

RURAL HEALTH FACILITY TYPES



Critical Access Hospitals (CAH)



56 **Federally** Certified Rural Health Clinics (RHC)



Rural Prospective payment system (PPS) Hospitals



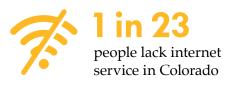
Federally Qualified Health Centers (FQHC)



Community **Health Centers**

Technology & **Internet Access**

In 2023, President Biden and Vice President Harris allocated Colorado \$826,522,650 from the Broadband, Equity, Access and Deployment (BEAD) funds as part of the Biden administration's "Internet for All" program. This program's purpose is to bridge the rural-urban divide and help connect America's rural, underserved population with high-speed broadband.



have high levels of connectivity, and many have very low levels

Southeast Colorado has the poorest access to 100/20 Mbps broadband



10%

Chevenne

Crowley

Dolores

Custer

Hinsdale

TELEHEALTH VISITS

30% of rural facilities complete visits

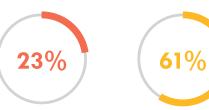


55% of urban facilities complete visits

33% telehealth users

39% telehealth users

AMONG ALL PAYERS USING TELEHEALTH



were for patients 0-17 years of age



were for females



were among non-Hispanic white patients

Health Information Technology

The Rural Connectivity Program is a program funded by the Office of eHealth Innovation, Department of Health Care Policy and Financing and in partnership with the Colorado Community Managed Care Network (CCMCN). The goals are to establish a sustainable model for rural connectivity, including connecting providers to Colorado's Health Information Exchanges (HIE), supporting rural providers to adopt health information, data sharing and analytics/tools to support care coordination and quality measurement.



100% OF RURAL CONNECTIVITY PROGRAM ARE CONNECTED WITH HEALTH INFORMATION EXCHANGES



84 eligible rural facilities

were already connected to the Health Information Exchange

65 were connected to CRHC's Data Vault





There are 2 main types of electronic medical record (EMR) Pricing Models:

Perpetual License or Subscription License

COSTS FOR ONE RURAL HEALTHCARE FACILITY



\$1,200-\$500,000+

Perpetual License: one time license fee with additional and hidden costs



\$200-\$35,000

Subscription License: monthly license fee with hidden costs

TOP TELEHEALTH SERVICES FOR RURAL COLORADO IN 2022



Behavioral Health and Substance use Disorders



Primary care



Mental health conditions



services were provided per 1,000 people in rural areas

Women's and Maternal Health

From 2015 to 2019, there were at least 89 obstetric unit closures in rural hospitals across the country. By 2020, about half of rural community hospitals did not provide obstetrics care.



25 counties in Colorado are considered "Maternal Care Deserts," or areas where there are no OB providers, hospitals, or birthing centers offering OB care



Huerfano County has 6,920 people and is a maternal healthcare desert



San Miguel County has 8,074 people and has full access to maternal care

29.8%



15.3%

of live births receive inadequate care

of pregnancies receive inadequate care





6.4%

of births are premature

of births are premature

6.49 out of 1,000



4.15 out of 1,000

births results in the death of the child

births results in the death of the child



of counties do **not have a hospital or birth center** offering maternity
care in Colorado



36% of rural women

had their first prenatal care visit at 3 months in 2022

Fewer than half of women in rural areas can find perinatal care within 30 miles

ABORTION IS PROTECTED UNDER COLORADO LAW

22 states now prohibit abortion or restrict it earlier in pregnancy



30% of abortions

in Colorado in 2022 were for patients who crossed state lines

It is estimated that a national ban on abortions would lead to a 20% increase in maternal mortality

Childbirth and Infant Health

The number of births in rural areas have decreased overtime

Declining from 8,000 to 6,596 births annually

2000 2022



Colorado rural counties have higher rates of preterm births than urban counties



Rural hospitals report

higher rates of hemorrhage and blood transfusions as compared to urban hospitals

IN AN AVERAGE WEEK IN COLORADO



1,182 babies are born



117 babies are born preterm



1,114 babies are born low birth weight



836women receive adequate prenatal care



3.8% of babies

covered by Health First Colorado were substance-exposed newborns and/or diagnosed with neonatal abstinence syndrome

OF RURAL BIRTHS



listed the maternal marital status as "not married"



had a maternal educational attainment of a high school diploma or less (compared to 13% in urban areas)



had a maternal annual income of less than \$15,000



of rural deliveries were performed by midwives



higher risk for childbirth complications

MATERNAL MORTALITY

Top causes of maternal deaths in Colorado



- Suicide
- Unintentional drug overdose
- Injuries, including motor vehicle accidents
- Homicide, over 50% of which were committed by an intimate partner
- Cardiac conditions

1,205 people died of maternal causes in the U.S. in 2021 — a 40% increase from the previous year

WOMEN'S AND MATERNAL HEALTH INSURANCE



of counties have a higher percent of women **without health insurance** than the Colorado average



1/4 of Colorado pregnant women on Medicaid insurance do not go to a doctor's appointment during the first trimester

GYNECOLOGICAL CARE



75% of Colorado females aged 21-65 reported having a pap within the past 3 years in 2020

65.6% of rural women are up to date with mammogram scrennings



Less than 10% of obstetric providers practice in rural areas



52.3% of Prenatal Women,

were enrolled in Women Infant and Children (WIC) in 2022

PRENATAL CARE RATES IN THE FIRST TRIMESTER

76.0%

Most birthing parents

57.7%

Native Hawaiian Other Pacific Islander

70.2%

Black/African American

70.6%

American Indian Alaska Native



40% higher teen pregnancy rate

in rural Colorado than urban parts of the state



Counties with low access to telehealth

were 30% more likely to be maternity care deserts

Health of Older Adults

Rural aging comes with a host of challenges such as the lack of medical services; infrastructure needs regarding transportation and internet connectivity; affordable, safe and manageable housing; and an increased risk of social isolation.

RURAL OLDER ADULTS EXPERIENCE HIGHER RATES OF MEDICAL CONDITIONS

All-cause mortality	20%	Heart disease	40%
Hypertension	11%	Stroke	30%
Diabetes	40%	Chronic obstruct	ive pulmonary disease 100%





43% of the 28,000 providers

who refuse Medicare reimbursement work in behavioral health disciplines

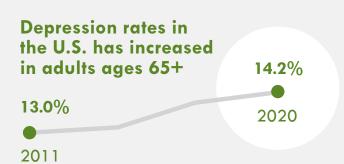
MENTAL HEALTH OF OLDER ADULTS

In 2022, deaths by suicide among 65+ adults in Colorado were:

31.62 per 100,000 older adults in



21.8 per 100,000 older adults in





Drug overdoses among those 65+ in rural Colorado have remained flat since 2018 at 9.62 per 100,000 people

2022 SENIOR HEALTH RANKINGS FOR COLORADO

Strengths for older adults

- Low prevalence of multiple chronic conditions
- High volunteerism
- Low prevalence of physical inactivity

Challenges for older adults

- High suicide rate
- High prevalence of falls
- High percentage of low-care nursing home residents

Oral Health

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

Coloradans ages 65+ who have lost all of their natural teeth

in rural areas in urban areas



Coloradans who have lost 6 or more, but not all, teeth due to decay or periodontal disease

in rural areas in urban areas

COLORADO ADULTS REPORTED

Poor oral health

20.2%

in rural areas

in urban areas



Dental pain limiting activities like work or school in the past twelve months

6.5% 7.3%

in rural areas in urban areas



Children aged 5-19 living in low-income families are 2x as likely to have cavities, compared with higherincome kids



Oral health services in schools protect from the harmful effects of tooth

decay by decreasing the barriers to accessing dental care, preventing missed school hours, and improving school readiness



Access to oral health providers is limited in rural regions,

because of geographic isolation and workforce shortages



Tobacco use, such as cigarettes or smokeless chew tobacco, is known to cause oral health problems

26.9% of adults use in rural areas

19.3% of adults use in urban areas

Dental Care Access

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



Coloradans who saw a dental professional in the past year

67%

75%

in rural areas in u



11 rural counties do NOT have an active licensed dentist, which contributes to a disparity in access

Coloradans who reported not getting dental care in the last year because it was <u>challenging to find</u> <u>a dentist or hygienist</u> they could relate to

7.4% in rural areas



6.2% in urban areas



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



of Coloradans cited fears about contracting COVID-19 for not receiving dental care



67.4%

Cost of dental healthcare

is a larger barrier in rural areas

Black and hispanic/latinx are less likely to get dental care

DENTAL INSURANCE

Coloradans without insurance consistently report worse oral health status than individuals insured by Medicaid, Medicare, or private insurance.

The rate of dental insurance coverage 50.1% has increased in rural Colorado

Lagging behind the 80% of urban adults who report having coverage

2013 2021

19 of 47
rural counties have
a dental clinic who
takes Medicaid

Substance Use & Prescription Drugs

ALCOHOL COMSUMPTION IS SIGNIFICANTLY HIGHER IN RURAL AREAS OF COLORADO



of rural youth reported having their first drink of alcohol before the age of 13 compared to 14.8% of urban youth



of rural youth report binge drinking compared to 12.1% urban youth



of adults living in rural are heavy drinkers

MARIJUANA USE AMONG COLORADO YOUTH



13.3% of youth

reported using marijuana one or more times in the past 30 days compared to 15.0% of rural youth

The highest prevalence of marijuana use was 21.4% in these counties:

Park

Clear Creek

Teller

Gilpin

RURAL ESTIMATES & TOP 5 REASONS THEY REPORT USING SUBSTANCES









18.6% to have a good time with friends

14.5%

to feel good

12.6%

to cope

12.5%

to experiment

8.2%

boredom

TOBACCO PRODUCTS



13.8%

of rural adults smoked in 2022 compared to the state rate of 10.7%



19.8%

of rural high-school aged youth reported using an e-vape product in 2021 compared to state average of 16.1%



5.2%

of rural high-school aged youth reported smoking cigarettes in the past 30 days compared to state average of 3.3%



26%

of Colorado deaths are caused by smoking each year



\$1.89 Billion

per year smoking-related health care costs



5,100

smoking-related losses in productivity



\$1.27 Billion

per year portion of cancer deaths attributable to smoking

OPIOID PRESCRIPTIONS DISPENSED PER 1,000 RESIDENTS



The opioid prescribing rate has decreased since 2014 from 740 to 489



of rural youth used pain med without a prescription compared to 14% of urban youth

The highest opioid prescribing

rates are seen within southeast Colorado



790 Pueblo

756 Las Animas

750 Huerfano

649 Bent

BENZODIAZEPINE PRESCRIPTIONS DISPENSED PER 1,000 RESIDENTS

More females had a benzodiazepine

prescription filled than males



259
Females



161Males



The annual age-adjusted rate of prescriptions filled has

declined since 2014 from 329 to 211

Top 5 rural counties benzodiazepine prescriptions dispensed



375 Pitkin

325 Las Animas

314 Rio Blanco

310 Moffat

305 Mesa

STIMULANT PRESCRIPTIONS DISPENSED PER 1,000 RESIDENTS

Males were more likely to have a stimulant

prescription filled than females



180 Males



162 Females



The annual age-adjusted rate of stimulant prescriptions filled has increased since 2014 from 148 to 171

Top 5 rural counties for stimulants dispensed

Rates are significantly higher in urban areas



323 Pitkin

259 Douglas

233 Broomfield

199 Boulder

198 Jefferson

Drug Use Disorder

While the burden of overdose deaths has remained flat from 2021-2022, the burden remains greatest in rural Colorado, with the highest rates in southern Colorado.

OVERALL DRUG OVERDOSES PER 1,000 RESIDENTS

Average annual age-adjusted rate of any drug overdose

28.7

30.8

in rural areas in Colorado



The greatest burden was among the Hispanic population in rural areas

29.6

28.9

25.5

Hispanic

White

American Indian

Men in rural areas saw higher rates of drug overdoses than women



38Men



18 Women

Average annual age-adjusted rate of <u>drug overdose with suicide intent</u>

2.4 in rural areas



2.7 in Colorado

Top 5 rural counties with the highest rates of age-adjusted drug overdose deaths



- **84** Las Animas
- **76** Alamosa
- **63** Moffat
- **52** Lake
- 51 Saguache

EMERGENCY ROOM VISITS PER 1,000 RESIDENTS

From 2021-2022, the average annual age-adjusted rate of **emergency** room visits for overdoses involving all drugs

202.2

209.6

in rural areas in Colorado



Females in rural Colorado

had higher rate of emergency room visits for drug use



236Formula



171Males

OPIOID DRUG OVERDOSES PER 1,000 RESIDENTS

Average annual age-adjusted rate of any opioid overdose death

17.4 in rural areas



20.5 in Colorado

Rates were significantly higher among males



22.7



II.I
Females

The highest rates were among Hispanic people

19.9 Hispanic

17.6 White

14.8 American Indian

Top 5 counties with the highest rates

of age-adjusted any opioid overdose death



60 Las Animas

51 Moffat

46 Alamosa

42 Rio Grande

34 Otero



From 2021-2022, the average annual age-adjusted rate of emergency room visits for overdose involving opioids

31.3 in rural areas

39.9 in Colorado

There were no major differences by gender in rural areas.



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



Emergency room visits for any opioid overdose have significantly increased since 2016

METHAMPHETAMINE OVERDOSES PER 1,000 RESIDENTS

The average annual age-adjusted rate of meth overdose in Colorado

12.1

12.2

in rural areas in Colorado



More males die

due to meth in rural Colorado





8 Females

Substance Use Treatment

In 2023, Colorado state health officials and clinic partners joined together to service smaller communities with six mobile health clinics tailored to treating addiction. The goal of these mobile clinics is to provide access to addiction assistance and treatment to rural and frontier communities. Officials say these communities tend to be disproportionately affected by substance abuse disorders. Providers say the most common substance addictions they treat are for opioids, meth, and alcohol.

80,000 COLORADANS DIDN'T GET NEEDED SUBSTANCE USE TREATMENT IN 2021



72.3%
did not feel comfortable
talking with a professional about their problems



51.4%

were concerned about what would happen if someone found out they had a problem



36.6% did not think insurance would cover it



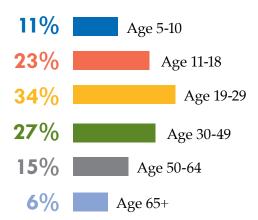
55.9%
were concerned
about the cost of treatment



22.8% had a hard time

getting an appointment

YOUNGER ADULTS WERE MORE LIKELY TO REPORT NEEDING BEHAVIORAL HEALTH SERVICES IN THE NEXT YEAR



The Colorado Department of Public Health and Environment distribute Narcan to various harm reduction organizations



10,454 doses

From July 2019 through June 2020



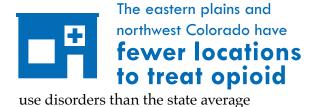
51,631 doses

July 2020 through June 2021



124,000 doses

July 2021 through June 2022





About 1/2 of all overdose deaths are attributed to fentanyl

Mental Health

Students are experiencing social and emotional hurdles that interfere with their ability to learn and engage in their education. Mental health concerns are particularly acute for communities of color, communities in poverty, and rural populations.

Anxiety among children ages 3-17 increased 23% in Colorado

7.5%

9.2%

in 2017-2018 in 2020-2021



Depression among children ages 3-17 increased 27% in Colorado

3.3% in 2017-2018

4.2%

in 2020-2021



Frontier and rural communitites have the highest rates of suicide

PER 100,000 IN 2021

28.1 Frontier 21.7 Urban
26.9 Rural 22.6 Colorado



of youth suicides in rural Colorado were caused by a firearm



20 lives ages 10-24

were lost by suicide in rural Colorado in 2021



1 in 13 children in Colorado will experience the death of a parent or sibling by the age of 18

Protective factors to reduce risk of suicide among youth

- Increase education about safe storage of firearms
- Access to culturally competent and evidence-based care
- Affirming school environments for LGBTQ+ youth

MENTAL HEALTH AMONG ADULTS IS WORSE IN RURAL AREAS



Only 1 mental health provider

for every 1,282 residents in rural Colorado

versus 1 mental health provider for every 755 residents in urban areas



Suicides have significantly increased in rural areas

134

202

people in 2010

people in 2021

1/5
of adults
in rural areas
reported being
depressed

Gun Violence

37%

of adult Coloradans indicate they currently have **firearms in their home**



of those with firearms in their homes **stored their firearms while loaded**



of those who kept loaded firearms in their home reported that those **firearms were** stored unlocked



This means that ~6% of adult Coloradans have a loaded gun stored unlocked in their home

SIGNIFICANTLY HIGHER RATES OF GUN ACCESS ARE IN RURAL AREAS

~40% of students

report having access to firearms



70% of parents

who own firearms said their children could not get their hands on the guns

41% of kids

from those same families said they could get to those guns within 2 hours

~17% of students

report having access in under 10 minutes

CHILD (1-19) FIREARM DEATHS PER 100,000



Firearm deaths among children are up 63%, from 3.5 to 5.7 deaths

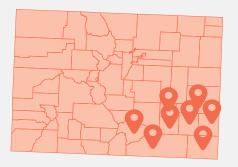
between 2013-2015 and 2018-2020

79% of youth suicides

involving a firearm used a firearm belonging to a family member

Counties with the highest access to

firearms without adult supervision within one hour (35.5%)



Baca

Bent

Las Animas

Crowley

Otero

Prowers

Huerfano

ano

Kiowa

Climate Change

With increasing temperatures come shifts in snowmelt runoff, water quality concerns, stressed ecosystems and transportation infrastructure, impacts to energy demands, and extreme weather events that can impact air quality and recreational opportunities. Larger cities often have water storage reservoirs that can carry them for months if not years during dry periods, but that's not the case in smaller rural and mountain towns.

WATER



80% of the population is on the Front Range



only 20% of the natural water



Colorado's system of water reservoirs hit 100% of average

in June 2023, thanks to heavy snow and rain fall



>> The fullest they've been in 3 years



Colorado estimates the South Platte River basin will need up to

500,000 new acre-feet

of water to meet demand by 2050









1 out of 5

of water the Front Range drinks comes from Granby, Fraser, and Winter Park



The value of acre-feet of water has increased dramatically from \$1,150 to \$30,000 since 1989



Climate projections show that Colorado's springtime mountain snowpack will likely decline by 2050, with potential impacts on late-season skiing

DROUGHT



The Colorado River basin is experiencing a severe 22-year drought

Extensive impacts throughout the West



It could take up to 8 years of above average snowpack

to restore the Colorado River basin system



Annual and spring precipitation totals have been generally below average since 2000



Spruce beetle affected roughly 53,400 acres of high-elevation Engelmann spruce across Colorado in 2021

AGRICULTURE IN COLORADO

Rising temperatures, heat waves, and droughts can reduce crop yield and slow cattle weight gain. Colorado farmers and ranchers are already accustomed to large natural swings in weather and climate, but may find it especially challenging to deal with expected changes in water resources.

Colorado Big Thompson Project began piping water to the Front Range

85% went to agricultural use in 1957



70% went to cities & towns in 2018



80%+ of agriculture

uses of available water in Colorado

5%-6% 0.1%

City water systems Oil producers



decrease in crop yields in the San Luis Valley due to the tireless wind in 2022

Crowley County's irrigated acres has been sucked dry due to water buys

in 1970 in 2015 today

TEMPERATURES



6 of the 8 warmest years

on record for Colorado have occurred since 2012



By 2050, the southwest of the U.S. could experience 850 heat associated deaths per year



Temperatures in Colorado have risen about 2.5°F

since the beginning of the 20th century

They've remained consistently higher than the long-term (1895–2020) average since 1998

AIR QUALITY



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 2022 "State of the Air" report findings

Denver &

were worse for particle Fort Collins pollution and ozone

Grand **Junction**

ranked among the country's cleanest cities

Chronic Disease

PREVALENCE OF CHRONIC DISEASE AMONGST COLORADO ADULTS IN 2021

Diabetes

7.1% Rural

7.0% Urban

7.6% Statewide

Heart Attack

3.3% Rural

2.5% Urban

2.6% Statewide

Heart Disease

4.0% Rural

2.3% Urban

2.5% Statewide

High Blood Pressure

28.2% Rural

25.7% Urban

26.0% Statewide

High Cholesterol

34.8% Rural
31.7% Urban
32.0% Statewide

Stroke

3.6% Rural

2.0% Urban

2.2% Statewide

Coloradans with 1+ chronic disease

71.7% Rural
66.2% Urban
66.9% Statewide

Coloradans with 2+ chronic disease

42.9% Rural **39.5%** Urban **39.9%** Statewide

CANCER

In Colorado in 2021, there were an estimated

28,630 new cancer

8,420 deaths caused by cancer



Top 3 most lethal cancers in Colorado

- Lung and Bronchus
- Colorectum
- Breast



2,000 new cases of melanoma is estimated each year in Colorado

We are 1 of the 10 states with the highest death rates for melanoma

ASTHMA EMERGENCY DEPARTMENT VISITS PER 100,000 RESIDENTS

Top 5 rural counties with the highest rates

of age-adjusted rates of Asthma emergency visits in 2021



- 51 Las Animas
- 41 Otero
- **59** Kit Carson
- 41 Logan
- 53 Sedgwick



This is significantly lower than 2019 (30.69 visits)

CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) PER 10,000 RESIDENTS

Hospitalizations due to COPD in rural areas

103

is the highest in Phillips County 2

is the lowest rate in Routt County



Both the percentage of people diagnosed with COPD and the rate of people dying of COPD is higher in rural Colorado than urban Colorado

DIABETES

Diabetes self-management education and support (DSMES) is a crucial component of treatment to delay or prevent complications. Rural communities face many unique challenges in accessing DSMES, including geographic barriers and availability of DSMES programs that are culturally adapted to rural context.

34+ million people

in the U.S. have diabetes, with 1.5 million diagnosed every year

In 2021, adults reported having diabetes

7.1% Rural

6.99% Urban

6.97% Statewide



In 2021, diabetes self-management course participation among adults

50% Rural

60% Urban

RURAL COUNTIES WITH A DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT PROGRAM



Yuma

Huerfano

Otero

La Plata

Eagle

Kit Carson

San Miguel

Routt

Lincoln

Chaffee

Montezuma

Moffat

Prowers

Rio Grande

Pitkin

Garfield



9.0-10.2%

is the average rate of southeastern Colorado residents with diabetes



Only 2 sites in southeastern Colorado

cover Diabetes Self-Management Education and Support (DSMES)

HEART DISEASE AMONGST COLORADO ADULTS

High Cholesterol in Ages 20+

34.8% Rural
31.7% Urban
32.0% Statewide

Statewide **70**

Blood Pressure Medication

72.8% Rural
70.6% Urban
70.8% Statewide

High Blood Pressure

28.2% Rural
25.7% Urban
26.0% Statewide

Heart Attack

3.3% Rural
2.5% Urban
2.6% Statewide

Adults who have had a heart attack attend cardiac rehab

35.4%

47.1%

45.4%

Rural Urban Statewide



Adults ages 20+ reported having a cholesterol screening within 5+ years

82.2%

85.4%

Rural

Urban

Vaccines

Vaccines create the herd immunity. Different diseases have different thresholds in terms of the percentage of vaccinated people needed to create it. The evidence shows that when we have decreases below those thresholds it really increases the risk of vaccine – preventable disease outbreaks.

Colorado requires several vaccines for children in school or child care

Measles Whooping cough

Mumps Polio

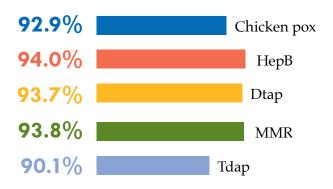
Rubella Varicella (chickenpox)



There are additional,
optional vaccines that public
health officials recommend

COVID-19 Hepatitis A Human papillomavirus Influenza

PERCENT OF COLORADO K-12 COUNTY SCHOOLS FULLY IMMUNIZED 2022/2023





Immunization rates for school-required vaccines among kindergartners all fell below 90% for the second year in a row

with all but the hepatitis B vaccination



86.8% is the lowest

rate of MMR coverage among kindergartners since the 2017–2018 school year

WORK-RELATED INJURIES



112 work-related deaths occur in Colorado each year

Or about one work-related fatality every 3 to 4 days



16.7% of theColorado population

was employed in an occupation with a high risk of morbidity