

Challenges of Data in Rural Areas

Suicide Prevention – Unified Research (SPUR) seminar series, University of Colorado

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Challenges

- Deaths with counts of fewer than three must be suppressed to maintain privacy and confidentiality
- Small counts and small populations can cause rates to vary widely
- Difficult to measure progress



Solutions

- Combine multiple years of data
- Combine multiple counties or regions together
- Capture process measures in addition to outcome measures

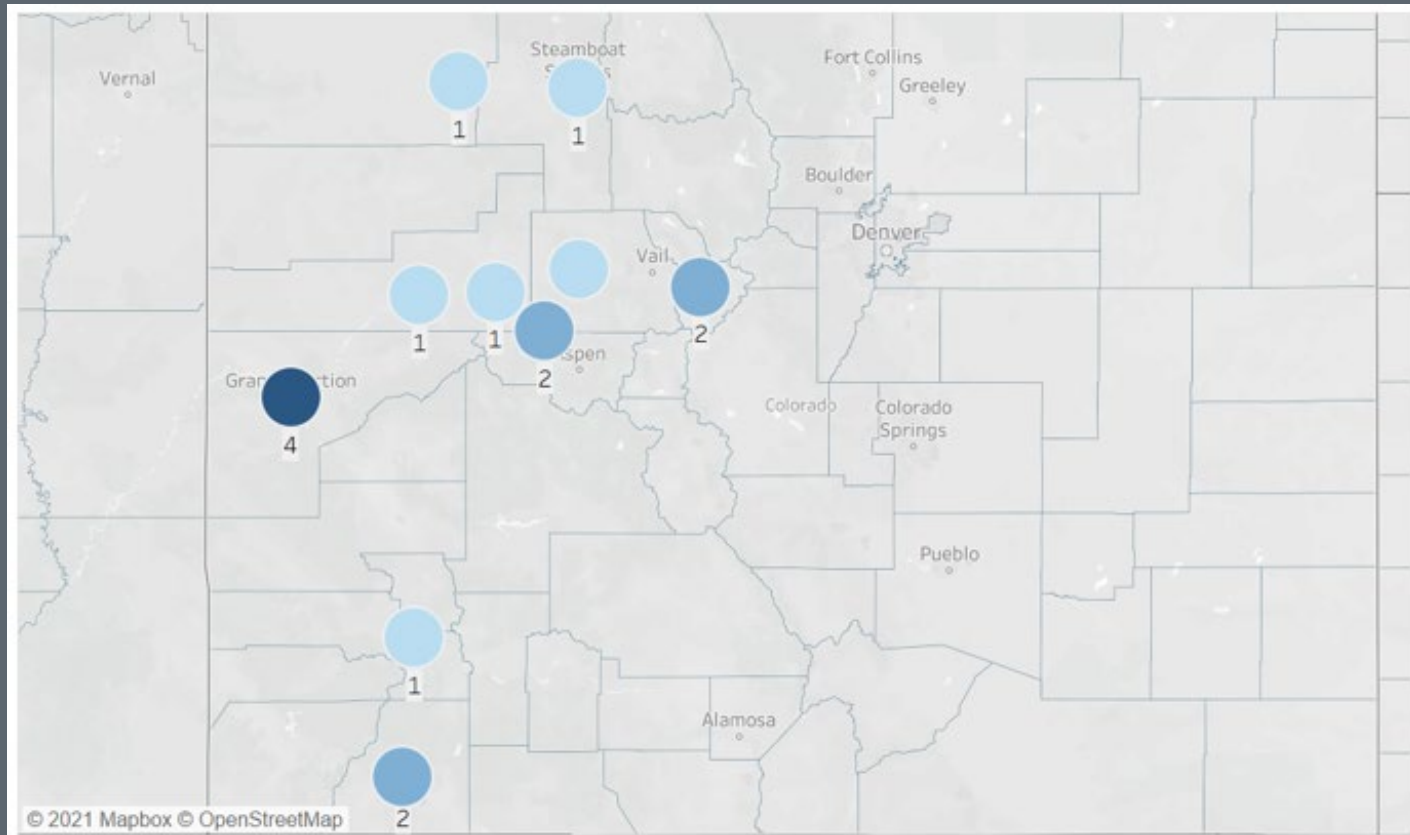


CDPHE Suicide Data Visualization Dashboard

- Suicide death counts, crude rates, and age-adjusted rates
- Demographics: age, sex, race/ethnicity, marital status, veteran status, county of residents
- Circumstances: financial/job issues, relationship issues, physical and mental health information, etc.
- Toxicology: alcohol and drug information
- Industry and Occupation



SPUR participant communities



Counties: Moffat, Routt, Mesa, Garfield, Eagle, Summit, Pitkin,
La Plata, San Juan



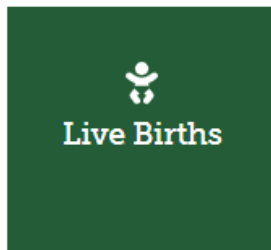
COLORADO
Department of Public
Health & Environment

CoHID



The Colorado Health Information Dataset (CoHID) provides access to state and local-level data and resources compiled by the Colorado Department of Public Health and Environment to help understand health and related issues affecting people in Colorado.

Colorado Health Data and Statistics



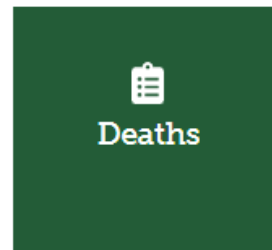
Live Births

▼ More Information



Birth Defects

▼ More Information



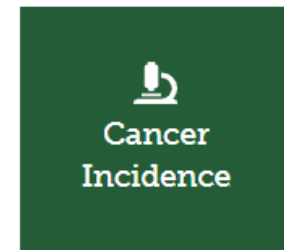
Deaths

▼ More Information



Population
Estimates

▼ More Information



Cancer
Incidence

▼ More Information



Chronic Disease

▼ More Information



Colorado Health
Indicators

▼ More Information



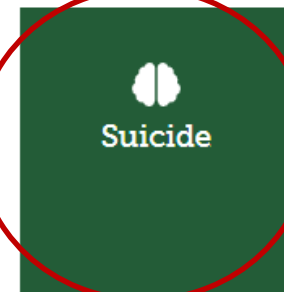
Maternal and
Child Health

▼ More Information



Healthy Kids
Colorado
Survey

▼ More Information



Suicide

▼ More Information

Suicide Dashboard

- Live Demonstration
- <https://cdphe.colorado.gov/cohid>



Suicides in Colorado: Counts

Colorado Vital Statistics Program, (death certificate)

Total suicides for selected populations and years:

17,044

Select years:

2004

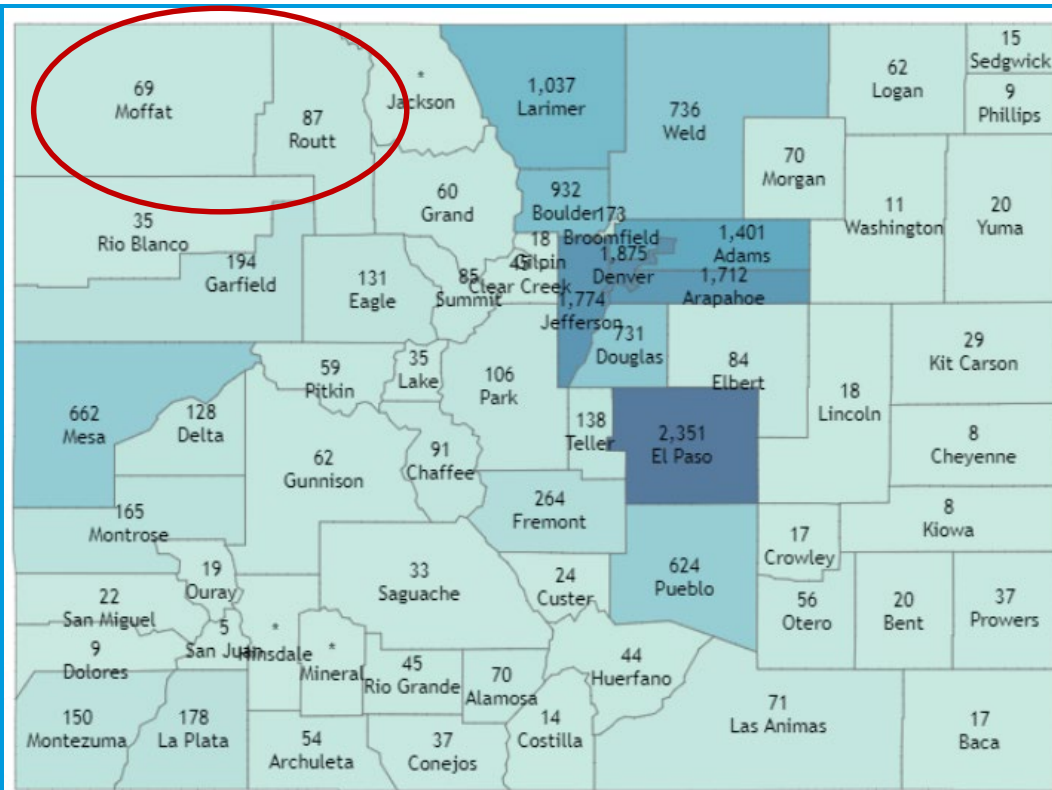
2020



Number of suicides by demographics

Click on one or more subgroups below to filter all other charts to that group(s); click again to deselect

Can select multiple years together and/or select multiple counties together



Suicides in Colorado: Age-adjusted suicide rates per 100,000 population

Colorado Vital Statistics Program, (death certificate)

Select years:

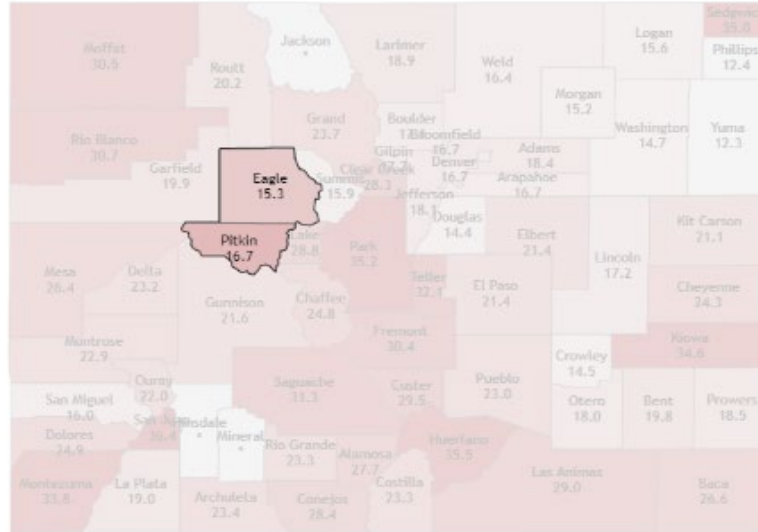
2004 2020

Select method used to inflict the fatal injury:

All methods

Age-adjusted suicide rate per 100,000 population

Age-adjusted rate	15.6
95% confidence interval (lower)	13.2
95% confidence interval (upper)	17.9
Deaths	190
Population	1,176,388



Age-adjusted rate of suicide by demographics

Click on one or more subgroups below to filter all other charts to that group(s); click again to deselect

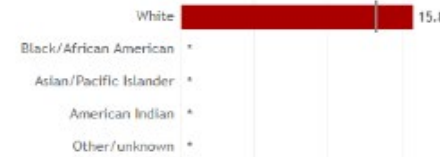
by sex



by ethnicity



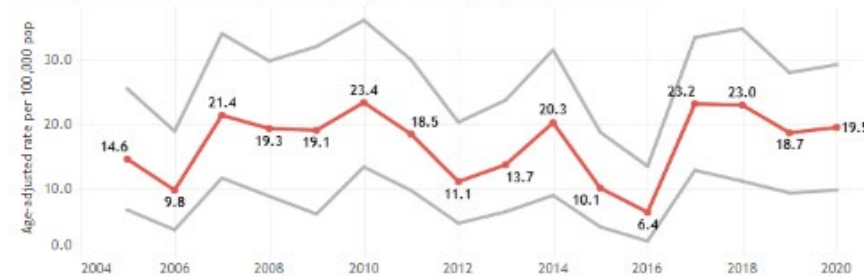
by race



Selected population for all charts on this page

Sex: All, Ethnicity: All, Race: All, Method: All methods, County: Eagle & Pitkin

Age-adjusted rate of suicide per 100,000 population per year, 2004 to 2020



Suicides in Colorado: Circumstances, Toxicology, and Injury Location

Colorado Violent Death Reporting System

Select Year:

2004

2019

County of residence:

(All)

Sex:

(All)

Age:

(All)

Race/ethnicity:

(All)

Education:

(All)

Marital status:

(All)

Employment status:

(All)

Veteran status (ever in U.S. Armed Forces):

(All)

Method used to inflict the fatal injury:

(All)

Total suicides entire state: 15,521

Total suicides selected population: 15,521

For all charts below: the bars represent the values for selected population, the yellow reference bands are the values for the entire state

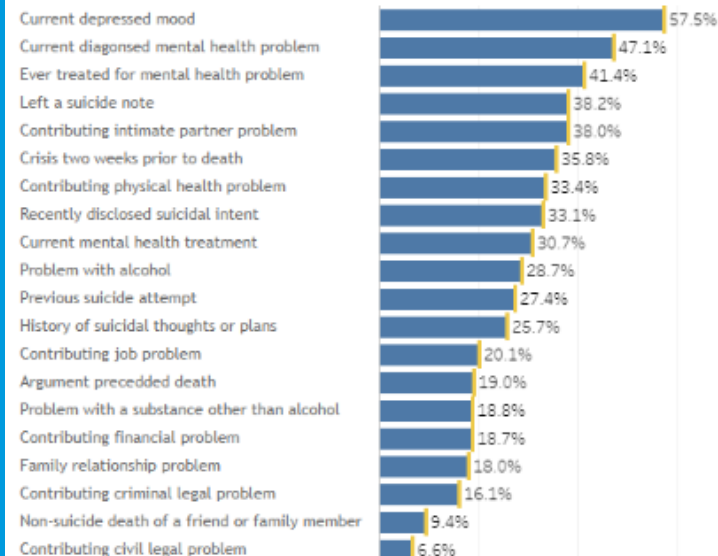
Circumstances

Entire state:

1+ circumstances known	14,727
No circumstances known	794

Selected population:

1+ circumstances known	14,727
No circumstances known	794



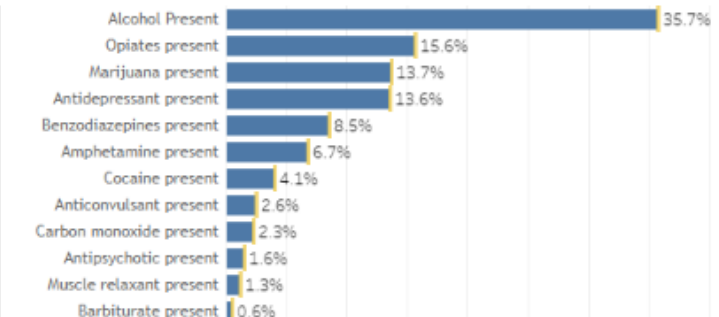
Toxicology

Entire state:

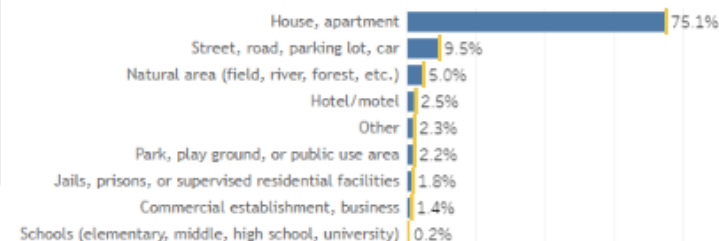
Toxicology info available	12,860
No toxicology info available	2,661

Selected population:

Toxicology info available	12,860
No toxicology info available	2,661



Location where fatal injury was inflicted



Suicides in Colorado: Demographics for Circumstances and Toxicology

Colorado Violent Death Reporting System

Number of suicides for which *Alcohol Present* was indicated:
4,591

Select Years:

2004 _____ 2019

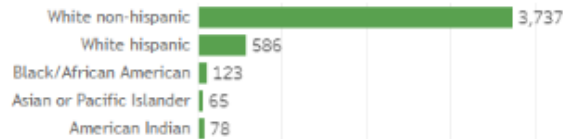
Choose County or Counties of residence:

(All)

Choose Circumstance or toxicology category:

Alcohol Present

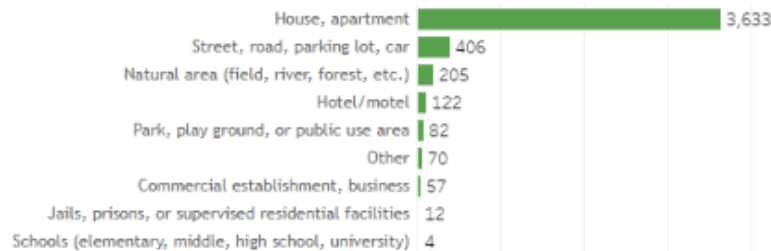
by race/ethnicity



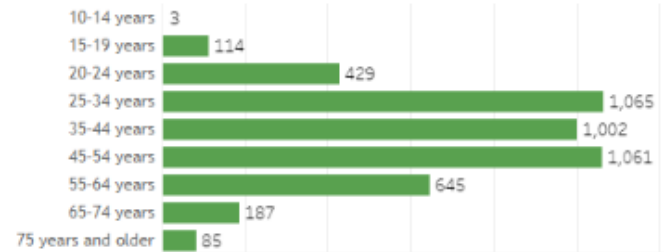
by sex



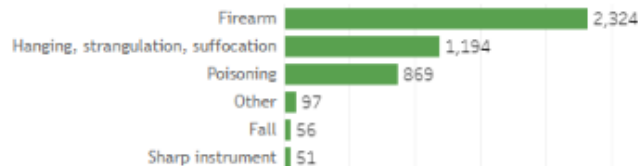
by injury location



by age



by method used to inflict the fatal injury



by marital status



by veteran status (ever in U.S. Armed Forces)



Suicides in Colorado: Industry and Occupation, age 16 years and over

Colorado Violent Death Reporting System

Legend for demographic groupings

Overall

Select County of Residence:

Method of injury:

Select years:

Demographic groupings:

(All)

(All)

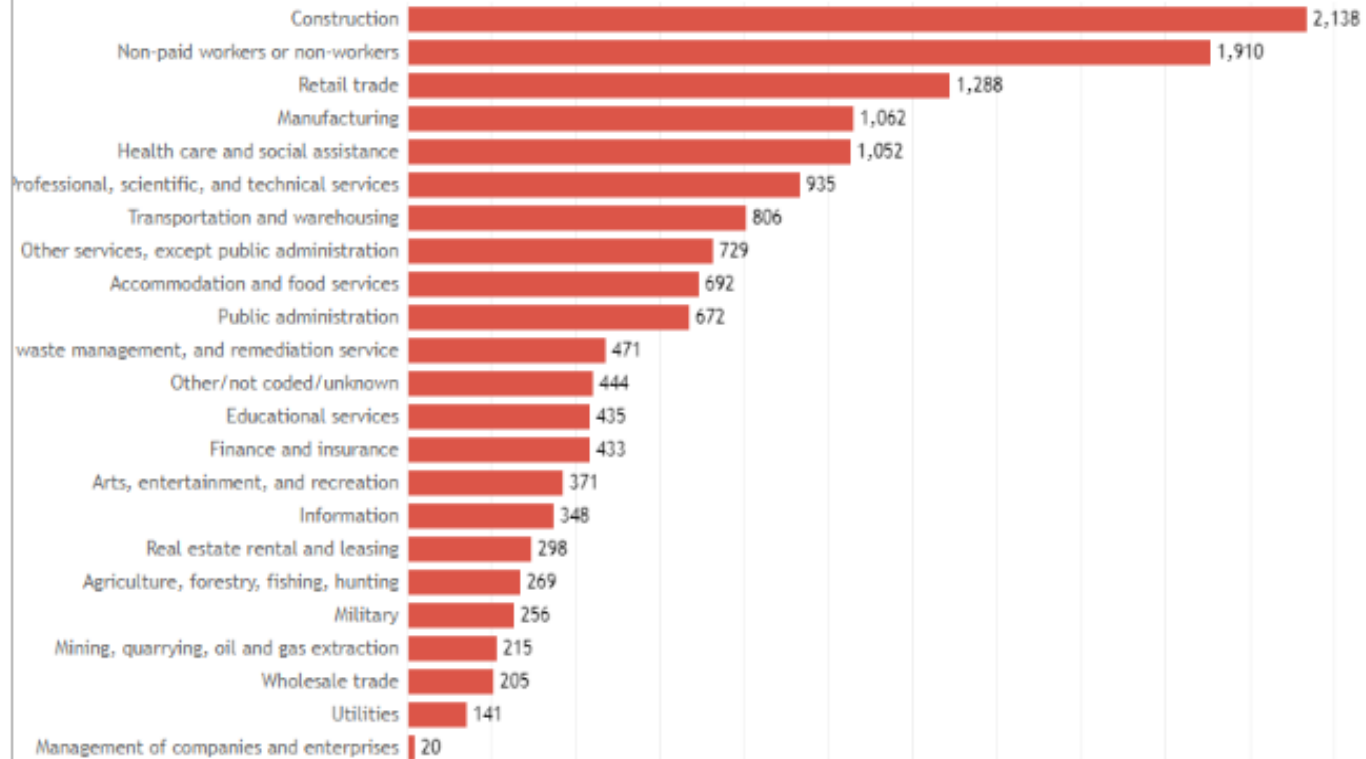
2004

2019

None

- (All)
- No county of residence
- Adams
- Alamosa
- Arapahoe
- Archuleta
- Baca
- Bent
- Boulder
- Broomfield
- Chaffee
- Cheyenne
- Clear Creek
- Conejos
- Costilla
- Crowley
- Custer
- Delta
- Denver
- Dolores
- Douglas
- Eagle
- El Paso
- Elbert
- Fremont
- Garfield
- Gilpin
- Grand
- Gunnison

Number of suicide by industry for selected year(s), County: All, and Method of injury: All
 View occupations and circumstances



Number of suicide by occupation within industry selected above

Circumstances for industry group selected above



THANK YOU

More questions?

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COLORADO RESOURCES AND SOURCES

Colorado Vital Statistics Program

<https://cdphe.colorado.gov/center-for-health-and-environmental-data/registries-and-vital-statistics/vital-statistics-program>

Colorado Violent Death Reporting System & Suicide Data Dashboard

<https://cdphe.colorado.gov/center-for-health-and-environmental-data/registries-and-vital-statistics/colorado-violent-death-reporting-system>

Colorado Office of Suicide Prevention and Suicide Prevention Commission

<https://cdphe.colorado.gov/office-of-suicide-prevention>

Man Therapy

<https://mantherapy.org/>

Colorado Overdose Prevention Program and Overdose Data Dashboard

<https://cdphe.colorado.gov/overdose-prevention>

Colorado Consortium for Prescription Drug Abuse Prevention & Data Dashboard

<http://www.corxconsortium.org/>

