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Firearm Injury Deaths in New Mexico

New Mexico has higher firearm death rates than the United States.¹ Trends over the past two decades reveal persistent annual increases in the rates and numbers of firearm deaths in New Mexico. The current report summarizes epidemiology data about the patterns of firearm deaths in New Mexico. It also examines some of the policies and research around gun violence prevention.

Methods

Mortality data come from the NMDOH Epidemiology and Response Division Bureau of Vital Records and Health Statistics; the NM Office of the Medical Investigator; state and local law enforcement reports; the NM Violent Death Reporting System; and the CDC's Web-based Injury Statistics Query and Reporting System. International Classification of Diseases, 10th Revision (ICD-10) codes X60–64 (suicide), X85-Y09, Y35 (homicide) listed as an underlying cause of death were used to identify intentional violent deaths. Preliminary firearm death data for 2018 were collected from the NM Office of the Medical Investigator by the NM Violent Death Reporting System.

Results

Firearm mortality rates in New Mexico were consistently higher than United States' rates from 2005 through 2017. They also increased nearly twice as fast in New Mexico as the United States. The age-adjusted firearm mortality rate increased 34% in New Mexico from 2005 to 2017 (13.3 to 17.8 per 100,000), compared to 19% increase in the United States from 2005 to 2017 (9.9 to 11.8 per 100,000).

For every two firearm deaths in the United States there are now three on average in New Mexico. Two-thirds of resident firearm deaths in 2017 were suicides, and 30% were homicides (Figure 1). Firearms were used in 53% of suicides and 63% of homicides in New Mexico in 2017. Among 680 suicides and homicides in New Mexico in 2017, 56% or 380 involved firearms. Mathew Christensen, PhD; Michael Landen MD, MPH Epidemiology and Response Division New Mexico Department of Health

Age-adjusted firearm mortality rates during 2013-2017 varied in New Mexico by race/ethnicity, age, and county. Whites and Blacks had 21 deaths per 100,000 persons, while Hispanics and American Indians had 14 and 9 per 100,000 respectively. Young adults aged 25 to 44 years had 24 deaths per 100,000 and adults aged 85 years and above had 25 deaths per 100,000 persons. Residents in Grant, Sierra, Torrance and Taos counties had firearm mortality rates of 28 per 100,000 persons, compared to residents of Los Alamos and McKinley counties with 8 per 100,000.

In 2005, 257 New Mexicans died by intentional firearm use compared to 380 in 2017 (Figure 2). The three other most common mechanisms of inflicting intentional fatal injuries are hanging suffocation, drug overdose, and knife wounds (Figure 2). Every year in New Mexico since 2005 there were more violent deaths caused by firearms than by hanging, drugs, and knives combined.

In recent years the numbers of firearm-related multiplehomicide incidents, and homicide-followed-by-suicide incidents have increased in New Mexico. In the twoyear period 2016 - 2017, New Mexico experienced 41 firearm shooting incidents that each had multiple decedents. Common circumstances in some of the multipledeath incidents included intimate partner violence, family conflict, escalation from fighting, mental illness, violent intent, chronic health problems, access to firearms, drug trafficking, robbery, and drug and alcohol abuse.

In 2018, New Mexico experienced its most violent year of firearm deaths in more than a century. Compared to 2017 when 412 residents and nonresidents died by firearms in New Mexico, 2018 saw a 6% jump to 436 firearm deaths in the state (Figure 3).

Figure 1. Number and Percent of Firearm Deaths by Intent, NM, 2017



Discussion

New Mexico has a high firearm mortality rate. Fortunately, by strengthening firearm policies, New Mexico can reduce these deaths.

Firearm ownership rates across the United States and rates of firearms in the home are associated with firearm mortality rates which are also associated with states' firearm laws.²⁻⁷ Obtaining a license to purchase or possesses a gun is a requirement in 14 states.⁸ Ten of them require a permit-to-purchase (PTP), three require a license to own a firearm, and one state requires proof of successful completion of firearm safety training. Additionally, states' licensing practices often include safety training, and comprehensive background checks required of both licensed dealers and unlicensed private sellers. States with strong firearm policies had lower firearm mortality rates than states with weaker firearm policies.²⁻⁴

Some states have passed laws that prohibit firearms from criminals and other high-risk groups. The laws either seek to identify and disqualify individuals at greatest risk of gun violence, or they seek to prevent guns from being diverted to prohibited individuals, or both. A review of the scientific literature found comprehensive background checks and strong PTP handgun laws were associated with reduced diversion and reduced firearm mortality rates.⁹ Thirteen states have proposed and passed legislation for Extreme Risk Protection Orders (ERPOS), as of September 2018.¹⁰ When a person is in crisis, many ERPOS allow family members, household members, and law enforcement officers to seek a court order to temporarily remove firearms from a dangerous situation and reduce the risk of violence. In many cases the warning signs that precede firearm violence are witnessed by spouses, children, relatives and friends to include emotional instability, physical violence, mental illness and verbal threats.

An evaluation of the impact of risk-based firearm seizure laws in the years after the laws passed in Connecticut and Indiana found suicide rates decreased by 14% in Connecticut and 8% in Indiana.¹¹ A review of research published between 1999 and 2014 concluded that the effects of states' policies to keep firearms out of the hands of high-risk individuals was associated with lower rates of firearm violence for domestic violence restraining orders and violent misdemeanants.⁹

Conclusions

Firearm mortality rates are lower in states with strong firearm policies. Requiring a license to purchase a firearm and instituting comprehensive background checks for all sellers are associated with lower firearm mortality rates. Risk-based firearm seizure laws may also help to reduce firearm mortality rates.

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Figure 3. Preliminary Numbers of Firearm Deaths (436) by Month, New Mexico, 2018



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