Firearm Deaths in Colorado 2016-2021

Deaths due to firearm injuries are an important and complex part of public health in Colorado. Between 2016 and 2021 there were 5,287 firearm deaths among Colorado residents with a combined age-adjusted rate of 15.0 deaths per 100,000 population. The number of firearm injury deaths in Colorado was greater than deaths due to motor vehicle crashes, opioid overdoses, colon cancer, and influenza. The annual number of firearm deaths and the annual age-adjusted rate reflect small year-to-year increases, with a statistically significant increase observed between 2020 and 2021. Among firearm injury deaths 73.6% were intentional self-harm/suicides, 24.9% were assaults/homicides, 0.8% were unintentional, and 1.0% were of undetermined manner.

Table 1. Age-adjusted firearm death rates (per 100,000 population) by year, Colorado residents, 2016-2021

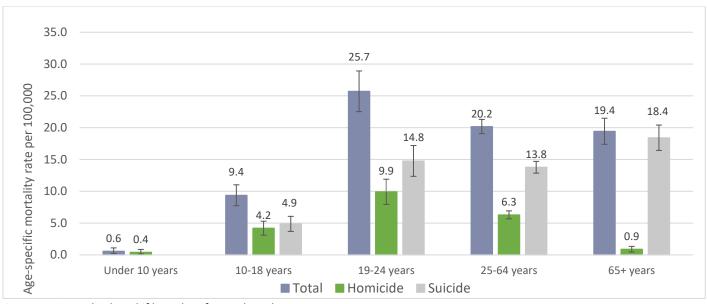
Year	N	Pop	Age-adjusted rate	LCL	UCL
2016	801	5,474,900	14.1	13.1	15.1
2017	777	5,549,977	13.3	12.4	14.3
2018	885	5,632,434	15.1	14.1	16.1
2019	847	5,700,954	14.2	13.2	15.1
2020	918	5,720,799	15.5	14.5	16.5
2021	1,059	5,752,336	17.7	16.6	18.8

Source: Vital Statistics Program, Colorado Department of Public Health and Environment. LCL and UCL represent the lower and upper limits of the 95% confidence interval of the age-adjusted rate.

Demographics

From 2020-2021, the age group 19-24 years experienced the highest rate of firearm deaths at 25.7 per 100,000 population (Figure 1). People aged 65+ had the highest suicide rate, 18.4 per 100,000, and people aged 19-24 had the highest homicide rate, 9.9 per 100,000. The majority of firearm deaths occurred among males (85.6%).

Figure 1. Age-specific firearm injury mortality rates, Colorado residents, 2020-2021

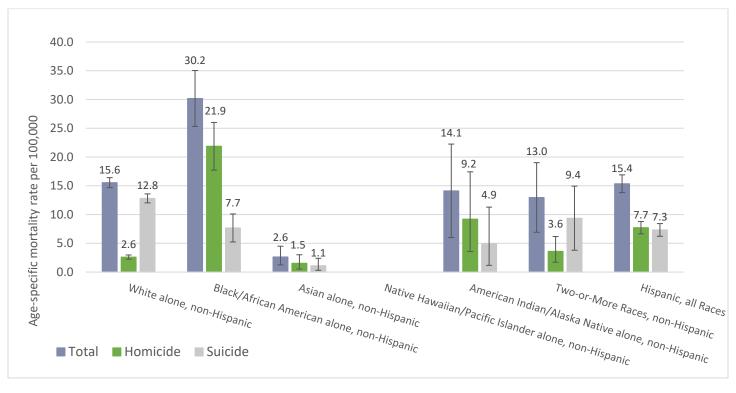


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Source: Vital Statistics Program, Colorado Department of Public Health and Environment. Error bars represent the lower and upper limits of the 95% confidence interval of the age-adjusted rate.

From 2020-2021, the highest rate of firearm-related suicide deaths were among the White alone, non-Hispanic population (12.8 per 100,000), and the highest rate of firearm-related homicide deaths were among Black/African American alone, non-Hispanic population (21.9 per 100,000) (Figure 2).

Figure 2. Age-adjusted firearm injury mortality rates by race and Hispanic origin, Colorado residents, 2020-2021

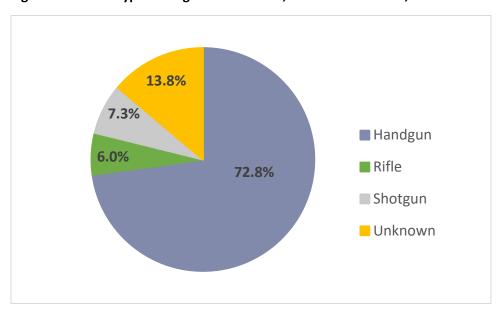


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Source: Colorado Vital Statistics Program, Colorado Department of Public Health and Environment.

From 2016-2020, handguns were used the most in firearm deaths in Colorado at 72.8%, shotguns were used the second most at 7.3%, and rifles the third leading firearm type used (6.0%) (Figure 3).

Figure 3: Firearm type among firearm deaths, Colorado residents, 2016-2020



Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment.



Firearm-Related Death Circumstances

The Colorado Violent Death Reporting System (CoVDRS) further collects data about circumstances at the time of death, for which the most reported circumstances among homicide victims during 2016-2020 were homicide precipitated by another crime (40.1%), substance abuse problem excluding alcohol (36.9%), argument preceding homicide (29.6%) and precipitating crime in progress (28.8%) (Figure 4). Among firearm-related suicide deaths the most common circumstances were current depressed mood (48.3%), a history of suicidal thoughts or plans (48.3%), current mental health problem (48.2%), a crisis in the last two weeks (41.9%), and ever treated for a mental health problem (40.6%) (Figure 5).

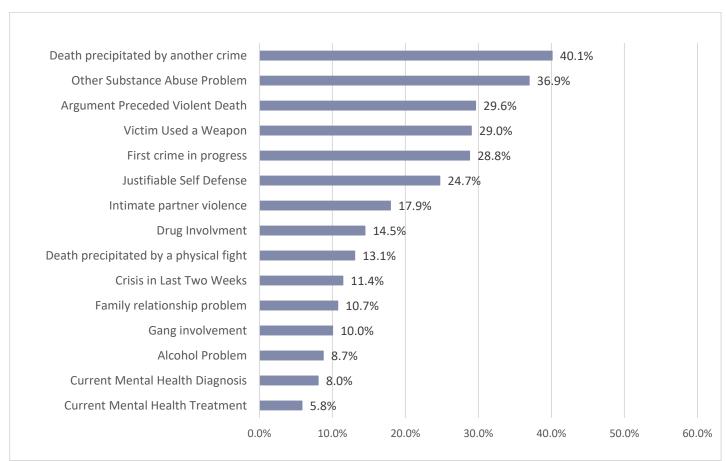


Figure 4: Firearm homicides circumstances preceding death, Colorado residents, 2016-2020

Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment.

Current depressed mood 48.3% History of suicidal thoughts or plans 48.3% Current mental health problem 48.2% Crisis in last two weeks Ever treated for mental health problem 40.6% Intimate partner problem 38.9% Diagnosis of depression 35.9% Physical health problem 35.8% Left a suicide note 35.2% Problem with alcohol Disclosed intent to commit suicide 29.3% Current mental health treatment 25.0% Death preceded by argument 24.8% Family relationship problem 21.4% Job problem 19.6% History of previous suicide attempts Problem with other substance 16.9% Financial problem 16.0% Contributing criminal legal problem Recent non-sucide death of friend or family 11.9% 0.0% 10.0% 20.0% 50.0% 60.0% 30.0% 40.0%

Figure 5: Firearm suicide circumstances preceding death, Colorado residents, 2016-2020

Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment.

Unintentional firearm deaths

There were 43 unintentional firearm deaths from 2016-2021. Among these, five deaths (11.6%) were among children under 9 years of age, and 40 deaths (93.0%) occurred among males of all ages.

Data sources

Data for this report come from vital statistics data (Colorado death certificates) and the Colorado Violent Death Reporting System (CoVDRS). The CoVDRS is an enhanced public health surveillance system designed to obtain a complete census of all violent deaths occurring in Colorado. More information about these programs can be found on the Colorado Department of Public Health and Environment website at cdphe.colorado.gov, and additional explored on the Colorado Health Information Dataset (COHID) at cdphe.colorado.gov/cohid. For additional questions, please contact cdphe.healthstatistics@state.co.us.