

# SNAPSHOT OF RURAL HEALTH IN COLORADO

- 2022 -

A wide-angle landscape photograph of a mountain range in Colorado. In the foreground, a paved road with white lane markings curves through a valley. The ground is covered with low-lying, brownish-yellow vegetation and patches of snow. In the middle ground, a dense forest of evergreen trees stretches across the valley. The background features rugged, rocky mountain peaks with snow-dusted ridges and peaks under a blue sky with scattered white clouds.

**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 Organization*

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.

## *Mission & Vision*

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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**COLORADO RURAL HEALTH CENTER** | *The State Office of Rural Health*

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### *Definitions*

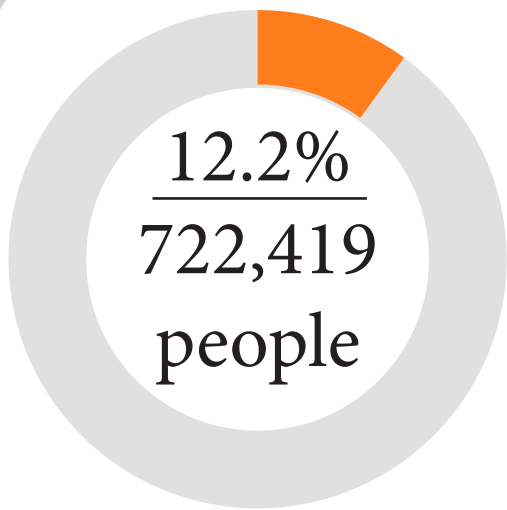
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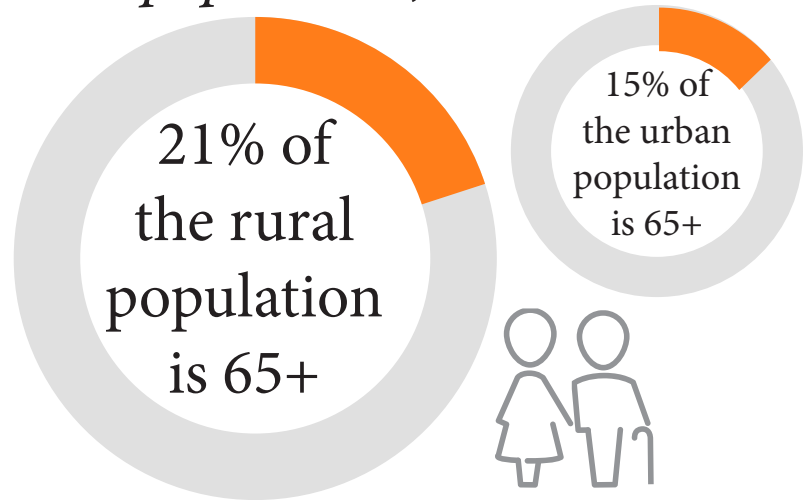
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Rural Health Clinics (RHCs) were created by the Rural Health Clinic Services Act of 1977 to support and encourage access to primary healthcare services for rural residents. RHCs must be located in a federally-designated provider shortage area. RHCs are paid an all-inclusive rate of \$83.45-\$110.36 per visit furnished by an eligible practitioner though the rate often does not cover the cost of a visit. The 55 RHCs across Colorado provide primary and preventative health services to an estimated 130,000 Coloradans annually.

# Demographics

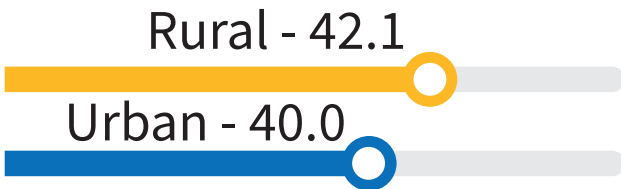


The estimated Colorado population in 2022 is 5,922,503. The rural population is 722,419 (12.2% of the total state population).



## An Aging Population

Median Projected Age: 2030

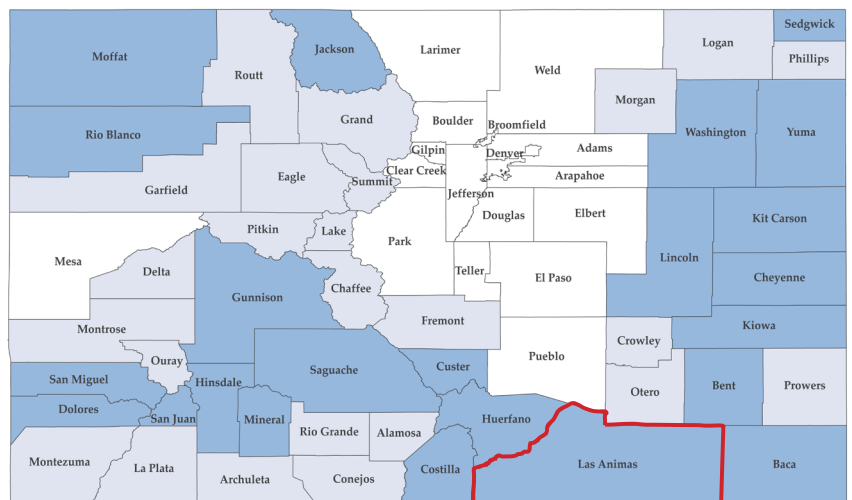


The state's top 3 oldest counties represent rural areas and have a median age of 49+ including Custer, Archuleta, and Delta counties.

## 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)

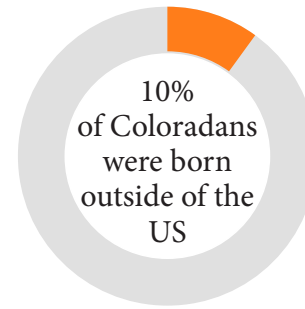
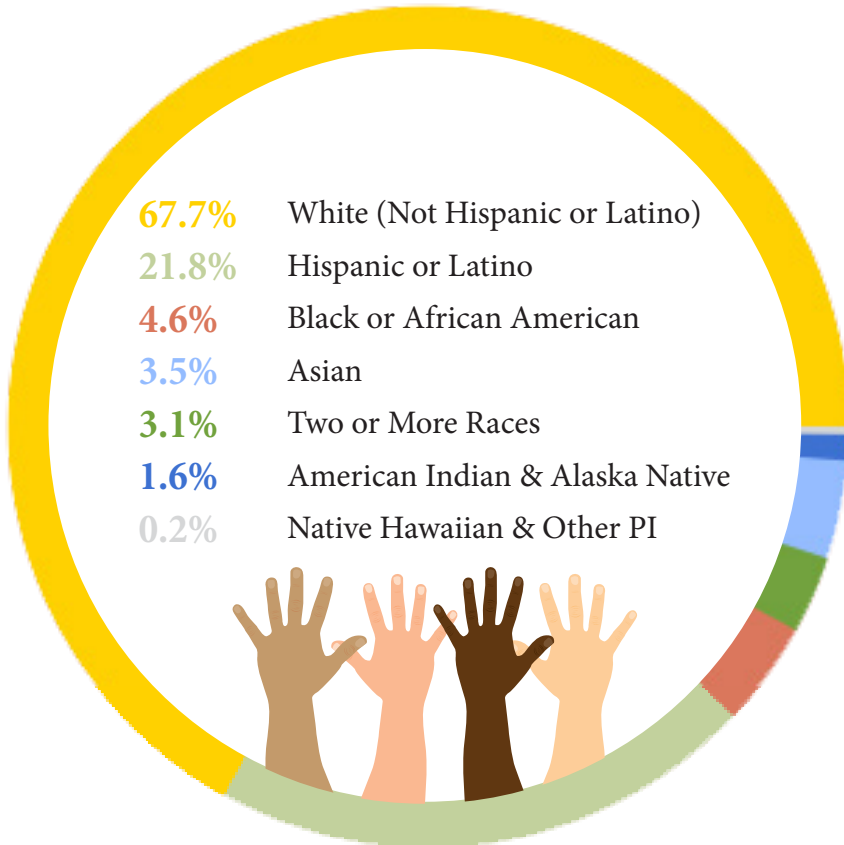
Rural Las Animas County is roughly the size of Connecticut, yet has only 1 hospital



"Rural" - a non metropolitan county with no cities over 50,000 residents  
 "Frontier" - a county that has a population density of 6 or fewer residents per square mile



## Race and Origin of Coloradans



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.

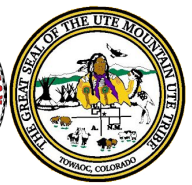


In rural areas of the state, people of color comprise about 26% of the population and 31% in urban areas.

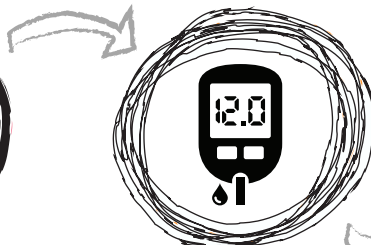
*It is estimated that 45% of Colorado's population will be people of color by 2040.*

### Native Americans 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 1.1% of the Colorado state population is American Indian and Alaska Native (about 56,010 people).



21.1% of American Indian/Alaska Native (AI/AN) Coloradans are living below the poverty level compared to all Coloradans at 11.5% (a 59% difference).



In Colorado, 13.3% of AI/AN individuals have diabetes, compared to the overall state average of 6.5%.



45.7% of AI/AN Coloradans are food insecure compared to all Coloradans at 23.9%.



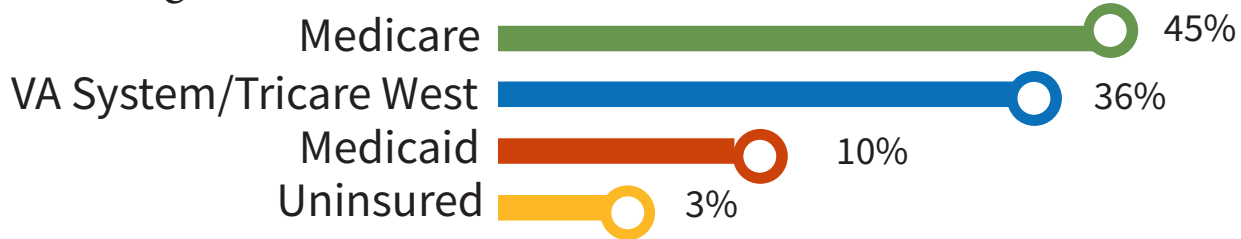
The life expectancy of AI/ANs born today have a life expectancy that is 5.5 years less than the life expectancy of US all races (73 years versus 78.5 years).

# Demographics

## PEOPLE

### Veterans

#### Covering Veterans' Healthcare



2x

Coloradans who have served are more than twice as likely to have a disability that impacts their mobility. 95,053 veterans in the state of Colorado have a service related disability (25.4%).

*An estimated 383,223 veterans currently live in Colorado (6.5% of the population).*



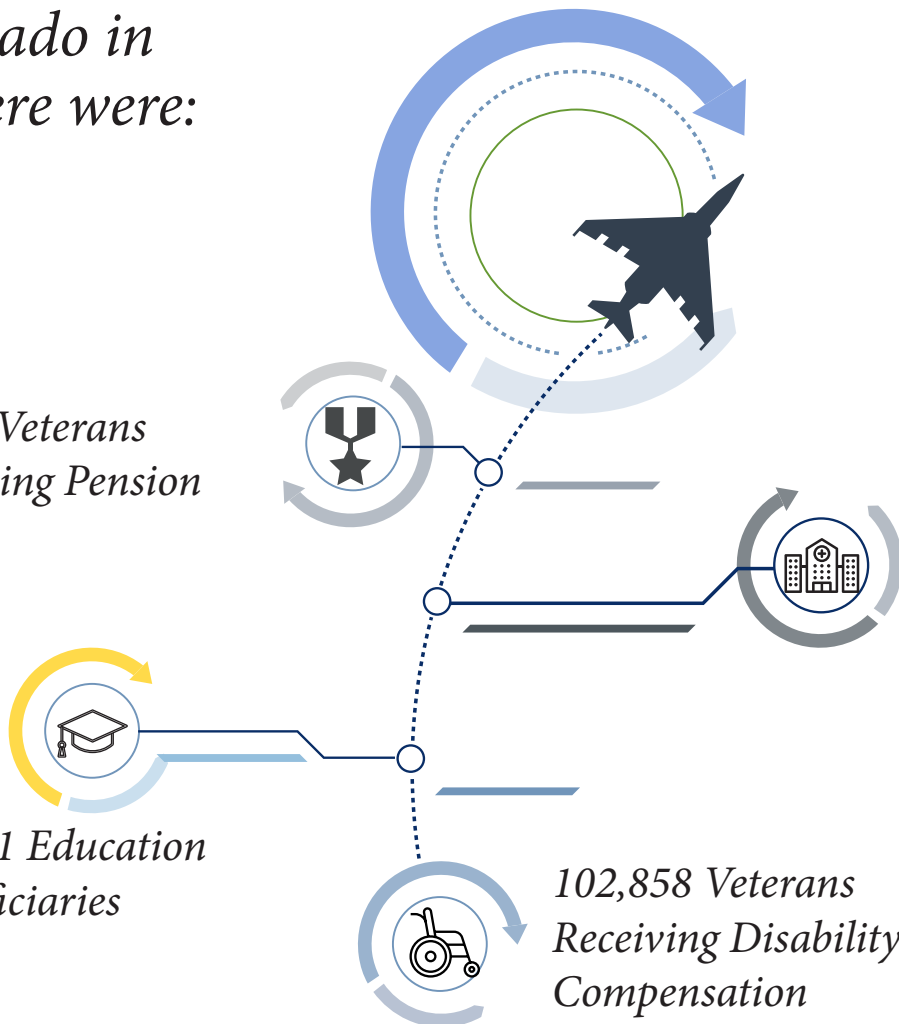
#### *In Colorado in 2017 there were:*

3,779 Veterans Receiving Pension

168,888 Enrollees in VA Healthcare System  
106,654 Unique Patients Treated

29,811 Education Beneficiaries

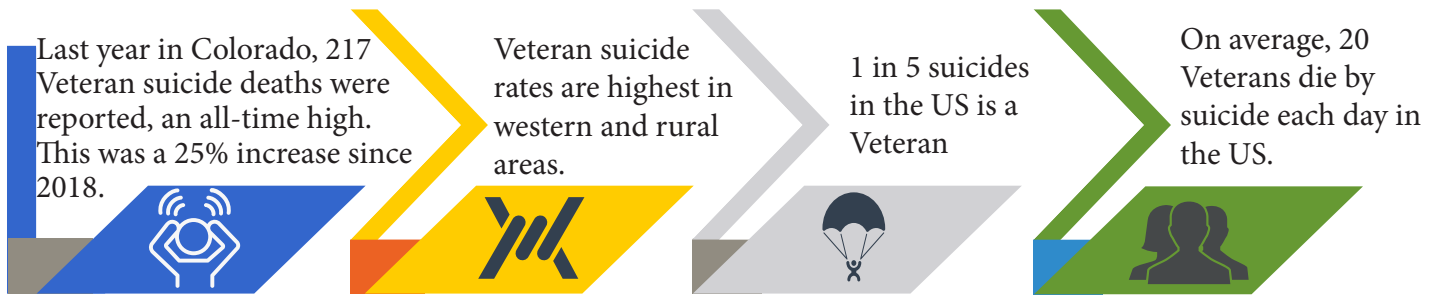
102,858 Veterans Receiving Disability Compensation





## Veteran Suicide

In a report published by the Department of Veteran Affairs, Colorado's Veteran suicide rate was **significantly higher** than the observed national rate.

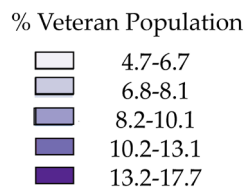


*3.9% of Veterans in Colorado are unemployed.*

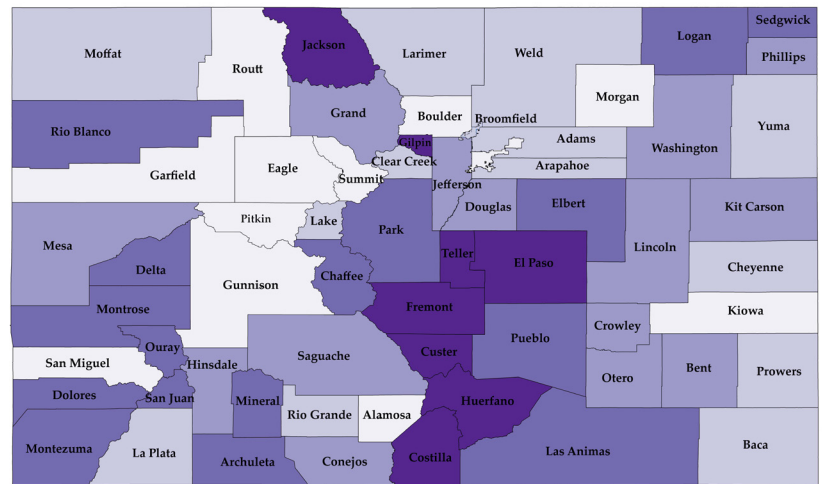


*Colorado Veterans have a median income of \$70,760.*

*6.1% of Colorado Veterans are living in poverty.*



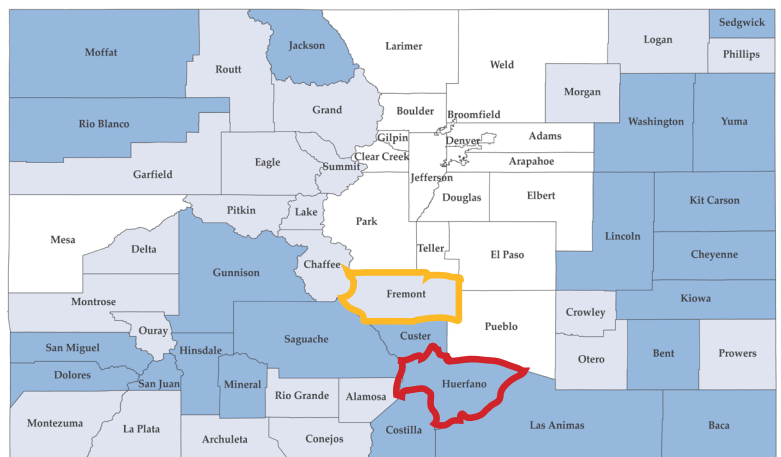
Colorado Veterans as a Percentage of the Population



## Rural Leadership for Veterans

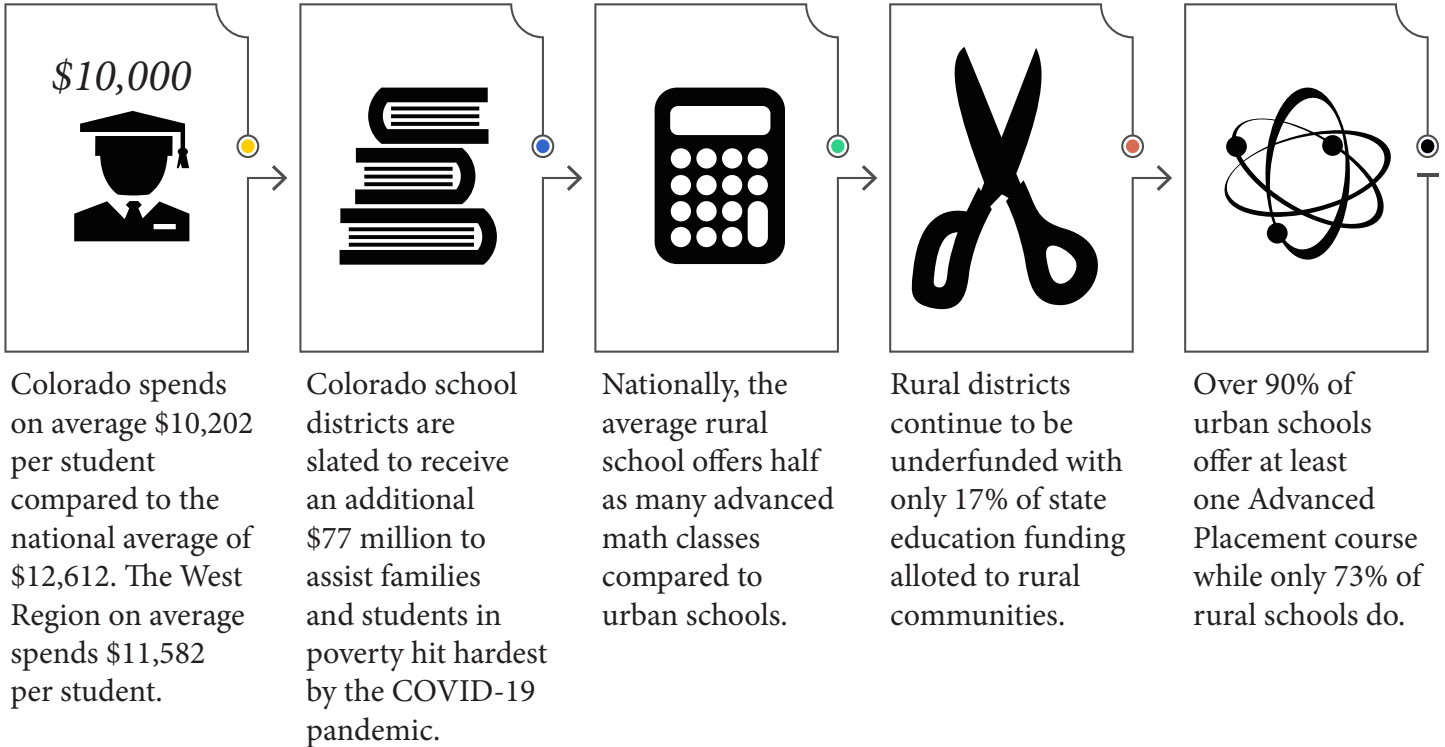
**Huerfano County**, Colorado is home to Spanish Peaks Veterans Community Living Center, an award-winning Veterans centered Nursing Home. The location contains 120 long-term care beds which serve veterans, spouses, widows/widowers, and parents of veterans nationwide.

An estimated 1,044 Colorado Veterans are homeless. **Rural Fremont County** is leading in a national initiative for eradicating homelessness among veterans. It ranks 12th nationally in a program called "Build for Zero" where each unhoused veteran is known by name and the community demonstrates an ability to keep that population smaller than their capability to house those people over the course of a month. In Fremont County, the number of unhoused veterans is 3. There are 80 cities and counties nationwide working on the "Build for Zero" initiative, 8 of which are in Colorado.



### School and Student Funding

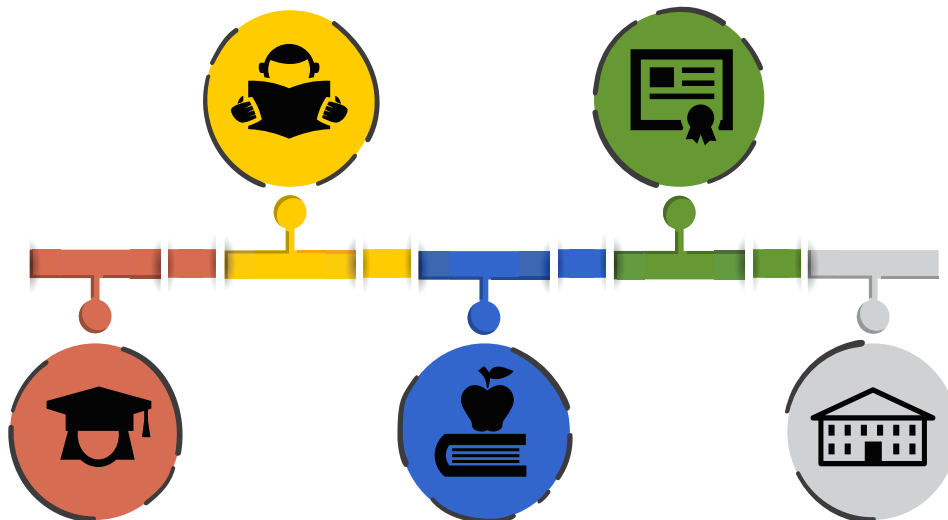
Nationally, many disparities exist in rural schools, such as persistent test score gaps, racial gaps in graduation rates, and scarce resources.



### Post Secondary Education

There is a 91% high school completion rate in rural Colorado compared to 93% in urban Colorado.

63% of rural Coloradans attend some kind of post-secondary education, compared to 67% of urban Coloradans.

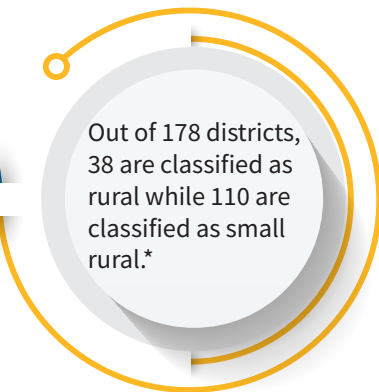
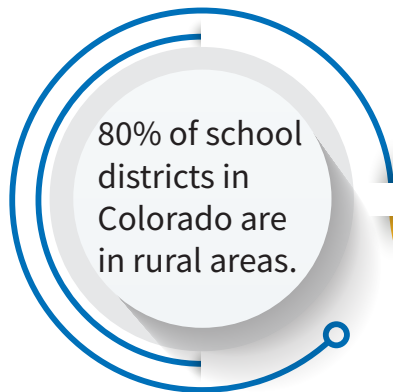


College attendance among all Colorado high school graduates has not increased for the past 10 years.

10% of adult Coloradans lack basic literacy skills.

Approximately 56% of the class of 2019 enrolled in a 2 or 4 year college within one year of graduating (the national average in 2018 was 69%).





*Only 52% of students who took out student loans in rural areas still reside in their home communities six years later. Students with higher student loan debt are most likely to leave their rural hometowns.*

\*A rural district in Colorado is located in a non-urban area and has a student enrollment of 6,500 students or less, a small rural district meets the same geographic criteria and has less than 1,000 enrolled students



*Colorado teacher salaries in almost every rural district (95%) are below the regional cost of living.*



In Colorado, the highest average teacher salary is \$53,434 (national average: \$61,730).

The highest earning teacher salaries were observed in metro and resort-town districts where the salaries ranged from \$50,440 to \$80,329.

In the 2020-2021 teaching year, the 10 districts with the lowest average teacher salaries were located in rural counties. The average salaries for those 10 districts fell below \$36,000.

*Nearly 40% of teachers are considering leaving the profession as a result of overwhelming workloads, risky work environments due to COVID-19 and low pay.*

The top five food insecure counties in Colorado are rural

### Disparities

Currently, 43% of non-white and Latinx residents are struggling to put food on the table, compared to 29% of white residents.

### Hunger

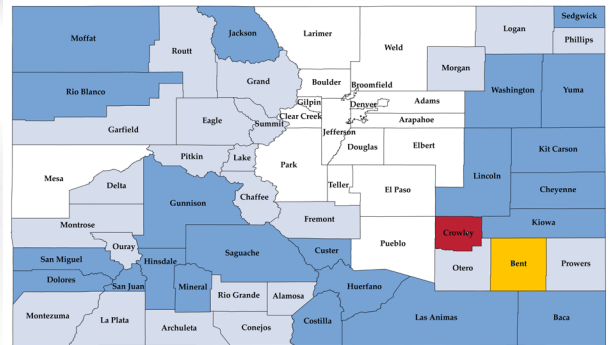


1 in 3 Coloradans are struggling with hunger.

Rural **Bent** and **Crowley** counties have the highest percentages of people facing food insecurity at 19% and 18%. The state rate of food insecurity is 10%.

### Middle Age

The highest rates of food insecurity were observed in the age group of 35-44.



## Housing



There is a shortage of affordable and available rental homes for extremely low income households in Colorado. An extremely low income is one where the income is at or below the poverty guideline or is 30% of the area median income. 21% of renter households in Colorado are considered extremely low income.



In 49 of Colorado's 64 counties, families are rent burdened, defined as spending 35% or more of household income on rent.



Over the past 10 years, average Colorado home prices have increased 77% while the state's median income only increased 4.5%.



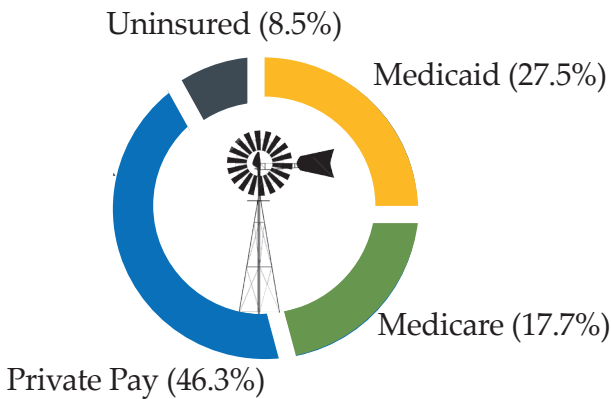
An estimated 11,000 Coloradans do not have a place to live. A third of them are families with children and over 40% are people with disabilities.



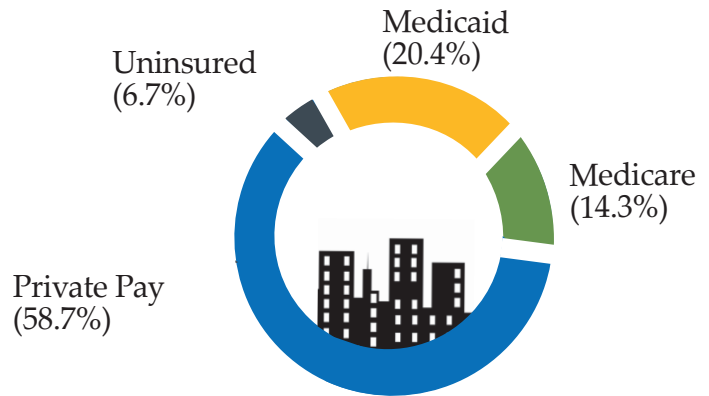
# HEALTHCARE COVERAGE

Rural Colorado has higher rates of public insurance (38.7%) compared to urban Colorado (33.5%).

**Rural Payer Mix**



**Urban Payer Mix**



## Healthcare Exchange - Connect for Health Colorado

- By Connect for Health Colorado's enrollment deadline of 1/1/2021, over 168,000 Coloradans had purchased a medical insurance plan. This is a 6% increase from the previous enrollment year.
- In the 2020 enrollment period, 6.5% of Coloradans went without insurance and 72% of Connect for Health Colorado customers qualified for financial assistance.



## Insurance Coverage

Prior to the COVID-19 pandemic, the uninsured rate in Colorado remained at 6.5% (approximately 361,000 Coloradans). Rates of uninsurance vary across the state (2.6% in Jefferson County to up to 14.3% in the I-70 mountain corridor).



### Few Plans Available

14 rural counties have only one insurance carrier option

### Uninsured Counties

The 25 counties with the highest uninsured rate for adults are all rural or frontier.

### Costilla County

Costilla County has the highest combined Medicare/Medicaid rate of all Colorado counties at 94%.

### Saguache County

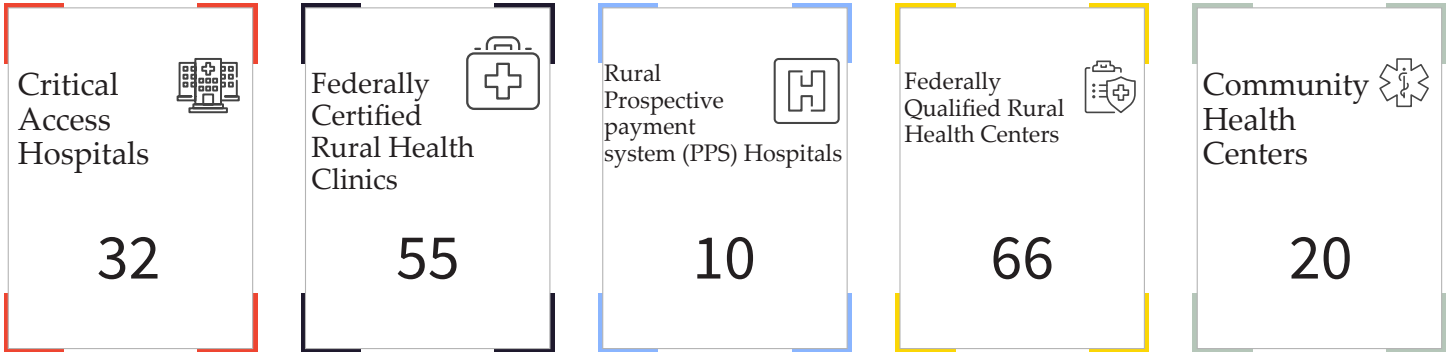
20% of adults in Saguache County are uninsured (compared to the state average of 10%)

Rural premiums average 32% higher than urban parts of Colorado.



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

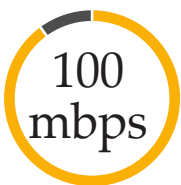
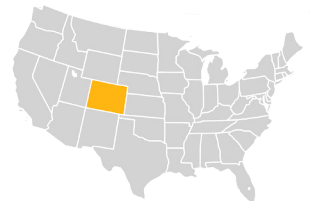
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## RURAL HEALTH INFORMATION TECHNOLOGY

### Broadband Access

It is difficult to improve broadband access in rural areas due to the cost of infrastructure and maintenance, which has a low return on investment and is not affordable in sparsely populated areas.

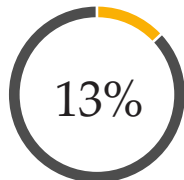
Colorado ranks 25th of all states for broadband access.



90.2% of Coloradans have access to broadband 100mbps or faster.



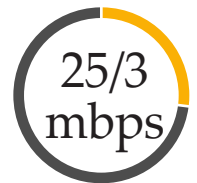
Only 4% of Coloradans have access to 1 gigabit broadband.



The Colorado Broadband Office states that 13% of rural Coloradans lack broadband access.



A recent report by the Federal Communications Commission indicates that 22.3% of Americans in rural areas, and 27.7% of Americans living in Tribal lands, lack coverage from fixed terrestrial 25/3 Mbps broadband compared to only 1.5% of Americans in urban areas.

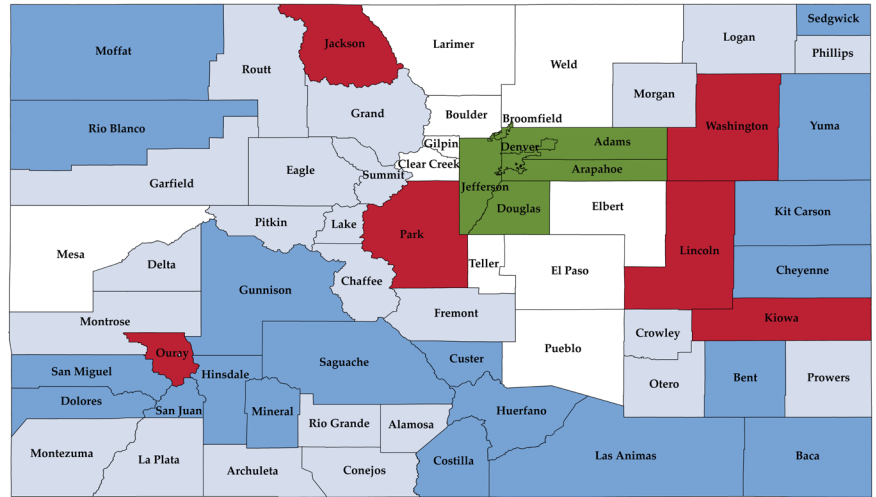


- The 6 counties with the **worst broadband coverage** are rural or frontier with less than 55% coverage (Ouray, Lincoln, Washington, Park, Jackson, and Kiowa).

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

- The county with the worst broadband coverage is Ouray with 38.3% broadband coverage.

- The county with the best coverage is Broomfield with 98.5% coverage.



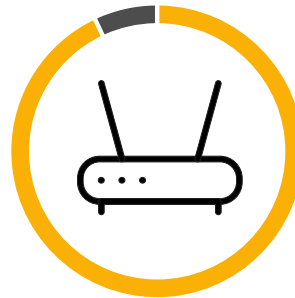
### Broadband Delivery Modes



96.8% of Coloradans have broadband access through a wireline service



87.2% of Coloradans have broadband access through a cable service

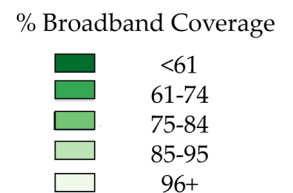
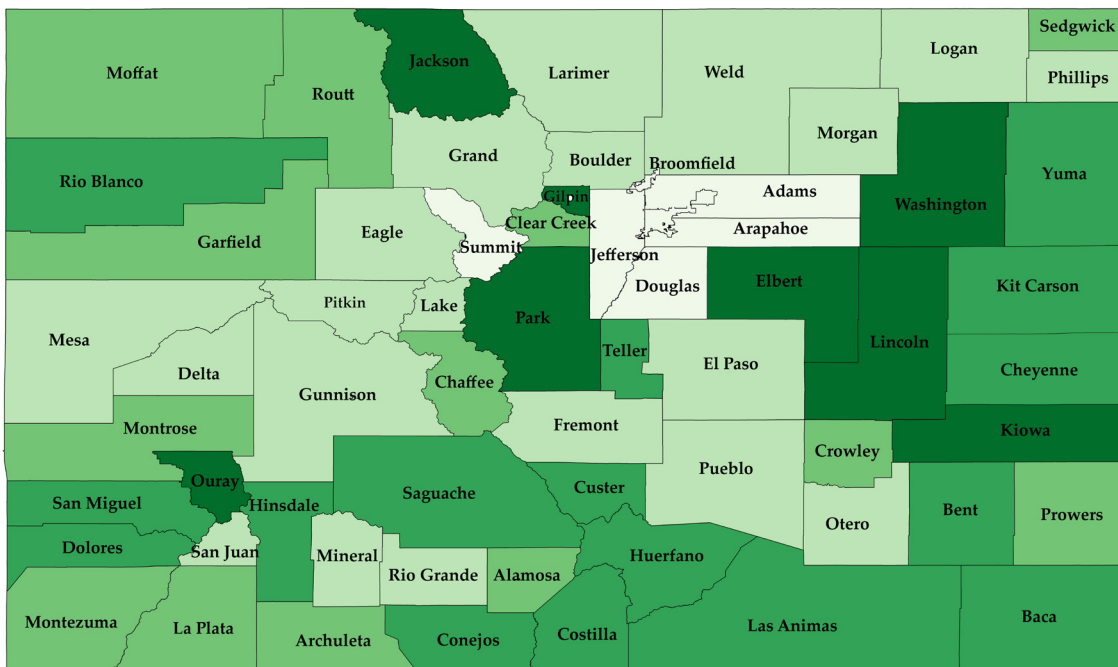


93.2% of Coloradans have broadband access through a DSL service



62.1% of Coloradans have broadband access through a fiber-optic service

### Broadband Access by County, 2021







# 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



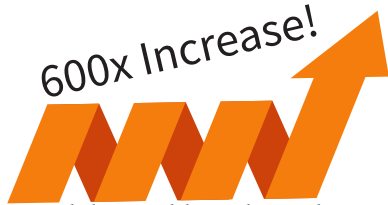
*\$200-\$35,000 with hidden costs affiliated with customization, system integration, storage.*

### Telehealth: A pandemic lifeline

There were significant drops in patient volume, and therefore hospital revenue, during the early months of the pandemic. These drops would have continued and been significantly more financially detrimental if the shift from in-person visits to telemedicine did not occur.

Since the COVID-19 Public Health Emergency was declared, the Colorado State Health Care Policy and Financing (HCPF) Department allowed safety net providers including RHCs, FQHCs and Indian Health Services to bill for telemedicine visits. Prior to COVID-19, rules limited payments to face-to-face medical encounters only. Due to restrictive regulations before the pandemic, many CAHs and RHCs were essentially launching telehealth programs from the ground up.

**600x Increase!**



Care delivered by telemedicine during the COVID-19 pandemic increased more than 600 times! Significant use was observed by community mental health centers with patients seeking care for anxiety or depression.

**\$800,000+ in Care**



From January 2020 through July 2021, \$629,115 in telemedicine services were delivered to adults, while \$172,986 in telemedicine services were rendered to children.

**61% Drop in Encounters**



On average, encounters dropped 43% during the pandemic compared to baseline data. If not for the quick adoption of telemedicine, the drop would have reached 61%.

## Federal Telehealth Funding

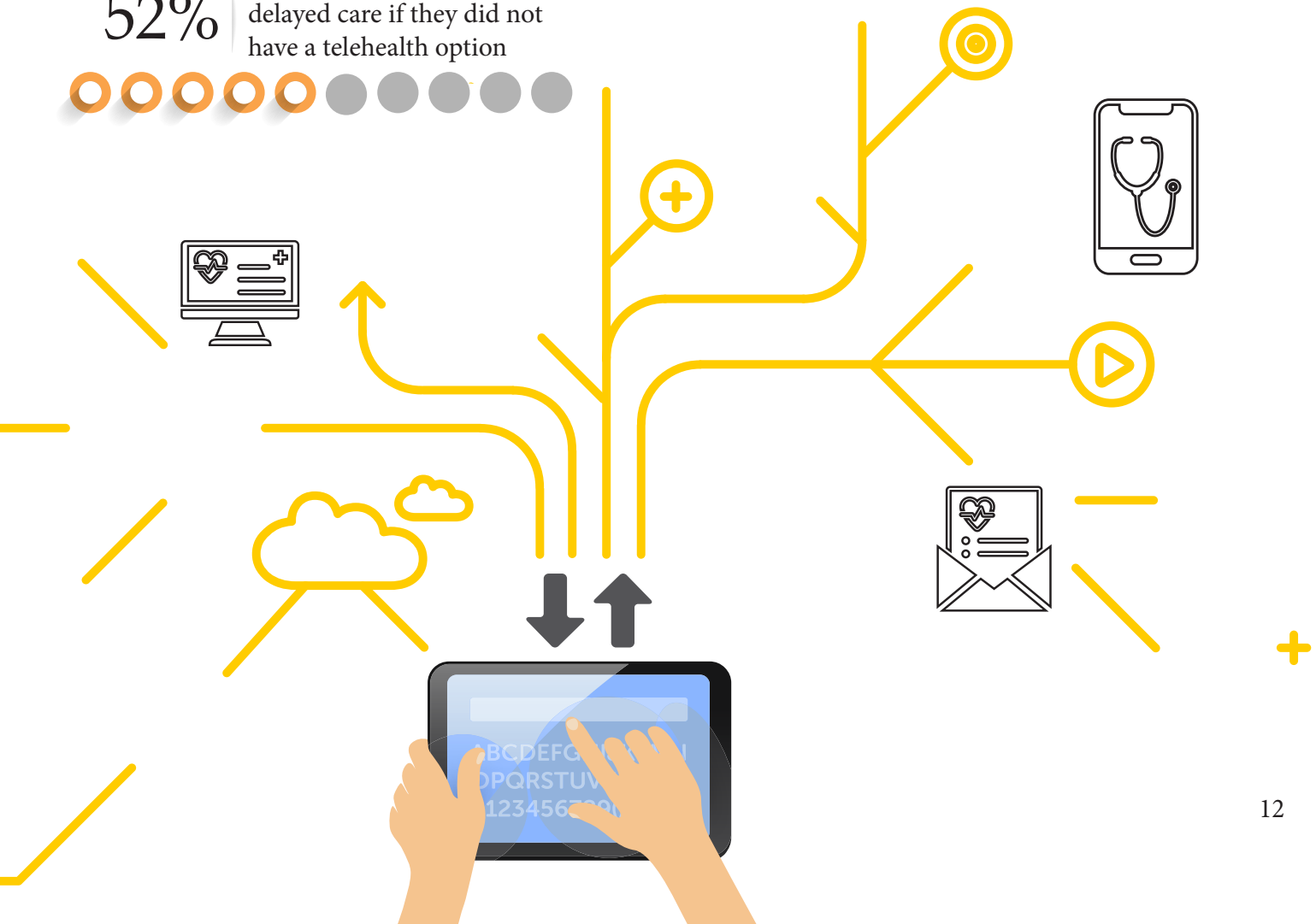
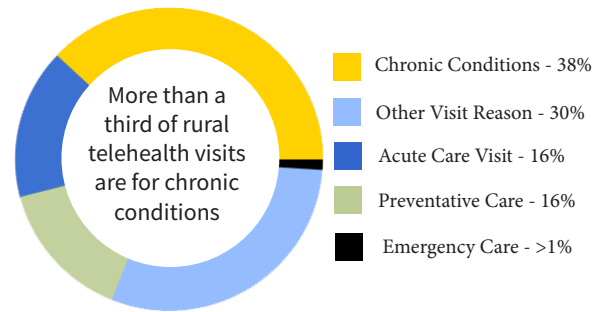
The Biden-Harris Administration announced key investments in telehealth totaling over \$19 million that will go towards the expansion and improved quality in order to provide sustained care for patients and increase service convenience. The funding is provided by the Health Resources and Services Administration (HRSA) at the US Department of Health and Human Services (HHS) through the following programs:

- Telehealth Technology-Enabled Learning Program (TTELP): \$4.28 million
- Telehealth Resource Centers (TRCs): \$4.55 million
- Evidence-Based Direct to Consumer Telehealth Network Program (EB TNP): \$3.85 million
- Telehealth Centers of Excellence (COE) program: \$6.5 million



## Surveying Rural 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:





# The Health of Rural

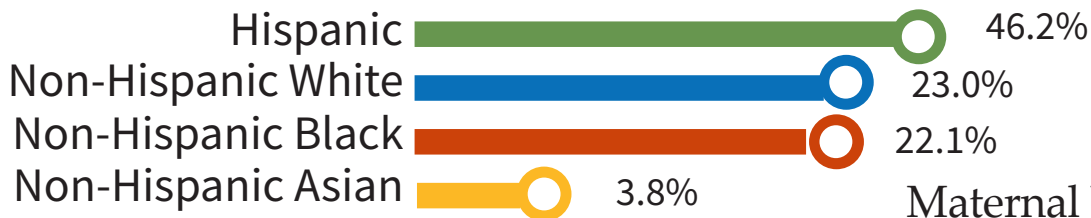
## WOMEN'S AND MATERNAL HEALTH

### Teen Pregnancy

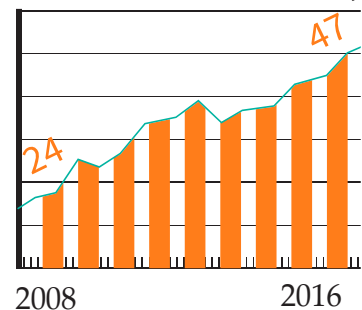


- Rural Colorado has a 46% higher teen pregnancy rate than urban parts of the state (statewide rate: 18.0\*, Rural: 23.6\*, Urban: 15.2\* \*per 1,000 females age 15-19)
- Teen Abortion Rate (Induced terminations of pregnancy among females ages 15-19 per 1,000 females ages 15-19): 3.9
- Percent of live births that were unintended in Colorado: 36%.
  - Percent of Colorado female high school seniors who are sexually active that are using Long Acting Reversible Contraception (LARC) methods: 18%
  - Number of second or higher order births to teens ages 15-19: 290
- Percent of all births to women with less than a high school education: 10.6%
- Percent of all births to women less than age 25, with less than a high school education, and not married: 2.9%
- Of births occurring in the US in 2018, 42% were covered by Medicaid.
- Family Medicine Physicians provide essential maternity care in rural areas of the US. On average, patients would be required to drive 86 miles round-trip to access care if family physicians were to stop delivering.

### COVID-19 in the US and Maternity Care: Pregnant women diagnosed with COVID-19:

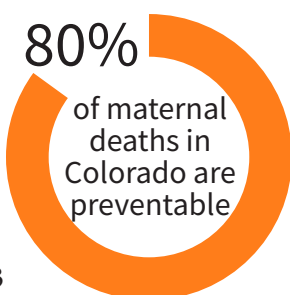


### Maternal Deaths/100,000



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.

### Maternal Mortality



### Top Causes of Maternal Deaths in Colorado

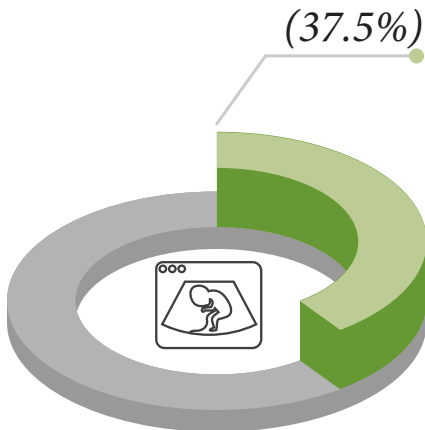


1. Suicide
2. Unintentional drug overdose
3. Injuries (including motor vehicle accidents)
4. Homicide (over 50% of which were committed by an intimate partner)
5. Cardiac conditions

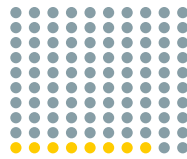


## Access to OB Care

24 of Colorado's 64 counties are considered "Maternal Care Deserts" (37.5%)

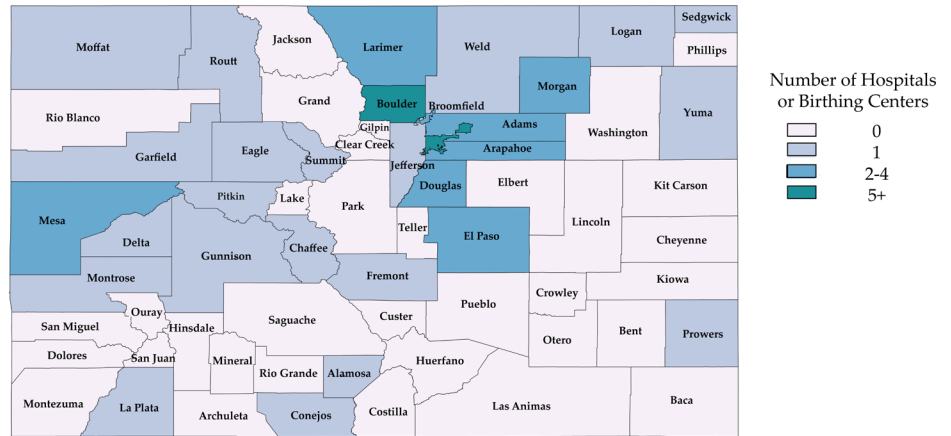


These are areas where there are no obstetric providers and no hospitals or birthing centers offering obstetric care. The counties in Colorado considered maternity care deserts were predominantly located in the Eastern Plains and in southern and northwestern Colorado.



Only 8% of all obstetric providers in the US reported that they practiced in rural areas.

## Access to Hospitals or Birth Centers



54% of rural Colorado counties lack OB services. Only 18 of Colorado's 32 CAHs have obstetric departments.

## ORAL HEALTH

Adults in rural areas have almost twice the prevalence of tooth loss vs. urban adults.

Access to oral health providers is limited in rural regions because of geographic isolation and workforce shortages.

In Colorado, the prevalence of cavities observed in kindergarteners has decreased significantly from 45% in 2006-2007 to 31% in 2016-2017.

In Colorado, approximately 35% of the general adult population have lost at least one tooth due to decay or gum disease. Increased rates were observed in diabetics (59%) and smokers (44%).

Dental caries are largely preventable, although they still remain the most common chronic disease of children and adolescents.

## Dental Outcomes



18% of Coloradans over age 65 have lost ALL of their natural teeth.



# The Health of Rural

## ORAL HEALTH



In Colorado, tooth decay is evident in 31% of children by the time they reach kindergarten.



Rural areas have lower health literacy. For oral health, this can cause poor oral health outcomes due to poor oral hygiene.



Tooth decay is 4 times more common than asthma among adolescents aged 14 to 17 years.



9 out of 10 adults aged 20+ have some degree of tooth decay.

*Rural populations have a lower supply of dentists, receive less dental care for adults and children, and have higher rates of tooth loss for adults. They are also more likely than urban populations to have inadequately fluoridated drinking water.*

### Fluoride

- The installation and upkeep of fluoridated water systems in rural areas can be expensive.
- The average cost of fluoridation of community water sources ranges between 50 cents per year per person to \$3 per year per person depending on community size.
- The CDC estimates that for every \$1 spent on water fluoridation \$7-\$42 is saved in oral health treatment costs.
- 20% of Coloradans are on well water (national average: 15%)

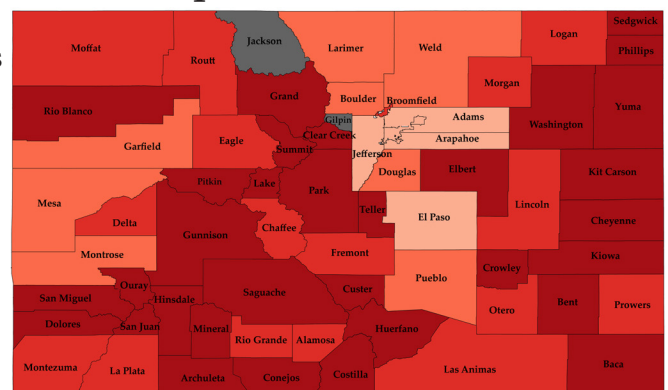
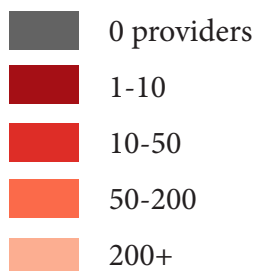


### Access to Dental Care

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

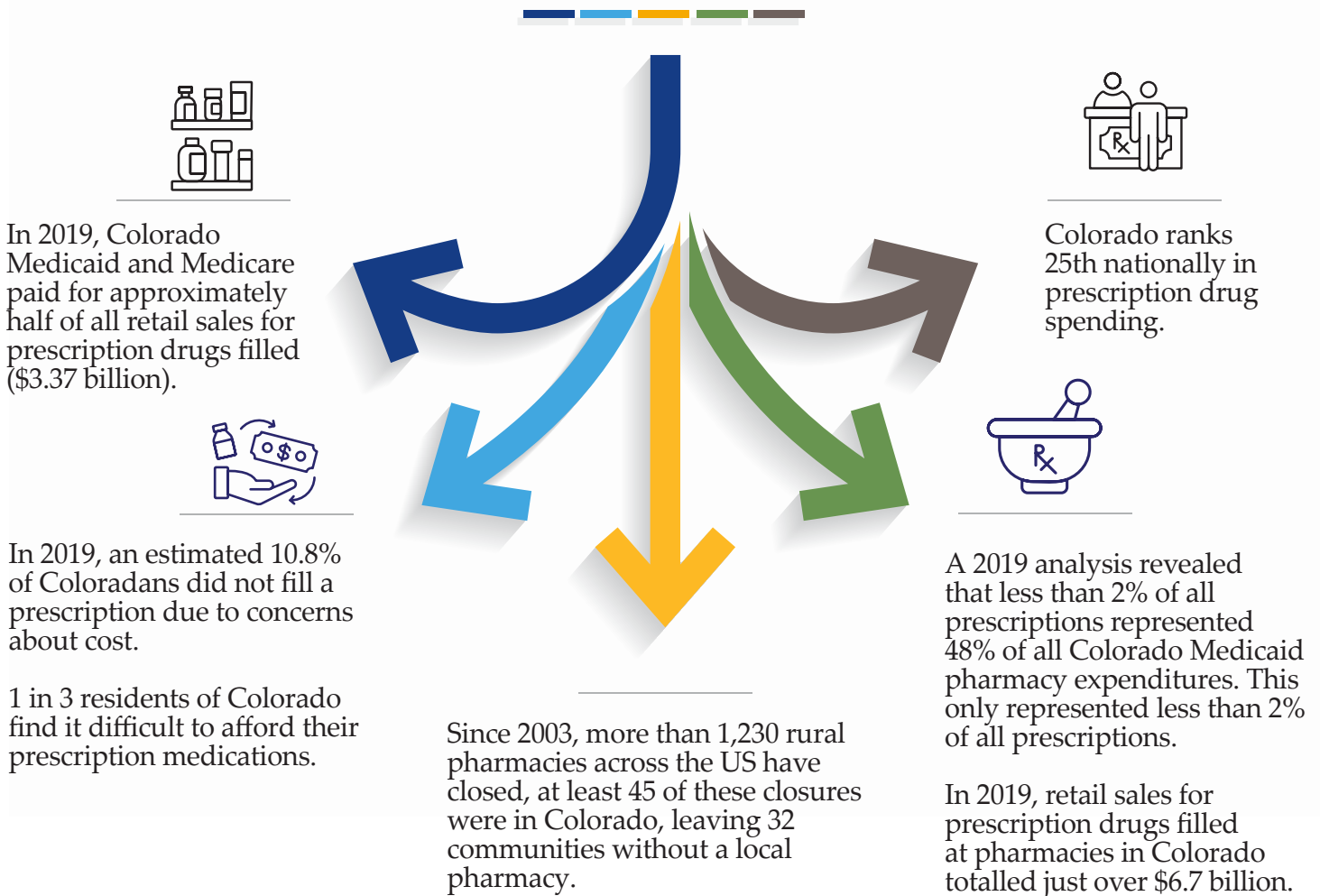


### Number of Dental Providers That Accept Medicaid



# PRESCRIPTION DRUGS

*The US ranks highest in the world for the amount of money being paid for pharmaceutical drugs, which includes 19 of the top 27 Medicare drugs prescribed.*



*9 rural counties in Colorado have no pharmacy, while 11 other rural counties have only 1 pharmacy.*

- During the COVID-19 Pandemic between January and June 2020, drug manufacturers increased prices of nearly 900 brand-name and generic drugs by an average of 6.8%.
- It is illegal for the Center for Medicare and Medicaid and Medicare Services (CMS) to directly negotiate with pharmaceutical manufacturers for lower drug prices, even though they are one of the largest purchasers of prescription drugs through the Medicare program.

## *Rural Colorado Policy Win: SB21-175*

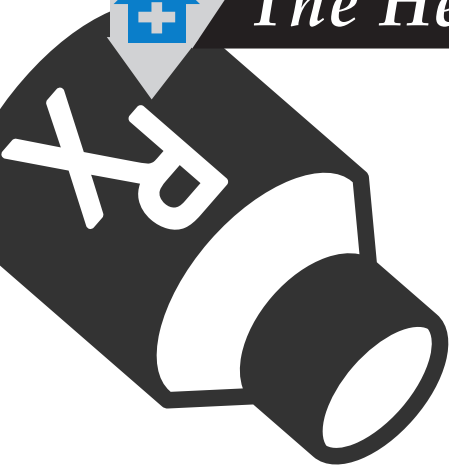
On June 16, 2021 Senate Bill 21-175 was signed into law. It creates the Colorado Prescription Drug Affordability Review Board (PDAB) which will review the affordability of certain prescription drugs to determine whether any are unaffordable for Colorado residents. Beginning in April 2022, the PDAB can establish Upper Payment Limits for any prescription drug it has deemed unaffordable for Colorado consumers for up to 12 prescription drugs each calendar year for 3 years.





# The Health of Rural

## OPIOID USE DISORDER

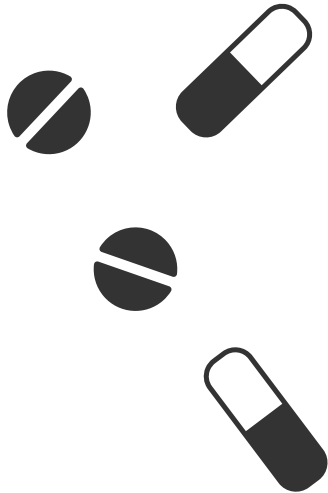
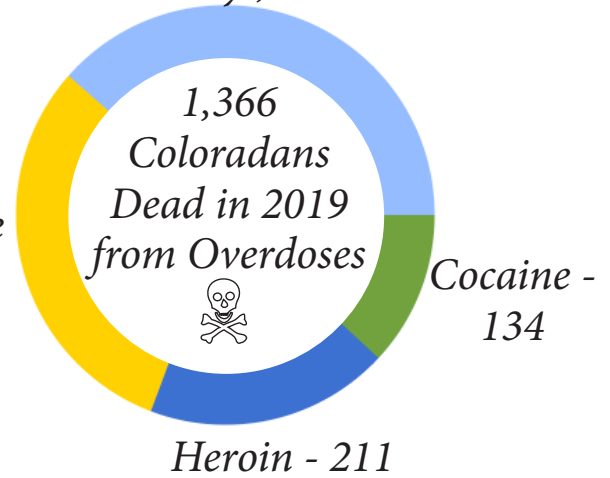


Colorado ranks **13th** for lowest opioid related deaths

*Methamphetamine* - 347

Opioids kill one person in Colorado every 9.5 hours

*Prescription Opioids (including Fentanyl) - 674*



**95,000** Coloradans said they needed but did not receive services for Substance Use Disorder Treatment in 2019. *Why not?*

72.4% reported they did not get care because they were concerned about someone finding out they had a problem.

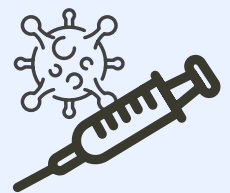
They had a problem and 72.8% reported they did not feel comfortable talking with someone about their personal problem.



- The overdose death rate from 2019 to 2020 increased for Black, Hispanic, American Indian, White and Asian Coloradans, with the largest spike observed in Black Coloradans.
- Drug overdose deaths among Coloradans who are American Indian or Alaska Native nearly doubled between 2018 and 2019.

### Concurrent Public Health Crises

- Fears that the pandemic would foster social isolation, increase mental health distress and other conditions to ultimately increase overdoses and deaths were confirmed as opioid deaths increased by 43% across the US between February to August 2020.
- Opioids accounted for 75% of all overdose deaths in the US during the early months of the pandemic.
- It is estimated that Colorado's estimated percent increase in overdose deaths was 46.8% (between 2019 and 2020).
- In the US, overdose deaths accelerated during the COVID-19 pandemic with over 81,000 drug overdose deaths occurring June 2019 through May 2020. This is the highest number of overdose deaths ever recorder over a 1 year period. The majority of deaths have been attributed to synthetic opioids (illegally manufactured fentanyl).



## Fentanyl

The Drug Enforcement Agency reported that 26% of seized pills contained a lethal level dose of fentanyl.

In 2019, over 70,000 Americans died from drug related overdoses. Over 50% were attributed to synthetic opioids other than methadone (primarily fentanyl).

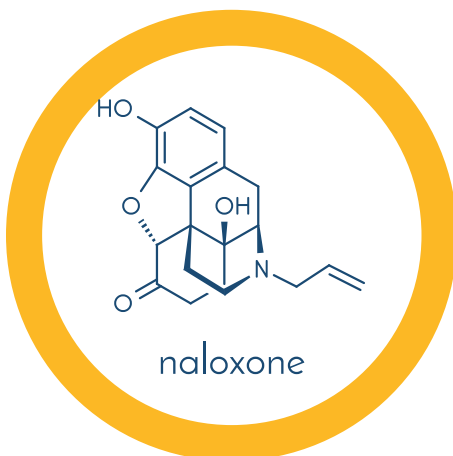
In 2020, it was involved in at least 534 fatal overdoses which is more than 2 times higher than the 222 deaths observed in 2019.

In Colorado, the fentanyl-related death rate is more than 4 times higher than what was observed in 2016.

The median number of overdose experiences for individuals surveyed and who overdosed was 3.



## Naloxone



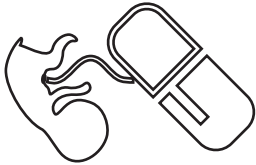
Naloxone (also known as Narcan®) is an opioid antagonist that counters the effects of opioid overdose. Specifically, it is used to prevent life-threatening decline of the central nervous system and respiratory system, which would allow an overdose victim to breathe normally.

The documented use of Naloxone by emergency medical services (EMS) in Colorado to treat suspected heroin overdoses has increased 240% from 2011-2015. All Coloradans has access to naloxone at the pharmacy.

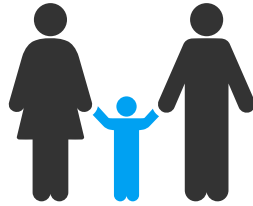
### Neonatal Abstinence Syndrome (NAS)

NAS rates have increased by 120% in Colorado from 2011-2016.

83% 

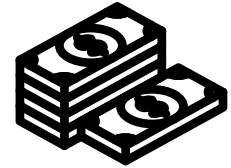


From 2010 to 2015, Neonatal Abstinence Syndrome rose 83%, with even higher rates observed in southern parts of Colorado.



In 2016, 5,212 Colorado children were placed in foster care with 39% of placements (approximately 2,033) noting parental substance use as a factor.

\$462 million



Medicaid provided care related to 82% of the nation's NAS-related births in 2014 at a cost of \$462 million.

## MENTAL AND BEHAVIORAL HEALTH



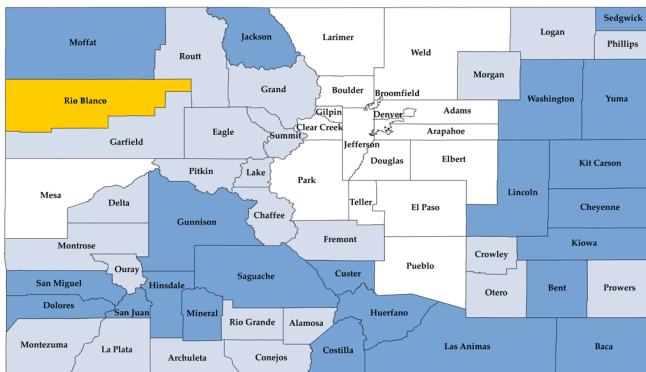
### Untreated youth with depression

The state of Colorado ranks 20th for prevalence of untreated youth with depression (55.6%) and ranked 33rd for youth with severe major depressive episode who received some consistent treatment (25.6%).



**2x** *Rural youth are twice as likely to die by suicide.*

Of the 1,729 suicides reported in Colorado, 210 took place in rural or frontier counties (12.1%). Young adults under the age of 25 accounted for approximately 12.4% of all rural suicides. Suicide is the 4th leading cause of death in 15-19 year olds across the globe.



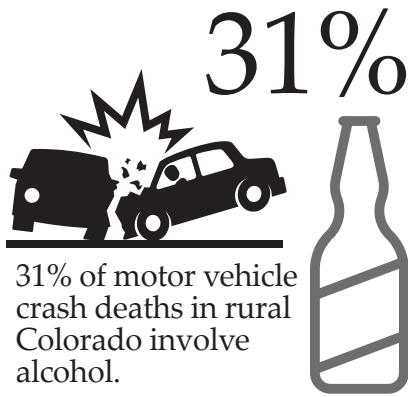
*Males represent 85.7% of all rural Colorado suicides compared to 14.3% females.*



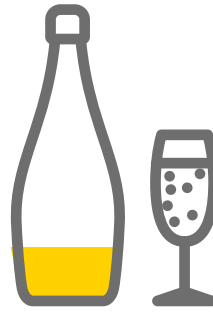
Rio Blanco has the highest suicide rate in rural Colorado at 63.9 per 100,000 compared to the state rate of 22.3 per 100,000.



## Alcohol Use



21% of adult rural Coloradans report drinking excessively.

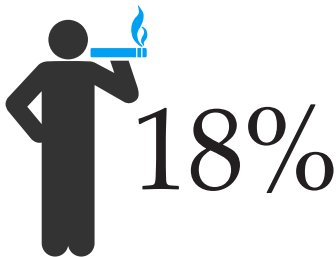


Although most consumer spending in Colorado fell during the pandemic, purchases of alcohol increased.



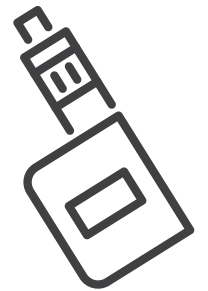
## Tobacco Use

*Smoking is more common in rural areas (27.7% of adults in non metro areas vs. 19.9% of adults in large metro areas).*



Colorado invests \$5.59 per smoker on their state's quit line, compared to the national average \$2.14. The state also has a mandate provision for quitting tobacco under private insurance to promote cessation.

26% of high schoolers in Colorado say they currently vape nicotine.



## Marijuana

Recent findings from a study by UHealth University of Colorado show edible cannabis accounts for 11% of ER visits yet makeup only 1% of cannabis sales.

Since recreational marijuana was legalized, Colorado traffic deaths where drivers tested positive for marijuana more than doubled. In 2013, the rate equaled 1 person killed every 6.5 days and this rate increased to 1 person killed every 3.5 days in 2019.



In 2020, the state collected close to \$387.4 million in taxes and fees which can be used for funding projects, such as school infrastructure and public health research.



In Colorado, adult marijuana use over the past month has increased 19% since marijuana was legalized.

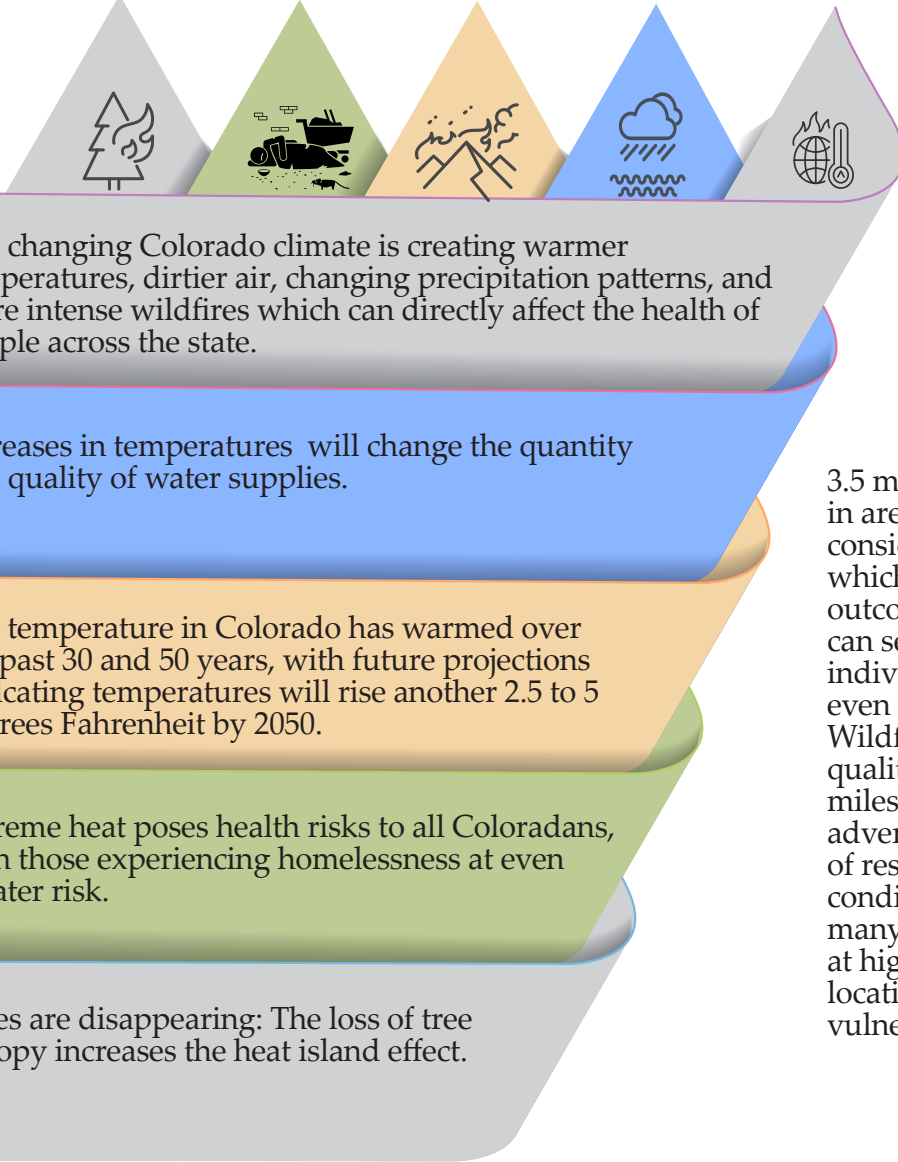
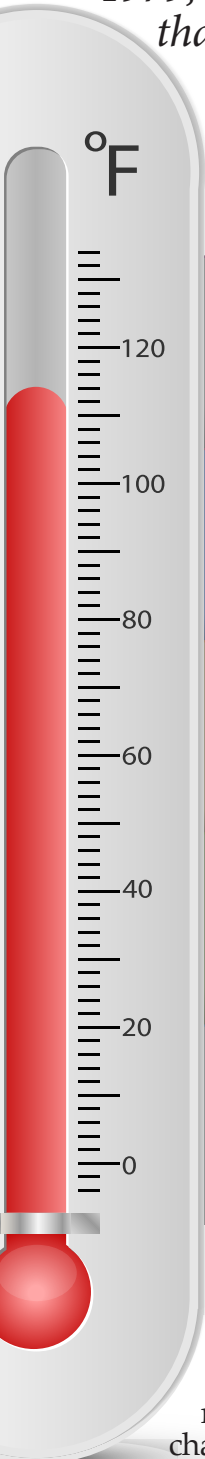


# The Health of Rural

## THE CLIMATE CRISIS

### Rising Temperatures

Higher average temperatures increase the number of extreme heat days. Prior to 1979, Denver averaged about five days of 95-degree heat but now averages more than 20 days. Similar trends have been observed across the state.



The changing Colorado climate is creating warmer temperatures, dirtier air, changing precipitation patterns, and more intense wildfires which can directly affect the health of people across the state.

Increases in temperatures will change the quantity and quality of water supplies.

The temperature in Colorado has warmed over the past 30 and 50 years, with future projections indicating temperatures will rise another 2.5 to 5 degrees Fahrenheit by 2050.

Extreme heat poses health risks to all Coloradans, with those experiencing homelessness at even greater risk.

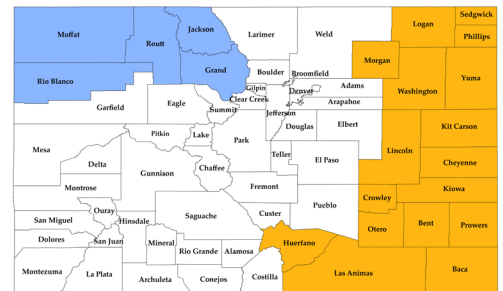
Trees are disappearing: The loss of tree canopy increases the heat island effect.



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. Wildfires can diminish air quality for thousands of miles from the source which adversely affects the health of residents with respiratory conditions. Additionally, many native reservations are at high risk due to geographic location and economic vulnerability.

### Regional Climate Change Risks

Many residents of Southeastern Colorado are older, struggle with health issues, and experience poverty, which makes the region the state's most vulnerable area to climate change impacts. Southeast Colorado had the state's highest rates of emergency department visits due to heat-related illnesses, as well as 60 extreme heat days in 2017.



People in **Colorado's Eastern Plains** are most at risk from potential harmful effects of climate change on human health.

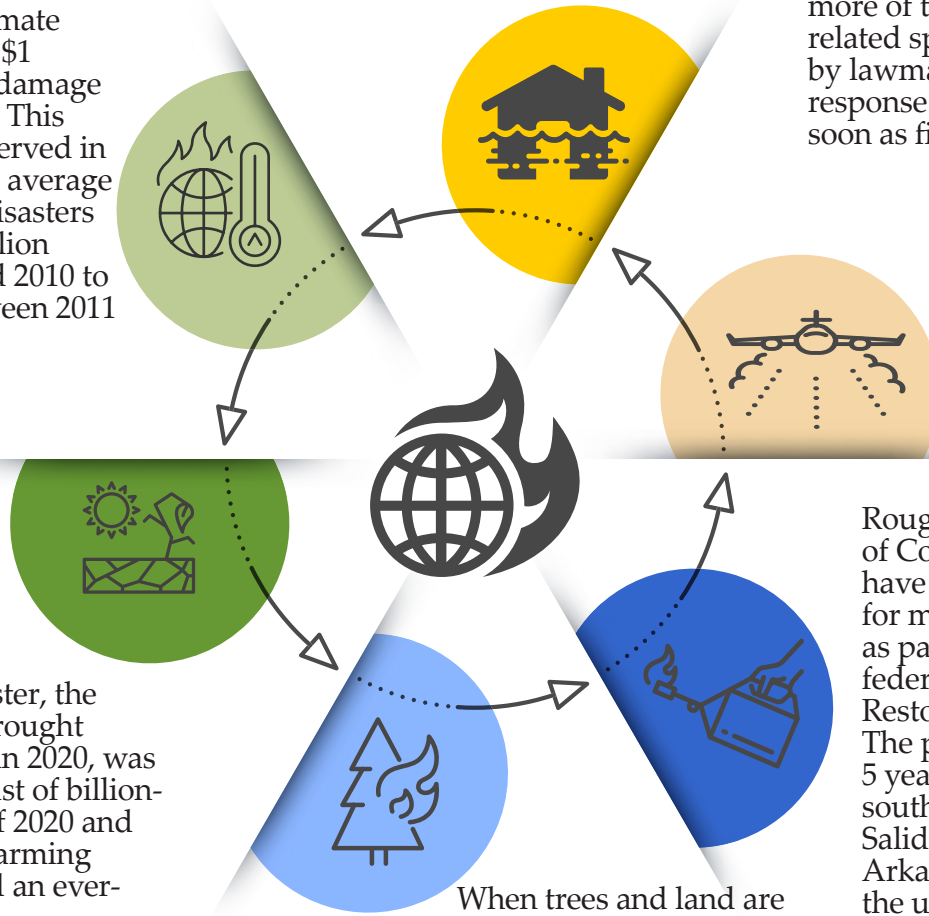
Many residents in **Northwestern Colorado** are younger and living in newer housing which made it the state's least vulnerable population.

## Natural Disasters

There have been 29 climate disasters in Colorado in the past decade costing over \$136 billion in damages.

There were 22 climate disasters causing \$1 billion dollars in damage in the US in 2020. This was the most observed in a single year. The average cost for natural disasters rose from \$4.8 billion between 2001 and 2010 to \$10.9 billion between 2011 and 2020.

The state of Colorado will direct roughly \$15 million more of the annual wildfire-related spending approved by lawmakers toward rapid response and suppression as soon as fires are detected.



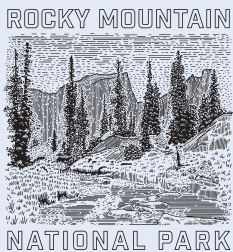
One natural disaster, the west's extreme drought resulting in fires in 2020, was included on the list of billion-dollar disasters of 2020 and was caused by warming temperatures and an ever-changing climate.

When trees and land are burned by wildfires and die, it is difficult for new trees to propagate and rebuild the ecosystem.

Roughly 150,000 acres of Colorado forest have been targeted for mitigation efforts as part of a \$4 million federal Rocky Mountain Restoration Initiative. The project will last 5 years and starts in southwestern Colorado, Salida along the Arkansas River, and the upper South Platte River watershed between South Park and metro Denver.

## Case Study: Colorado's Historic 2020 Fire Season

*4 of the 5 largest wildfires in recorded Colorado history burned in 2020 alone. The 10 largest fires in history have occurred since 2002.*

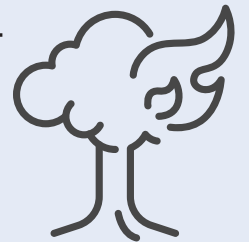


The fast-moving East Troublesome Fire that burned in Rocky Mountain National Park resulted in mandatory evacuations, including Estes Park Health.



In 2020, wildfires in Colorado shattered records by burning 667,000 acres statewide.

5,300+



In 2020, at least 5,300 wildfires broke out in Colorado, with 5,284 going out naturally or were stopped by firefighters before they grew.

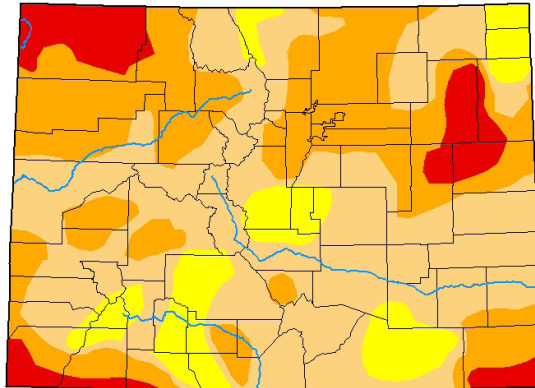


## Drought

The Colorado River Basin has experienced the driest 16-year period in over 100 years of historical natural flows since 2000. This same period ranks fifth as the driest 16-year period in the last 1,200 years.

- Droughts impact the ecosystem, reduce crop production and increase wildfires. Agricultural and recreational economic losses increase as drought levels increase.
- Projections for Lake Mead in 2021 stated that the water level will fall below 1,075 feet (328 meters) for the first time ever.
- The Colorado River Basin is extremely sensitive to slight variations in temperature. It is estimated that for each degree average Celsius temperatures rise, flows in the Colorado are likely to decline more than 9%.

## Colorado Drought Monitor 2021



### 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 <http://droughtmonitor.unl.edu/About.aspx>

### Author:

Richard Heim  
NCEI/NOAA



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

## CHRONIC DISEASE

### 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.

**Rx** ●●●●

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

**Rx** ●●●●

Just over 14% of Colorado women will develop breast cancer in their lifetime. As of 2016, an estimated 61,000 breast cancer survivors are living in Colorado.

**Rx** ●●●●

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

**Rx** ●●●●

In terms of cancer screenings, Colorado ranks 49 for “up-to-date mammography, women 45 years and older.”



# CHRONIC DISEASE

The top 4 leading causes of death in Colorado include:

1. Cancer, 2. Heart Disease, 3. Accidents, and 4. Chronic Lower Respiratory Disease.



- Colorado's heart disease death rate is 124.3 per 100,000 total population
- In Colorado, cardiovascular disease, such as coronary artery disease, heart attack, heart failure and arrhythmia, is the primary cause of death in women. A woman dies every 76 seconds from heart disease in the US
- The cost of cardiovascular disease in the US was \$555 billion in 2016. By 2035, the cost will reach an estimated \$1.1 trillion!



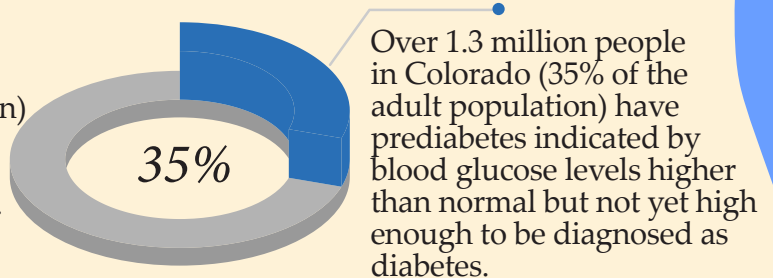
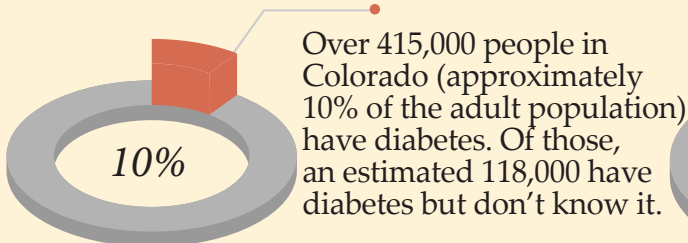
- 25% of adult rural Coloradans are considered obese with a distinct difference between the eastern plains (Logan County - 28%) and some mountain areas of the state (Eagle County - 16%).
- 28% of children in Colorado are overweight or obese while 55% of children are not physically active for at least 60 minutes per day.



- 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 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).
- 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).

## Critical Issue: Diabetes *Healthcare costs are 2.3 times greater for people with diabetes.*

- 9% of adults aged 20 and above in rural Colorado have been diagnosed with diabetes compared to 7% in urban.
- In 2017, diabetes, undiagnosed diabetes, prediabetes, and gestational diabetes reached an economic burden of almost \$404 billion, an estimated \$1,240 per person, while prediabetes was associated with \$43.4 billion of that total, an estimated \$500 person.
- For every \$4 of prediabetes and diabetes cost burden, \$3 goes to medical costs while \$1 goes to non-medical costs (things like absenteeism, reduced productivity and being unable to work).



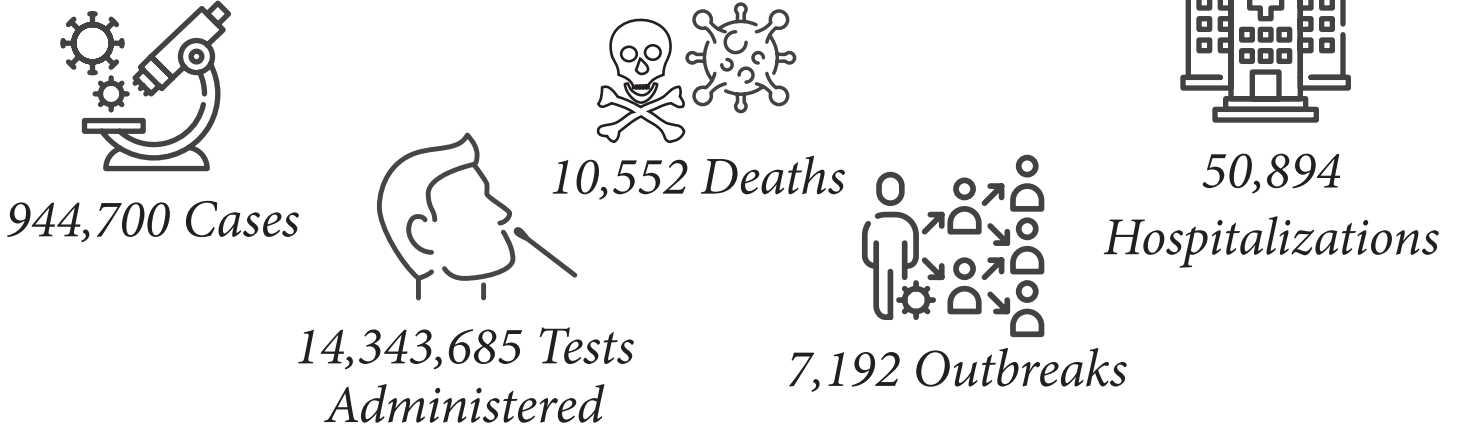


# The Health of Rural

## COVID-19

Rural Americans are dying of COVID-19 at twice the rate of urban Americans.

### COVID-19 in Colorado, as of December 31, 2021



### Capacity, Staffing, and Equipment, as of 12/31/2021

45% of critical care ventilators are in use in Colorado.

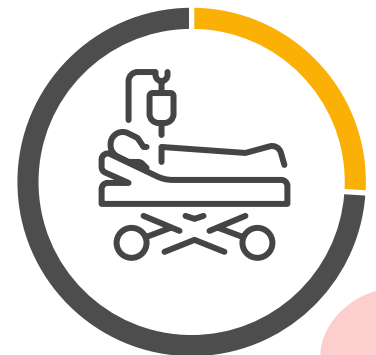
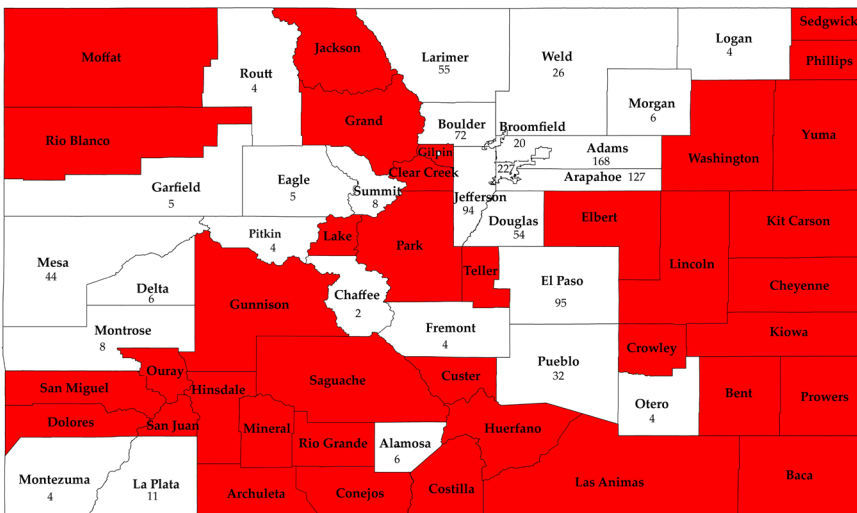


33% of Colorado facilities anticipate staff shortages within the next week.



There are ICU beds in only 27 of Colorado's 64 counties.

37 Colorado Counties (all rural or frontier) do not have any ICU Beds



26% of Colorado facilities anticipate ICU bed shortages in the next week

## COVID-19 Vaccination as of 12/31/2021

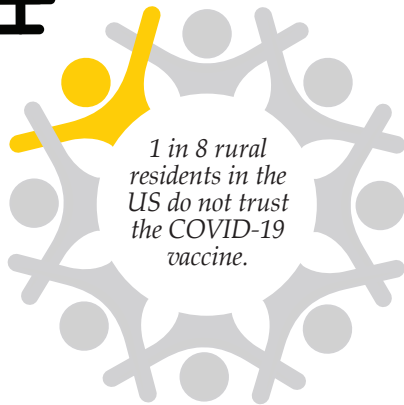
- 77.55% of eligible Coloradans immunized with 1 dose
- 71.25% of eligible Coloradans fully immunized
- 3,820,049 Coloradans immunized with 1 dose
- 3,509,846 Coloradans fully immunized



## Rural COVID-19 Vaccination Hesitancy



- Nearly 50% of rural residents are not vaccinated with 15% taking a “wait and see” approach.
- 9% will get vaccinated only if required to for work/school/activities, and 21% report that they will “definitely not” get the vaccine.
- These rates/counts have remained steady since January 2021.



1 in 8 rural residents in the US do not trust the COVID-19 vaccine.

44% of rural residents in the US believe that the news “generally exaggerated” the seriousness of COVID-19, while 33% believe the news got it “generally correct”.



Additionally, 40% of rural residents were less likely to say they are worried about themselves or family members becoming infected with COVID-19 compared to 54% in urban.

## Federal and State Aid

The Small Hospital Improvement Program (SHIP) is a federal grant program which provides funding to assist small hospitals. Funding expanded to assist hospitals during the pandemic under the SHIP COVID-19 Grant. The first round of funding assisted 39 eligible hospitals with \$3.29 million in federal funding in 2020-21. The second round of funding will award 32 hospitals \$8.27 million between 2021-23. The funds are used to assist CAHs and small rural PPS hospitals with expenditures related to COVID-19 activities. This included purchasing PPE (gloves, gowns, masks, etc.), ventilators, negative air rooms, partitions of plexi-glass for safety and social distancing, testing supplies, and minor renovations to facilitate safety and social distancing, etc. A new SHIP COVID-19 Testing and Mitigation grant will be available from 2021 through 2023 and funds will be used for Covid testing and mitigation activities (community education – healthcare worker education, and much more under mitigation).



The total amount for SHIP COVID-19 funding is \$2,902,350

Nearly \$4 billion from federal COVID relief package will assist the Colorado state budget through investments in mental health, behavioral health, affordable housing, workforce development, and recovery/relief programs. Rural Colorado was awarded \$2.3 million through the Department of Economic Development Administration (EDA)’s CARES Act Recovery Assistance grant. The grant is expected to create 100 jobs that will help rural communities develop economic recovery and resiliency plans to advance their business growth and economy. In Colorado, the federal COVID-19 funding aided rural hospitals more significantly, providing nearly 3 months of additional cash for short-term costs.



# The Health of Rural THE COVID-19 ECONOMY

## Childcare, 2020

*In Colorado, over 60% of families had to change their childcare arrangements during the COVID-19 Pandemic.*

20%



Due to COVID-19, 20% of working parents were forced to leave work or reduce their work hours solely due to a lack of childcare. Additionally, 70% of all working parents did not have any form of back-up childcare.

\$700 Billion



It is estimated that closing schools for COVID-19 could cost the US \$700 billion through lost revenue and productivity. School closures related to COVID-19 are likely to lead to a 0.8% drop in global economic growth.

44%



44% of families who spoke a primary language other than English did not have needed childcare compared to 34% of families overall. More than half of Americans live in childcare deserts.

## SNAP Benefits, 2020

In 2020, Fremont County received over \$1 million in SNAP benefits, which is the highest amount received by all rural and frontier counties.



In 2020, 255,101 Colorado households received SNAP benefits, and 38% of these households included children under the age of 18.

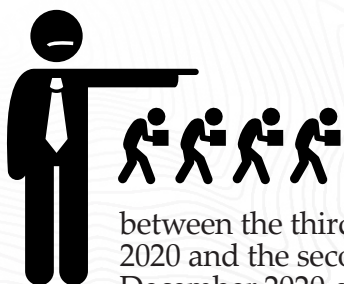
Over \$13 million in SNAP benefits were issued to rural Colorado in 2020.

The average Colorado SNAP benefit was \$343 a month in 2020.



## Unemployment

Nearly 50% of all Colorado families lost income since the beginning of the COVID-19 Pandemic, with families of color most impacted.



The number of unemployment claims filed in Colorado increased 976% between the third week of March 2020 and the second week of December 2020 compared to the same period in 2019.



In the past year and a half, Colorado has recovered 290,400 of the 375,800 non-farm payroll jobs lost at the peak of the COVID-19 Pandemic (from February through April of 2020).

## The COVID Economy - Colorado Tourism in 2020

The Colorado Tourism Office reported travel spending dropped \$8.8 billion from 2019 to 2020, resulting in the lowest amount of visitor spending since 2011.

As of December 2020, employment in occupations such as leisure/hospitality (which include bars, restaurants, hotels, fitness and retail) recovered only to 73.6% meaning 1 in 4 jobs from before the pandemic remain unfilled.

Colorado's top counties for tourism (Denver, Summit, El Paso, Eagle and Arapahoe counties) suffered a 43% decline in visitor spending in 2020.



Traveler-generated tax revenue dropped by 31.1%, a loss of \$439 million in state taxes.



The Colorado tourism industry lost 31,700 jobs

52.3% decrease in domestic flights into Colorado



The largest declines in jobs were observed in services related to travel and facilities and business support.



The tourism industry saw a 9.7% decline in earnings by workers

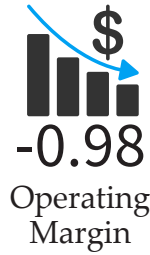




# The Rural Economy

## CRITICAL ISSUE: HOSPITAL FINANCIAL SUSTAINABILITY

### Rural Colorado Hospital Averages: October 2021



From data provided by the CRHC Medicare Rural Hospital Flexibility Program Grant (FLEX) Monitoring Team from 2018 to 2019, 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.

**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.

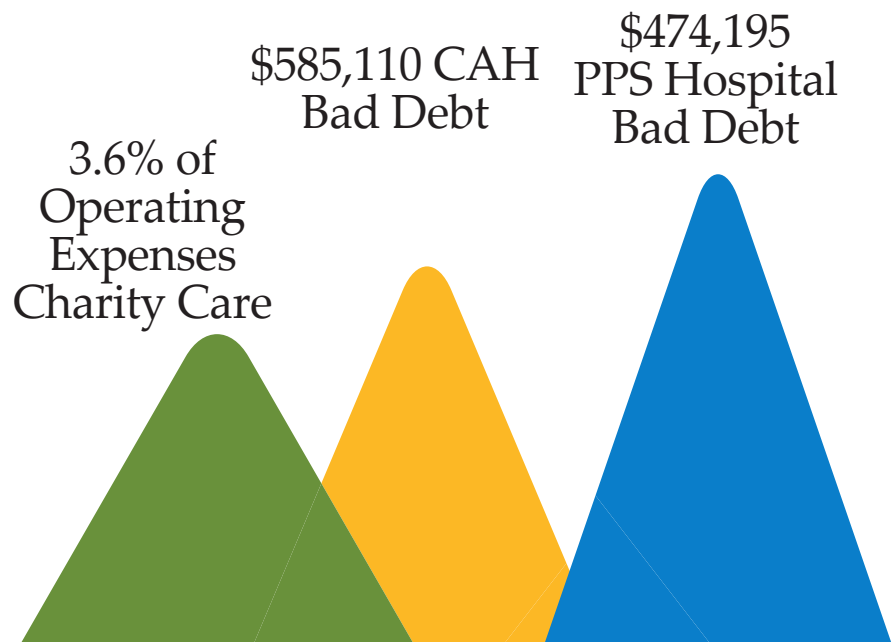
**Days Revenue in Accounts Receivable** measures the number of days that it takes an organization to collect its receivables. Low values means that it takes a hospital fewer days to collect its accounts receivable.

### In 2019, 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.*



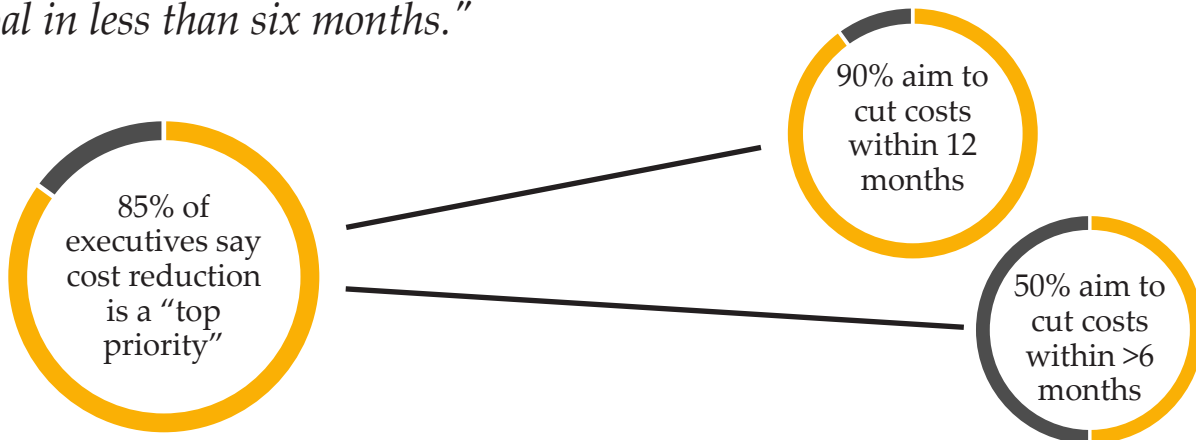


## The COVID Effect on the Bottom Line

It is estimated that potential rural hospital closures across the US could increase **25-30%** due to COVID-19.

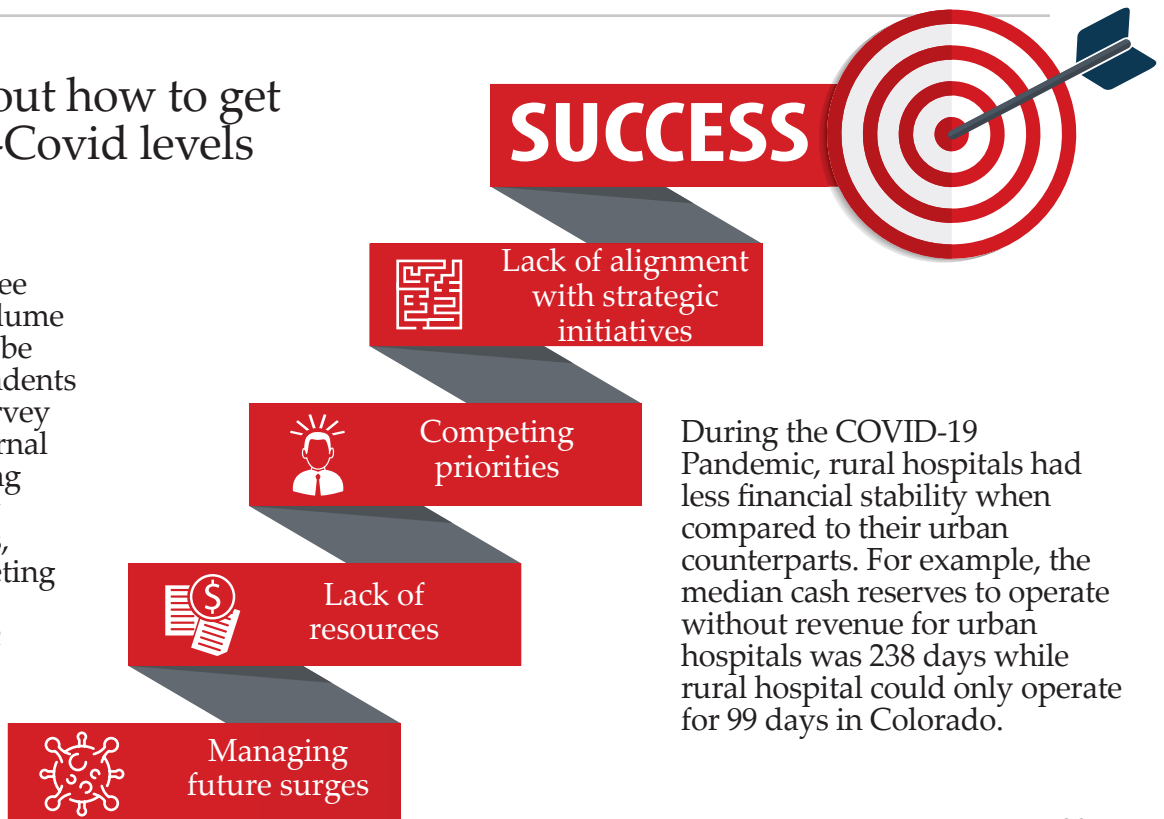


"A recent Financial Recovery Survey conducted by the Chartis Group noted that of those organizations surveyed, healthcare executives at 85% of them identified cost reduction as a top priority for addressing the impact of COVID-19 on their organizations with 90% of respondents aiming to meet their cost reduction targets in less than 12 months, while 50% even more aggressive and attempting to meet this goal in less than six months."



## Concerns about how to get back to pre-Covid levels

In order for systems to see pre-COVID revenue, volume recapture alone will not be sufficient. 90% of respondents in the Chartis Group survey had concerns about internal factors hindering meeting goals, such as managing future COVID-19 surges, lack of resources, competing priorities, and lack of alignment with strategic initiatives.



During the COVID-19 Pandemic, rural hospitals had less financial stability when compared to their urban counterparts. For example, the median cash reserves to operate without revenue for urban hospitals was 238 days while rural hospital could only operate for 99 days in Colorado.



# The Rural Economy

## INCOMES AND INDUSTRIES

### Income and Employment

*Of Colorado's 64 Counties, 9 have a median household income of less than \$40,000, all of which are rural or frontier.*

As of August 2021, Colorado's unemployment rate remains at 6.2% and the state ranks 35th in the country. Additionally, Colorado's labor force growth ranks 23rd and labor force participation rate ranks 3rd in the country.




Colorado ranks #16 out of all states overall when surveying economic indicators:



#16 Overall

#1 for Employment,  
#2 for Economy and  
#5 for Growth  
#41 in Crime and  
Corrections  
#45 in Fiscal  
Stability

Rural Coloradans  make \$6,225 less than the statewide income figure.

According to the USDA Economic Research Service, the average per capita income for Coloradans in 2019 was \$61,157 although rural per capita income lagged at \$54,932.

### Major Industries

Outdoor recreation in Colorado creates 149,000 direct jobs adding \$12.2 billion to the state's economy. Snow Activities are the number 1 outdoor recreation contributing to the \$12.2 billion value.



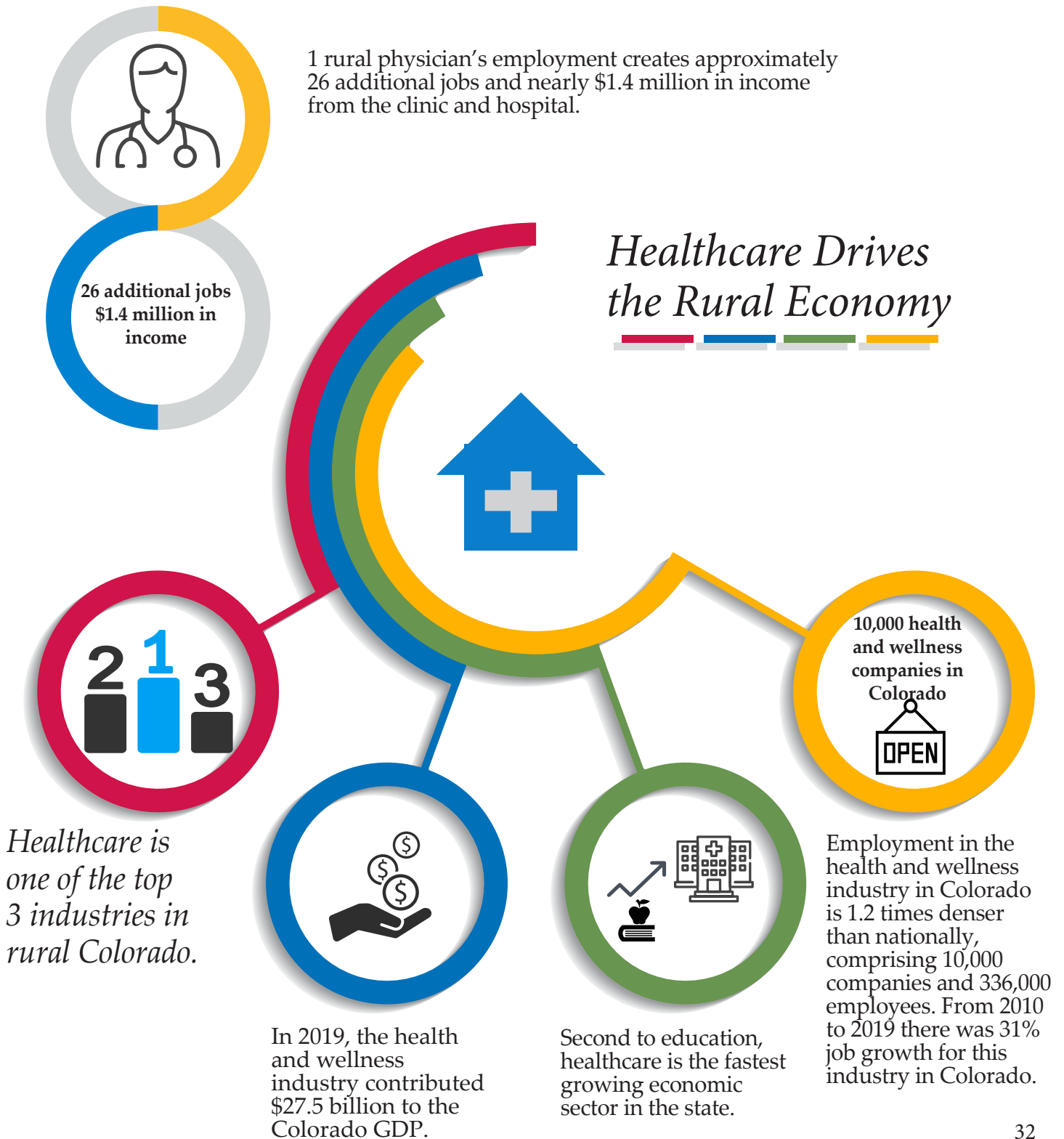
At the start of May in Colorado, 19,600 people were working in mining and logging, most of which were in oil and gas. In early 2020, this increased to 26,500.

- Agriculture provides 195,000 jobs among 38,900 farms and contributes \$47 billion dollars to the Colorado economy.
- There are over 32 million acres of land dedicated to Colorado Agriculture.
- The Colorado Department of Agriculture is moving \$76 million of state stimulus funds to assist rural communities. The money will support marketing, drought relief, renewable energy, agrivoltaics (coexistence of solar panels and crops), soil health, conservation, and financing of farm to market infrastructure.
- The USDA forecasts a decline of 8% in net farm income for 2021.



## HEALTHCARE AND THE RURAL ECONOMY

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

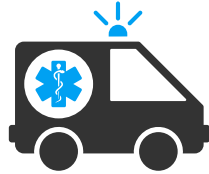
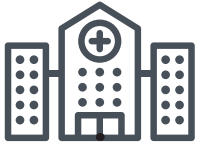




# Rural Health Infrastructure

## EMERGENCY MEDICAL SERVICES (EMS)

### Transport Times

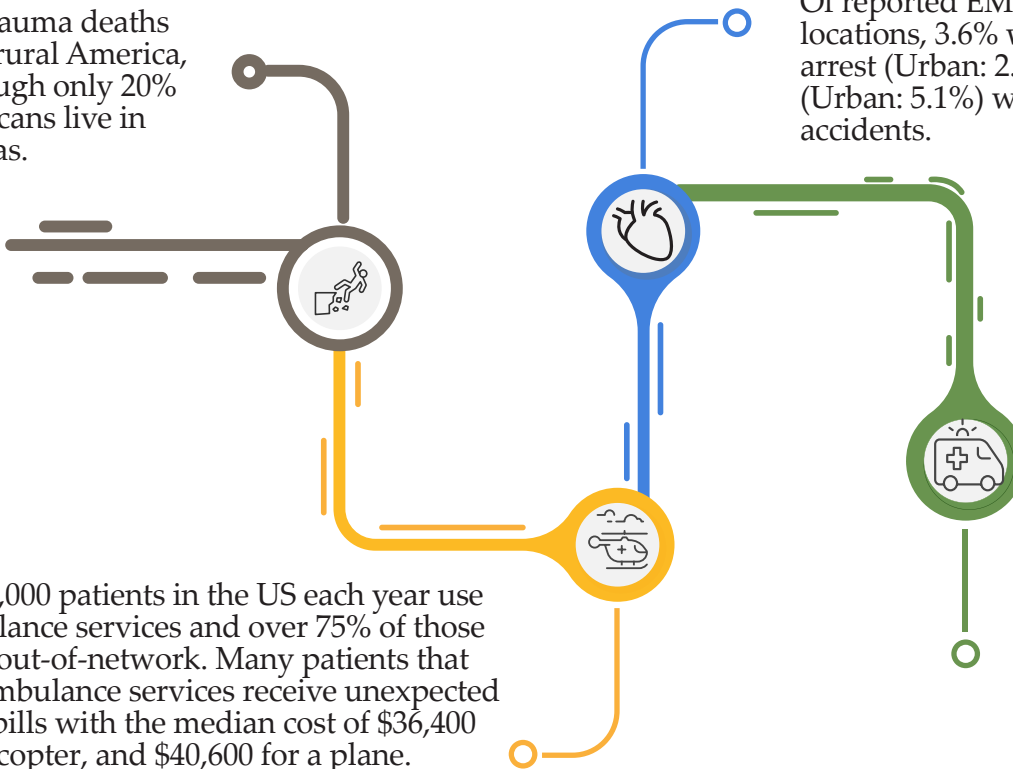


*Emergency Medical Service (EMS) response times are double in Rural vs. Urban areas.*



60% of trauma deaths occur in rural America, even though only 20% of Americans live in rural areas.

Of reported EMS responses for rural locations, 3.6% were for cardiac arrest (Urban: 2.4%) and 6.1% (Urban: 5.1%) were for motor vehicle accidents.



Over 550,000 patients in the US each year use air ambulance services and over 75% of those trips are out-of-network. Many patients that use air ambulance services receive unexpected medical bills with the median cost of \$36,400 for a helicopter, and \$40,600 for a plane.

Approximately 70% of emergency ground ambulance rides in Colorado result in an out-of-network charge. On average, patients who took a ground ambulance paid \$450 out-of-pocket after their insurance paid out.

### EMS Labor and Equipment Costs

Rural and mountain emergency medical services are trying everything to keep their ambulances running across Colorado's rugged and remote terrain, even though they are not always profitable. Maintaining these routes with these vehicles results in high costs and low reimbursement, and with few job applicants, ambulance services have no choice but to consolidate with fire responders, fill down time with broader tasks, and outsource to bigger metro hospitals.

Summit County makes their EMS efforts sustainable, but still only collect about 62% on ambulance charges.

Revenue competes with emergency costs that include things like:

- New ambulances - \$190,000 with only basic equipment
- New engines - \$600,000
- New ladder trucks - \$1.2 million to \$1.5 million



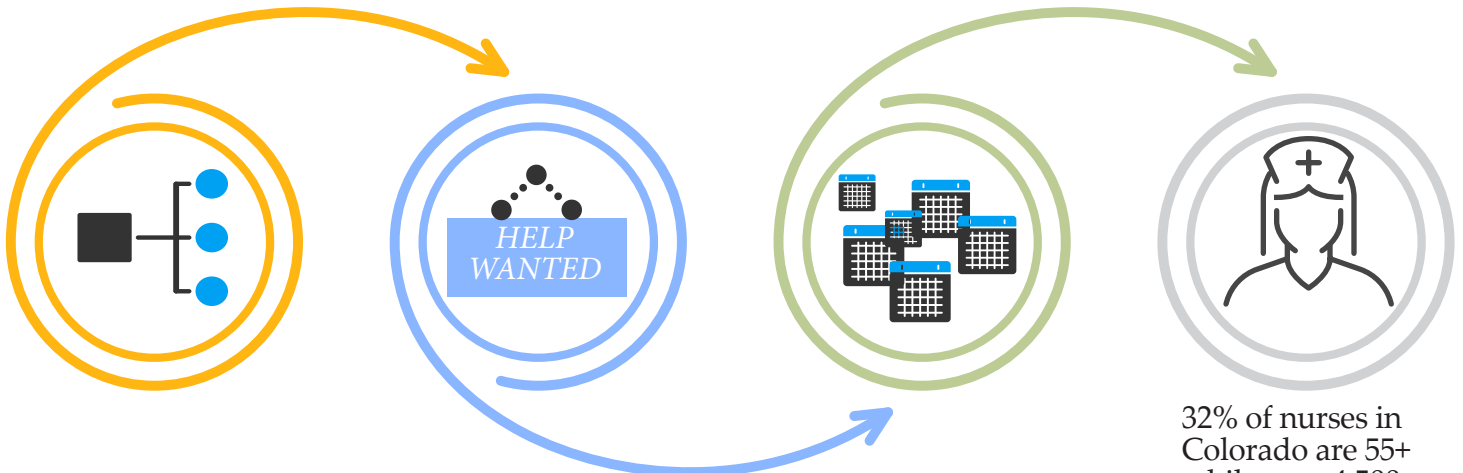


# Rural Health Infrastructure

## HEALTHCARE WORKFORCE

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



The state will face a rapid increase in demand for health care over the next ten years as a result of population expansion and aging adults.

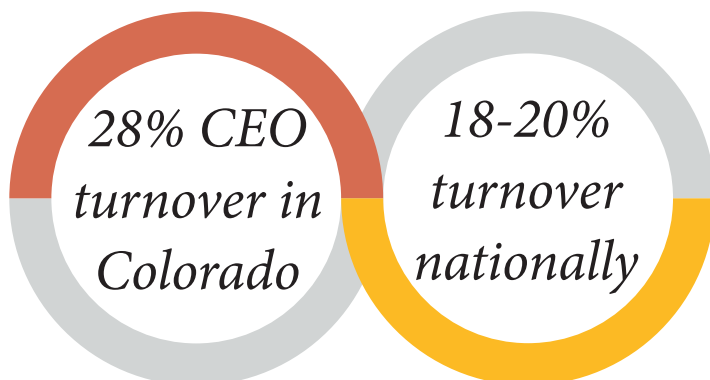
Amongst providers placed and surveyed by CRHC, less than 40% of rural primary care providers\* remain in the same rural community for 5 consecutive years.

Recruitment for an advanced practice nurse or physician assistant is 6 months on average.

32% of nurses in Colorado are 55+ while over 4,500 active registered nurses in the state are 65+. It is expected that over the next ten years, 2,000 nurses will retire annually. To meet forecasted population growth, the state would need 3,300 new nurses annually.

### 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

## WORKFORCE SHORTAGES

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



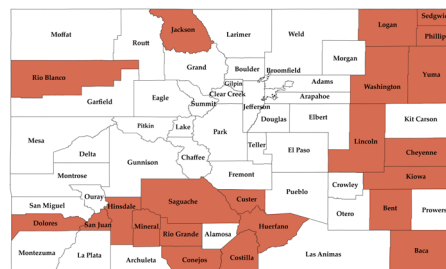
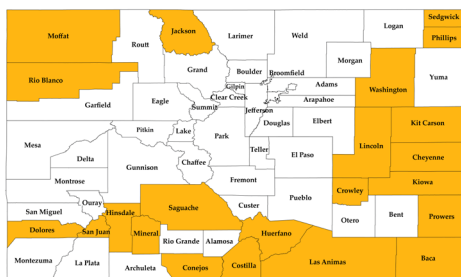
- 10% of the dentists (18% less than urban)



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

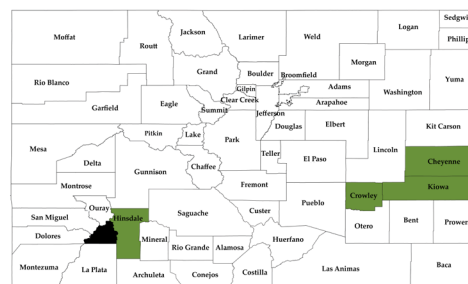
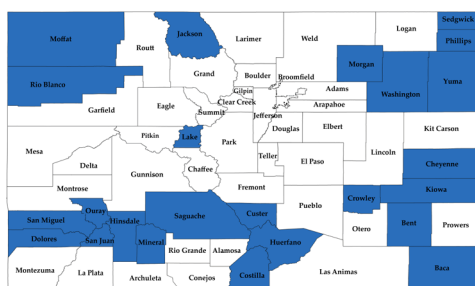


- 5% of the psychologists (67% less than urban)



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.

5\* rural counties do not have a licensed dentist. (Cheyenne, Crowley, Hinsdale, Kiowa, San Juan).

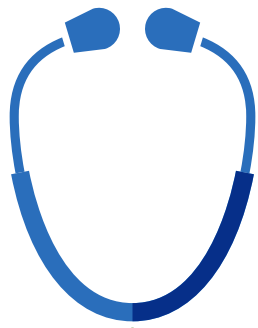
1\* rural county does not have dentist OR a physician (San Juan).

- 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).

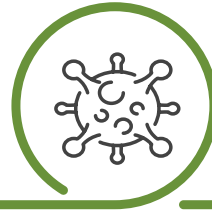
\*Data based on practitioner license file address and does not represent where a provider actively practices. See citations page for notation details.



## COVID-19 Burnout



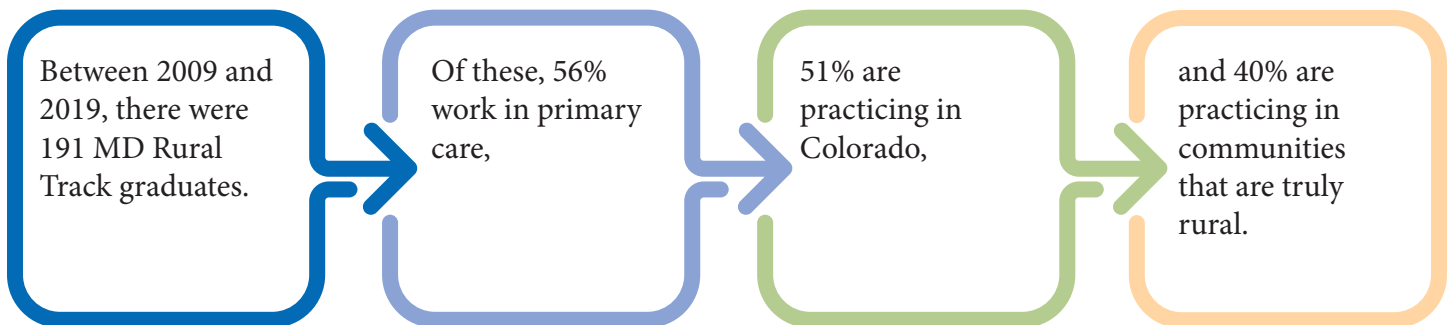
*"91% of Colorado clinicians rated the COVID-19 related stress on their practice as severe or close to severe."*



- Acute traumatic stress resulting from the COVID-19 Pandemic paired with burnout may intensify an already high pressure environment of assisting sick or distressed patients daily, increasing the risk of mental health trauma among health care professionals.
- Large-scale disasters are associated with significant increases in mental health disorders among healthcare providers. Similarly, burnout is associated with higher rates of substance abuse, depression, and suicide. In fact, a study following the SARS outbreak found that up to 10% of health care workers had high SARS-related PTSD symptoms 3 years after the outbreak.

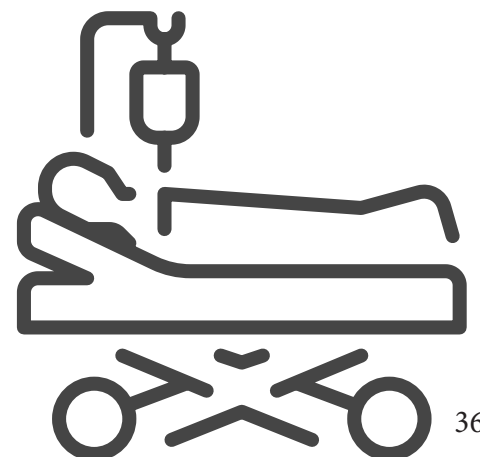
## The Rural Healthcare Workforce Pipeline

*"Physicians who receive part of their residency training in rural areas stay longer in rural practice. Physicians involved in teaching remain in rural practice longer than those who are not involved."*



## A Demanding Work Environment

Rural healthcare providers have to consider that they will experience a **heavy workload** of patients who require more care, that they will be **professionally isolated**, and have **fewer opportunities for continuing education**. Additionally, there are considerations with their family such as **limited job opportunities for spouses**, **travel distances to attend school**, and **availability of afterschool programs and daycare**.

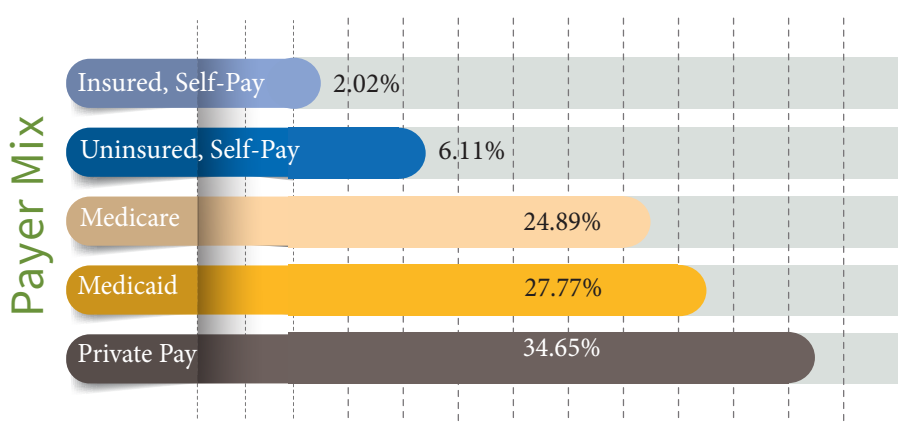




# Rural Health Infrastructure

## CASE STUDY: 2017-2020 CLINIC PROFILES DATA

The following data was collected by the Colorado Rural Health Center as a part of annual Clinic Profile Surveys conducted from 2017-2020. Data is self-reported.



### Electronic Medical Record (EMR) Usage

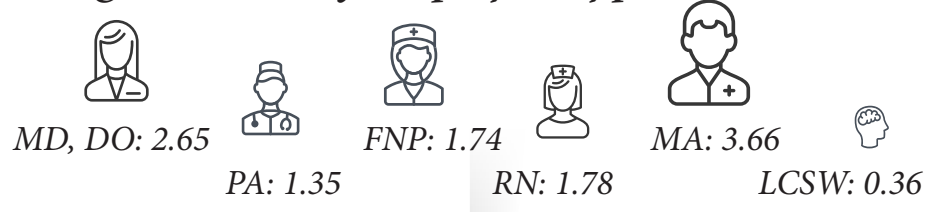


94% of Surveyed Clinics Use an EMR

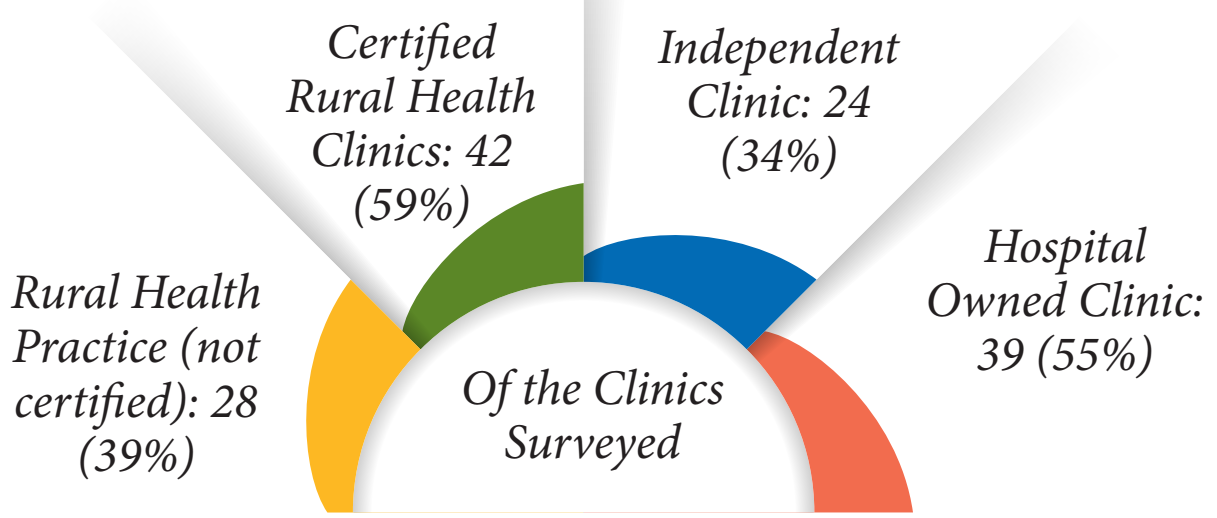
*Average Total Number of Staff at Each Clinic: 15.76*



*Average Number of Employee Types at Each Clinic:*



### Clinic Types and Ownership Models



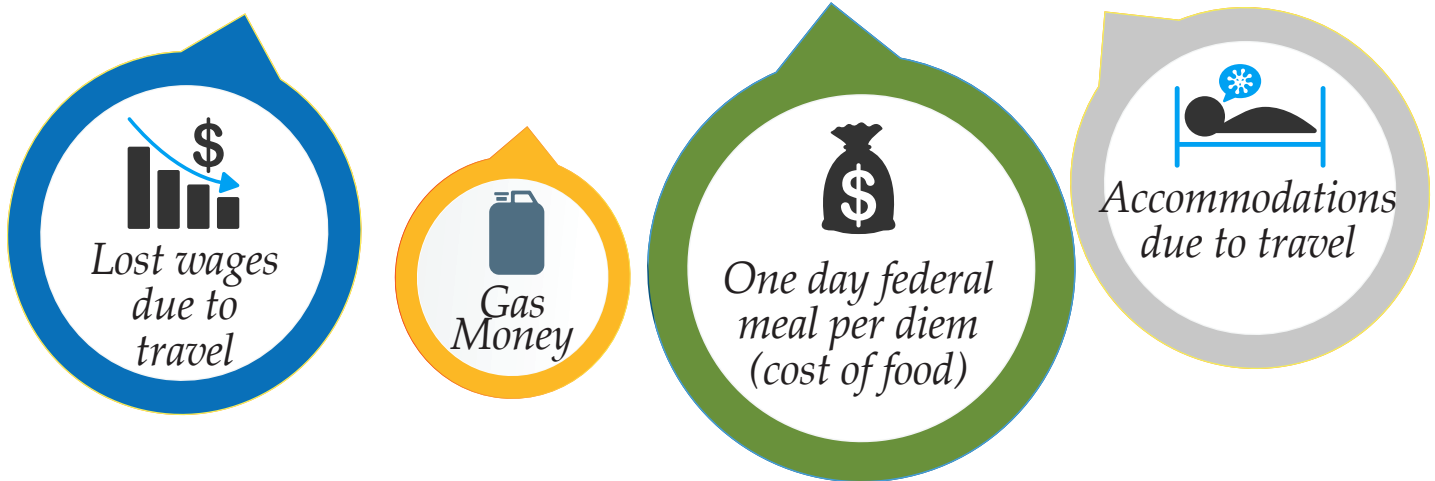
## Cost to Patient Case Study:

### 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>



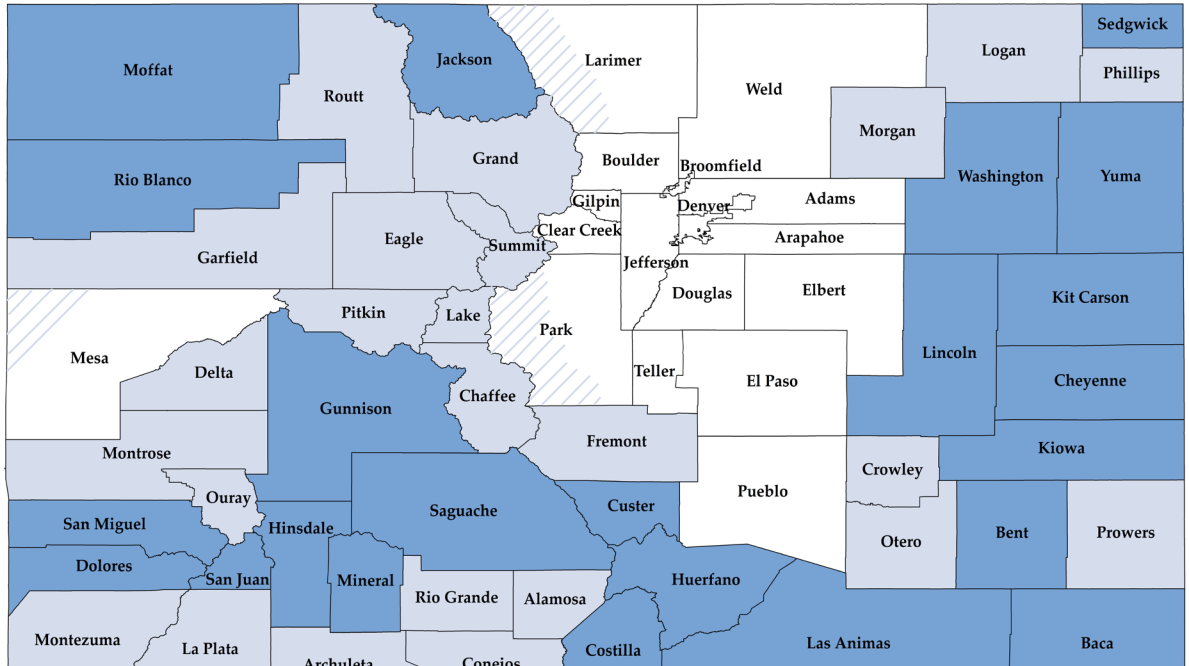
## Colorado: County Designations, 2022

### County Classifications

- Urban (17)
- Rural (24)
- Frontier (23)
- Rural areas of Urban Counties (approximate)

0 25 50 miles

Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health, current as of January 2016.

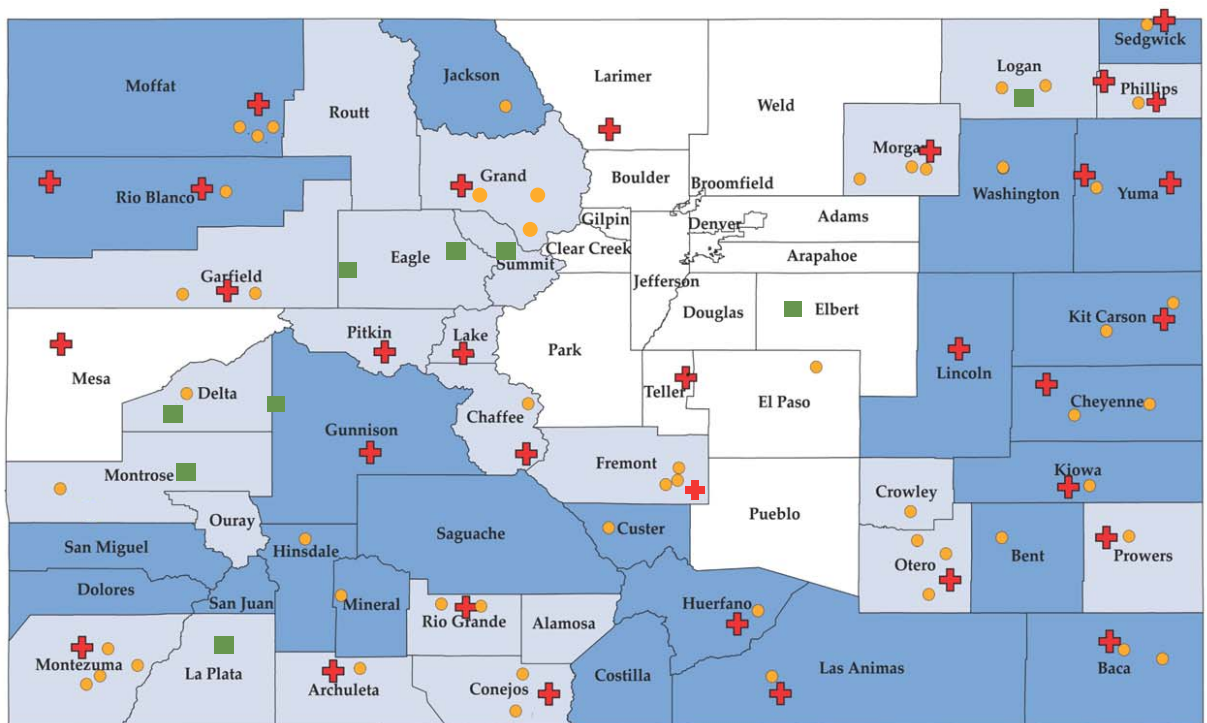


## Colorado: Rural Health Facilities within County Designations, 2022

- Urban
- Rural
- Frontier
- + Critical Access Hospitals
- Rural Health Clinics
- Rural PPS Hospitals

0 25 50 miles

Data Source Information:  
Site Data was collected and geocoded by Colorado Rural Health Center, the State Office of Rural Health, current as of January 2021







# Rural Colorado: Access to Healthcare, 2022

● Rural Clinic\*  
 + Rural Hospital\*

Symbols do not indicate location or quantity of facilities available.

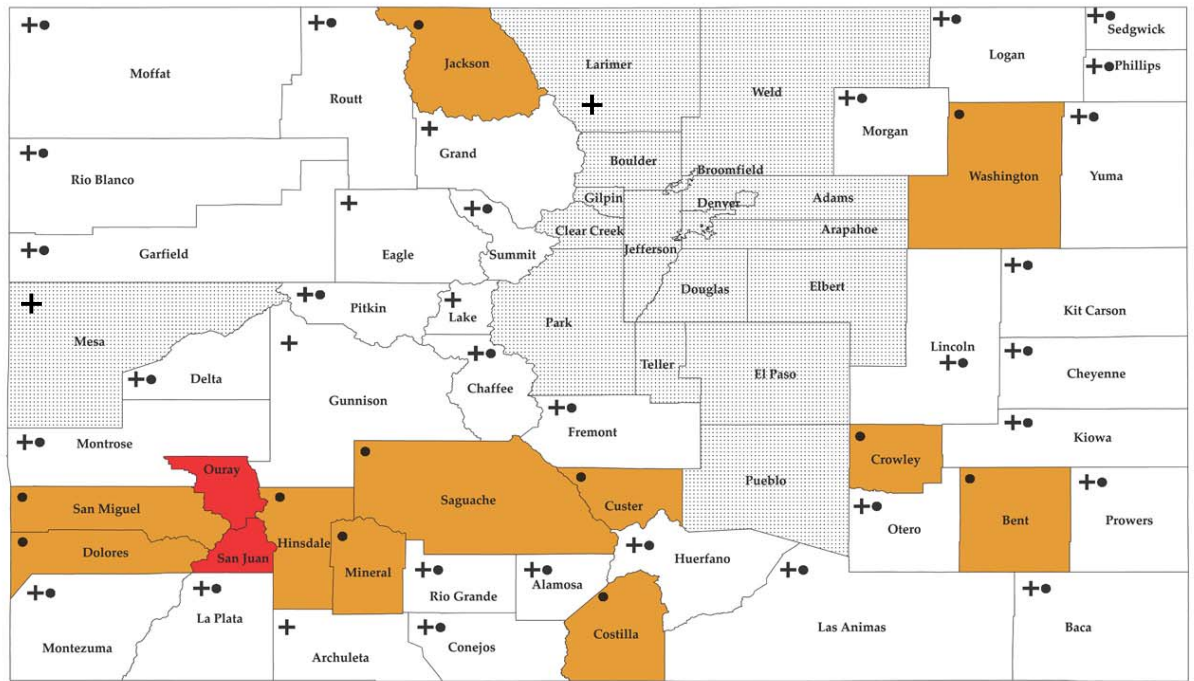
Urban County  
 No Hospital  
 No rural clinic or hospital

0 25 50 miles

Data Source Information:  
 Site addresses were collected and geocoded by the State Office of Rural Health, current as of February 2016.

Of Colorado's 47 rural counties:

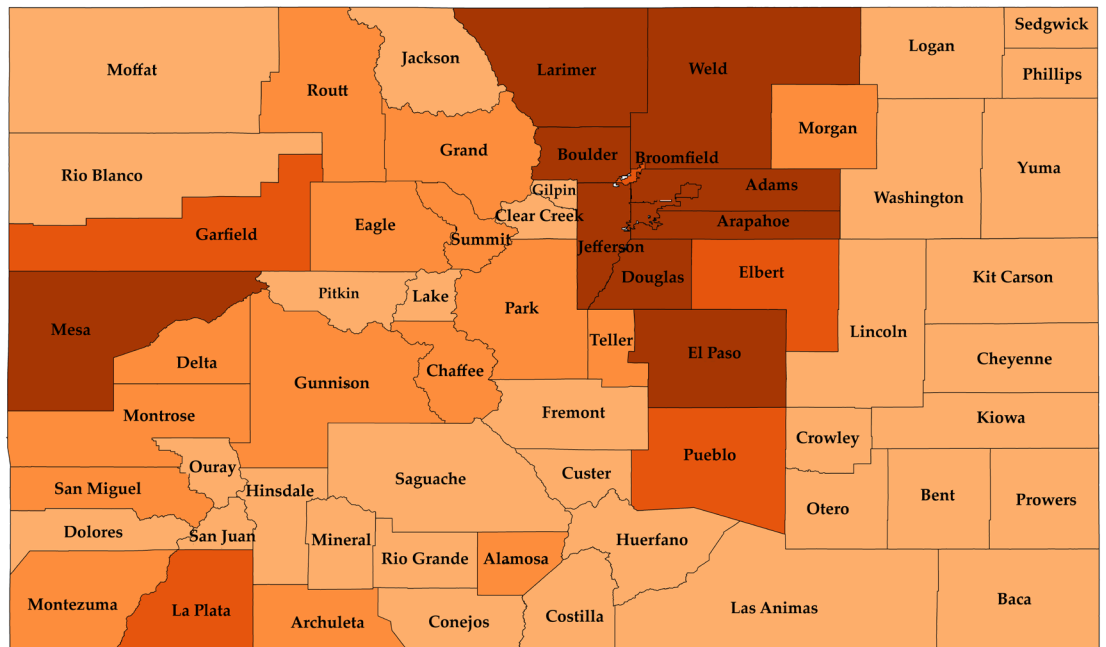
- 11 do not have a hospital
- 2 do not have a rural clinic or hospital



# Projected Population Change, 2010 - 2040

<5,000  
 5,000-20,000  
 20,001-50,000  
 >50,000

0 25 50 miles

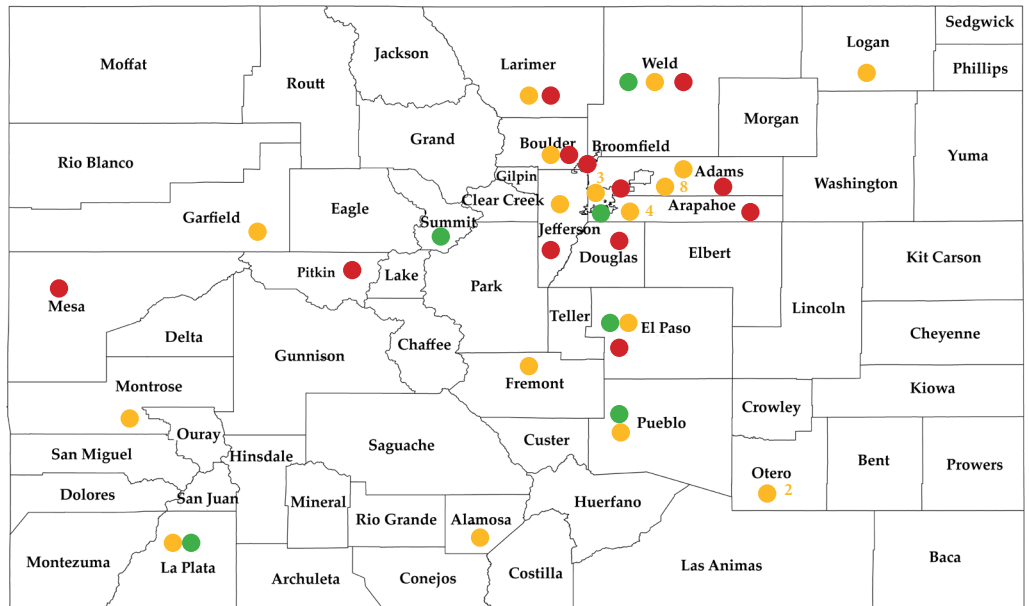




# Mental Health Facilities by Type

- 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.



# Rural Substance Use Disorder Facilities, 2020

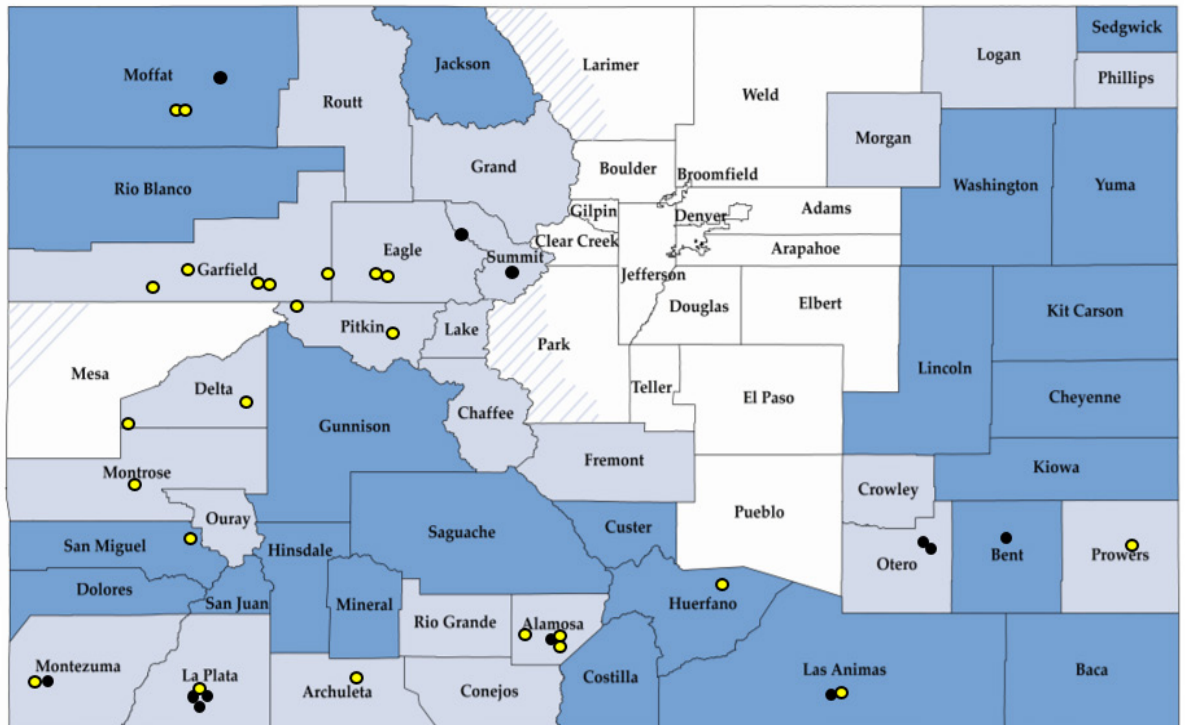
## County Classifications

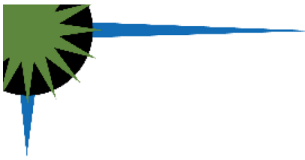
- Urban (17)
- Rural (24)
- Frontier (23)
- Rural areas of Urban Counties (approximate)

0 25 50 miles

Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health, current as of January 2016.

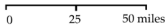
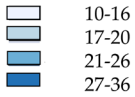
- Detoxification
- Hospital Inpatient Treatment
- Intensive Outpatient Treatment



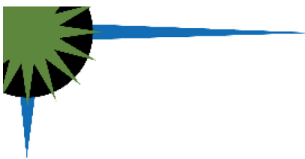
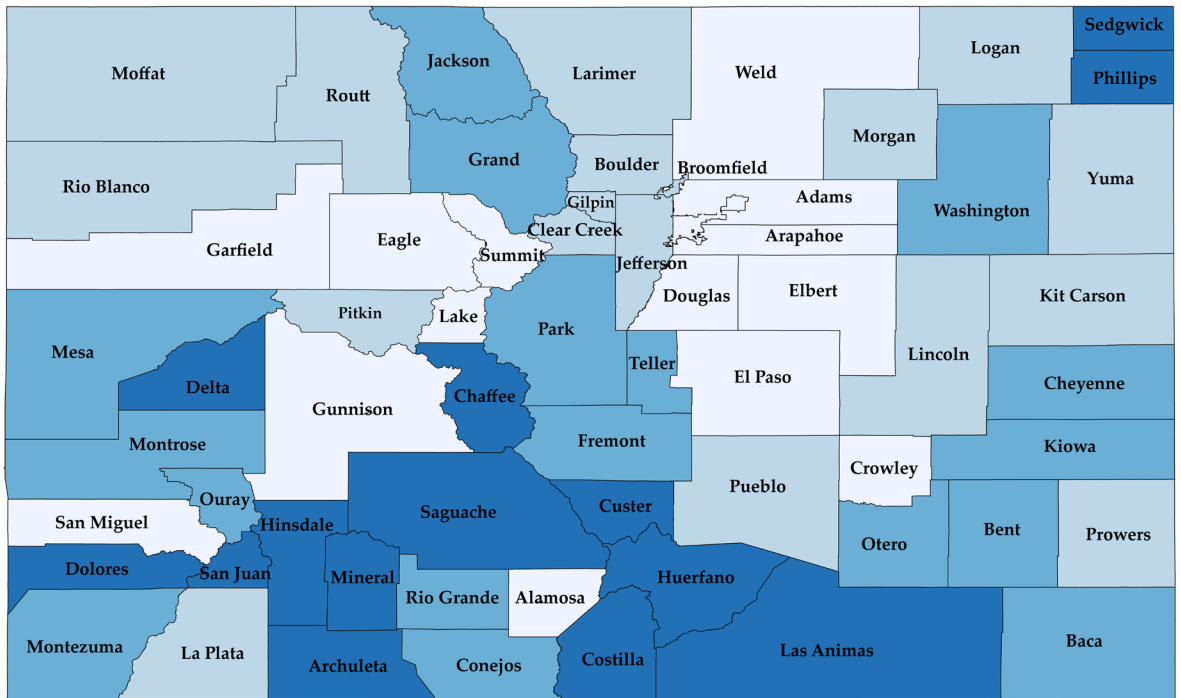


# Coloradans Aged 65 and Above

% of Population  
65+

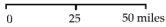
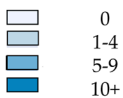


Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.

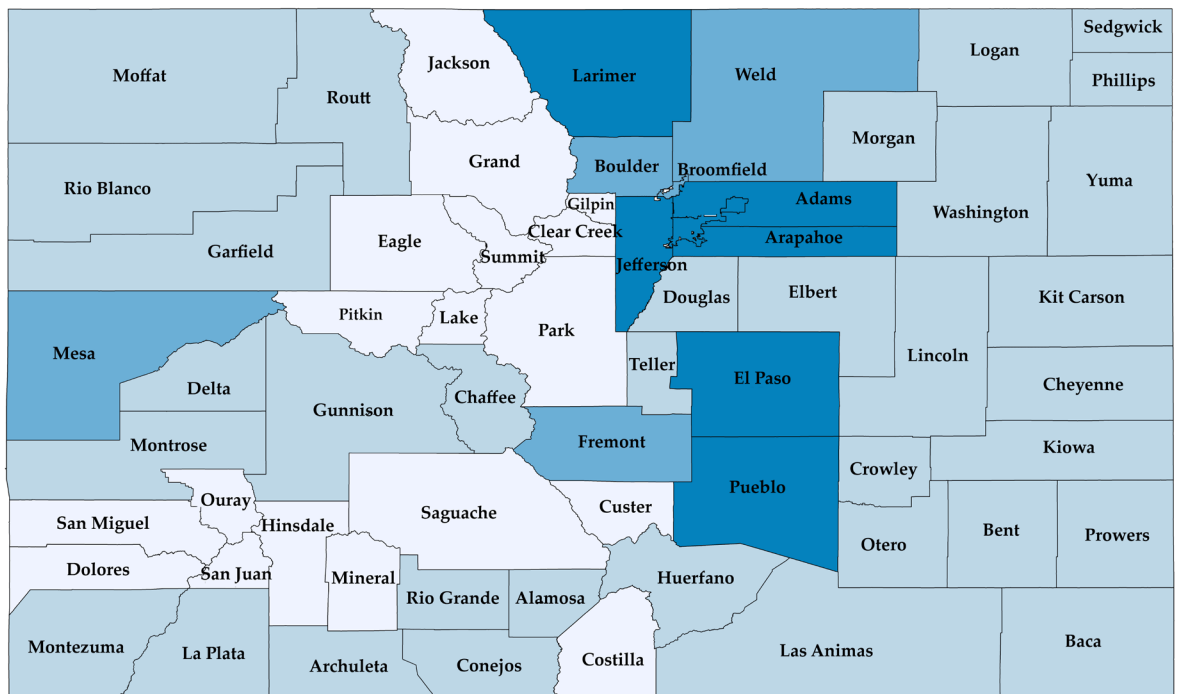


# Nursing Homes Across Colorado

Number of  
Nursing Homes



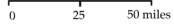
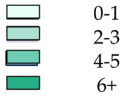
Data Source Information:  
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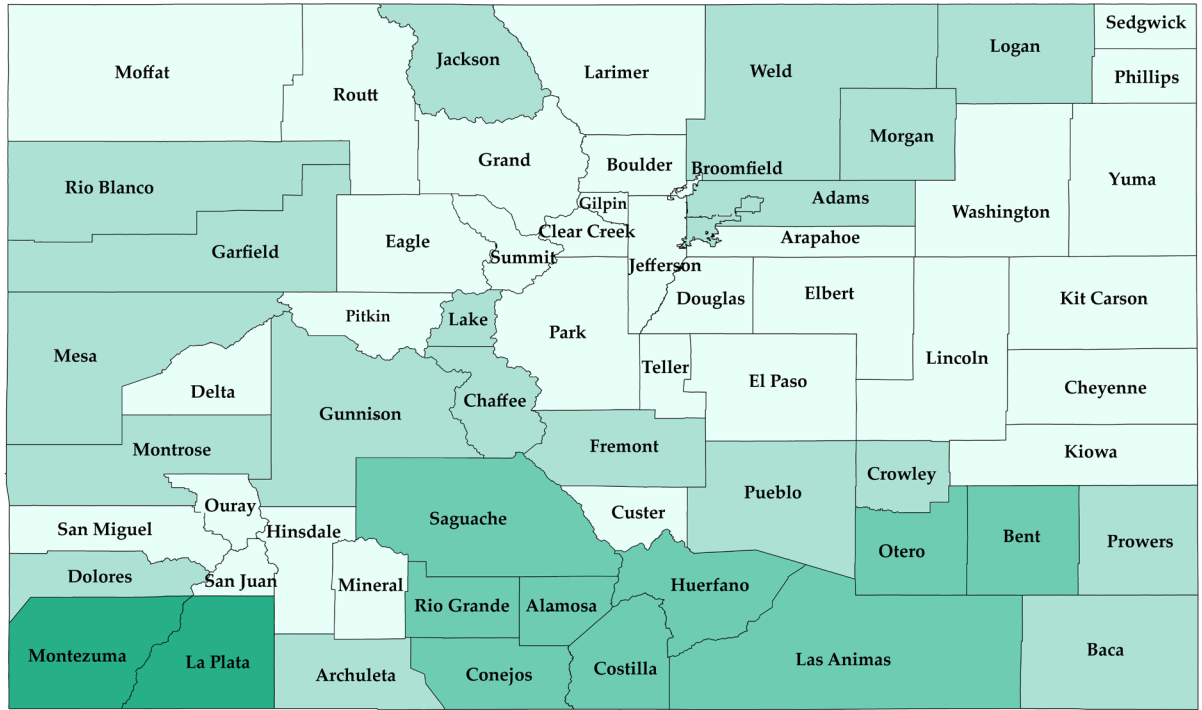


# American Indian & Alaska Native Population

% of Population that is American Indian and/or Alaska Native

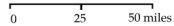
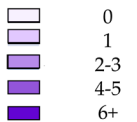


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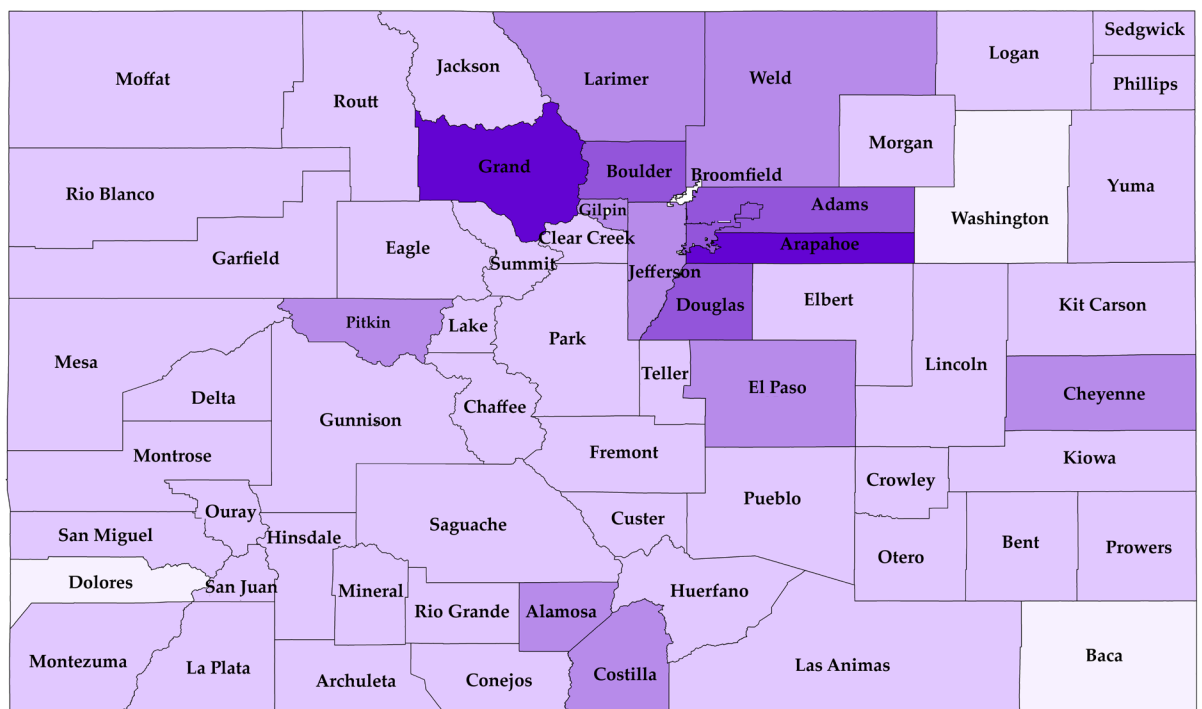


# Asian Population

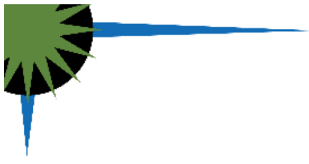
% of Population that is Asian



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

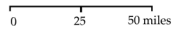
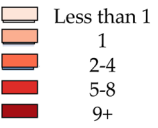




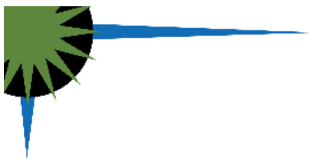
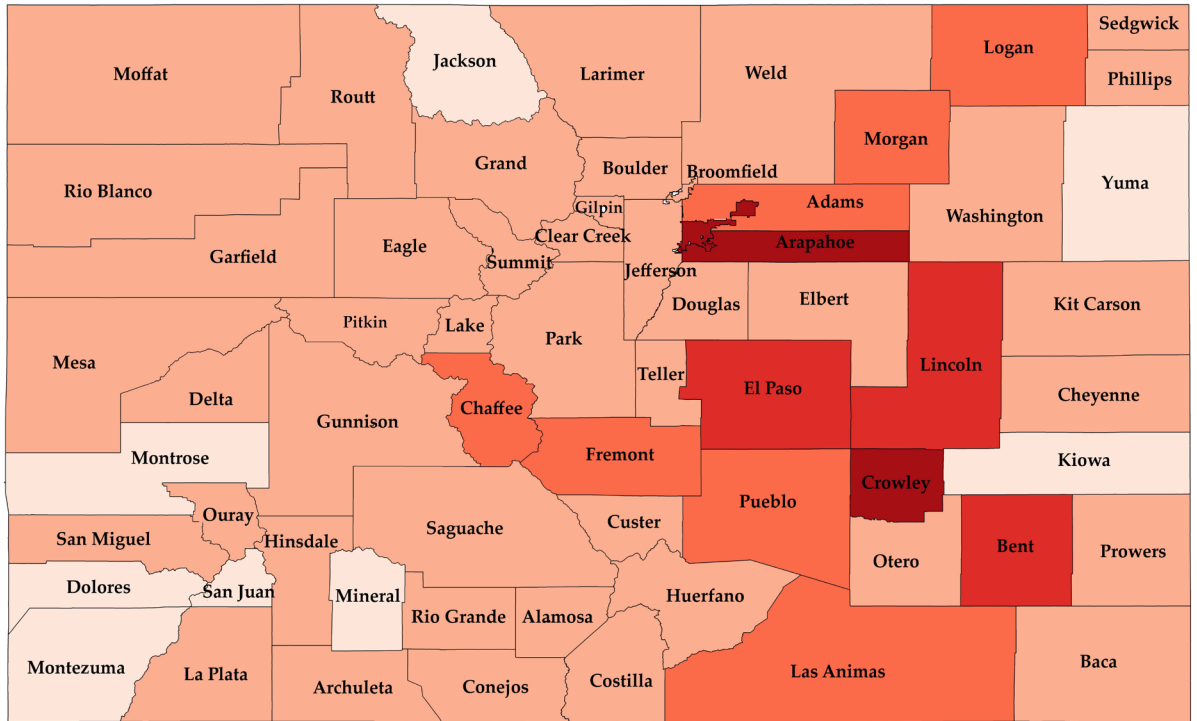


# Black Population

% of Population that is Black

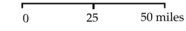
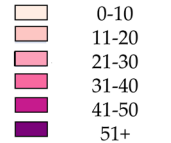


Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.

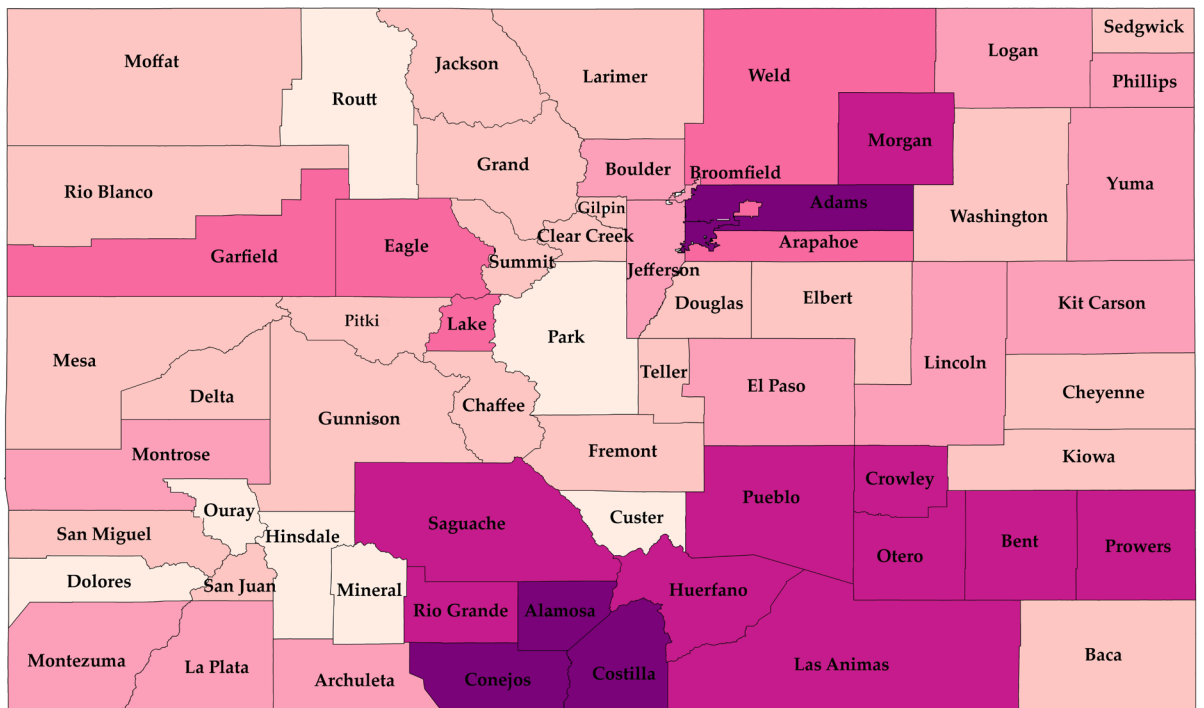


# Non-White Population

% of Population that is Non-White



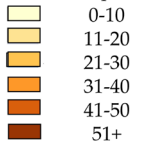
Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.





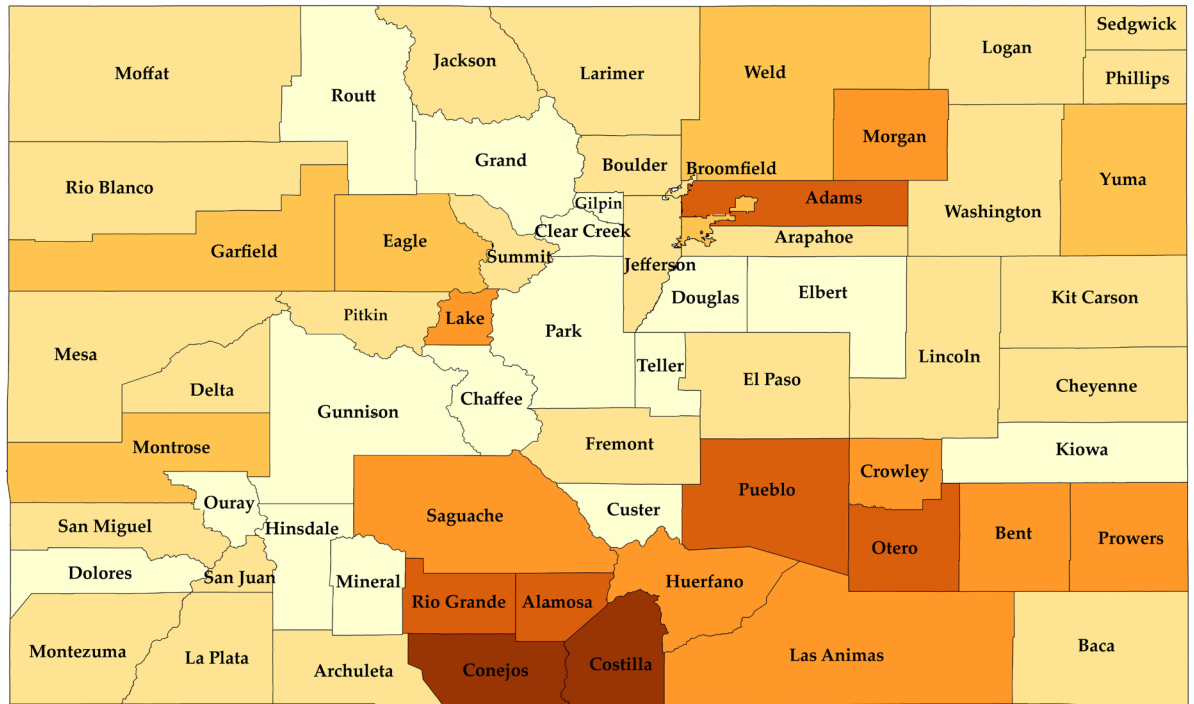
# Hispanic Population

% of Population that is Hispanic



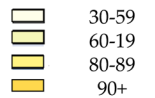
0 25 50 miles

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



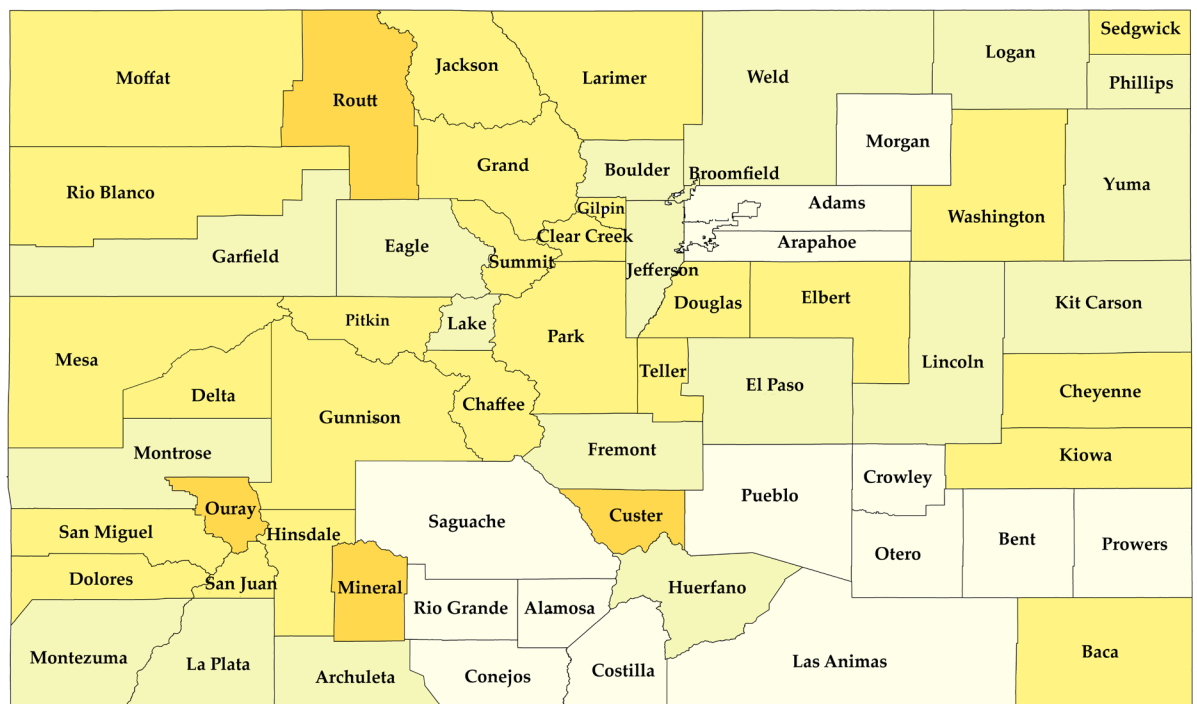
# Non-Hispanic White Population

% of Population that is Non-hispanic White



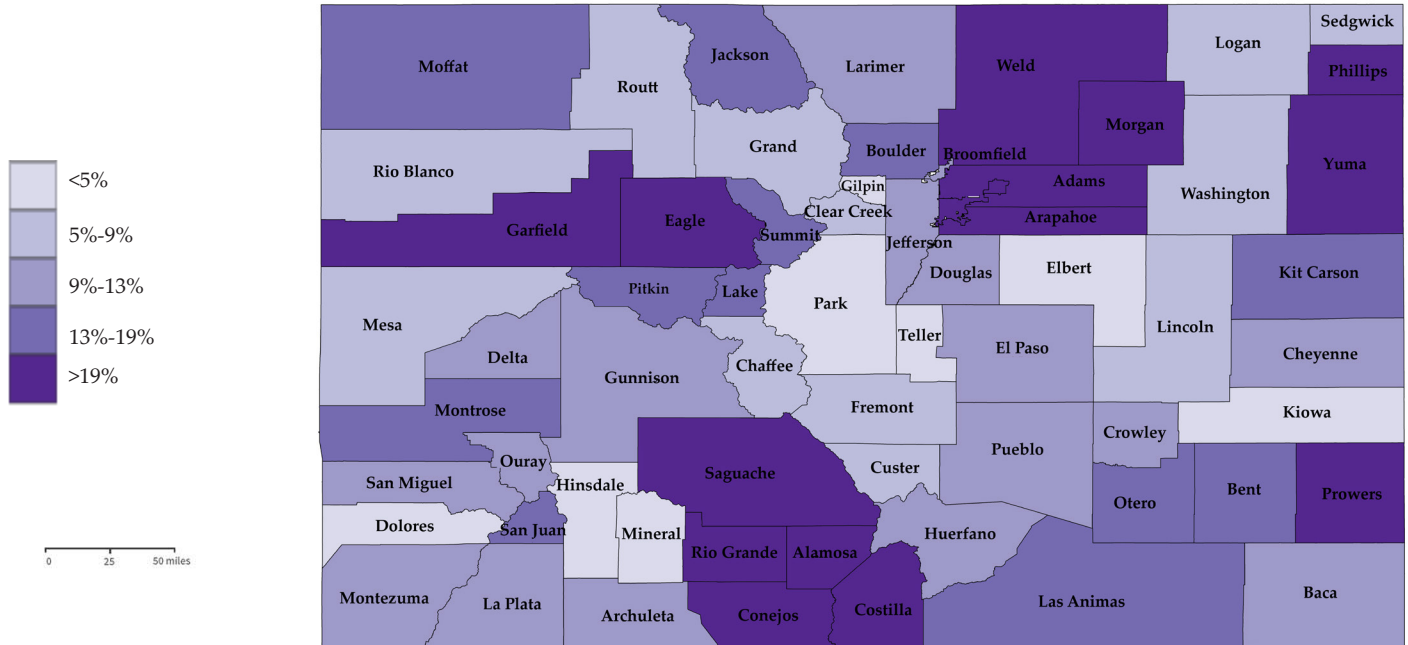
0 25 50 miles

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





## Percentage of People Who Speak a Language Other than English at Home, 2014-2018



## Bureau of Labor and Statistics 2020 Occupational Salaries by Region

Position	Denver, Aurora, and Lakewood Colorado	Eastern and Southern CO (Non-Metro Areas)	Southwest CO (Non-Metro Areas)	Northwest CO (Non-Metro Areas)	Average for CO Non-Metro Areas
Clinical Laboratory Technologists & Technicians	\$58,170	\$57,750	\$52,190	\$63,640	\$57,860
Clinical, Counseling & School Psychologists	\$99,610	\$87,970	\$91,640	Not Available	\$89,805
Dental Hygienists	\$91,590	\$83,890	\$74,100	\$93,650	\$83,880
Dentist, General	\$206,340	Not Available	\$121,620	\$105,920	\$113,770
Emergency Medical Technicians & Paramedics	\$44,260	\$36,130	\$36,890	\$48,070	\$40,363
Family Medicine Physicians	\$204,010	\$240,750	\$191,010	\$196,580	\$209,447
Firefighter	\$73,760	\$44,510	\$52,950	\$53,180	\$50,213
Medical Assistants	\$40,060	\$33,870	\$35,370	\$41,740	\$36,993
Obstetricians & Gynecologists	\$280,660	Not Available	Not Available	Not Available	Not Available
Psychiatrists	\$248,610	Not Available	Not Available	Not Available	Not Available
Registered Nurses	\$79,300	\$66,210	\$68,980	\$78,810	\$71,333
Substance Abuse, Behavioral Disorder, & Mental Health Counselors	\$55,010	\$53,310	\$52,780	\$52,860	\$52,983

\* May 2020 (last modified March 2021) Metropolitan and Non-Metropolitan Area Occupational Employment and Wage Estimates - Bureau of Labor and Statistics.

\*\*Occupation Regional Annual Mean Wages.

Legend

Highest Paid
Lowest Paid
Equal or Higher Than Urban



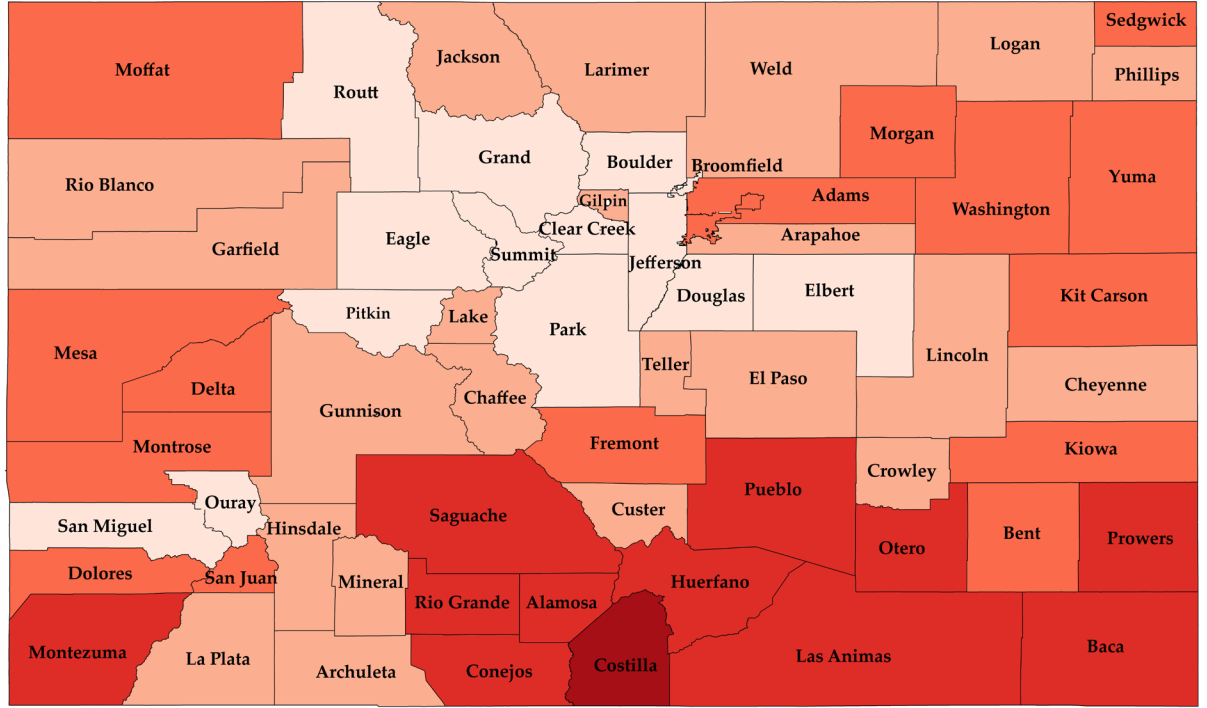
# Medicaid Member Caseload

% of Population on Medicaid

- 10-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%

0 25 50 miles

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



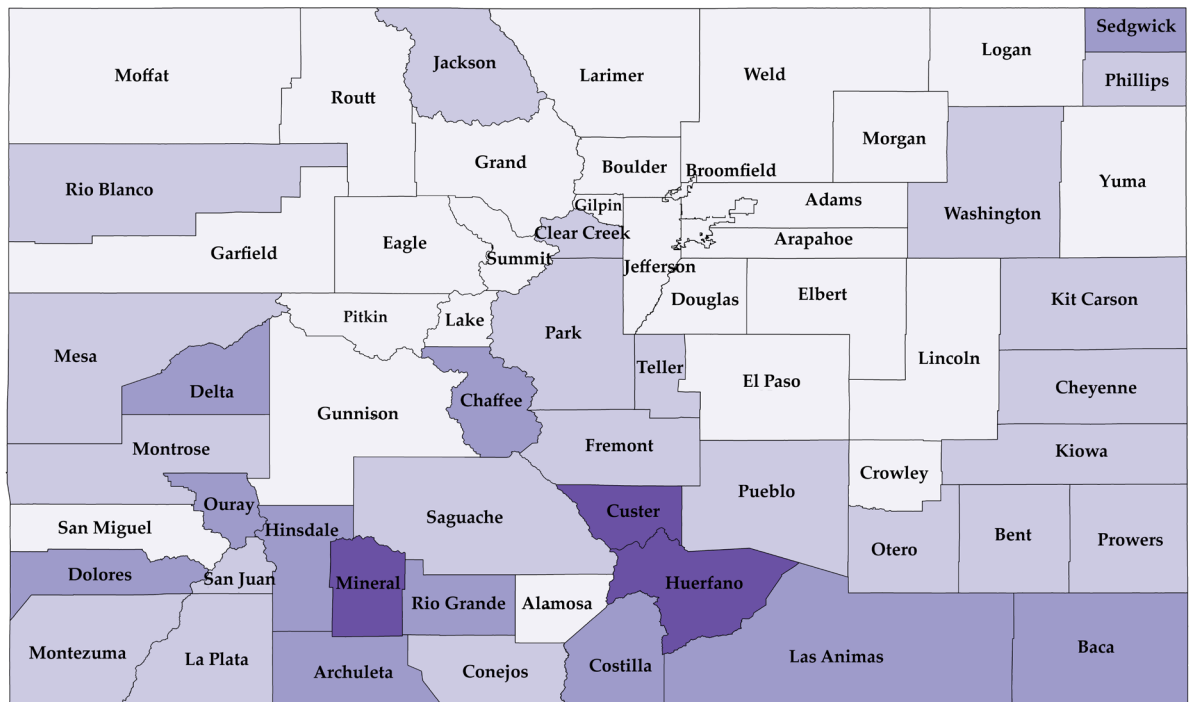
# Medicare Member Caseload

% of Population on Medicare

- 12-19%
- 20-27%
- 28-35%
- 36%+

0 25 50 miles

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

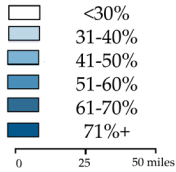




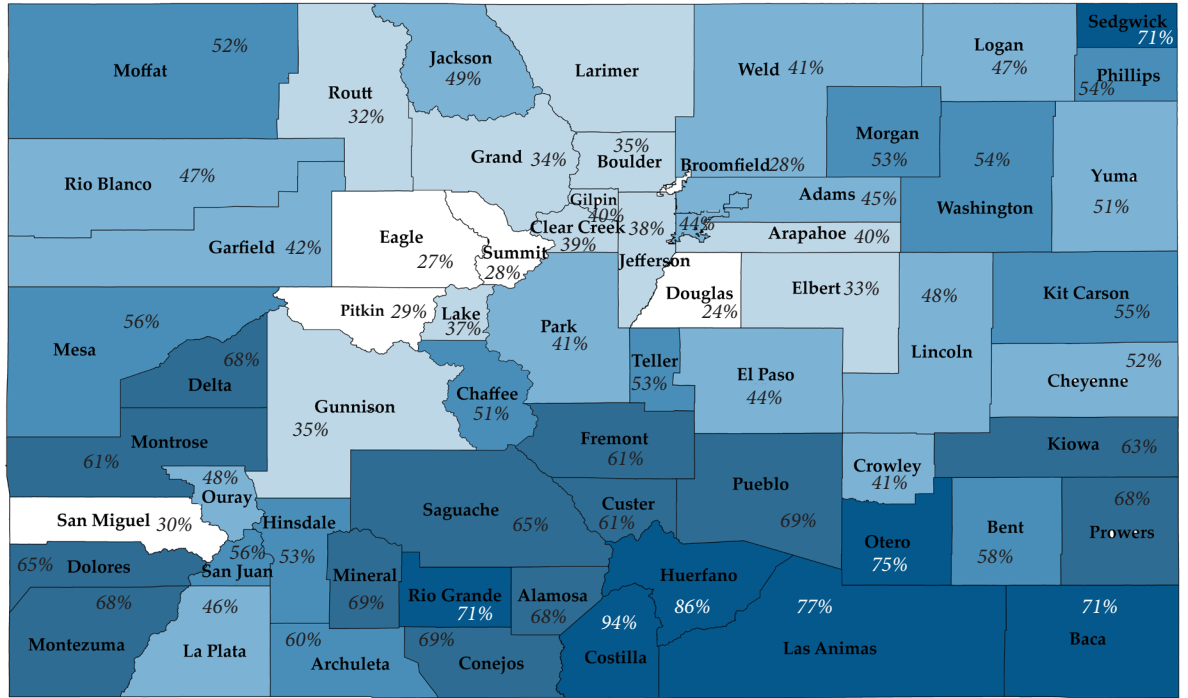


# Medicaid and Medicare Caseload

% of Population on Medicaid or Medicare

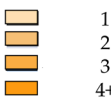


Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.



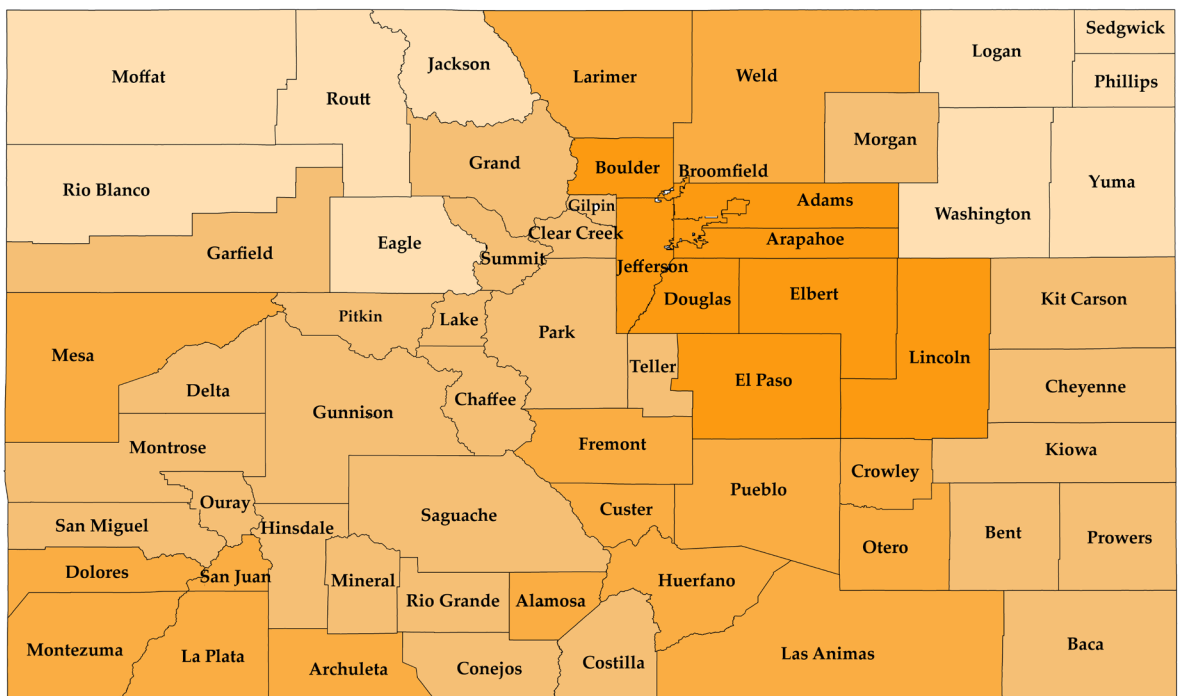
# Number of Healthcare Exchange Insurance Plans by County, 2020

Number of Insurers



0 25 50 miles

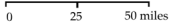
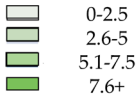
Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.



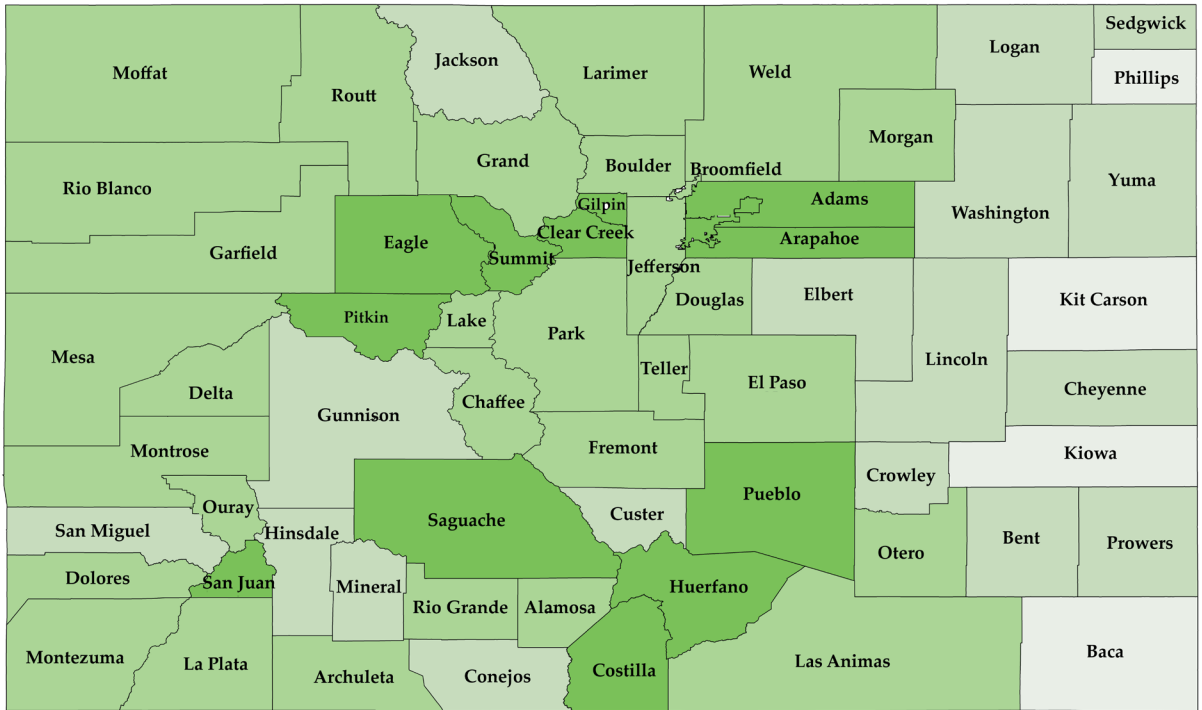


# Colorado Unemployment, August 2020

% Unemployment Aug. 2020

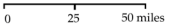
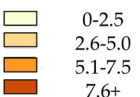


Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.

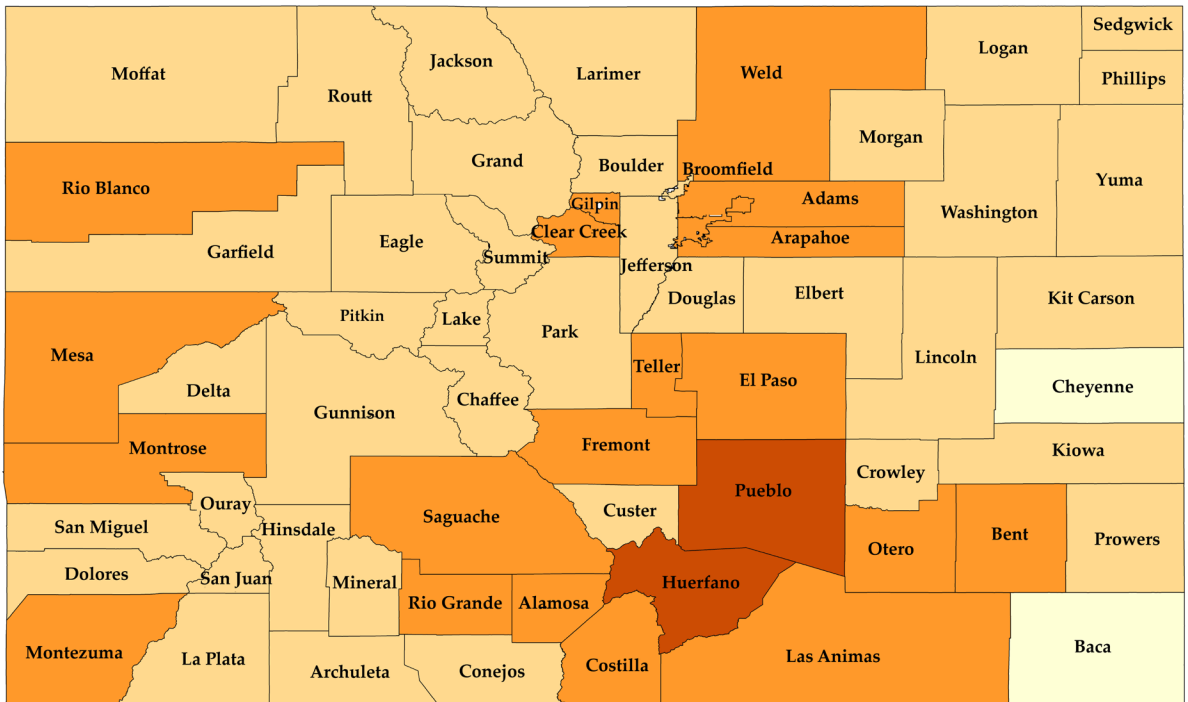


# Colorado Unemployment, August 2021

% Unemployed Aug. 2021



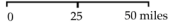
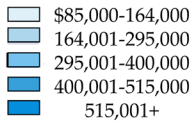
Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.



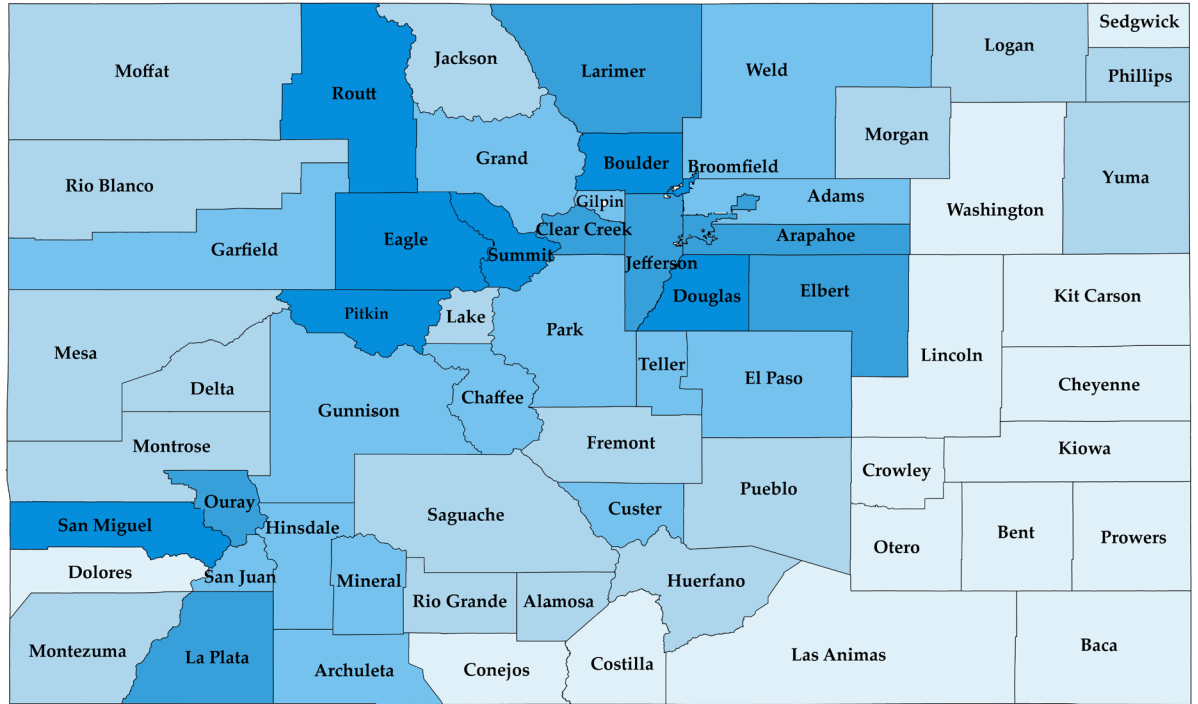


# Median Home Price

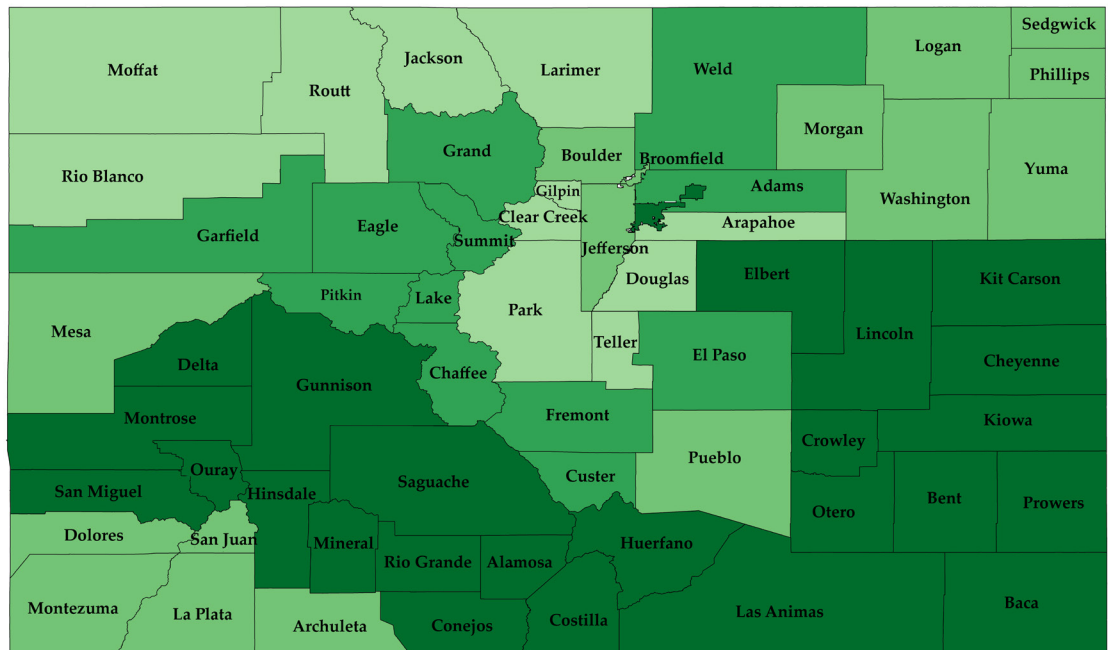
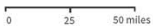
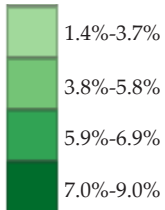
Median Home Price  
Q1 2021



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

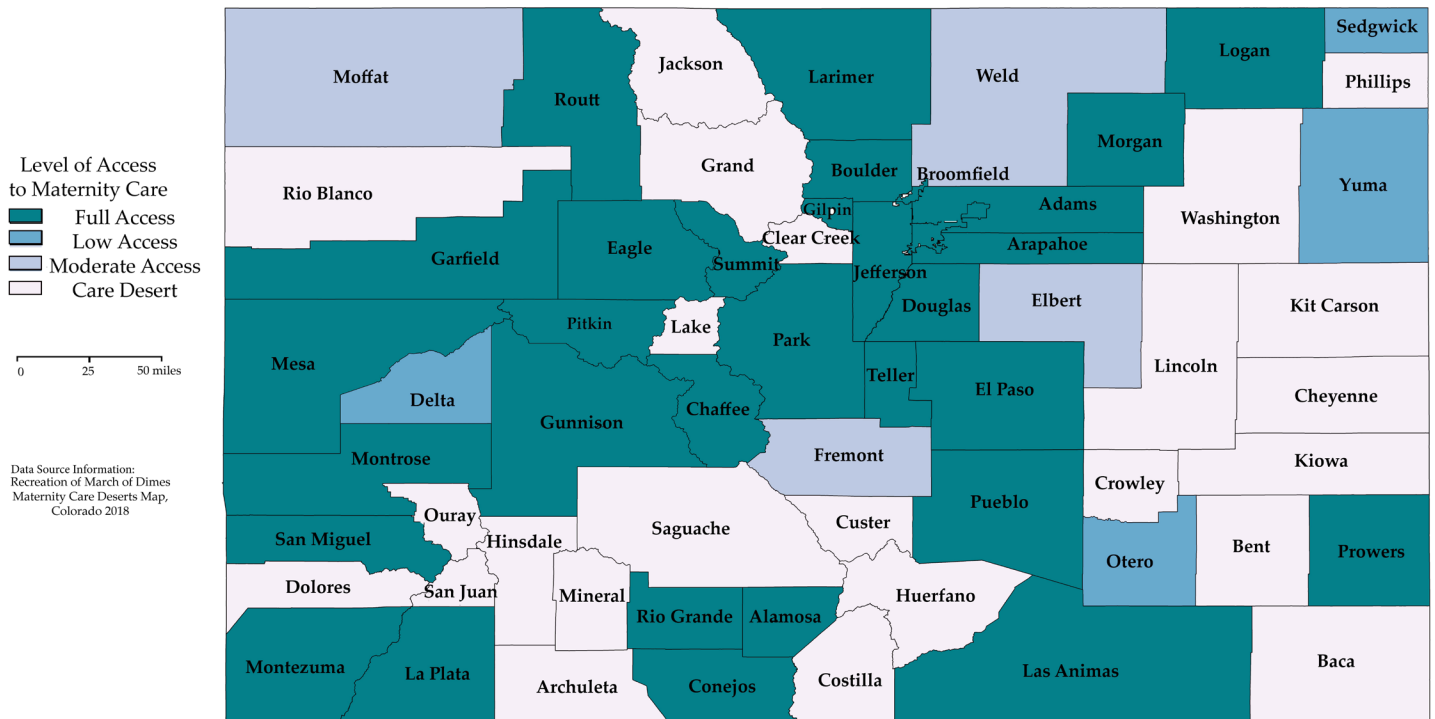


# Percentage of Coloradans Reporting Transportation as a Barrier to Healthcare, 2018

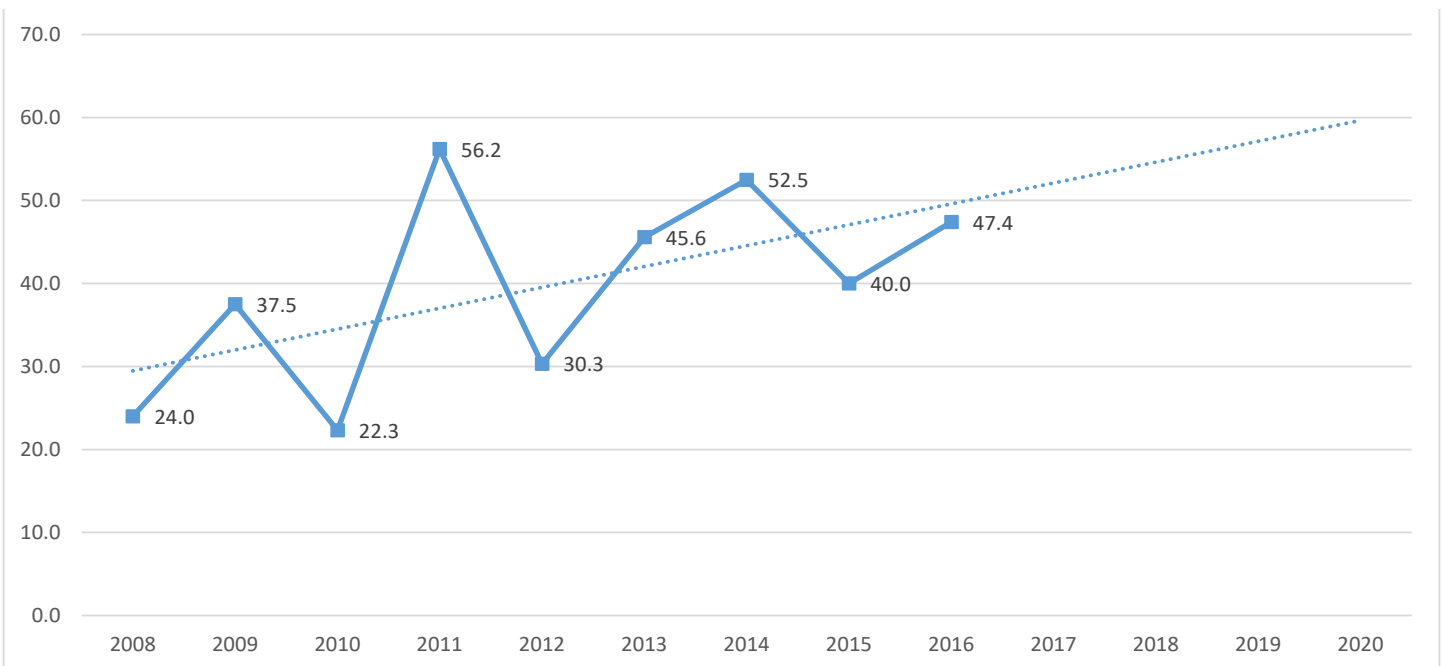




# Access to Maternity Care, 2018



# Pregnancy-Associated Mortality Ratio, Colorado, 2008-2016







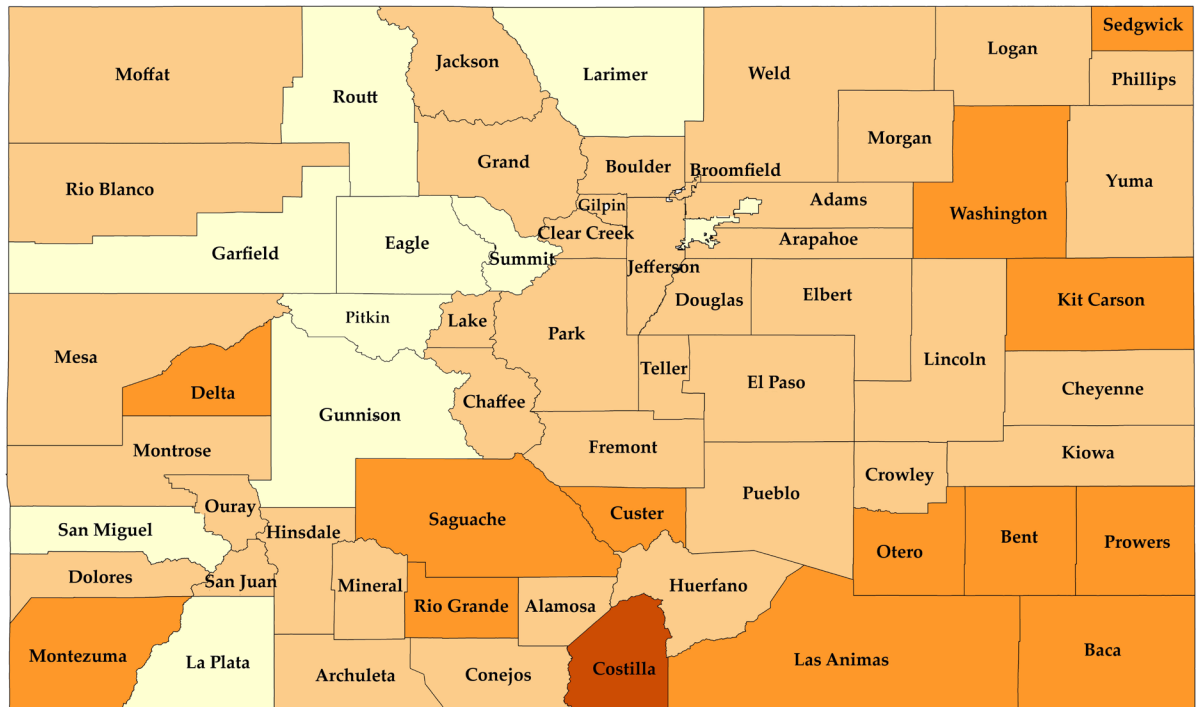
# Coloradans with Adult Diabetes

% 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.



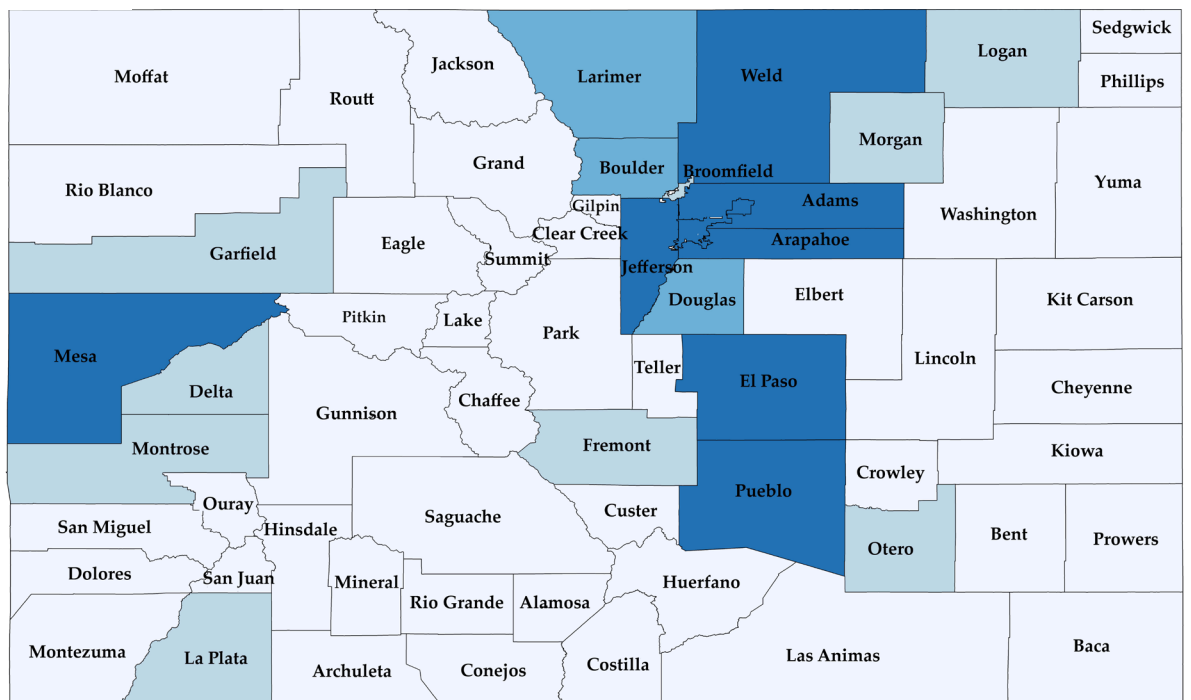
# COVID-19 Deaths

Deaths Among COVID Cases

- 0-50
- 51-100
- 101-300
- 300+

0 25 50 miles

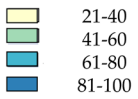
Data Source Information:  
Site addresses were collected and geocoded by the State Office of Rural Health.





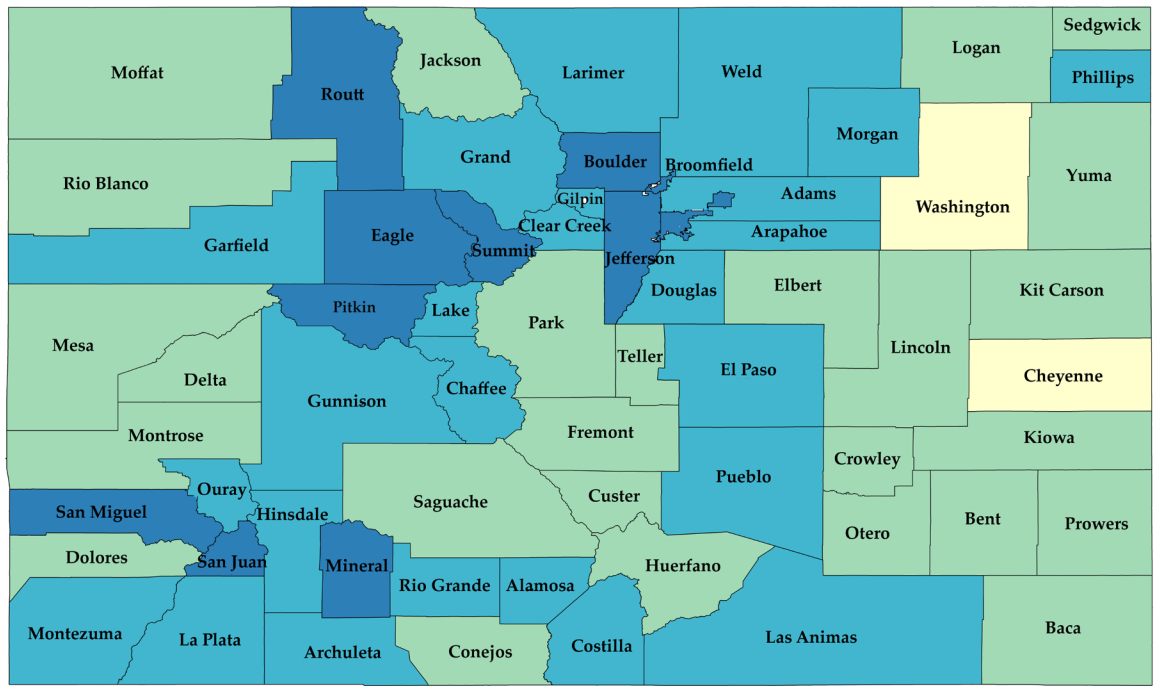
# COVID-19 Vaccination Rate (12+)

% of Eligible Population Immunized with 1 or More Doses of Any COVID-19 Vaccine (Age 12+)



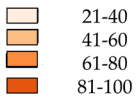
0 25 50 miles

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



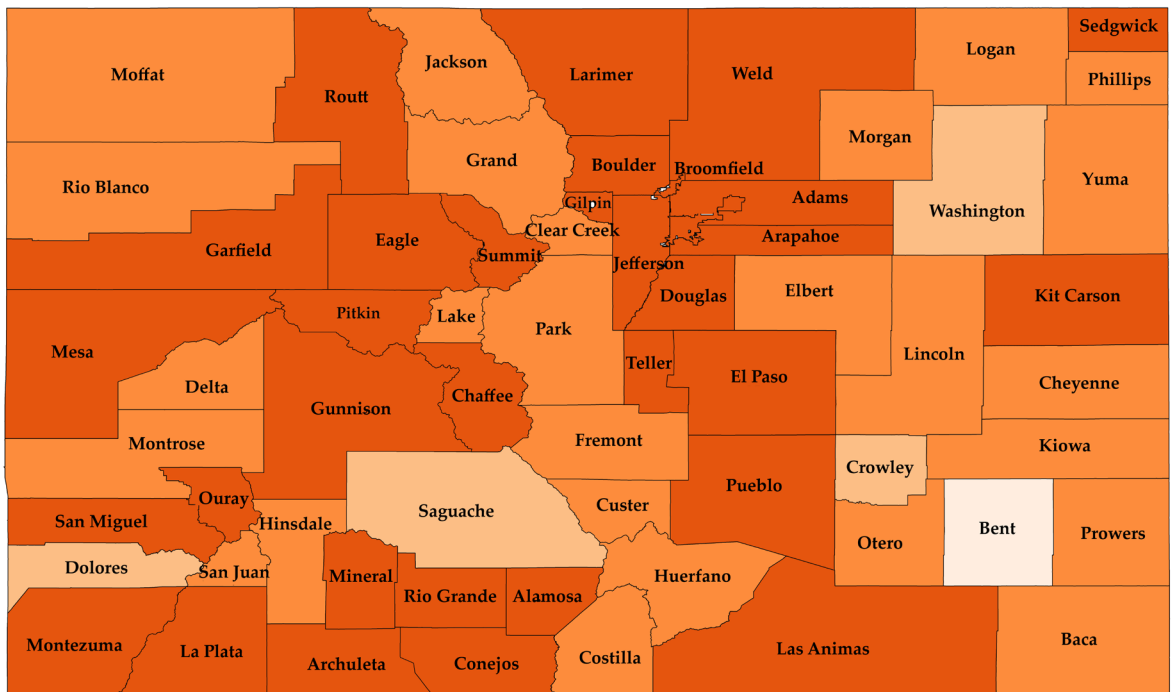
# COVID-19 Vaccination Rate (65+)

% of Eligible Population Immunized with 1 or more Doses of Any COVID-19 Vaccine (65+)



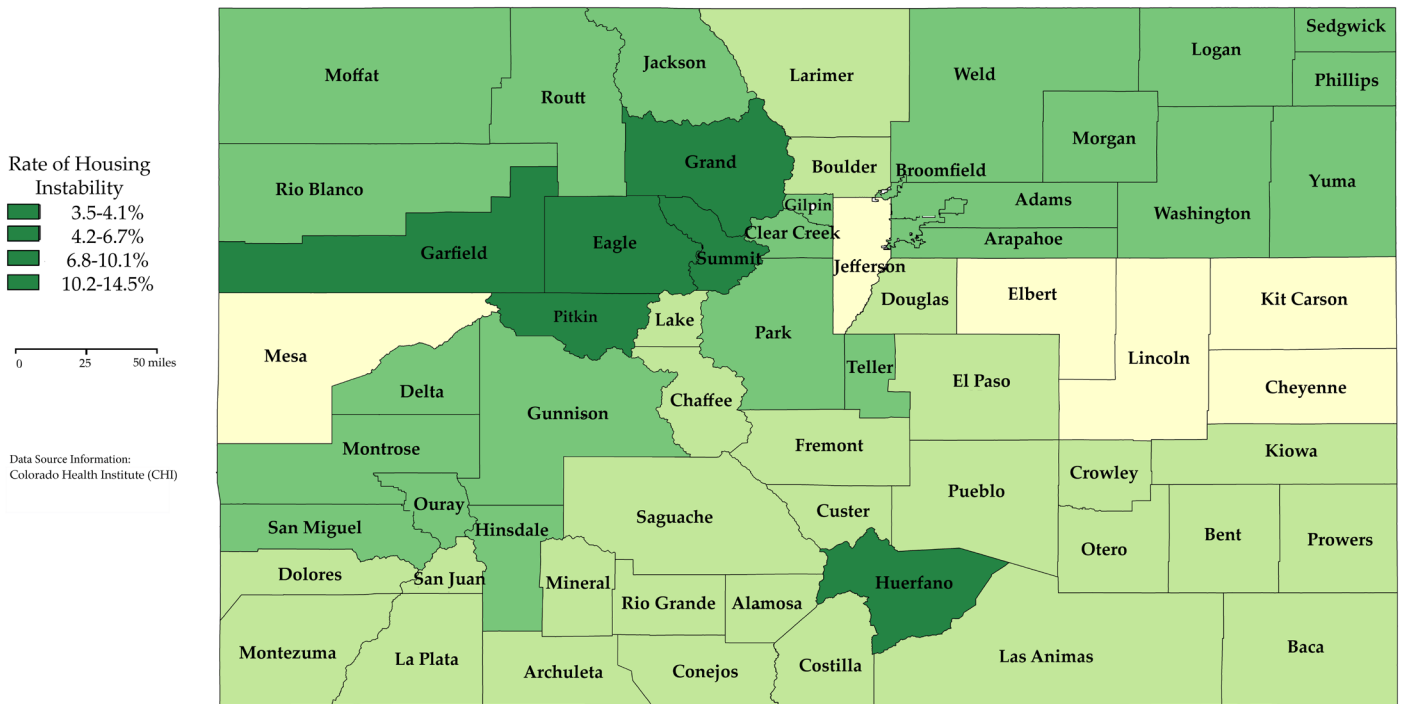
0 25 50 miles

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

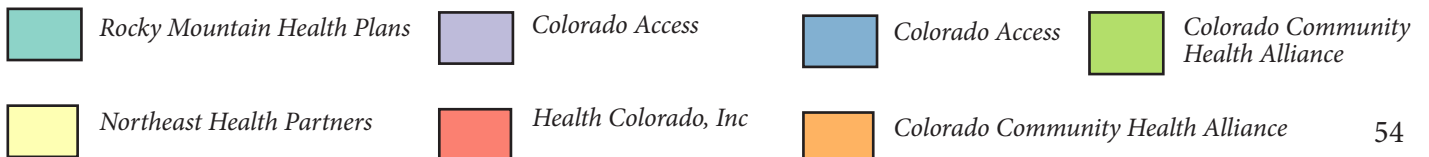
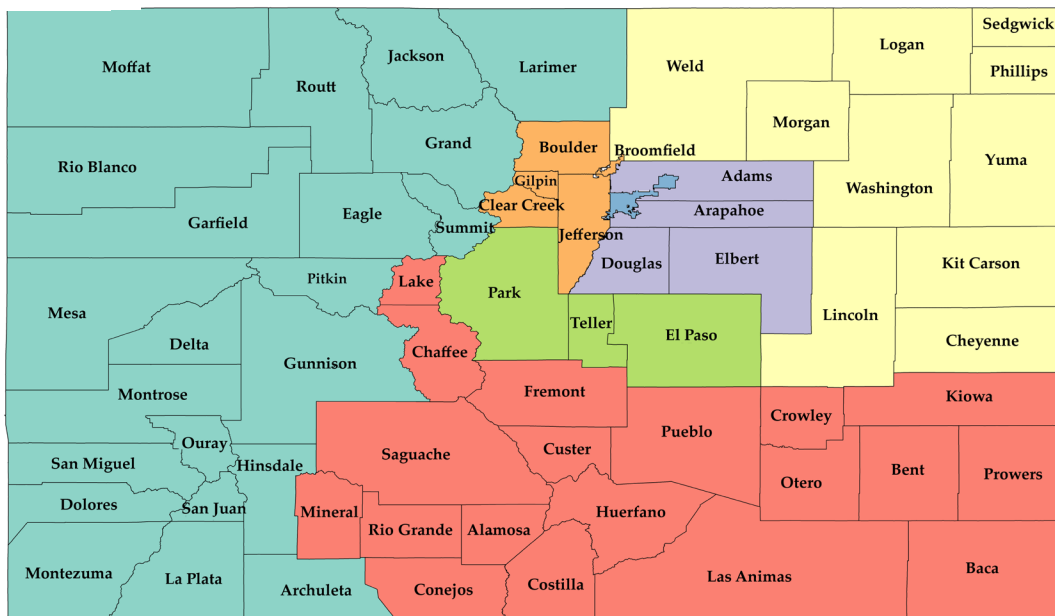




# Housing Instability



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







# 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-2022](https://coruralhealth.org/snapshot-data-2022)