

A NEW Approach to Preventing Firearm Deaths

Gun violence is a persistent and complex social and public health problem. In July 2016, Oregon Governor Kate Brown signed Executive Order no. 16-12, “Enhancing gun safety in Oregon,” which, among other provisions, directed Oregon Health Authority to report annually on gun violence in the state. This *CD Summary* highlights available data on gun deaths in Oregon, and presents strategies for preventing injury and death. The data presented come from Oregon’s Violent Death Reporting System (OVDRS), which collects data on all violent deaths in Oregon; and the Centers for Disease Control’s (CDC) Web-based Injury Statistics Query and Reporting System (WISQARS).

THE NUMBERS

In 2015, 36,252 people died from firearm injury in the United States (including deaths from all ‘intents’, i.e., suicide, homicide, and undetermined intent). This equates to 11.3 deaths per 100,000 people, and is just above the rate of motor vehicle traffic deaths (11.25 deaths per 100,000, or 36,162 total deaths in 2015). Compared to 2010, the rate of firearm deaths nationally increased by 9 percent.

The data from Oregon are even more sobering. Prior to 2010, Oregon had a firearm fatality rate comparable to the U.S. Since then, both the number and rate of firearm deaths have increased, putting Oregon ahead of the age-adjusted U.S. rate. In 2008–2009, approximately 400 Oregonians died each year from gun violence (10.0 deaths per 100,000 population); in 2014–2015, the number increased to 490 firearm deaths annually (11.5 deaths per 100,000 population). This increase is mainly due to an increase in suicide deaths.

* The CDC WISQARS, Fatal and nonfatal injury data, accessed 7 February 2017. Available at www.cdc.gov/injury/wisqars/index.html

INTENT IN FIREARM DEATHS

Firearm deaths occur due to suicide, homicide, legal intervention and unintentional shooting. In Oregon, >82% of these deaths are due to suicide, which is much higher than the national average of 62% (Table).

Table. Firearm fatalities by intent, 2010–2015

Intent	Oregon	U.S.
	% of total	% of total
Suicide	82.1	62.0
Homicide	13.6	34.3
Legal intervention	2.3	1.3
Unintentional shootings	1.2	1.6
Undetermined intent	0.8	0.8

Source: CDC-Injury-WISQARS

TYPES OF INCIDENTS

Most incidents of death due to gun violence involve one person, most often a suicide. However, multiple persons can be involved (e.g., homicide-suicide). From 2003–2015, 140 incidents involved multiple deaths. Of these, homicide-suicide events were the most common (75%), followed by multiple-homicide or homicide-legal intervention events (21%), and suicide pacts or other undetermined events (4%). One mass shooting incident in 2015 resulted in 10 deaths.

WHO IS AT RISK?

During 2010–2015, men were nearly six times more likely to die from firearm injury than women (Figure 1, *verso*). Older white males had the highest risk of death by firearm suicide and young African Americans had the highest risk of death by firearm homicide.

CIRCUMSTANCES SURROUNDING DEATHS

Based on 2010–2015 combined data from OVDRS, weapons used in firearm fatalities were primarily handguns (77%), rifles (12%), and shotguns (11%). Forty-five percent of people who died by firearm suicide had a depressed mood around the time of death, 33% had a diagnosed mental illness, 25% were being treated for a mental illness, 21% had a problem with alcohol, and 8% had a problem with a non-alcohol substance. Thirty-two percent of people who died by firearm suicide had disclosed suicide threats or ideation prior to suicide, and 12% had a previous suicide attempt. Fifty-four Oregon children <18 years of age (45% of total suicides among children) died by firearm suicide.

WHERE DOES GUN VIOLENCE OCCUR?

Gun violence occurs primarily in the home. Data from 2010–2015 show that firearm homicides often take place at a house or apartment (57%); street or road (17%); park, public use area, or nature area (6%); and parking lot or garage (5%). Firearm suicides often take place at a house or apartment (78%) and park, public use area, or nature area (8%).

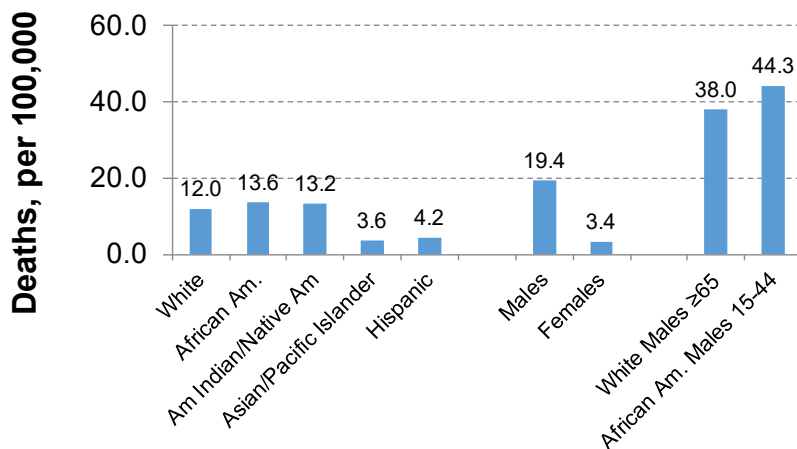
Geographically, southern counties in Oregon had the highest firearm death rate, 2010–2015 (Figure 1, *verso*).

PREVENTING GUN VIOLENCE

Gun violence is not inevitable. Preventing it requires a multi-faceted approach including: addressing community norms about gun safety, gun storage, removal or establishment of distance between gun owner in crisis and a gun, provision of individual mental health care, and collaboration with gun owners, gun shops, and shooting ranges.¹⁻³

Health care providers play an important role in preventing gun violence including: asking patients about firearms;

Figure 1. Firearm fatality rates by race/ethnicity, sex, and age group, Oregon, 2010–2015



All race groups exclude Hispanic ethnicity.

counseling on safe behaviors; and taking action when there is an imminent danger.⁴ Guidance about gun safety must be presented in the context of affirmation of a gun owner’s right to own a gun. Counseling patients about firearms when a patient exhibits behavior suggesting an acute risk of violence to themselves or others, or if a patient has other risk factors for violence is important for preventing deaths.⁵ Research indicates that limiting access to lethal means, including firearms, can be an effective method of suicide prevention.^{6,7}

Oregon State University conducted research that suggests that culturally competent public health messaging that affirms gun ownership rights can increase willingness of gun owners to remove lethal means from an individual in crisis when a friend, family member, or they themselves are experiencing suicidal ideation.⁸ Materials to help health professionals use language that facilitate these difficult conversations with their patients about their safety can be found on the Oregon Firearm Safety website (see link in ‘For More Information’).

Harvard University School of Public Health has developed “lethal means” counseling guidance for healthcare professionals. (See www.hsph.harvard.edu/means-matter/recommendations/clinicians/)

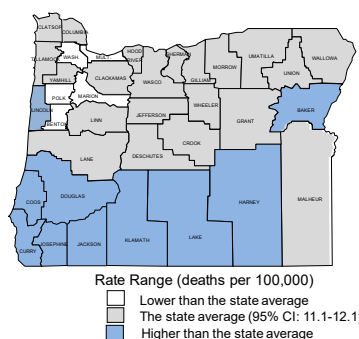
“In the context of suicide prevention, “lethal means counseling” means:

- assessing whether a person at risk for suicide has access to a firearm or other lethal means, and
- working with them and their family and support system to limit their access until they are no longer feeling suicidal.”

Rather than asking about guns directly consider saying: “Lots of people have guns at home. What some families in your situation do is store their guns away from home until the person is feeling better, or lock them and ask someone they trust to hold onto the keys. If you have guns at home, I’m wondering if you’ve thought about a strategy like that.”

Harvard researchers also advise healthcare providers to take the “inoculation approach”. When counseling patients it is important to deliver firearm safety messages even if a patient states he/she is not suicidal but is struggling with a painful life crisis. A sample script developed by researchers: “I’m glad to hear you’re not feeling suicidal. I do want to mention this though. Sometimes a crisis hits and people who are already struggling suddenly experience strong suicidal feelings. Those feelings often go away in a matter of hours or days, but they can feel overwhelming. If a period like that hits, I want to be sure you make it through safely and call for help. One step would be to store your

Figure 2. Firearm death rate by county, Oregon, 2010–2015



guns away from home until you’re feeling better.”

The Oregon legislature recently passed SB 719, which creates a process for prohibiting possession of deadly weapons (including guns) when that person presents an imminent risk of suicide or of causing injury to another person.[†] Implementation of SB 719 will include recommendations for how health care professionals can provide guidance to family members of patients in extreme risk situations.

SUMMARY

Firearm-related deaths continue to be a leading cause of injury death in Oregon. Data can help us understand the factors associated with firearm-related deaths. A multi-faceted approach to preventing firearm violence that includes health practitioners may help reduce these deaths in Oregon.

FOR MORE INFORMATION

Visit the Oregon Firearm Safety Organization website:

- <http://oregonfirearmsafety.org/firearm-safety/>
- <http://oregonfirearmsafety.org/addressing-firearm-safety/>

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[†] <https://olis.leg.state.or.us/liz/2017R1/Downloads/MeasureDocument/SB719/Enrolled>



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