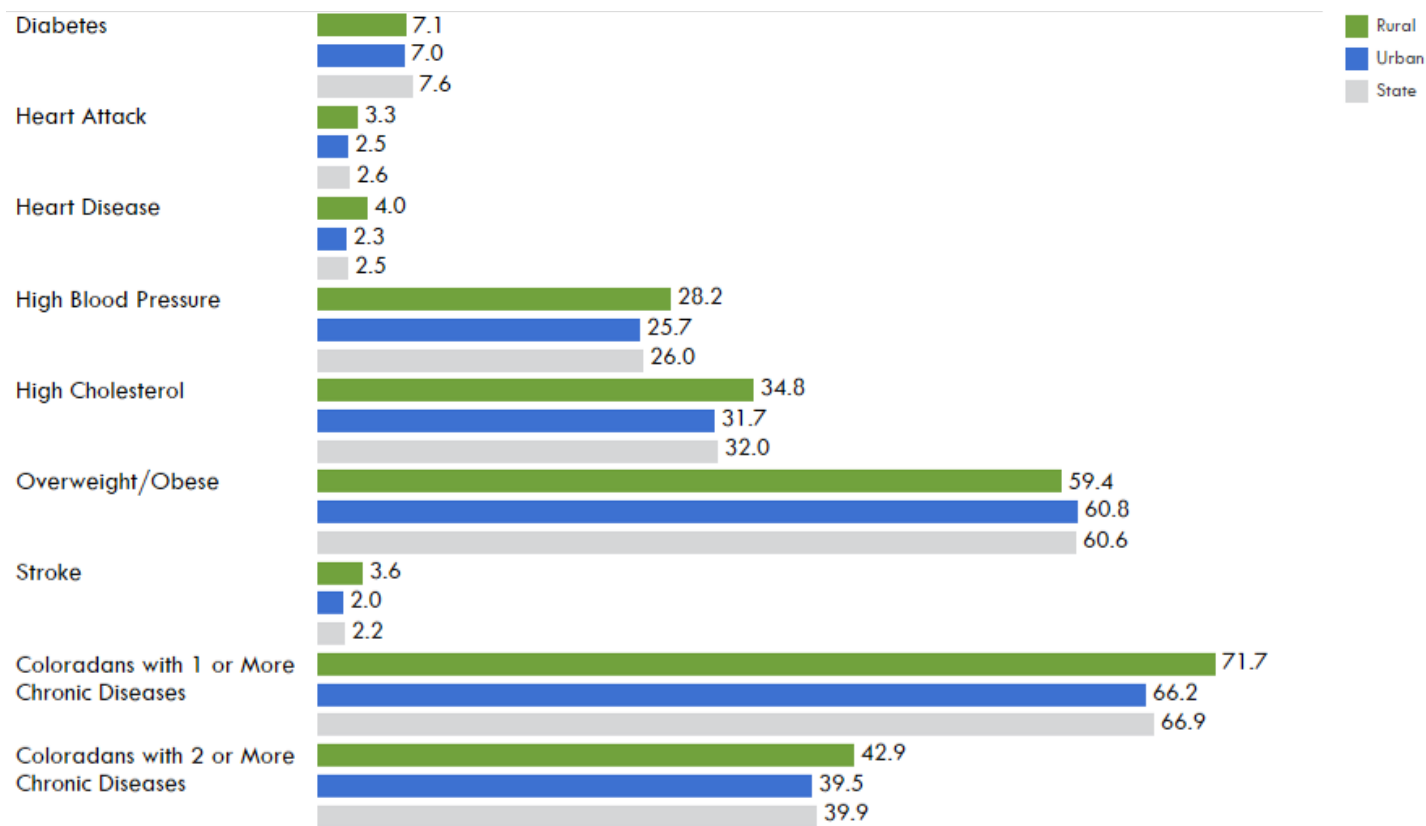




### Rural Chronic Disease, By the Numbers

#### Prevalence of Chronic Disease Amongst Colorado Adults

*Rural vs. Urban*

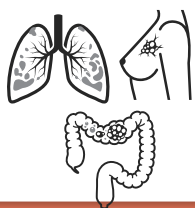


### Cancer

*In 2021, there were an estimated 28,630 new cancer cases in Colorado. There were an estimated 8,420 Colorado deaths caused by Cancer in 2021.*



The top 3 most lethal cancers in Colorado are: 1. Lung and Bronchus, 2. Colorectum, 3. Breast.



In 2019, Quality of Care- Cervical Cancer Screenings among all payers:  
Statewide: 58.3%  
Urban: 59.4%  
Rural: 50.5%



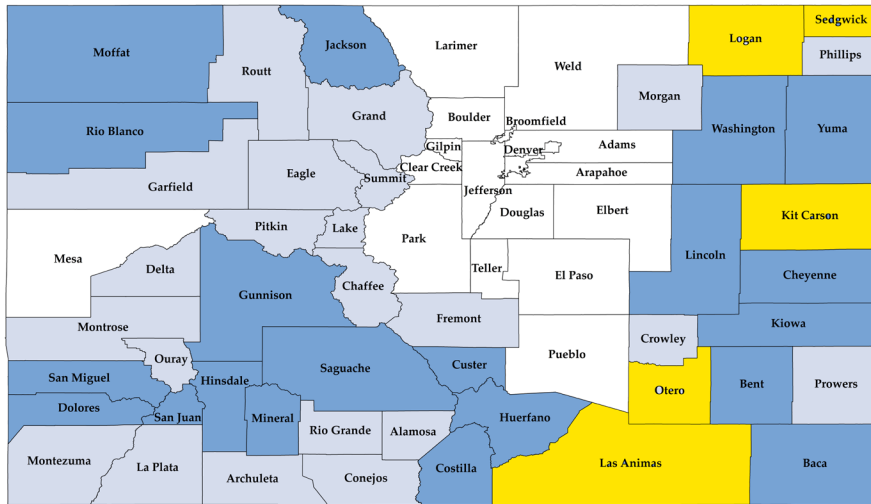
Melanoma cases are expected to increase in Colorado in 2021 with a 6% increase in melanoma diagnosis and a 4% increase in melanoma deaths.



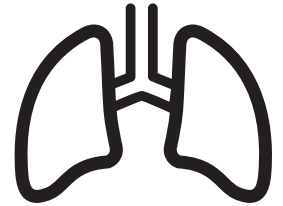
The percent of rural adults reporting being up to date with Colorectal cancer screenings increased from 57.2% in 2012 to 89.7% in 2020



## Asthma and COPD



In 2021, Las Animas (50.96 per 100,000), Otero (41.36), Kit Carson (59.24), Logan (41.41) and Sedgwick (53.03) all had age-adjusted rates of Asthma emergency visits significantly higher than the state.

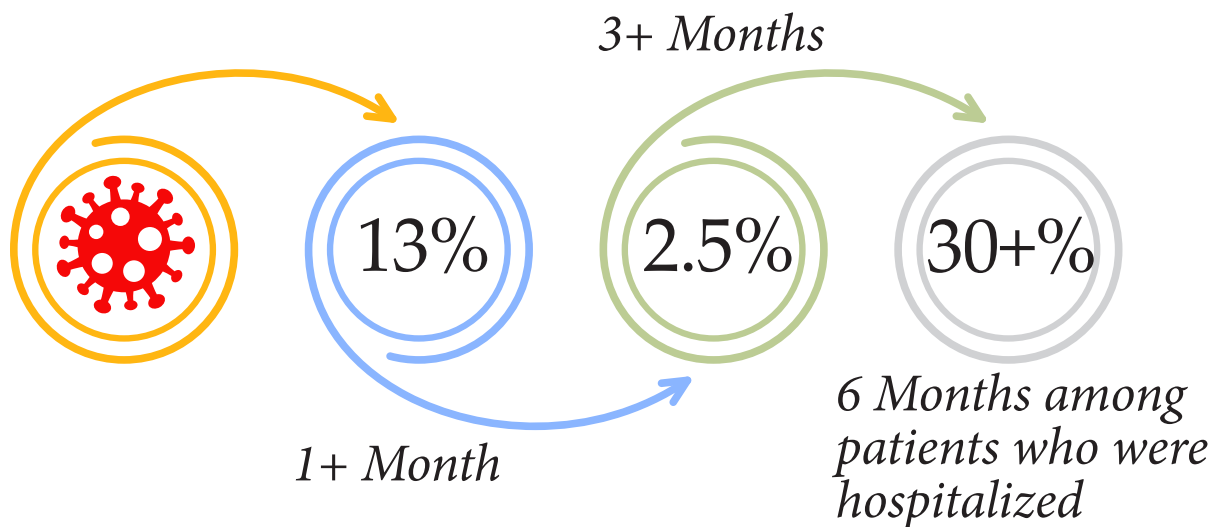


- Both the percentage of people diagnosed with COPD and the rate of people dying of COPD is higher in rural Colorado than urban.
- The highest rate of hospitalizations due to COPD in rural areas of the state is observed in Phillips County (103/10,000 people) with the lowest rate observed in Routt County (2/10,000 people).
- In 2021, there were 22.91 per 100,000 asthma emergency department visits. This is significantly lower than 2019 (30.69 per 100,000). Annually we see a spike in visits from Aug-Oct.

The highest rate of COPD emergency department visit rates in rural areas of the state is observed in Huerfano County (164/10,000 people) with the lowest rate is in Eagle County (3/10,000 people).

## Long COVID

*“The estimates for how many people experience post-COVID conditions can be quite different depending on who was included in the study, as well as how and when the study collected information. Estimates of the proportion of people who had COVID-19 that go on to experience post-COVID conditions can vary:*







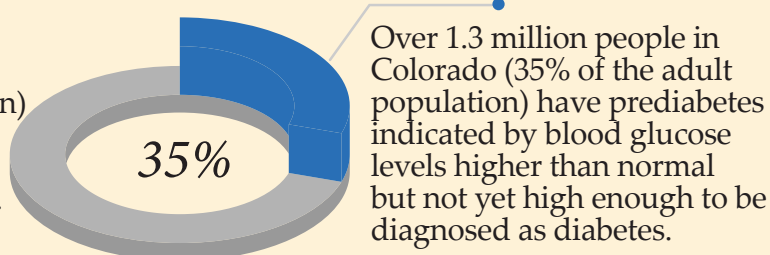
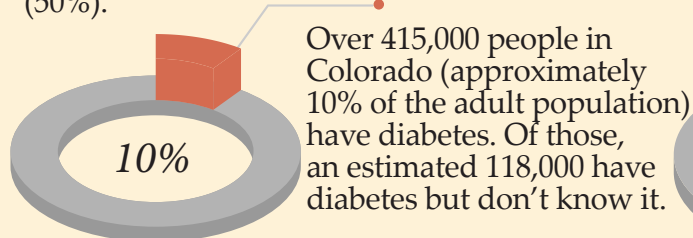
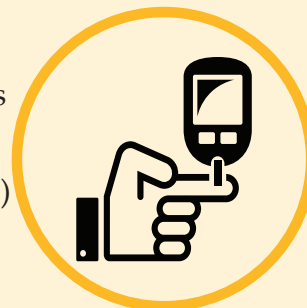
### Diabetes

*Healthcare costs are 2.3 times greater for people with diabetes.*

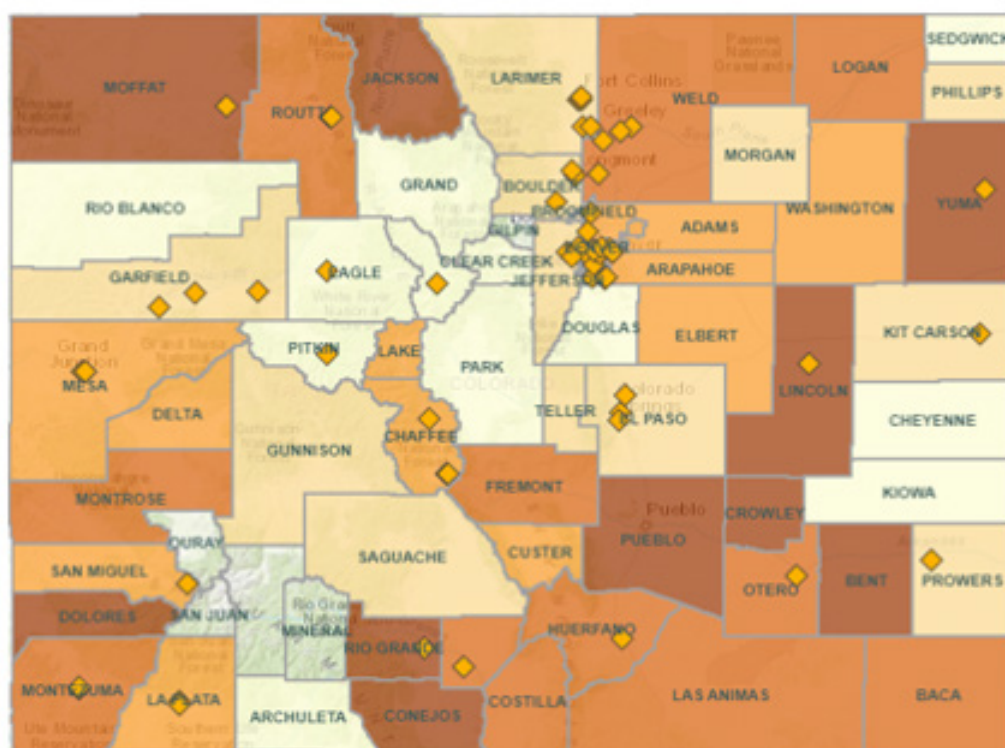
In 2021, 7.1% of adults in rural reported having diabetes compared to 6.99% of adults in urban and 6.97% at the state level. The percent of adults in rural who have diabetes has remained flat overtime.

In 2021, The prevalence of prediabetes is higher in urban Colorado (11.7%) compared to rural Colorado (7.7%).

In 2021, Diabetes self-management course participation, among adults with diabetes, is significantly higher in urban (60%) compared to rural (50%).



*Diabetes Self-Management Education and Support (DSMES) teaches participants how to eat healthy, be active, monitor blood sugar levels, take medication, problem solve, reduce risk for other health conditions, and cope with their disease. It is evidence-based and improves clinical outcomes, health status and quality of life. Despite having an average rate of 9.0-10.2% or Southeastern Colorado residents diagnosed with diabetes, the region has only 2 sites offering Diabetes Self-Management Education and Support (DSMES).*



DSMES - Site offers recognized/accredited Diabetes Self-Management Education and Support

Diabetes: Percent of Adults ever Diagnosed by County, Colorado BRFSS 2018-2020 (State Average 7.2%)

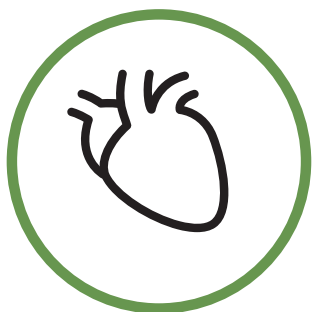
Estimated Percent of Adults Diagnosed with Diabetes





*HB21-1307 - Emergency and 12- Month Insulin Supply  
Beginning January 1, 2022, eligible individuals can receive a 12-month prescription for insulin for no more than a \$50 copay for a 30-day supply and an emergency 30-day supply of insulin once per 12-month period for no more than a \$35 copay. The law directs the state to create an application for the program. “*

## Heart Disease and Obesity



82.2% of rural adults 20+ reported having a cholesterol screening within 5+ years, compared to 85.4% of urban adults. The percent of adults in rural who are up to date has significantly increased since 2015 when only 71.7% of rural adults reported having a screening. CO 85.04%



34.8% of rural adults 20+ had high cholesterol compared to 31.7% in urban and 32% of adults statewide.

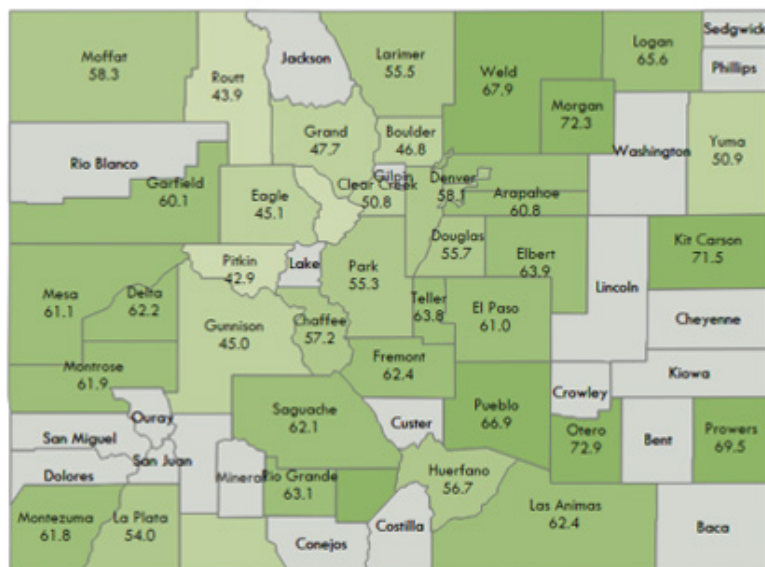
28.2% of rural adults have high blood pressure, compared to 25.7% in urban and 26% of adults in statewide.

72.8% of rural adults take medication for high blood pressure, vs 70.6% in urban and 70.8% of adults statewide.

3.3% of adults in rural reported having a heart attack compared to 2.5% in urban and 2.6% of adults in Colorado. Overtime, the percent of adults having a heart attack in rural Colorado has remained flat.

Among adults who have had a heart attack, fewer adults in rural (35.4%) are attending cardiac rehab compared to urban (47.1%) or the state (45.4%)

Percent of Adults (18+) who are Overweight or Obese  
(Body Mass Index Index  $\geq 25$ )



*Rural Colorado suffers from higher rates of obesity.*

Of the counties reporting, rural Otero County in Southeast Colorado had the highest obesity rate with 72.9% of adults having a BMI greater than or equal to 25.





# The Health of Rural

## PUBLIC HEALTH

### School Aged Vaccination Rates

Percent of Colorado K-12 County Schools with less than 90% vaccination rates:



27%  
Chicken  
Pox



20%  
HepB



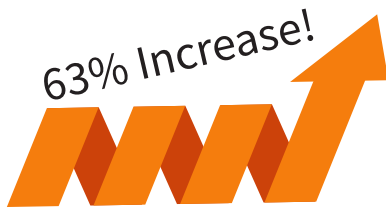
14%  
DTaP



16%  
MMR

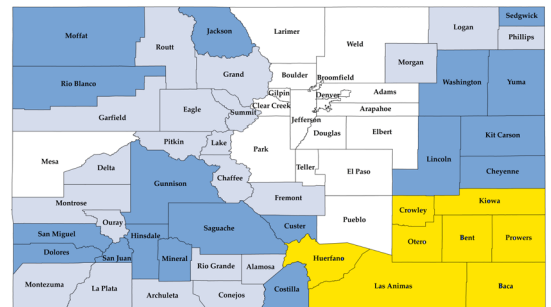
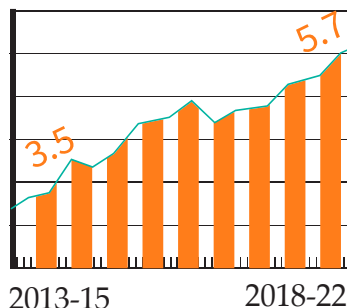
### Gun Violence

In 2021, 19.2% of youth reported they could fire a loaded gun without adult permission in less than an hour. This estimate was significantly higher in rural compared to urban.



Firearm deaths are up 63%. From 3.5 to 5.7 deaths per 100,000 children ages 1-19 between 2013-2015 and 2018-2020

### Child (1-19) Firearm Deaths/100,000



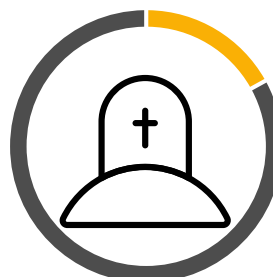
The counties with the highest access to firearms without adult supervision within one hour was (35.5%) Baca, Bent, Crowley, Huerfano, Kiowa, Las Animas, Otero, Prowers

### Occupational Health

Each year, on average, 112 work-related deaths occur in Colorado, or approximately one work-related fatality every three to four days. Every year, thousands of other people are injured on the job or become ill from work-related exposures.



16.7% of the Colorado population was employed in an occupation with a high risk of morbidity.



In 2017, 13.1% of the Colorado population was employed in an occupation with a high risk of mortality.





# The Rural Economy

## RURAL COLORADO'S ECONOMY

### Childcare

*Infant childcare costs in Colorado is among the highest in the nation. Colorado is ranked 45 out of 50.*

**\$12.60**



Median hourly wage for CO child care workers

**\$13.88**



Median hourly wage for CO preschool teachers

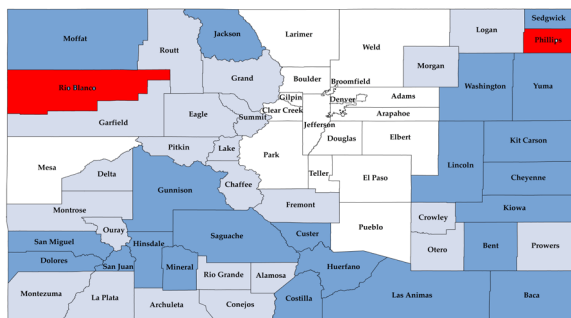
**403,927**

Colorado  
Kids under  
age 6



Percent of children under the age of 6 in Colorado with all available parents in the workforce: 62.9%

### Childcare Access



*In Colorado, the average child care cost burden is 28% meaning that over a quarter of every dollar earned by a median-income family goes toward paying for child care. In rural areas of the state such as Rio Blanco and Phillips counties, the child care cost burden is as high as 44%. Southwestern Colorado (17.0%) has rates of unmet childcare over five times that of urban Douglas County (3.0%).*

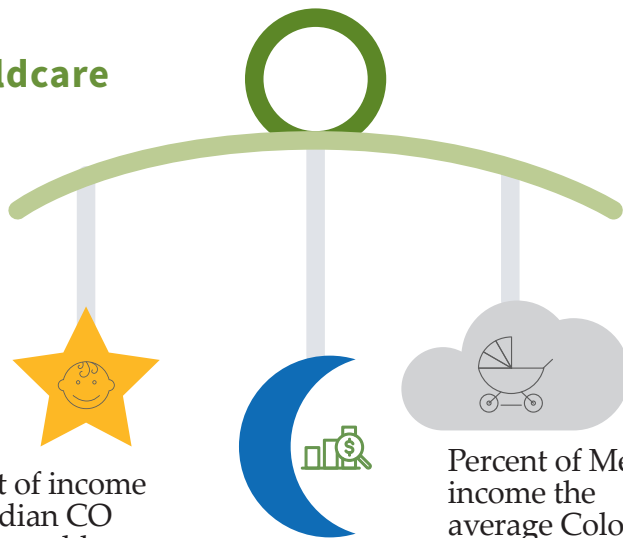
### The Financial Burden and Impact of Childcare

**\$3.1 Billion**

*Estimated annual state economic benefit of affordable child care*

**\$1.24 Billion**

*Estimated annual state economic benefit of universal preschool*



Percent of income the median CO family would pay to cover the true cost of high-quality child care for two children: 51%

Average annual child care tuition for two children in Colorado: \$27,055

Percent of Median income the average Colorado family spend on child care for two children: 33%





# The Rural Economy

## RURAL COLORADO'S ECONOMY

### The Outdoor Industry

53% of Americans ages 6 and over participated in outdoor recreation at least once, the highest participation rate on record. 7.1 million more Americans participated in outdoor recreation in 2020 than in the year prior. **71% of CO residents participate in outdoor recreation each year.**

- In 2020, Colorado ranked 12th among all states in Outdoor Recreation Satellite Account (ORSA) value-added and 44th among all states in ORSA value added growth. Since 2019, ORSA value added has decreased 23% in Colorado, compared with a decrease of 19.5% for the US.
- In 2020, Colorado ranked 10th among all states in ORSA employment and 39th among all states in ORSA employment growth. Since 2019, ORSA employment has decreased 19.5% in Colorado, compared with a decrease of 17.1% for the US.
- In 2020, Colorado ranked 10th among all states in ORSA compensation and 36th among all states in ORSA compensation growth. Since 2019, ORSA compensation has decreased 12.5% in Colorado, compared with a decrease of 12.5% for the US.

The Outdoor Recreation Satellite Account (ORSA) measures the economic activity as well as the sales or receipts generated by outdoor recreational activities, such as fishing and RVing. These statistics also measure each industry's production of outdoor goods and services and its contribution to U.S. GDP. Industry breakdowns of outdoor employment and compensation are also included.

The Outdoor Industry Contributes the Following to Colorado's Rural Economy:

120,063 Jobs,  
4.3% of State Jobs

\$47,253  
Average Salary



\$9.6 Billion,  
2.5% of GDP

Each year Colorado has over 350,000 deer, elk, and pronghorn hunters.



\$1,156,195

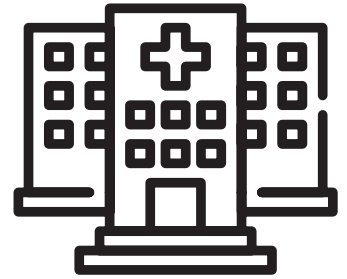
Snow Activities Economic Impact





## HEALTHCARE AND THE RURAL ECONOMY

*A hospital is often one of the largest employers in a rural community and contributes up to 20% of the community's employment and income.*



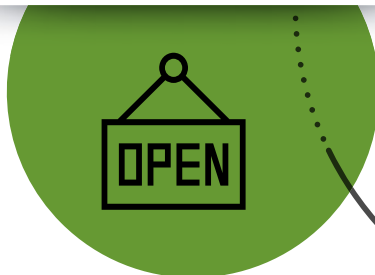
1 rural physician's employment creates approximately 26 additional jobs.



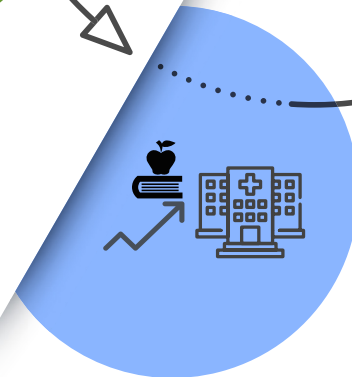
*Healthcare is one of the top 3 industries in rural Colorado.*



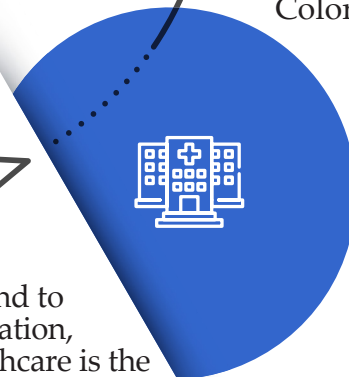
*Healthcare Drives the Rural Economy*



Employment in the health and wellness industry in Colorado is 1.2 times denser than nationally, comprising 10,000 companies and 336,000 employees. From 2010 to 2019 there was 31% job growth for this industry in Colorado.



Second to education, healthcare is the fastest growing economic sector in the state.



In 2019, the health and wellness industry contributed \$27.5 billion to the Colorado GDP.

1 rural physician's employment creates nearly \$1.4 million in income from the clinic and hospital.





# The Rural Economy

## RURAL COLORADO'S ECONOMY

### Oil and Gas

*Colorado's total oil and gas production will have an estimated value greater than \$25 billion for 2022 — 60% higher than in 2021 and a notable 160% higher than 2020. This all-time high production value is a reflection of the sustained higher crude oil and natural gas prices.*

In 2021, Colorado ranked seventh in the nation for marketed natural gas production in the US. EIA estimates that conventional and unconventional output from Colorado basins accounts for 4% of the total annual US natural gas production.



### \$16.73 Billion

In 2021, the real GDP of Colorado amount to around \$373.76 billion. In 2021, the mining industry added \$16.73 billion chained 2012 US dollars of value to the state GDP.



### Agriculture

*In Colorado, 89% of all farms and ranches are owned and operated by individuals and families*



Average Size of Farm and Ranch:  
820 Acres



Million Acres Land in Farms:  
31.8 Million Acres\*



Number of Farms and Ranches (2021):  
38,800



Farm cash receipts (2020) \$7.28 Billion  
(71% Livestock and Livestock Products, 29% Vegetable Crops)

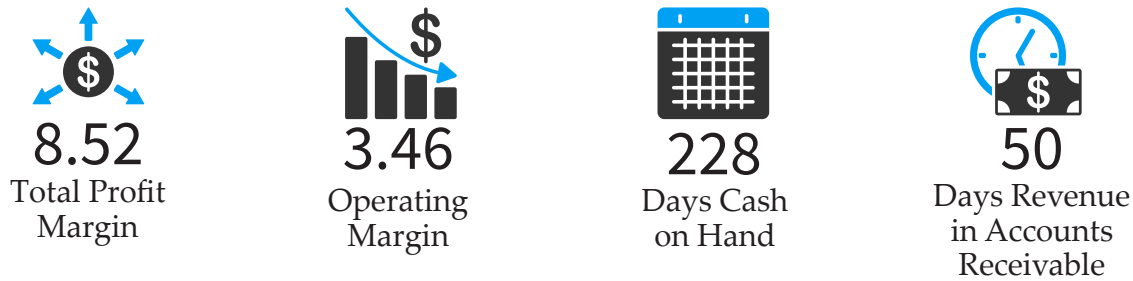




# The Rural Economy

## CRITICAL ISSUE: HOSPITAL FINANCIAL SUSTAINABILITY

### Rural Colorado Hospital Averages: October 2022



From data provided by the CRHC Medicare Rural Hospital Flexibility Program Grant (FLEX) Monitoring Team from 2019 to 2020, Total Margin and Operating Margin increased, while Days Cash on Hand and Average Days Revenue decreased. This indicates that there continues to be financial hardships for Colorado CAHs. In 2022, 22 rural hospitals were operating in the red.

**Total Margin** is the percentage calculated by dividing net income by total revenues. The higher the Total Margin value, the more the hospital retains on each dollar of sales.

**Operating Margin** measures how much profit a hospital makes on a dollar of sale, after paying for variable costs of production. The higher the Operating Margin the more profitable a hospital is.

**Days Cash on Hand** measures the number of days that an organization can continue to pay its operating expenses, given the amount of cash currently available. High Cash on Hand values imply higher liquidity and hence are viewed favorably by creditors.

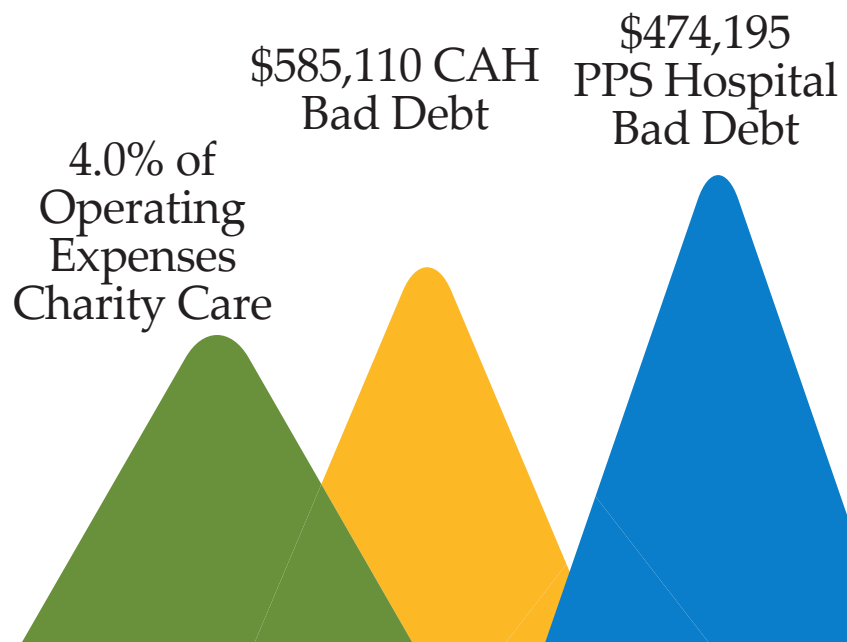
**Days Revenue in Accounts Receivable** measures the number of days that it takes an organization to collect its receivables. Low values means that it takes a hospital fewer days to collect its accounts receivable.

### In 2021, rural Colorado hospitals saw the effects of the following:

#### Definitions

*"Uncompensated Care" represents the percentage of total operating expenses that is uncompensated care. In 2019, the median uncompensated care for 32 operating Colorado CAHs was 3.16.*

*"Bad Debt" is a loss that a company incurs when credit that has been extended to customers becomes worthless, either because the debtor is bankrupt, has financial problems or because it cannot be collected.*





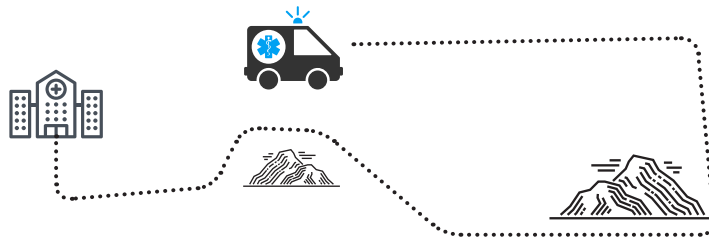


# Rural Health Infrastructure

## EMERGENCY MEDICAL SERVICES (EMS)

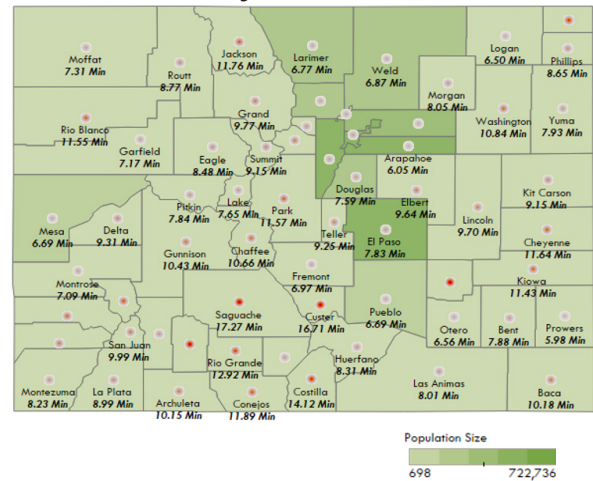
### Response Times

Response time is the time elapsed between when the unit is notified by dispatch and when the unit arrives at the incident scene.



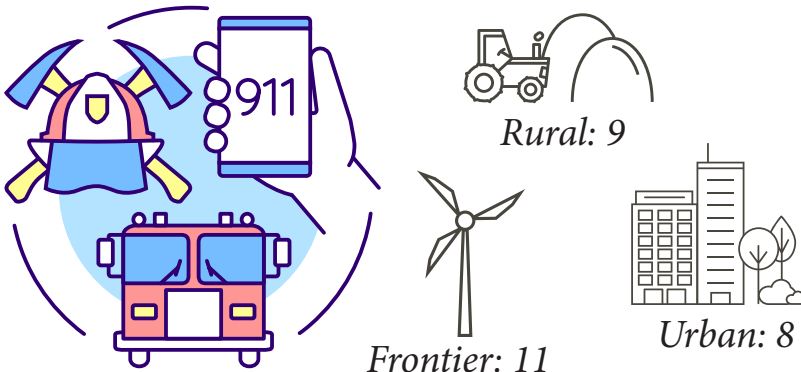
*It takes longer to respond to incidents in rural and frontier areas.*

### Incident Response Time by County, 2020-2021



### Transport Times

Transport is the elapsed time between when the unit leaves the scene and when the unit arrives at its destination. Average Incident Transport time in Minutes:



*Frontier counties like Hinsdale and Custer had average transport times of over 50 minutes.*

*Rural counties like Ouray and Crowley have transport times of over 40 minutes.*

### Reasons for EMS Calls

Primary Impression Categories is a summarized grouping of the NEMSIS standard ICD-10-CM Codes that describes the patient's primary problem or most significant condition, as recorded by the provider.

Primary Impression:

- State: Top three primary impressions were Injury (14%), Pain (11%), and Behavioral/Psychology (10%).
- Urban: Top three primary impressions were Injury (13%), Pain (11%), and Behavioral/Psychology (10%).
- Rural: Top three primary impressions were Injury (19%), Pain (11%), and Behavioral/Psychology (9%).
- Frontier: Top three primary impressions were Injury (18%), Pain (13%), and Behavioral/Psychology (9%).







# Rural Health Infrastructure

## HEALTHCARE WORKFORCE

*Essentially, all rural and frontier counties are facing primary care shortages. This is compounded by the difficulty of recruiting and retaining providers to practice in rural communities and a large portion of rural doctors nearing retirement.*

### Workforce Shortages

The Association of American Medical Colleges (AAMC) projected in 2020 that physician demand will continue to grow faster than supply, leading to a shortage of between 54,100 and 139,000 physicians by 2033, with the most alarming gaps in primary care and rural communities.



The state of Colorado is facing a Mental Health worker shortage. A study by Mercer, found that the state will face a deficit of more than 4,417 mental health workers by 2026.

*20% of healthcare workers are leaving the healthcare industry.*

### Nursing Shortages

Nursing has been an in-demand profession for years, with nearly every major hospital hiring for one of healthcare's most important roles. According to the US Bureau of Labor Statistics (BLS), on average, around 195,400 openings for registered nurses are projected from 2021-2031. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force.

*The state of Colorado is facing a nursing shortage. A study by Mercer found that the state will face a deficit of more than 10,000 registered nurses by 2026.*

*Annual mean wage of registered nurses varies by region with North West and Central Colorado having the highest salaries ~\$83,000, and Eastern and Southern Colorado having the lowest salary \$70,130 (below the 50th percentile).*

Annual mean wage of RNs, CO: \$80,670, Hourly \$38.78, National 50th percentile: \$78,070

Nurses per 1,000 Population: 8.95

*Travel Nurses in CO make between \$1,566-\$3,130 per week depending on specialty--potential to make \$40,690 in 13 week assignment*





# Rural Health Infrastructure

## WORKFORCE SHORTAGES

Of all active, licensed registered practitioners, rural Colorado receives:

18%  
less



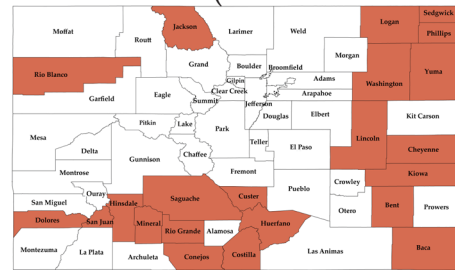
- 10% of the dentists (18% less than urban)



33%  
less



- 9% of the physicians (33% less than urban)



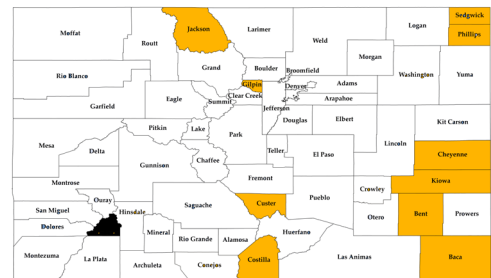
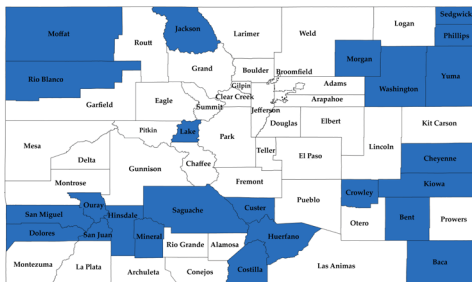
67%  
less



- 5% of the psychologists (67% less than urban)

**22\*** rural counties do not have a Psychologist: Baca, Cheyenne, Conejos, Costilla, Crowley, Dolores, Hinsdale, Huerfano, Jackson, Kiowa, Kit Carson, Las Animas, Lincoln, Mineral, Moffat, Phillips, Prowers, Rio Blanco, Saguache, San Juan, Sedgwick, Washington.

**22\*** rural counties do not have a Licensed, Social Worker: Baca, Bent, Cheyenne, Conejos, Costilla, Custer, Dolores, Hinsdale, Huerfano, Jackson, Kiowa, Lincoln, Logan, Mineral, Phillips, Rio Blanco, Rio Grande, Saguache, San Juan, Sedgwick, Washington, Yuma.



**24\*** rural counties do not have a Licensed, Addiction Counselor: Baca, Bent, Cheyenne, Costilla, Crowley, Custer, Dolores, Hinsdale, Huerfano, Jackson, Kiowa, Lake, Mineral, Moffat, Morgan, Ouray, Phillips, Rio Blanco, Saguache, San Juan, San Miguel, Sedgwick, Washington, Yuma.

**11 rural counties** do not have an active licensed dentist.

**1\*** rural county does not have dentist OR a physician (San Juan).

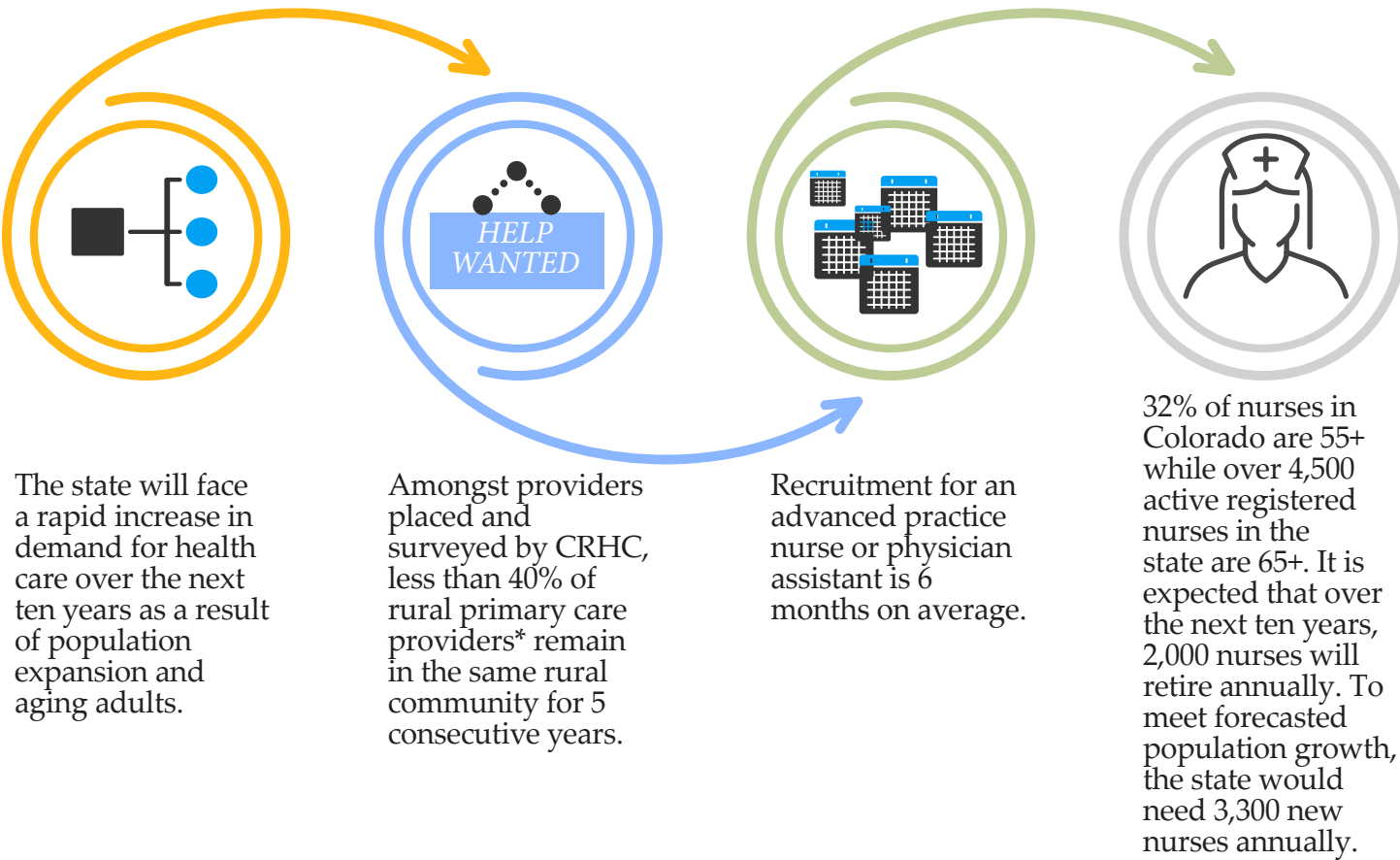
- 37 of 47 Rural/Frontier Counties (79% of rural/frontier counties) do not have a Direct Entry Midwife, compared to 6 of 17 Urban Counties (35%).
- 30 of 47 Rural/Frontier Counties (64% of rural/frontier counties) do not have a Licensed Certified Nurse Midwife compared to 1 of 17 Urban Counties (6%).
- 9 of 47 Rural/Frontier Counties (19% of rural/frontier counties) do not have a Licensed Physician's Assistant compared to 0 of 17 Urban Counties (0%). The 9 counties without one include: Bent, Cheyenne, Costilla, Custer, Dolores, Mineral, Saguache, Washington, and Phillips.
- 51%\* of all rural counties do not have an active, licensed addiction counselor.
- There is only 1\* urban county that does not have an active, licensed addiction counselor (Park).

*\*Data based on practitioner license file address and does not represent where a provider actively practices. See citations page for notation details.*



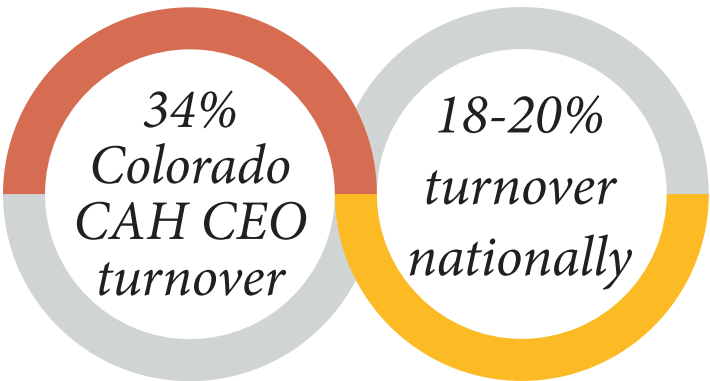
Essentially, all rural and frontier counties are facing a healthcare professional care shortage. This is compounded by the difficulty of recruiting and retaining providers and other healthcare staff to practice in rural communities and a large portion of rural providers and staff nearing retirement.

Rural Workforce Recruitment and Retention



Critical Access Hospital CEO Turnover

Unstable leadership team can affect quality of care and also impact the organization’s financial and operational health, and can impact the overall community.



The recruitment time for a new CEO tends to be lengthy — sometimes it takes 6-12 months to bring someone in.

“When a rural hospital loses a CEO unexpectedly, the cost of recruiting can be significant, and the hospital’s strategic plans may come to a grinding halt.”

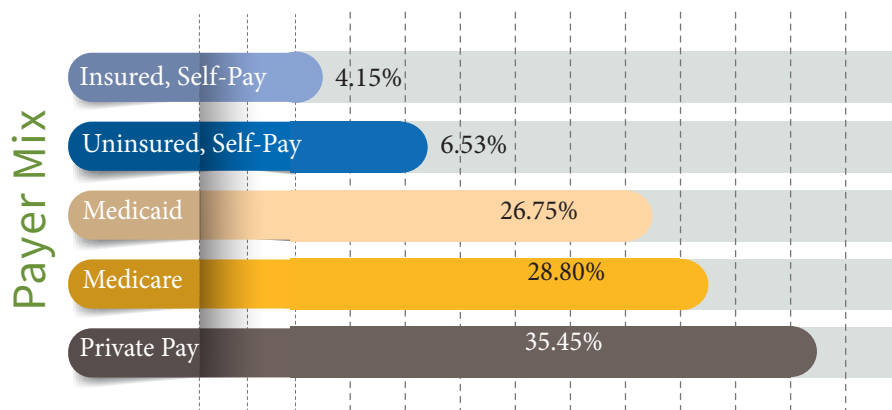




# Rural Health Infrastructure

## CASE STUDY: 2022 CLINIC PROFILES DATA

The following data was collected by the Colorado Rural Health Center as a part of annual Clinic Profile Surveys conducted in 2022. Data is self-reported.



### Clinics Offering Telehealth

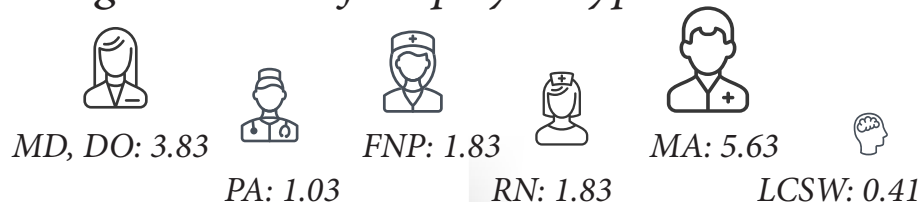


90% of Surveyed Clinics Offer Telehealth Services

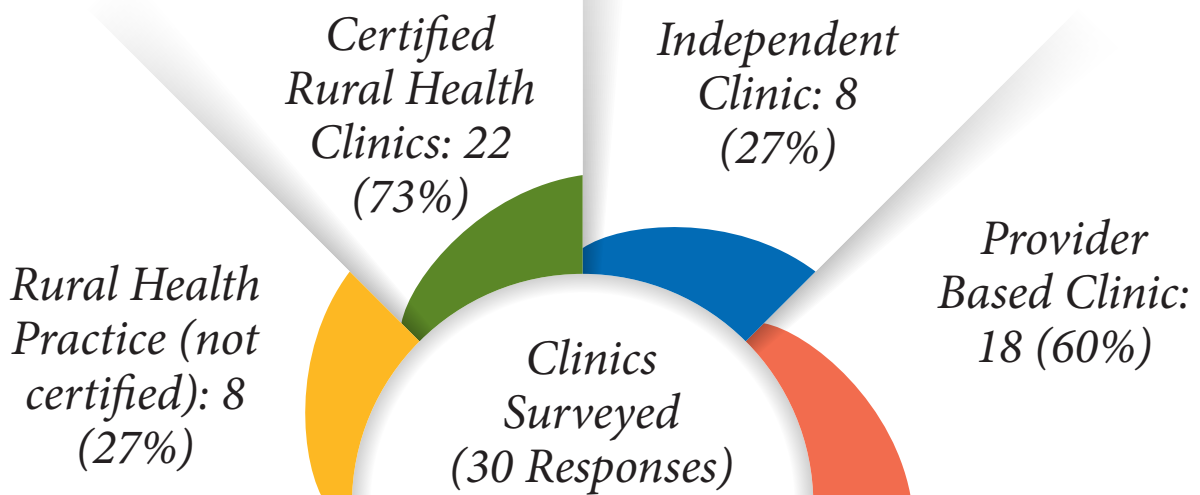
*Average Total Number of Staff at Each Clinic: 20.53*



*Average Number of Employee Types at Each Clinic:*



### Clinic Types and Ownership Models





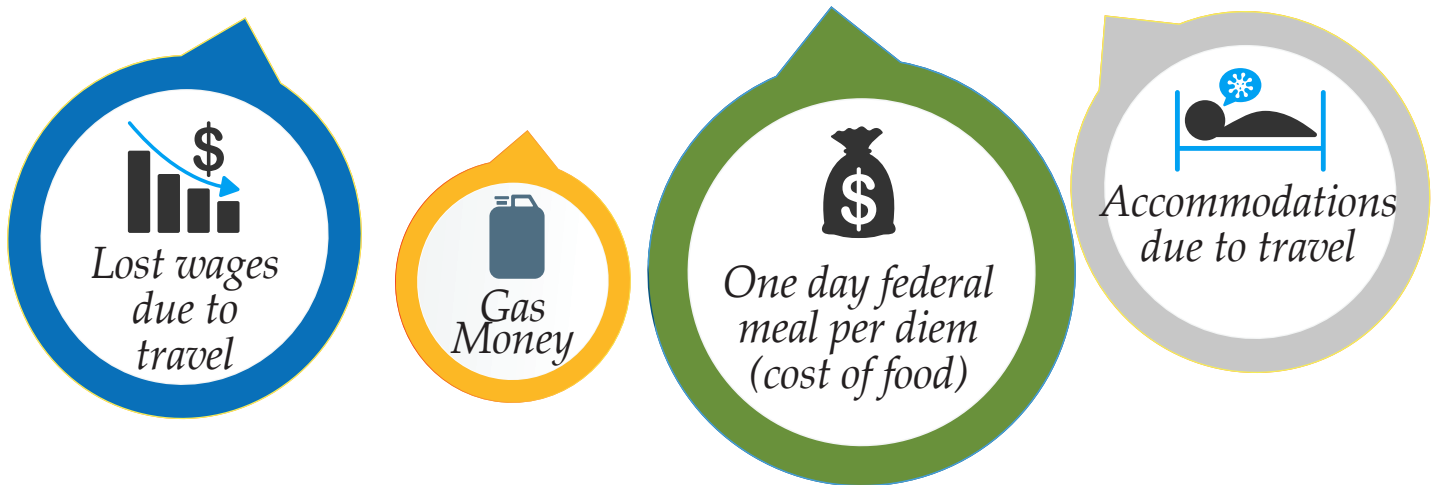
## Cost to Patient Case Study:

### A review of a patient's cost burden associated with services rendered outside of their local community

Health insurance companies often create programs to encourage patients to receive care outside of their local hospitals in order to decrease healthcare costs and reduce insurance premiums. For patients living in urban areas, this means better access to care, a higher volume of providers, and a greater diversity in options for primary care and specialty care providers.

For rural patients, this is not the case. It is important to consider the additional hidden costs affiliated with this concept. Rural areas often do not have many options outside of local hospitals. In turn, when insurance prompts a patient to seek care outside of the local hospital, the patient often is required to spend time and money to travel further (sometimes a day) to receive care.

*Examples of extra costs to patients when traveling to non-local hospitals include:*



*While insurance companies have a cost savings of ~\$200 from rural patients traveling to non-local hospitals, the patient has a cost burden upwards of \$600.*

### Case Study Results

*Average Overall Cost Burden Observed by Rural Patients traveling to distant, non-local hospital/clinic*

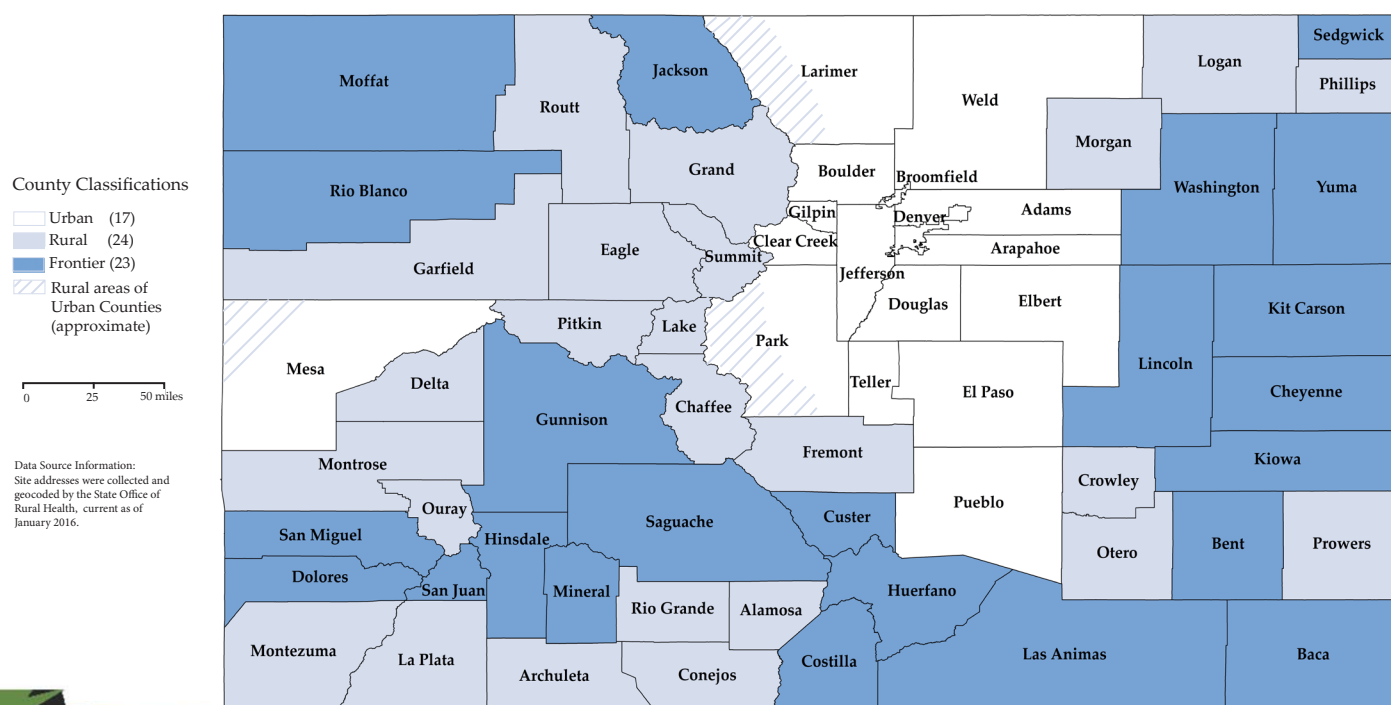
Cost Burden Description	Amount in USD	Running Total of Cost Burden (USD)
Average Member Liability Amount <sup>1</sup>	\$6.00	\$6.00
Mileage Reimbursement <sup>2</sup>	\$140.00	\$146.00
One Day of Lost Wages <sup>3</sup>	\$201.00	\$347.00
One Night of Accommodations <sup>4</sup>	\$117.00	\$464.00
One Day Federal Meal Per Diem <sup>5</sup>	\$133.00	\$597.00
<b>Total Cost Burden:</b>		<b>\$597.00</b>

*Average Cost Savings of Insurance Providers if Rural Patients travel to distant, non-local hospital/clinic*

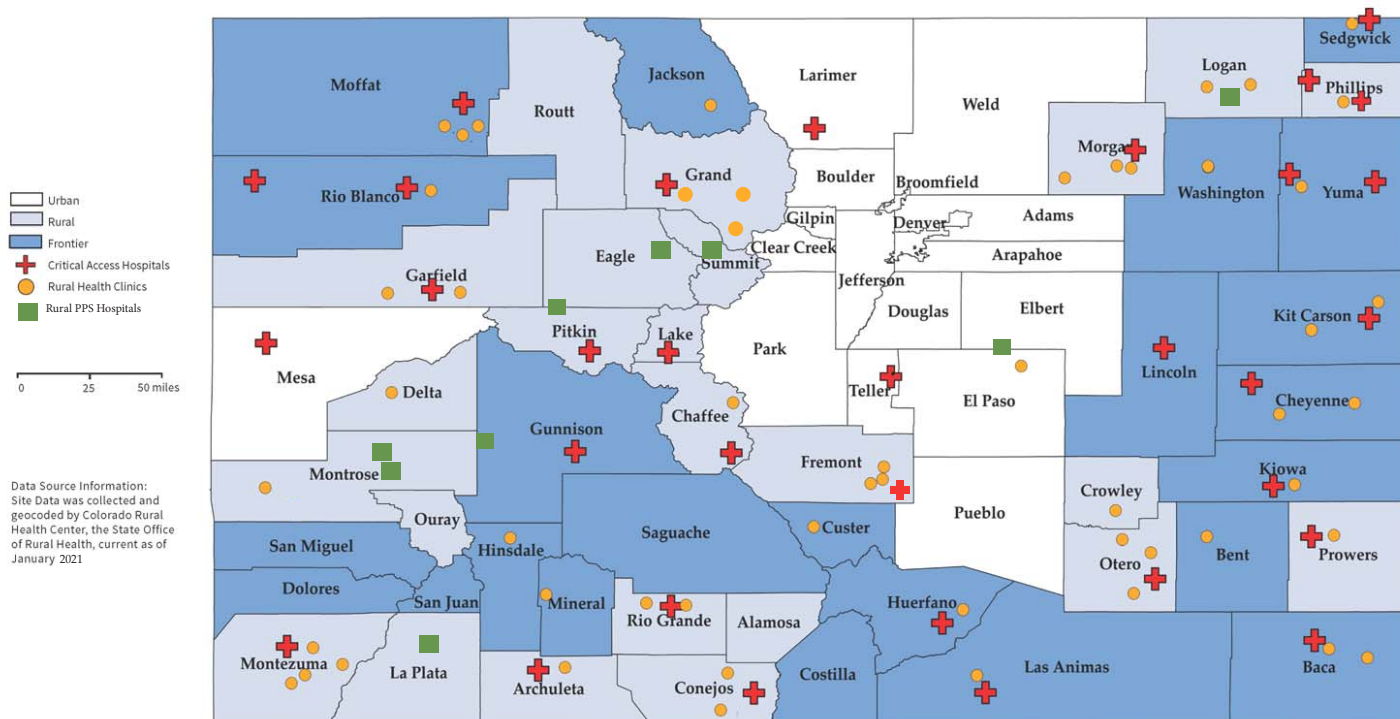
Scenario	Amount in USD
Scenario 1: Patient living in Kit Carson, CO but travels to Denver, CO	\$223.00
Scenario 2: Patient lives in Eads, CO but travels to Colorado Springs, CO	\$474.00
Scenario 3: Patient lives in Rangely, CO but travels to Grand Junction, CO	\$47.00
Average Cost Savings to Insurance Company <sup>1</sup>	<b>\$248.00</b>



### Colorado: County Designations, 2023



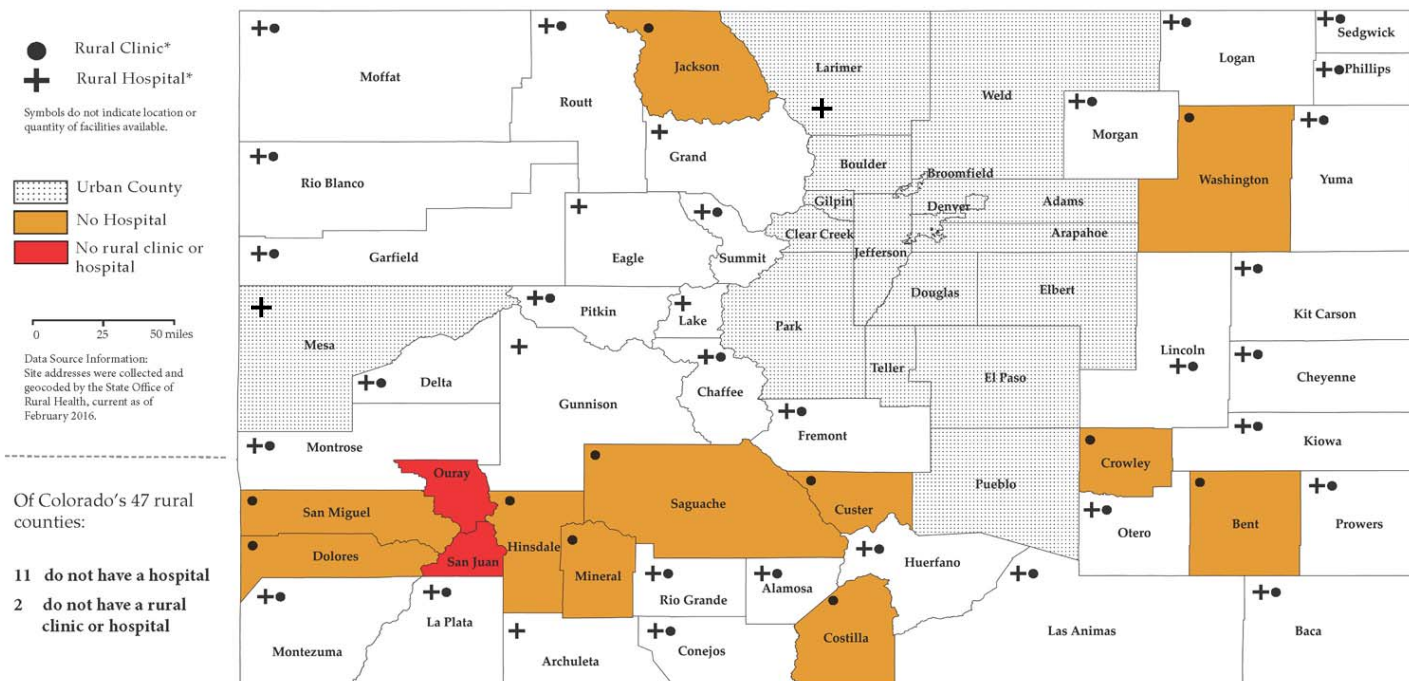
### Colorado: Rural Health Facilities within County Designations, 2023



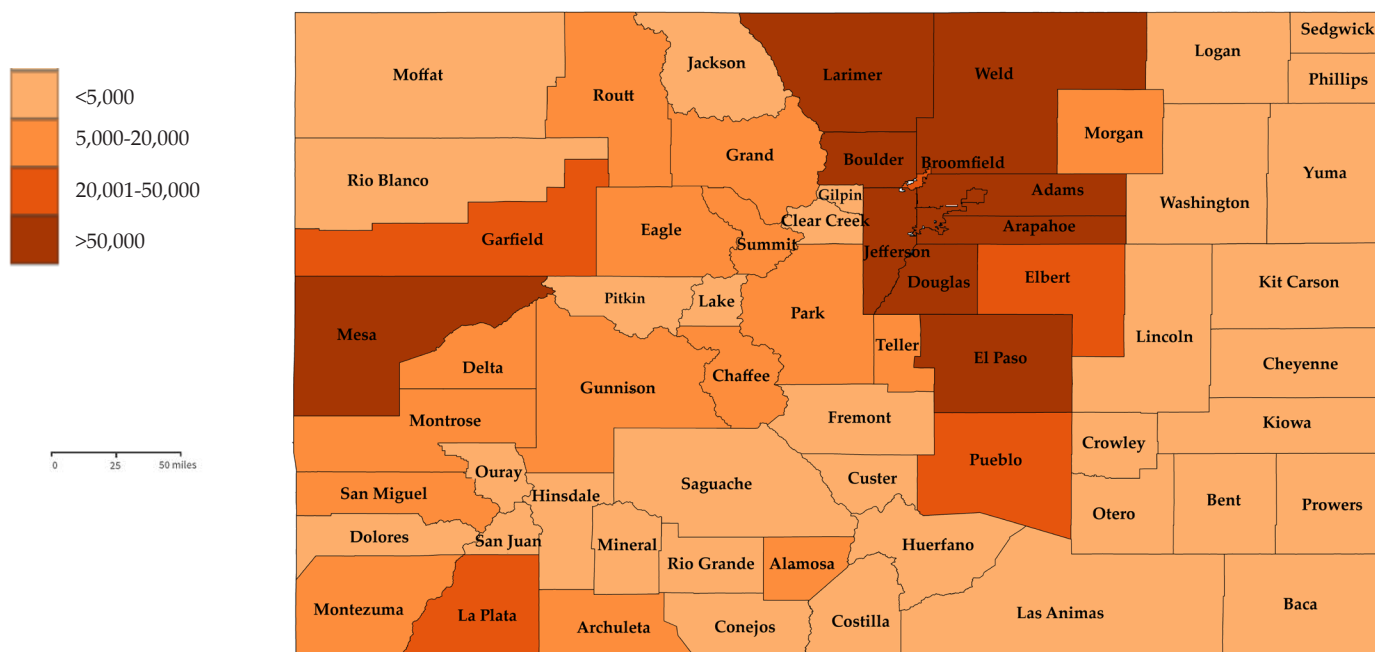




## Rural Colorado: Access to Healthcare, 2023



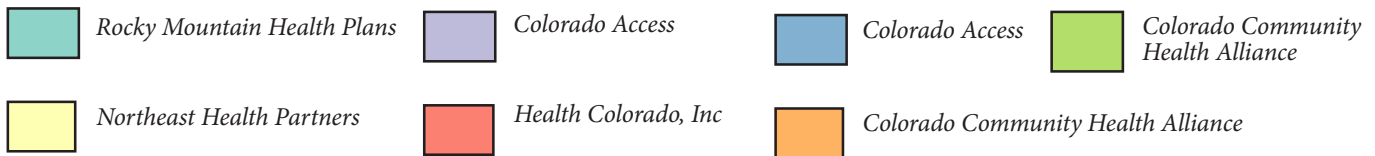
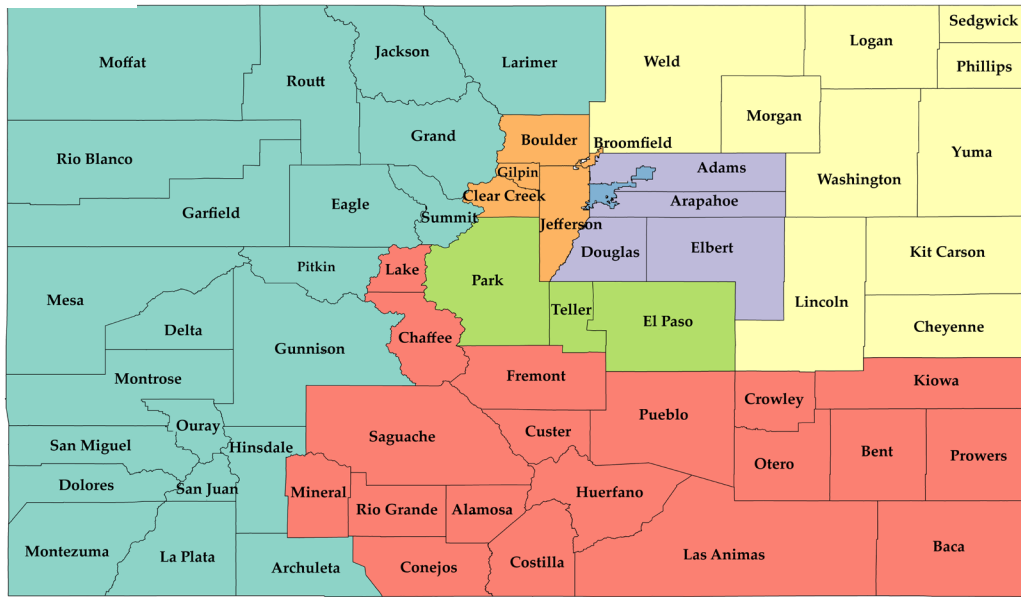
## Projected Population Change, 2010 - 2040







## Regional Accountable Entities (RAE) Regions in ACC Phase II



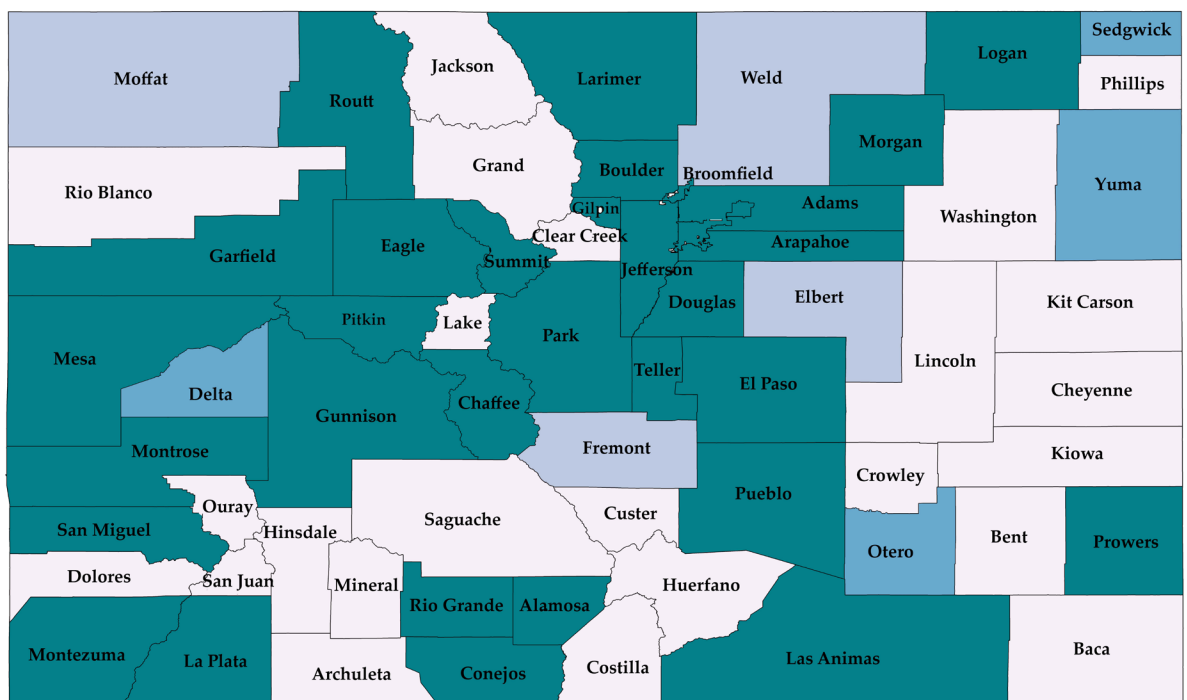
## Access to Maternity Care, 2018

Level of Access  
to Maternity Care

- Full Access
- Low Access
- Moderate Access
- Care Desert

0 25 50 miles

Data Source Information:  
Recreation of March of Dimes  
Maternity Care Deserts Map,  
Colorado 2018



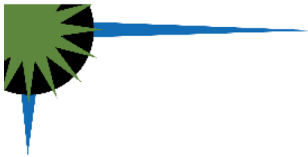
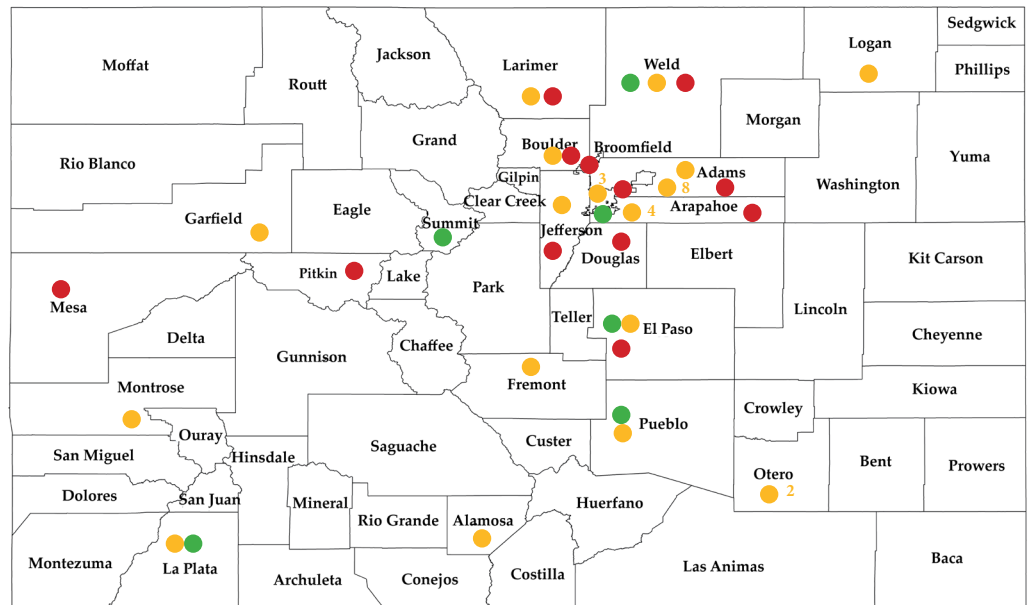




## Mental Health Facilities by Type

- Acute Treatment Units
- Community Mental Health Centers
- Residential Inpatient Treatment Centers

*Note: Numbers next to a dot on the map indicate multiple facilities of that type in the county*



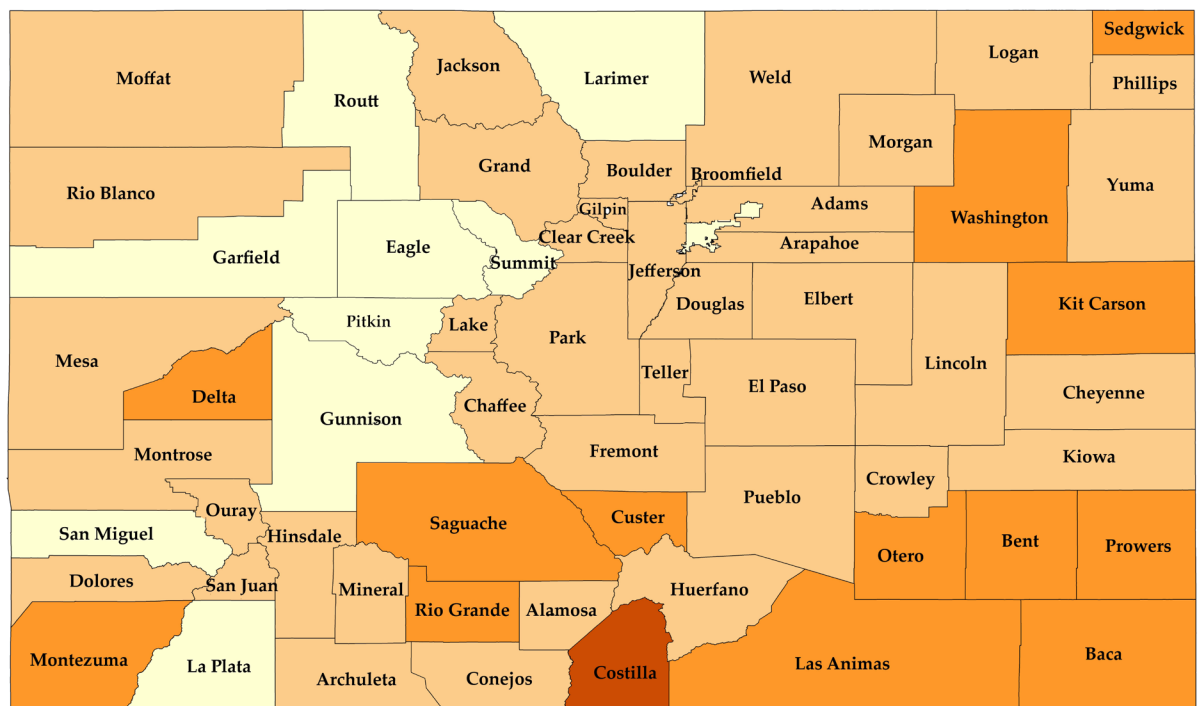
## Coloradans with Adult Diabetes

% of Adults with Diabetes

- 0-5
- 6-10
- 11-15
- 16+

0 25 50 miles

Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.

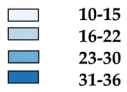






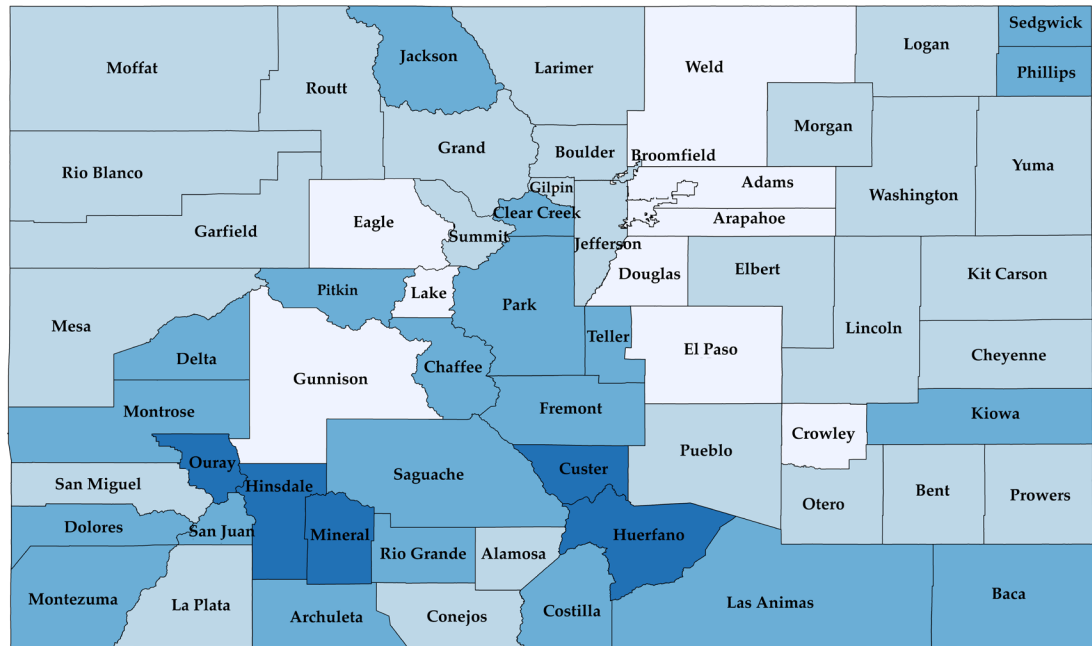
## 65+ Population

% of Population 65+



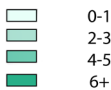
0 25 50 miles

Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.



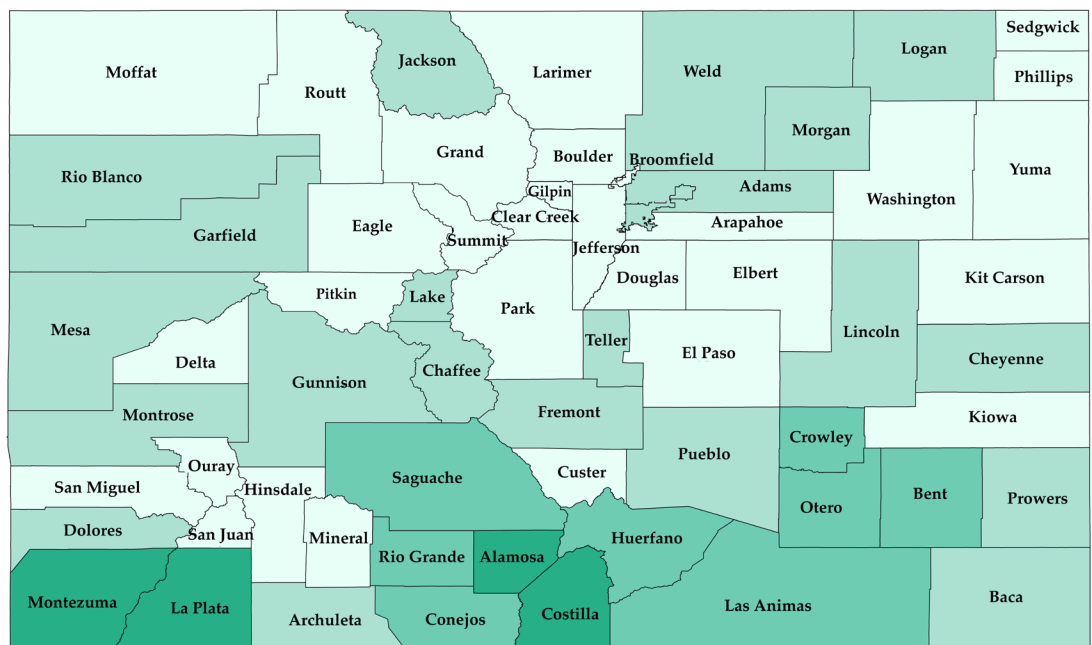
## American Indian & Alaska Native Population

% of Population that is American Indian & Alaska Native



0 25 50 miles

Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.







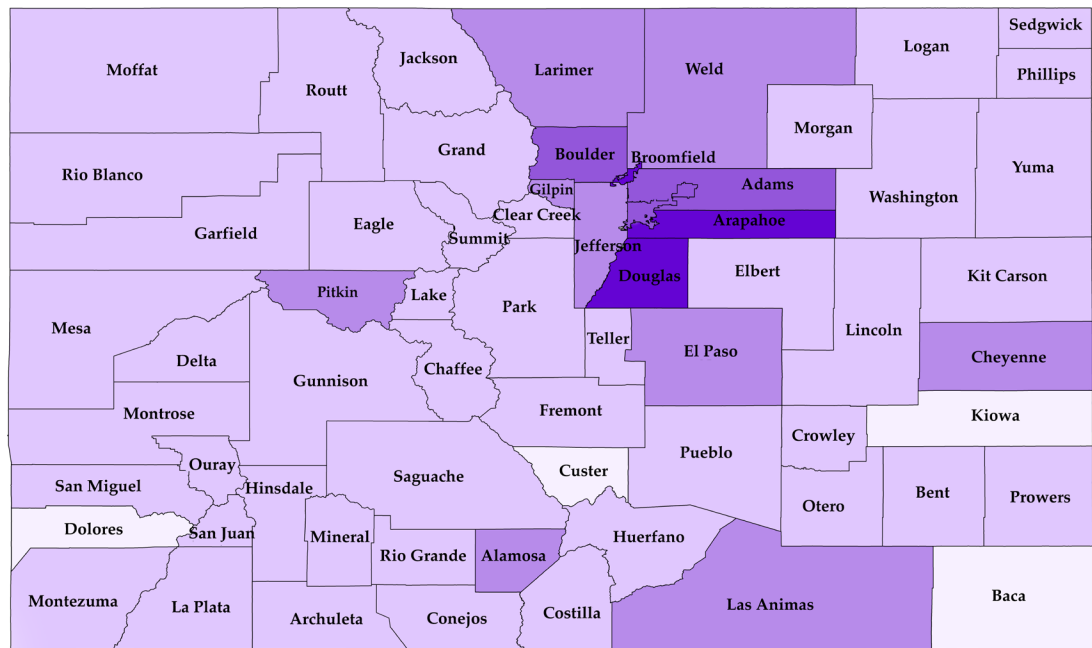
## Asian Population

% of Population  
that is Asian



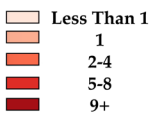
0 25 50 miles

Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.



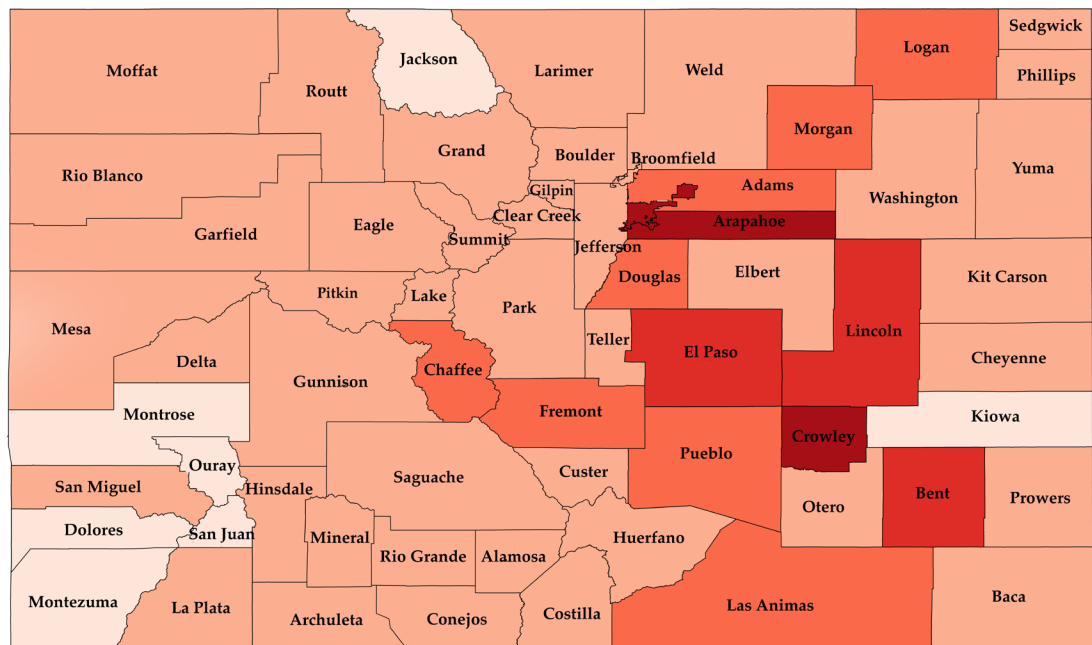
## Black Population

% of the Population  
that is Black



0 25 50 miles

Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.

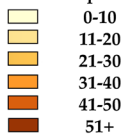






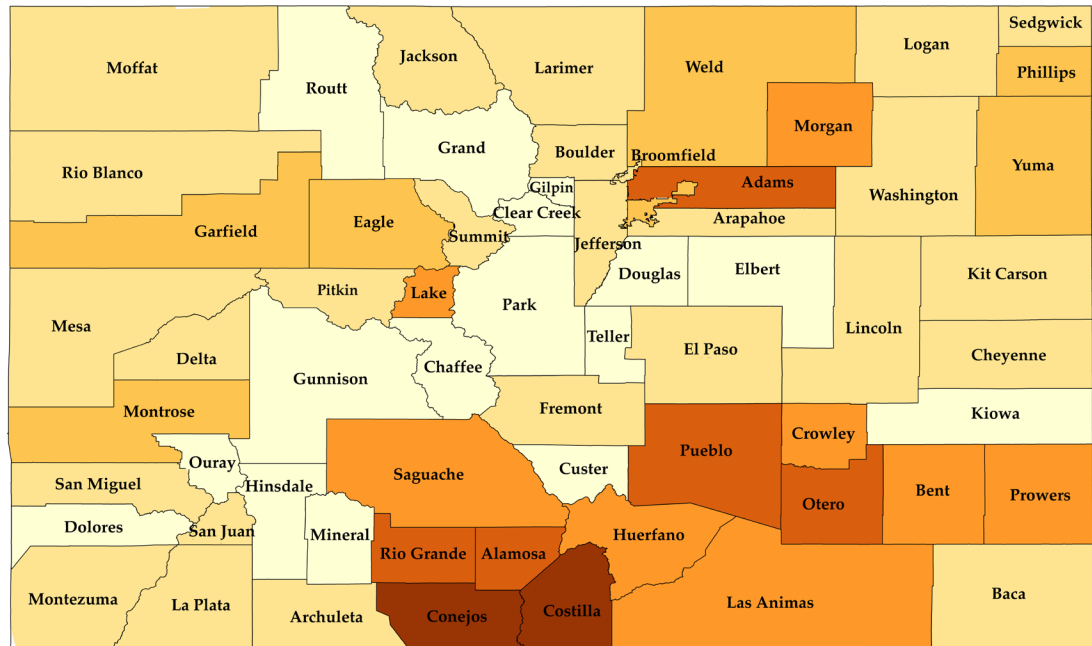
## Hispanic Population

% of Population  
that is Hispanic



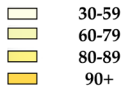
0 25 50 miles

Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.



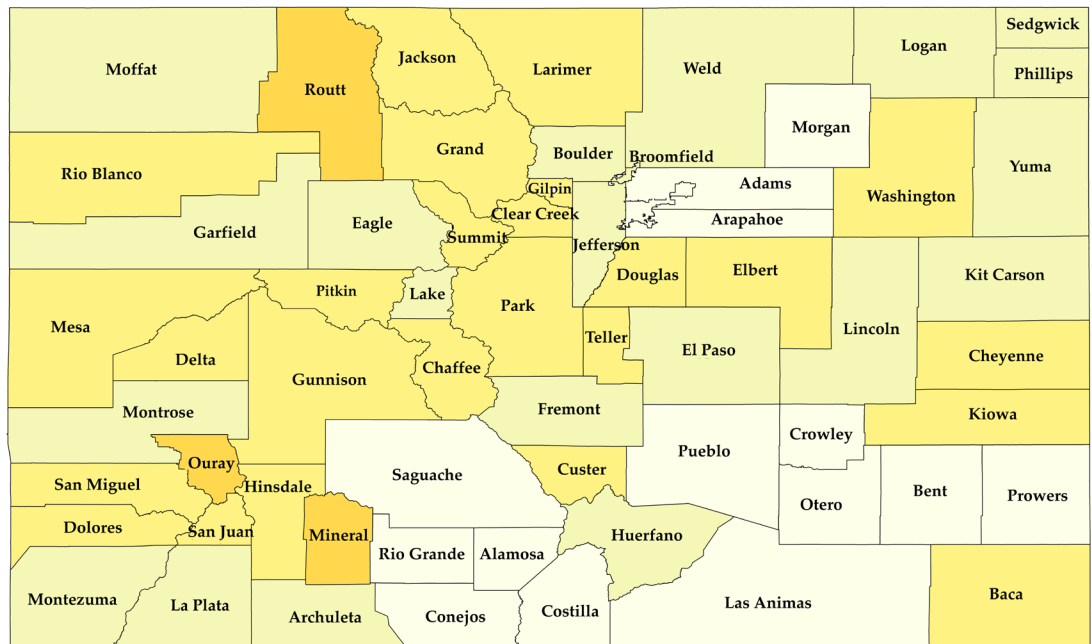
## Non-Hispanic White Population

% of Population that  
is Non-Hispanic White



0 25 50 miles

Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.

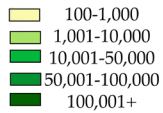






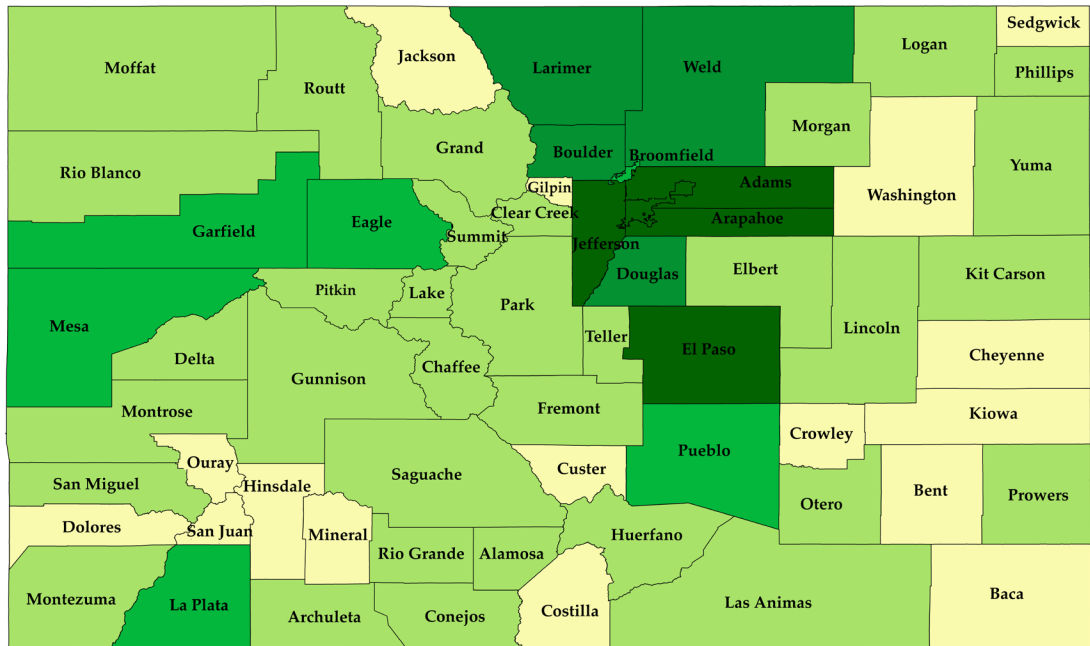
## Colorado Total Population 0 to 17 yrs

Number of  
0 to 17 year olds



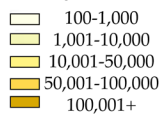
0 25 50 miles

Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.



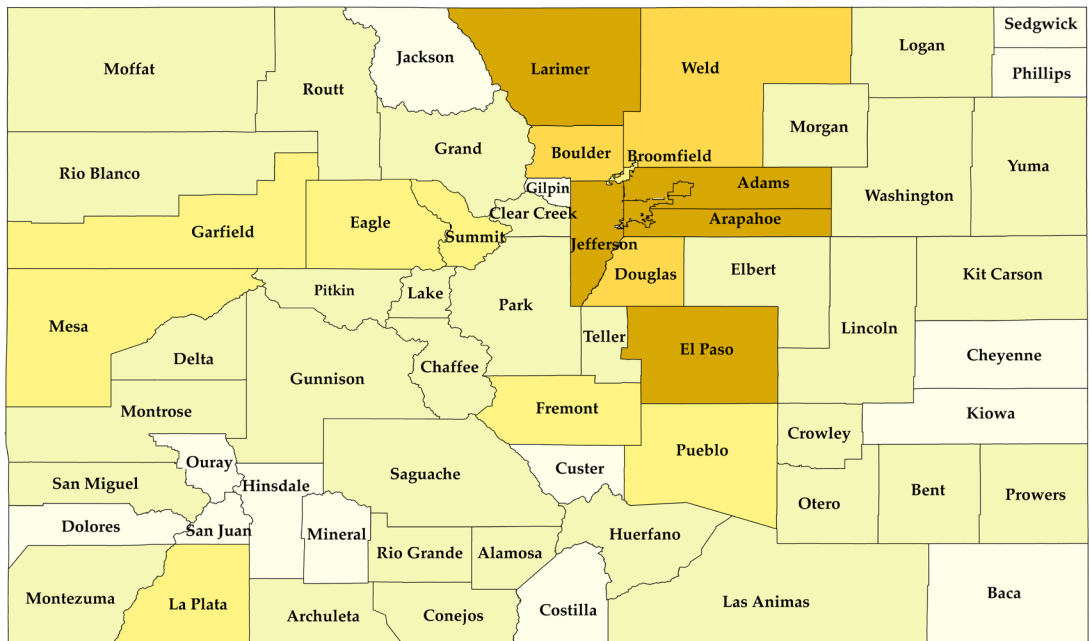
## Colorado Total Population 18 to 35 yrs

Number of  
18 to 35 year olds



0 25 50 miles

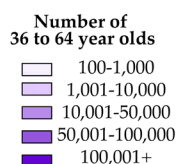
Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.





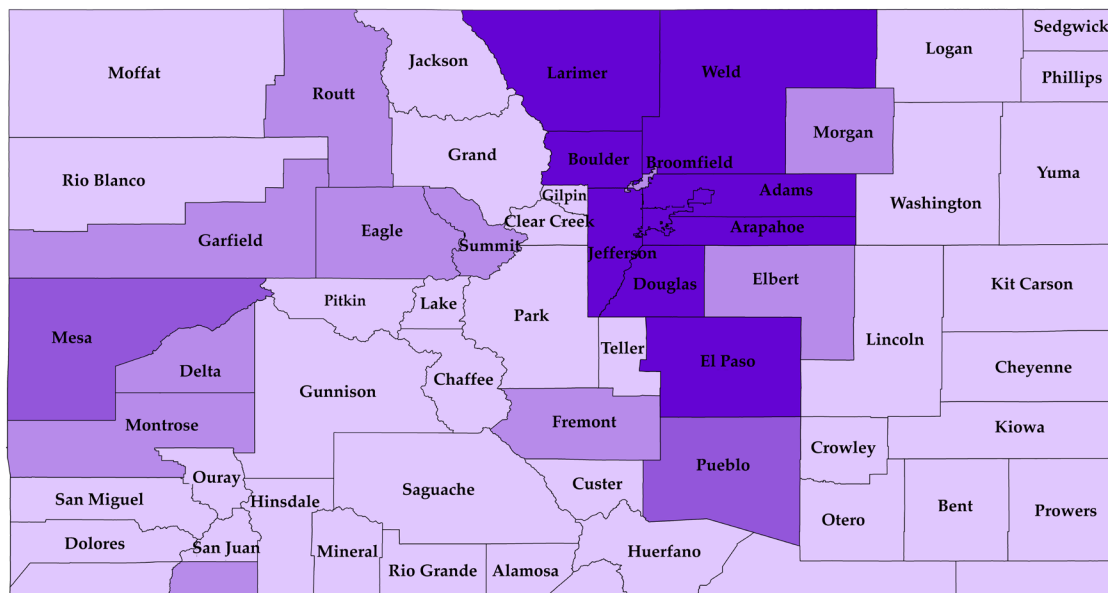


## Colorado Total Population 36 to 64 yrs

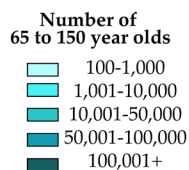


0 25 50 miles

Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.

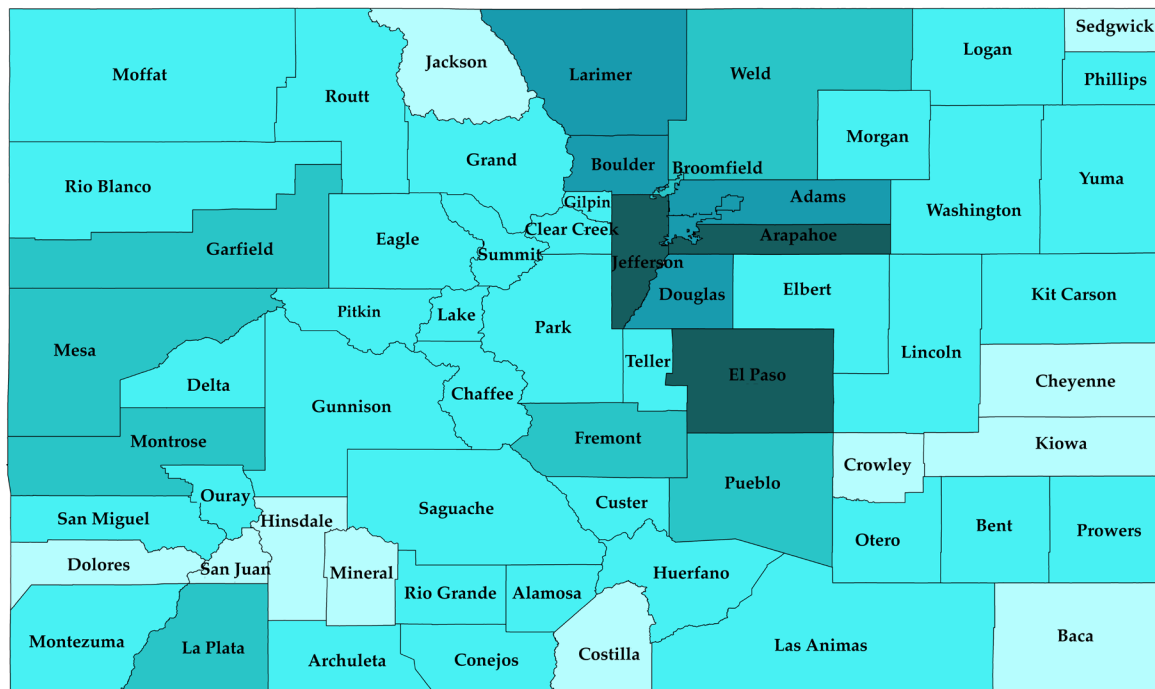


## Colorado Total Population 65 to 150 yrs



0 25 50 miles

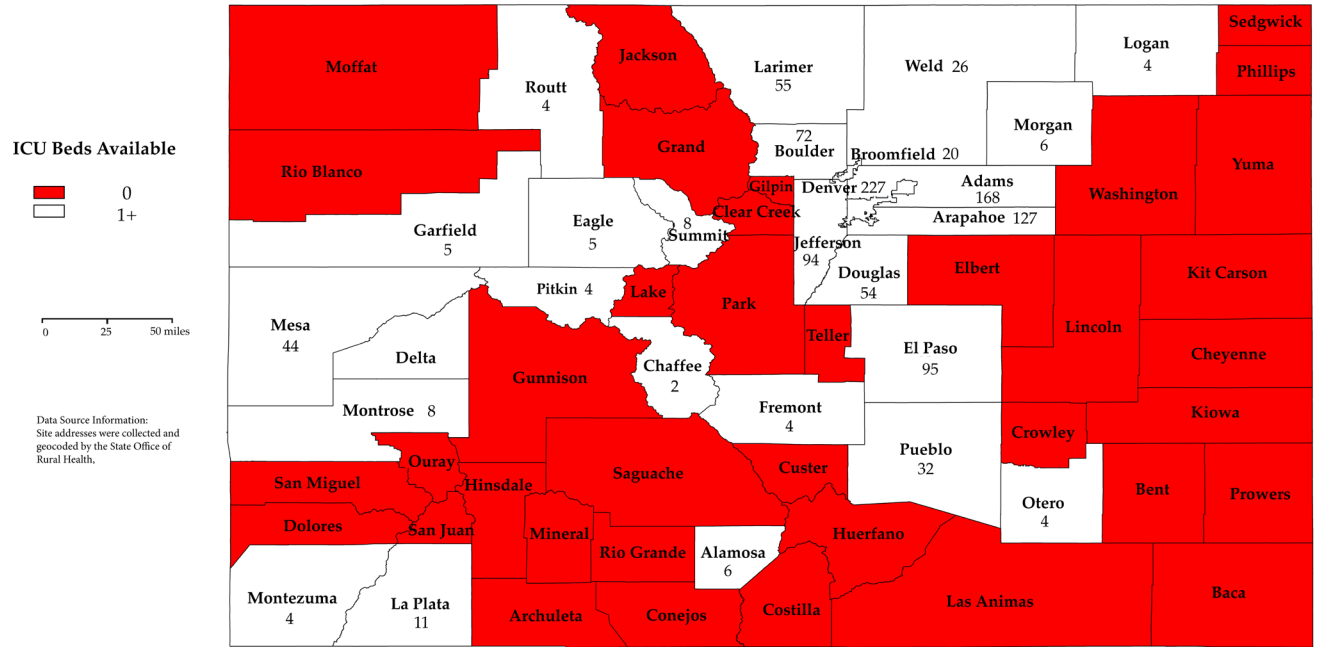
Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.



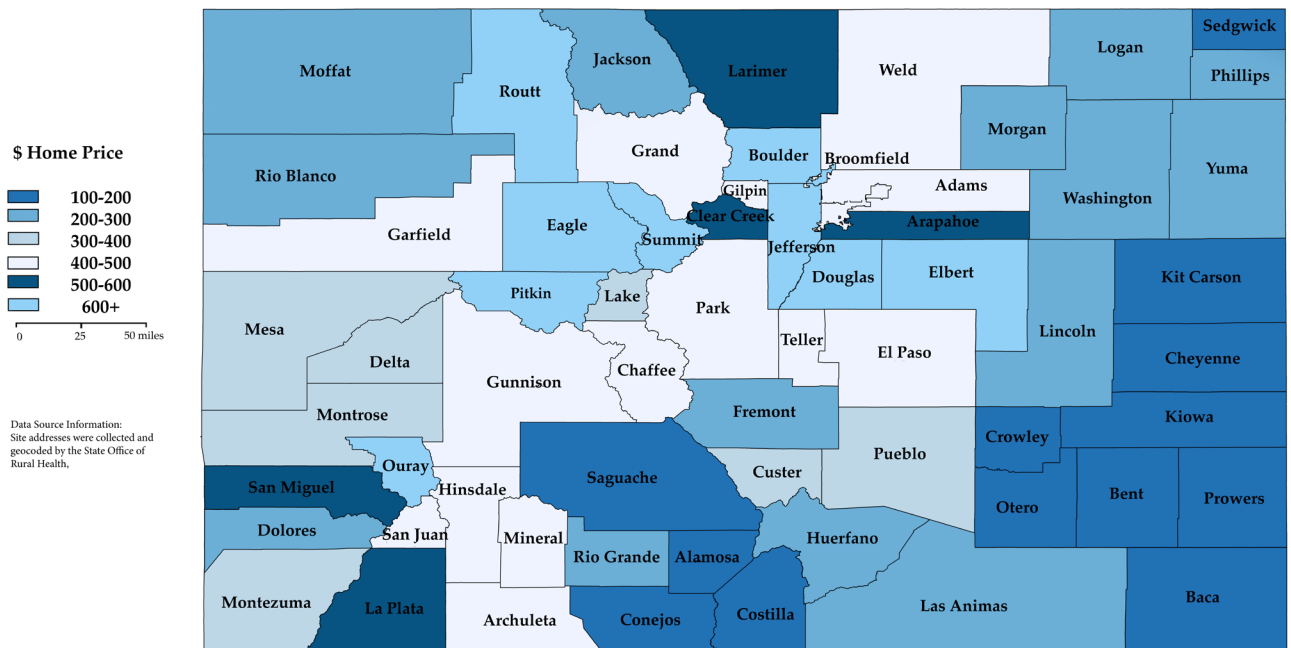




## ICU Beds



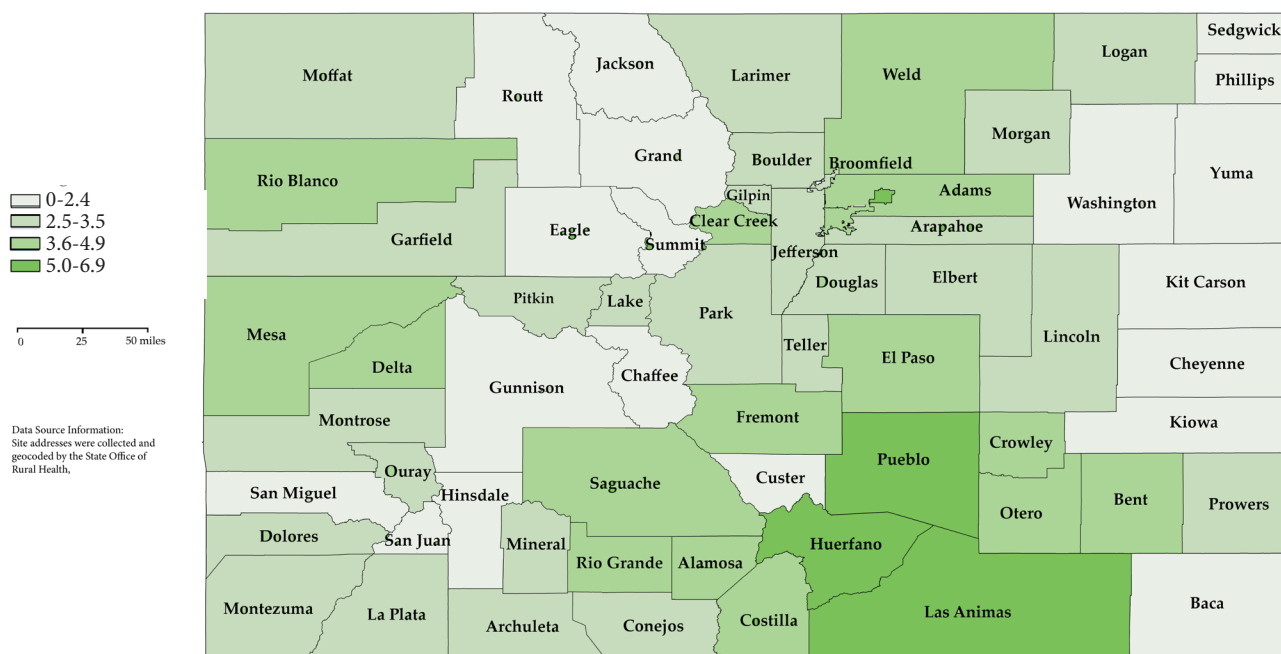
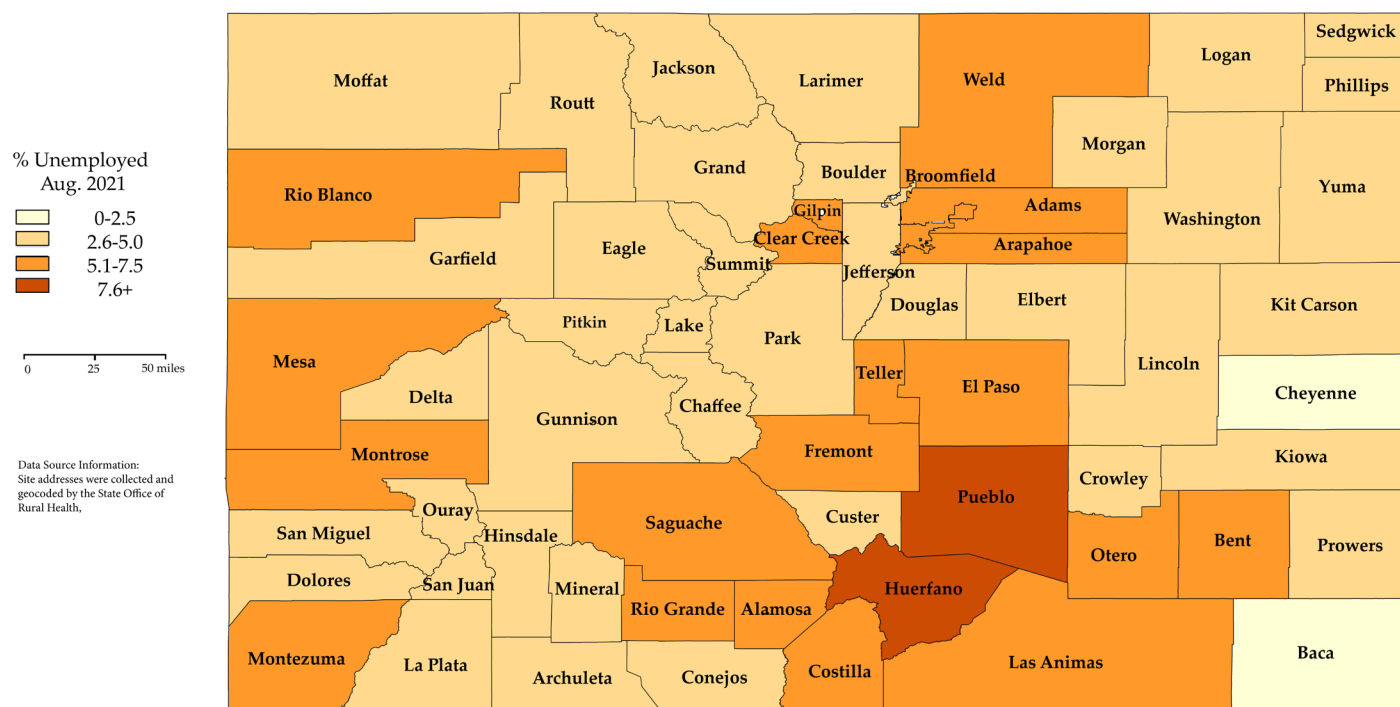
## Median Home Price, 2022









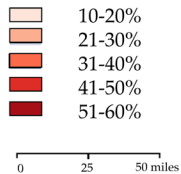






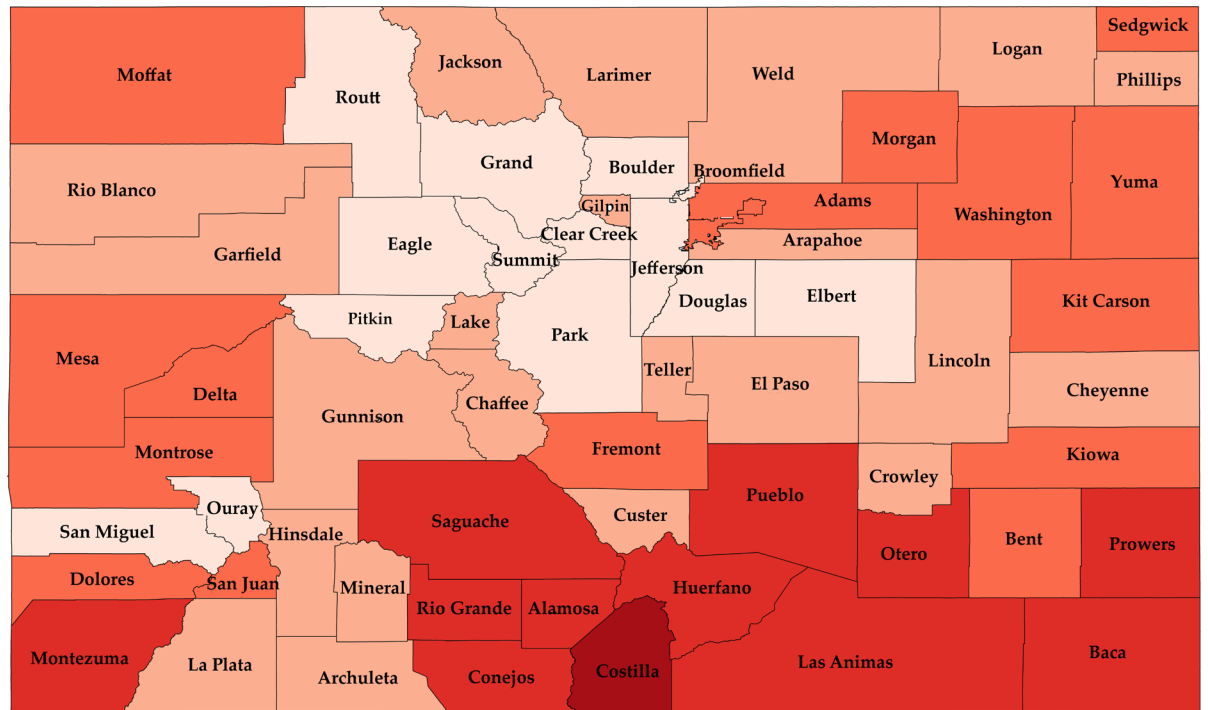
## Medicaid Member Caseload

% of Population  
on Medicaid



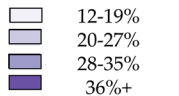
0 25 50 miles

Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.



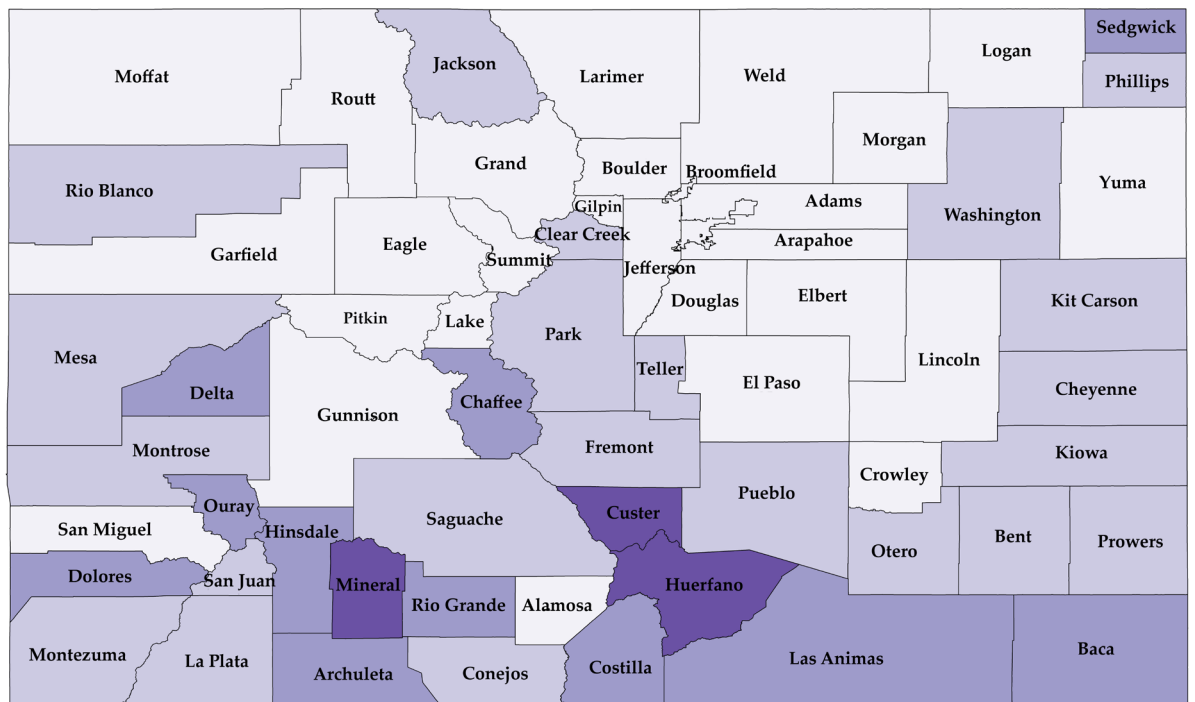
## Medicare Member Caseload

% of Population  
on Medicare



0 25 50 miles

Data Source Information:  
Site addresses were collected and  
geocoded by the State Office of  
Rural Health.

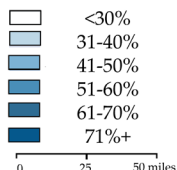




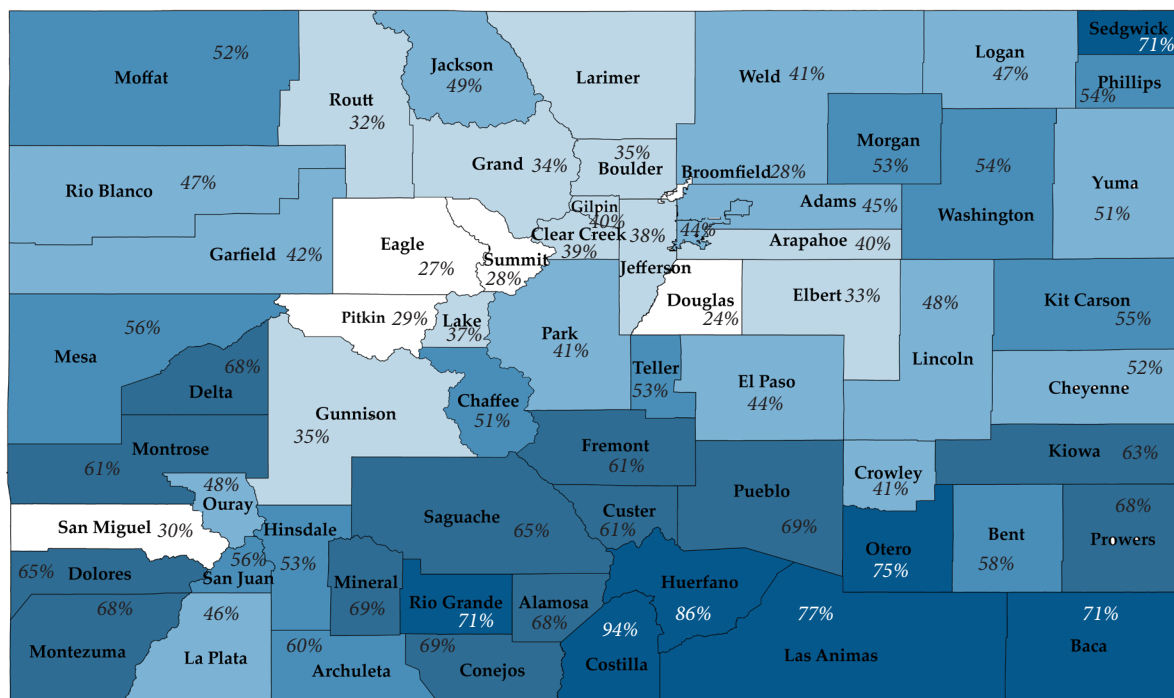


## Medicaid and Medicare Caseload

% of Population on Medicaid or Medicare

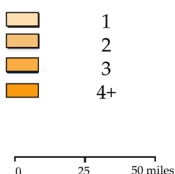


Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.

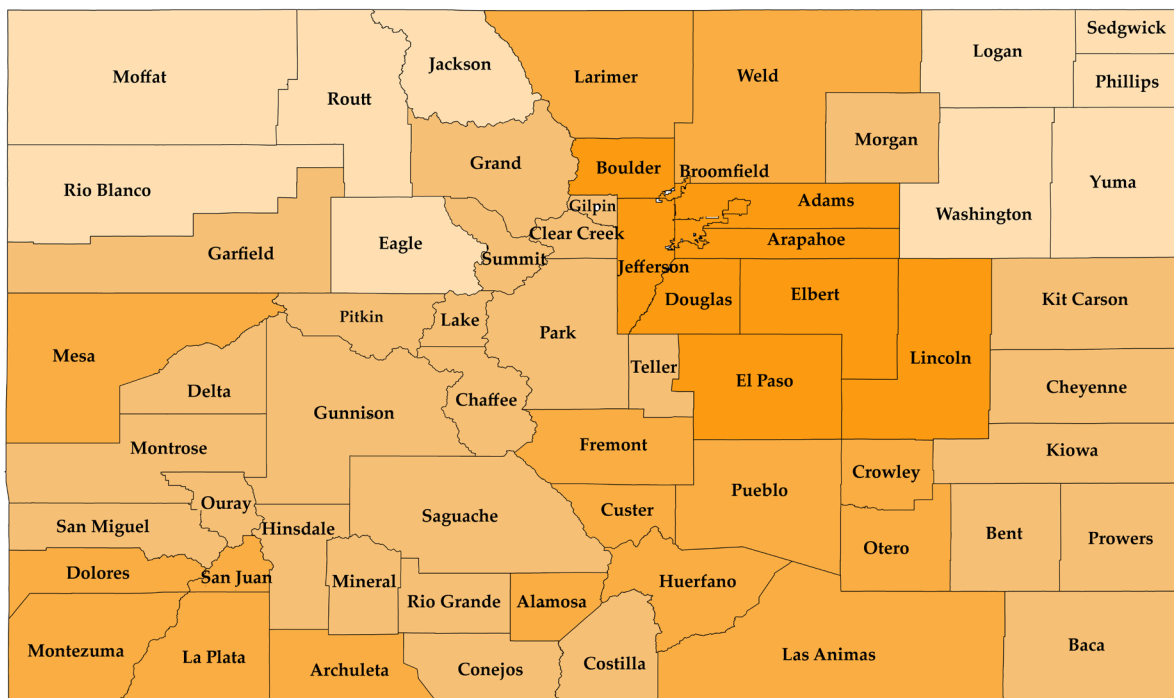


## Number of Healthcare Exchange Insurance Plans by County, 2020

Number of Insurers



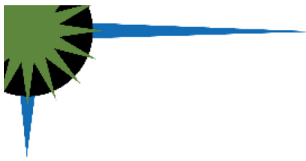
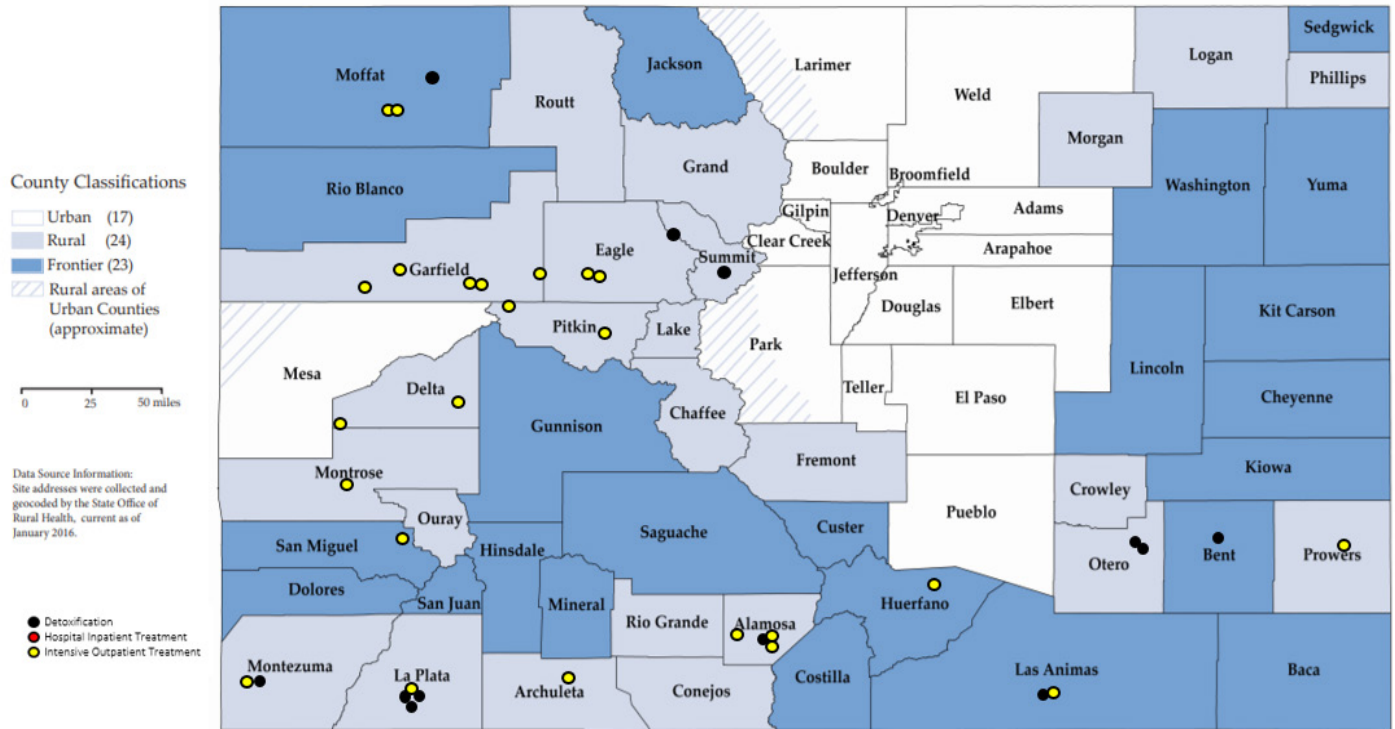
Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.



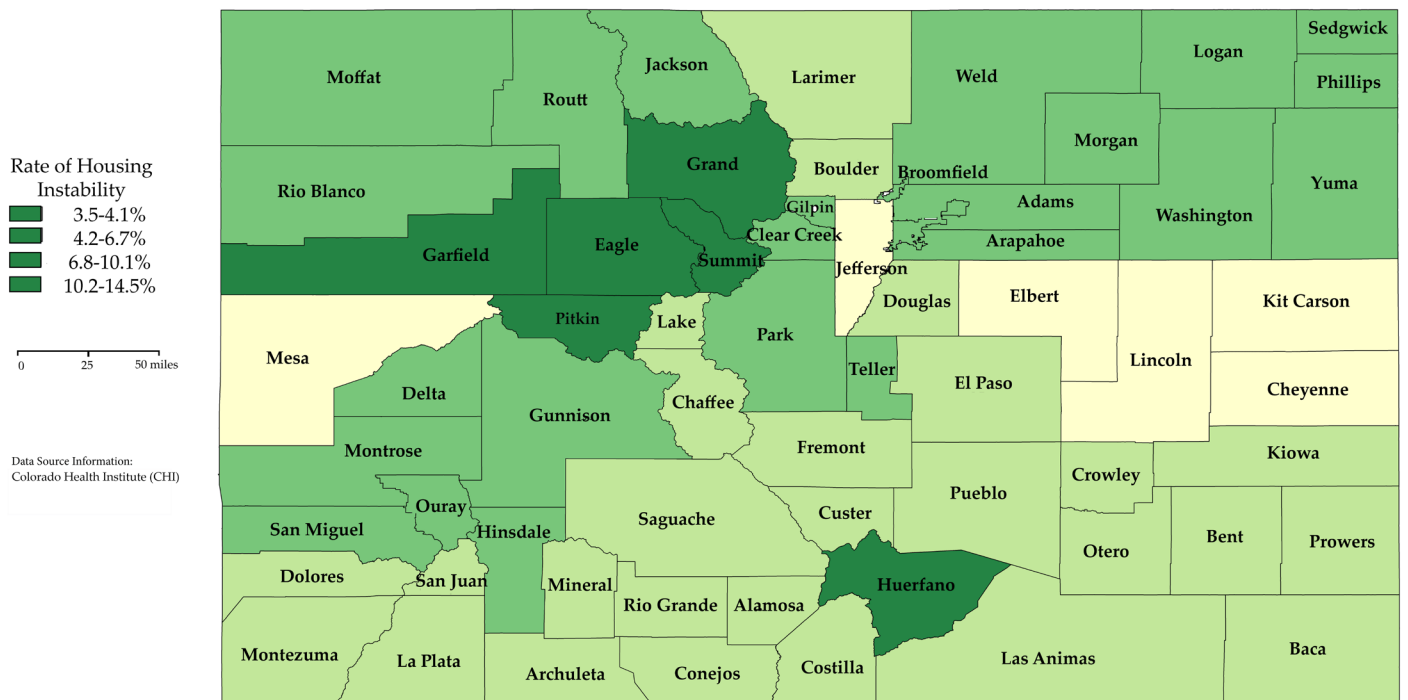




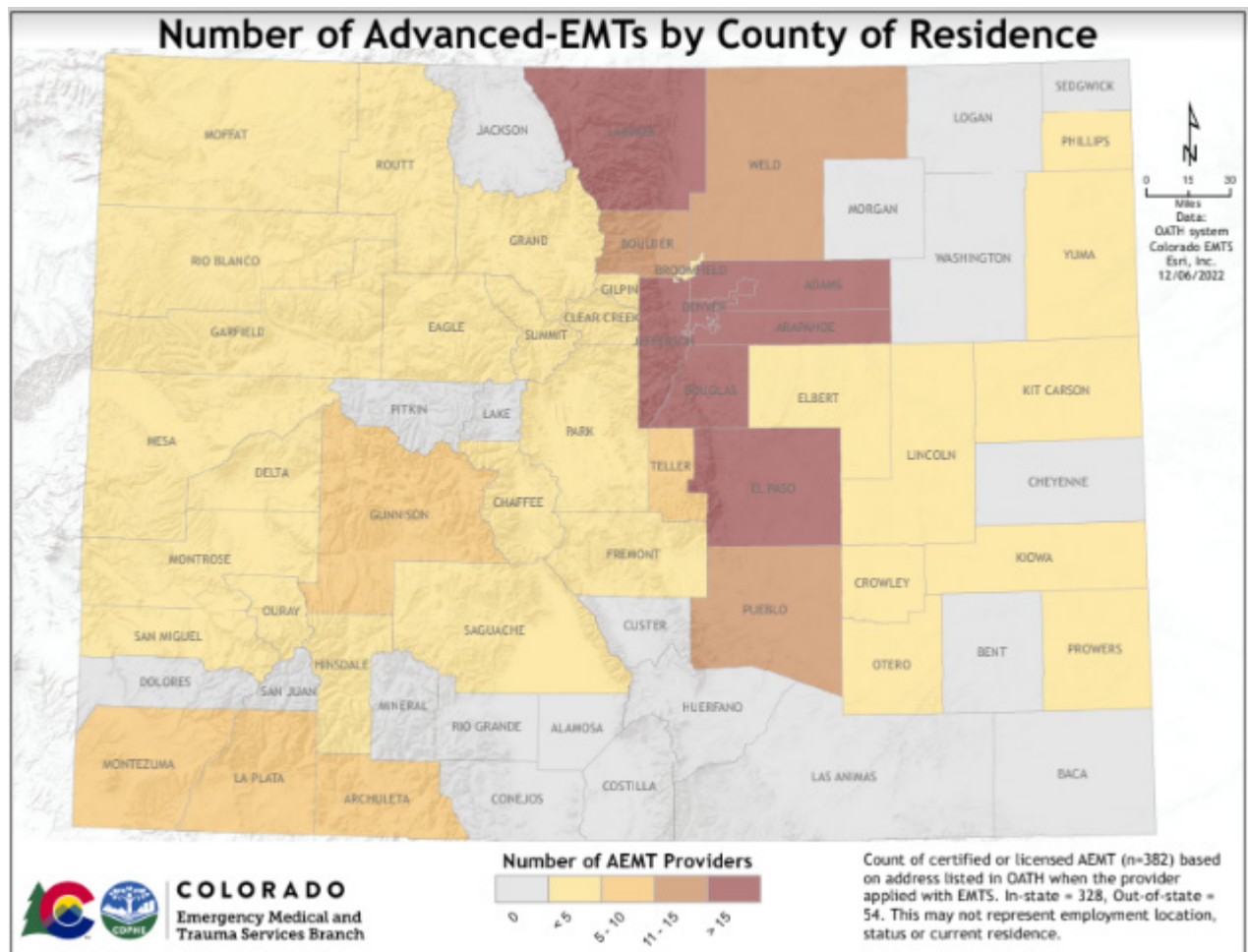
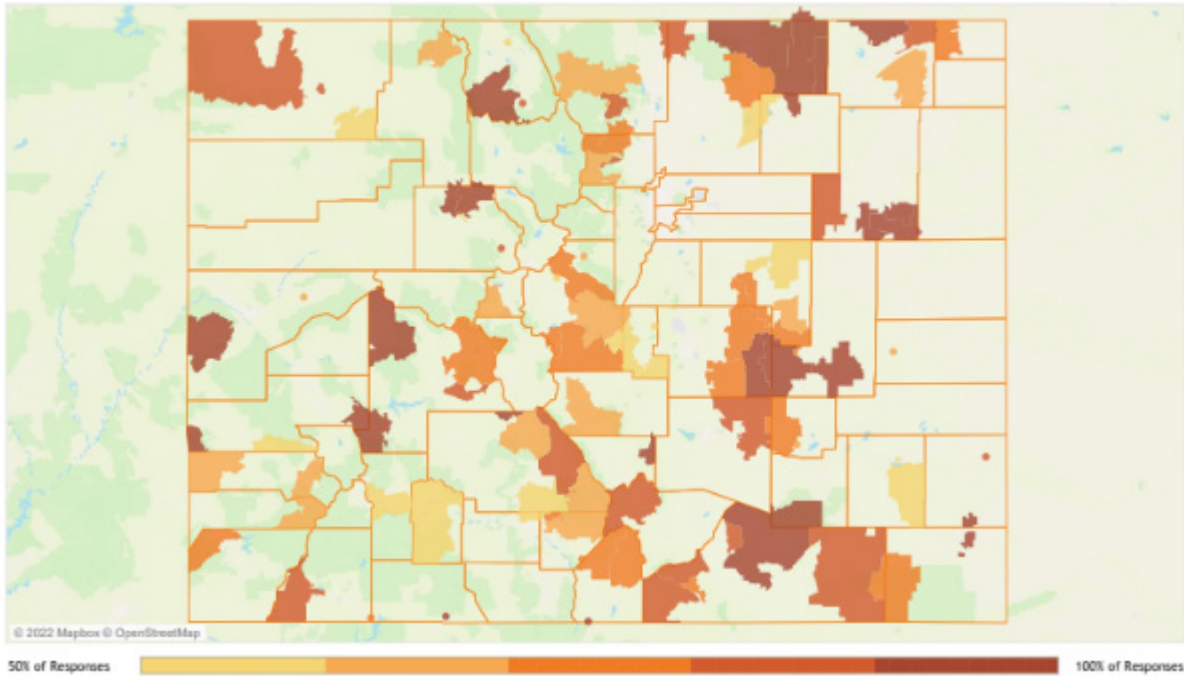
## Rural Substance Use Disorder Facilities, 2020



## Housing Instability



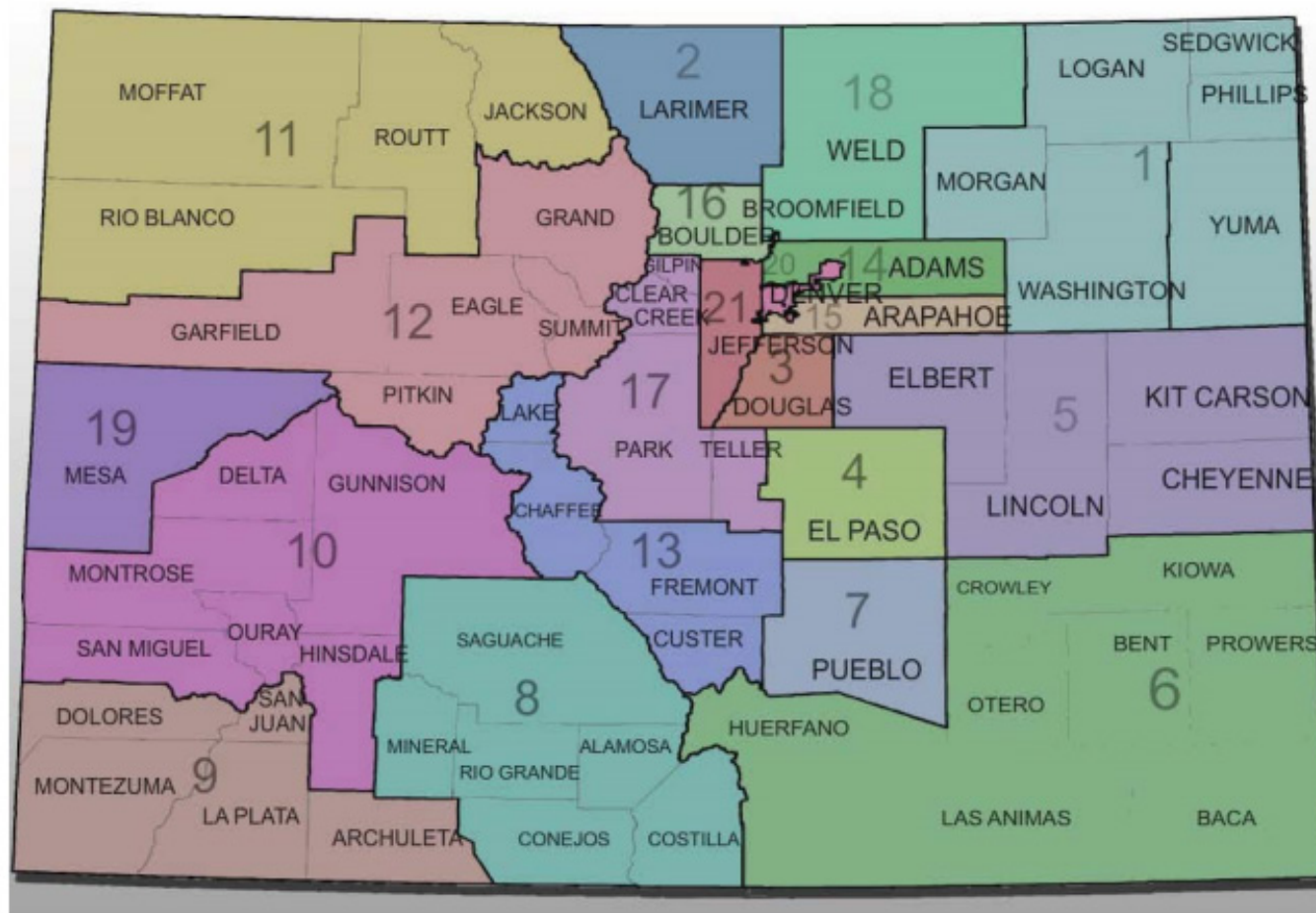






# Colorado Health Statistics Regions

Source: CDPHE



**Region 1:** Logan, Morgan, Phillips, Sedgwick, Washington, and Yuma Counties

**Region 2:** Larimer County

**Region 3:** Douglas County

**Region 4:** El Paso County

**Region 5:** Cheyenne, Elbert, Kit Carson, and Lincoln Counties

**Region 6:** Baca, Bent, Crowley, Huerfano, Kiowa, Las Animas, Otero, and Prowers Counties

**Region 7:** Pueblo County

**Region 8:** Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache Counties

**Region 9:** Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties

**Region 10:** Delta, Gunnison, Hinsdale,

Montrose, Ouray, and San Miguel Counties

**Region 11:** Jackson, Moffat, Rio Blanco, and Routt Counties

**Region 12:** Eagle, Garfield, Grand, Pitkin, and Summit Counties

**Region 13:** Chaffee, Custer, Fremont, and Lake Counties

**Region 14:** Adams Counties

**Region 15:** Arapahoe Counties

**Region 16:** Boulder and Broomfield Counties

**Region 17:** Clear Creek, Gilpin, Park, and Teller Counties

**Region 18:** Weld County

**Region 19:** Mesa County

**Region 20:** Denver County

**Region 21:** Jefferson County



# Expanded Definitions and County Breakdowns

## **RURAL COUNTIES**

A “rural county” is a county that is located in a nonmetropolitan area in the state that either has no municipality within its territorial boundaries with 50,000 or more permanent residents based upon the most recent population estimates published by the United States Census Bureau or that satisfies alternate criteria for the designation of a rural area as may be promulgated by the Federal Office of Management and Budget.

- Alamosa
- Archuleta
- Chaffee
- Conejos
- Crowley
- Delta
- Eagle
- Fremont
- Garfield
- Grand
- La Plata
- Lake
- Logan
- Montezuma
- Montrose
- Morgan
- Otero
- Ouray
- Phillips
- Pitkin
- Prowers
- Rio Grande
- Routt
- Summit

## **FRONTIER COUNTIES**

A “frontier county” is a county in the state that has a population density of six or fewer individuals per one square mile.

- Baca
- Bent
- Cheyenne
- Costilla
- Custer
- Dolores
- Gunnison
- Hinsdale
- Huerfano
- Jackson
- Kiowa
- Kit Carson
- Las Animas
- Lincoln
- Mineral
- Moffat
- Rio Blanco
- Saguache
- San Juan
- San Miguel
- Sedgwick
- Washington
- Yuma

## **URBAN COUNTIES**

- Adams
- Arapahoe
- Boulder
- Broomfield
- Clear Creek
- Denver
- Douglas
- El Paso
- Elbert
- Gilpin
- Jefferson
- Larimer
- Mesa
- Park
- Pueblo
- Teller
- Weld



For a complete list of Snapshot data sources,  
please visit [coruralhealth.org/snapshot-data-2023](https://coruralhealth.org/snapshot-data-2023)