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Addressing Gun Violence in the United States

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In recent years, discussions of gun violence have appeared frequently in the media. Debates on how the government should address gun violence- if at all- have become key points in political campaigns. Amidst the heated discussion, politicians, journalists and others risk oversimplifying or ignoring key aspects of this issue. Gun violence includes a broad range of activity, and is related to a variety of other issues in complex ways. Policymakers need to carefully examine those relationships to develop effective solutions.

One foundational question to examine is whether gun violence is a serious national issue. Based on historical trends, the current level of gun violence in the United States is nothing remarkable. According to data from Pew, the rate of overall gun deaths is lower than it was in 1993 by 31%- almost a third. The gun homicide rate fell from 7.0 to 3.4 per 100,000 people between 1993 and 2000, and has leveled off since then (Krogstad 2015). Although the firearm suicide rate is also lower now than it was in 1993, it has been rising in recent years and is now considerably higher than the homicide rate, at 6.7 deaths per 100,000 people.

Although the gun violence rates we are experiencing are not unprecedented in our country's history, they are unusual in a global context. This becomes clear when United States gun violence rates are compared with those of other countries in the Organization for Economic Co-operation and Development (OECD), a coalition of nations which conduct economic policy research and work to improve global living standards. Figures 1 and 2 compare rates of firearm and

non-firearm homicide and suicide across OECD countries which the World Bank defines as “high income”. Because they have very small populations, Iceland and Luxembourg are not included. The United States leads the field in both categories: its firearm homicide rate of 3.6 is more than five times that of the next- highest, Canada and Portugal at 0.5, and its firearm suicide rate of 6.3 is nearly twice that of Finland’s at 3.3. Compared with these other high-income countries, gun violence is clearly a problem in the United States.

This large amount of gun deaths contributes to an unusually high overall homicide rate. The United States has a total homicide rate of 5.3; the next highest, Finland, has a rate of only 1.5. The non-firearm homicide rate is also higher in the United States than in most of these other countries - only the Czech Republic has a higher rate - indicating that guns are not the only problem. However, the disparity in gun homicide rates is far more extreme: homicides by guns specifically need more attention in the United States (Grynshteyn 2016).

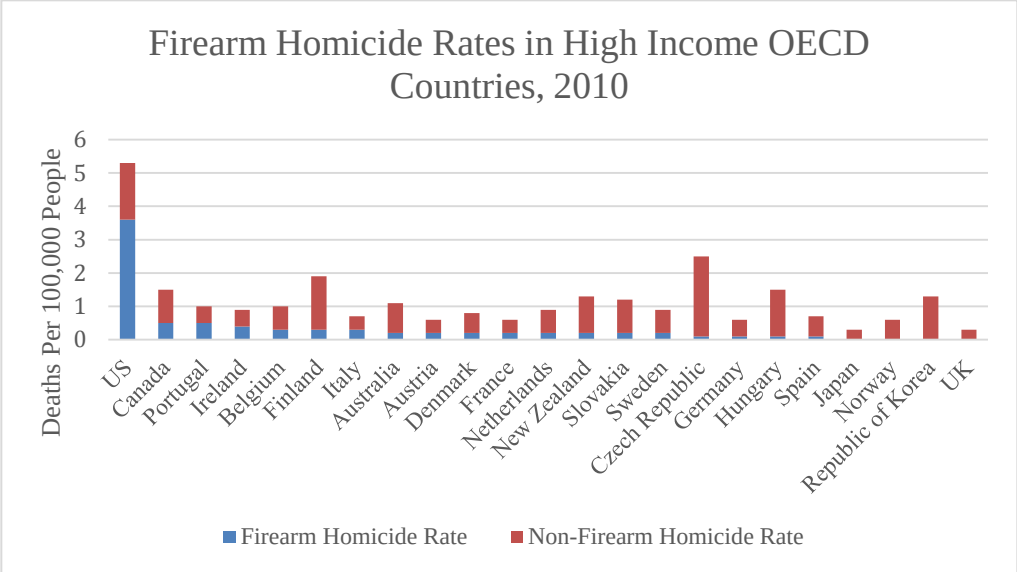

Figure 1

Source: Grynshteyn and Hemenway 2016

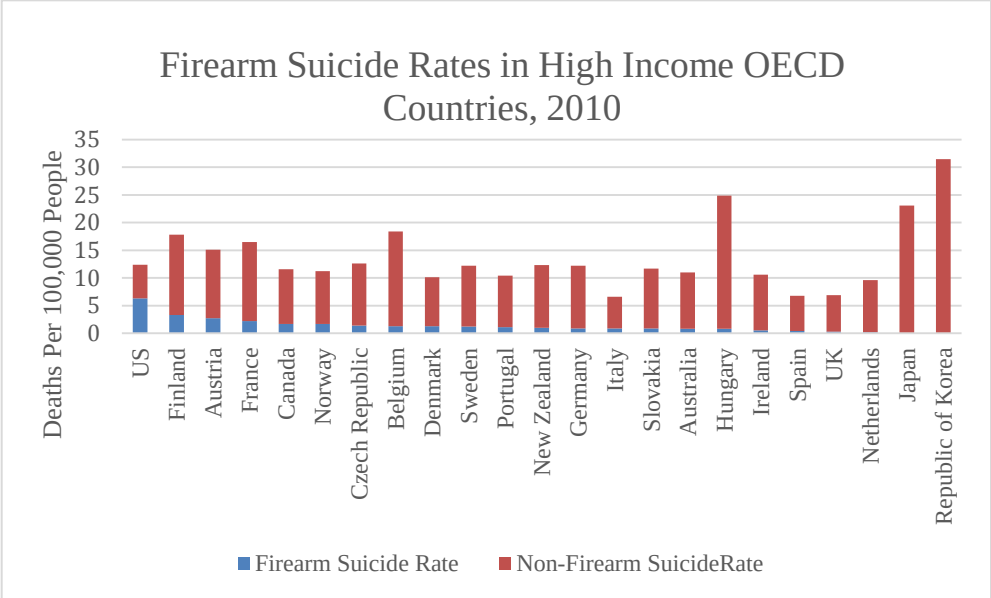

Figure 2

Source: Grynshteyn and Hemenway 2016

It is especially important to note that the gun suicide rate in the United States is much higher than the gun homicide rate: Americans with guns pose more of a threat to themselves than anyone else. Although homicide appears to be more of a problem in the United States compared with other countries, suicide causes many more deaths per year than homicide does and therefore deserves greater

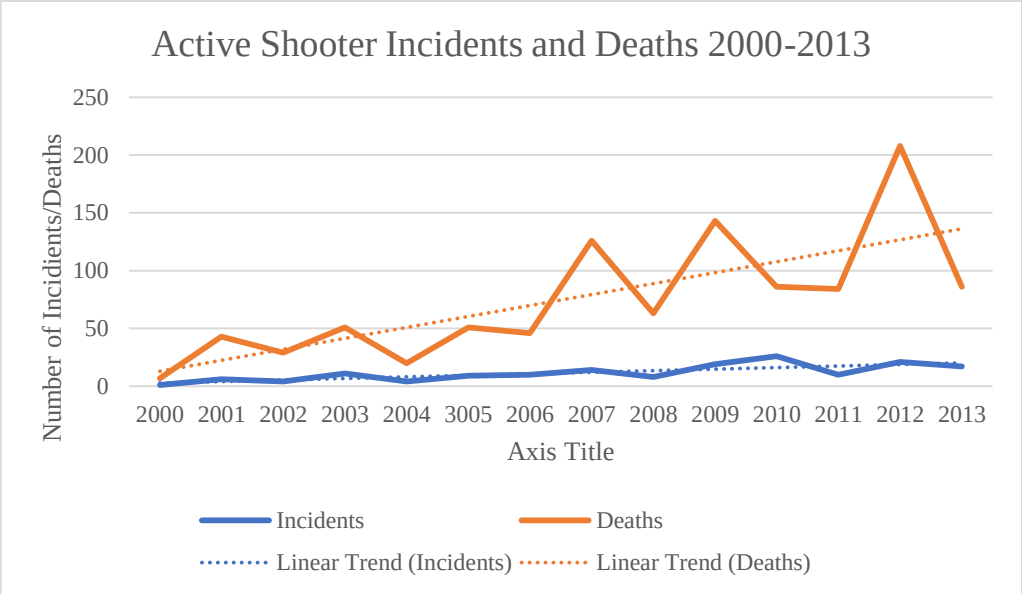

Figure 3
Source: FBI 2013

attention. The overall suicide rate in the United States falls in the middle of the pack: apparently, Americans do not have an unusual tendency to commit suicide. If gun suicide rates can be reduced without being replaced by other methods, specifically targeting guns could significantly reduce suicides.

Recently, much media and political attention has been devoted to mass shootings. To investigate the impacts of public shootings, including mass shootings, the FBI has conducted a study on "active shooter incidents," in which police are asked to respond to a shooting in progress in a populated area. The frequency of these events may be on the rise: the FBI finds a progressive increase in the number of active shooter incidents per year and the number of fatalities between 2000 and 2013 (2013a:8-9). Figure 3 shows the number of active shooter events and the number of casualties reported to the FBI each year, and increasing trends over time. However, these events are not representative of most gun violence in the United States. Although the apparent increase in active shooter incidents is concerning, overemphasis on this issue threatens to draw public attention from more common incidents.

FACTORS CONTRIBUTING TO VIOLENCE

Mental Illness

Politicians and the media frequently associate gun violence with mental illness. Their concern is not completely unfounded, as mental illness can increase the risk of violence. A 1990 survey by the National Institute of Mental Health Epidemiologic Catchment Area (ECA) found that 2% of those without a mental illness had committed violent acts within the past year, compared with 7% to 8% for those with severe mental illness (Swanson 2015:367). Similarly, Van Dorn et

al. argue that "most researchers have concurred that a modest but statistically significant relationship exists between violence and [severe mental illness]" (2012:495). However, the ECA study also found that only 4% of the risk of violence in the United States could be attributed to mental illness alone. This means that even if the violence rate among those with severe mental illness were reduced, 96% of violent crimes would not be affected (2015:368).

Other factors complicate the link between violence and mental illness. Van Dorn et al. include substance abuse disorders in their analysis and find that there is a stronger association between severe mental illness and violence when substance abuse is involved (2012:501). They also point out that people may not have these disorders for their entire lives, and their analysis only considers those who have had symptoms of the disorder within the past year. When they make this qualification, they find a much stronger relationship than when those who have had a mental disorder in their lifetime, but may no longer experience symptoms, are included. This is an important consideration for developing policies: if restrictions on access to firearms are to be imposed at all, it might make sense to base them on recent experiences of mental illness rather than past diagnoses.

Regardless of its association with homicide, mental illness is a critical factor in suicide risk. The vast majority of suicide victims- about 90%- are diagnosed with a mental illness (Dragisic et al 2015:188). Risk of suicide is considerably higher among those who experience depression. Studies have found that between 2.2% and 15% of this population eventually die by suicide, as shown in Figure 4 (Friedman and Leon 2007). Those with other mental disorders are also at increased risk: it is estimated that nearly 5% of those with schizophrenia die by

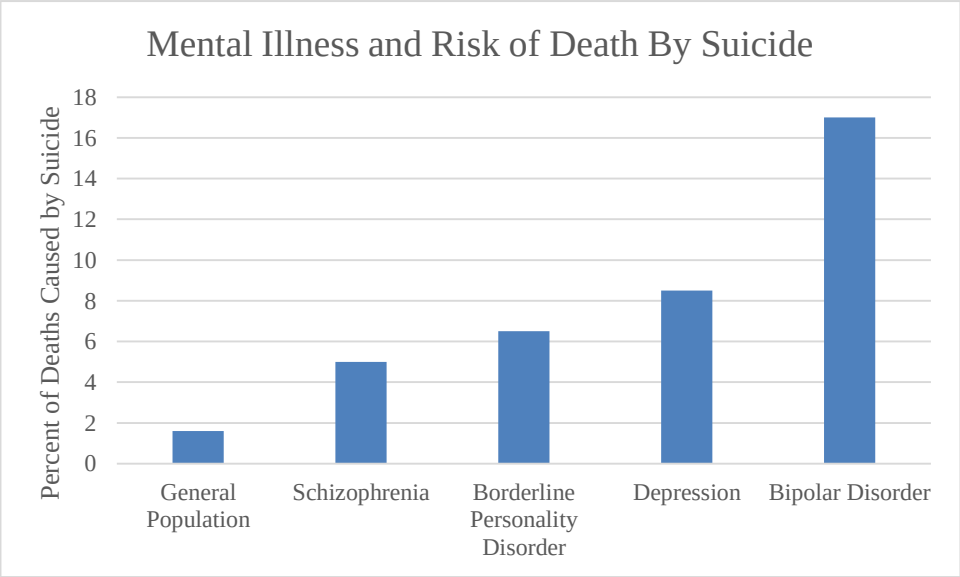

Figure 4

Sources: U.S. Department of Health and Human Services 2012, Drapeau and McIntosh 2016
The exact suicide rate for each of these populations is uncertain; the above chart presents midrange estimates from a variety of studies.

suicide; that rate is 3 to 10% among those with borderline personality disorder and 15 to 19% for those with bipolar disorder type I or II (U.S. Department of

Health and Human Services 2012:115-118). By comparison, suicide causes 1.6% of deaths nationally (Drapeau and McIntosh 2016). It is important to consider mental illness when designing gun control policies, not because people with mental illness are dangerous to others, but because they are at a much greater risk of self-harm.

Social Surroundings

Gun violence results from a combination of individual characteristics with multiple environmental influences. According to the American Psychological Association (APA), "gun violence is associated with a confluence of individual, family, school, peer, community, and sociocultural risk factors that interact over time during childhood and adolescence." Because the influences of so many people and institutions are at play, it is impossible to pinpoint which people will ultimately commit violent acts. However, examining which environmental factors increase risk may help us develop safer communities. Citing a wealth of studies, the APA identifies several specific conditions which may contribute to the development of violent behavior. The influence of parents is critical: "low parent–child synchrony and warmth, poor or disrupted attachment, harsh or inconsistent discipline (overly strict or permissive), poor parental monitoring, the modeling of antisocial behavior, pro-violent attitudes and criminal justice involvement, and coercive parent–child interaction patterns" all contribute to children's risk of developing violent behaviors (Dodge and Pettit 2003; Farrington et al. 2001; Hill

et al. 1999; Patterson, Forgatch and DeGarmo 2010). The APA also highlights the importance of the school environment, pointing out that schools in less affluent communities tend to have fewer resources to address their students' needs. They also tend to have strict disciplinary policies and may not have the information to address "problem behaviors" effectively (Edelman 2007). As a result, the students most likely to become involved in violence may find themselves without support and opportunities to find a better path. The community atmosphere is also crucial: people must have access to basic resources and positive personal relationships and feel that their personal safety is secure. High levels of violent activity in a community provide more opportunities for youth to engage in that behavior, and low availability of resources limits opportunities to develop positive, non-violent attitudes and skills.

Availability of Guns

Access to firearms is an especially important factor in the United States. Compared with the OECD countries discussed earlier, the United States has a much higher gun ownership rate, with 88.8 guns per 100 people. The next highest is Finland, with 45.3 guns per 100 people (Rogers 2012). The fact that the United States has both the highest gun ownership rate and the highest gun violence rates seems to indicate a relationship between those two factors. If the two variables are related, however, then higher gun ownership rates should correspond to higher gun violence rates among other countries as well. The United States is such an

outlier that it makes the correlation appear stronger than it really is. When the United States is removed from the dataset, a scatterplot of gun ownership rates and gun homicide rates among all other countries in the study reveals a very weak relationship, as shown in Figure 5. Although gun ownership may contribute to the homicide rate in the United States, it clearly is not the only factor. The relationship between gun ownership and gun suicides is much stronger; even with the United States removed from the dataset, there is a clear positive correlation, as shown in Figure 6. Access to guns seems to increase the threat we pose to ourselves, rather than each other (Grynshteyn 2016; Rogers 2012).

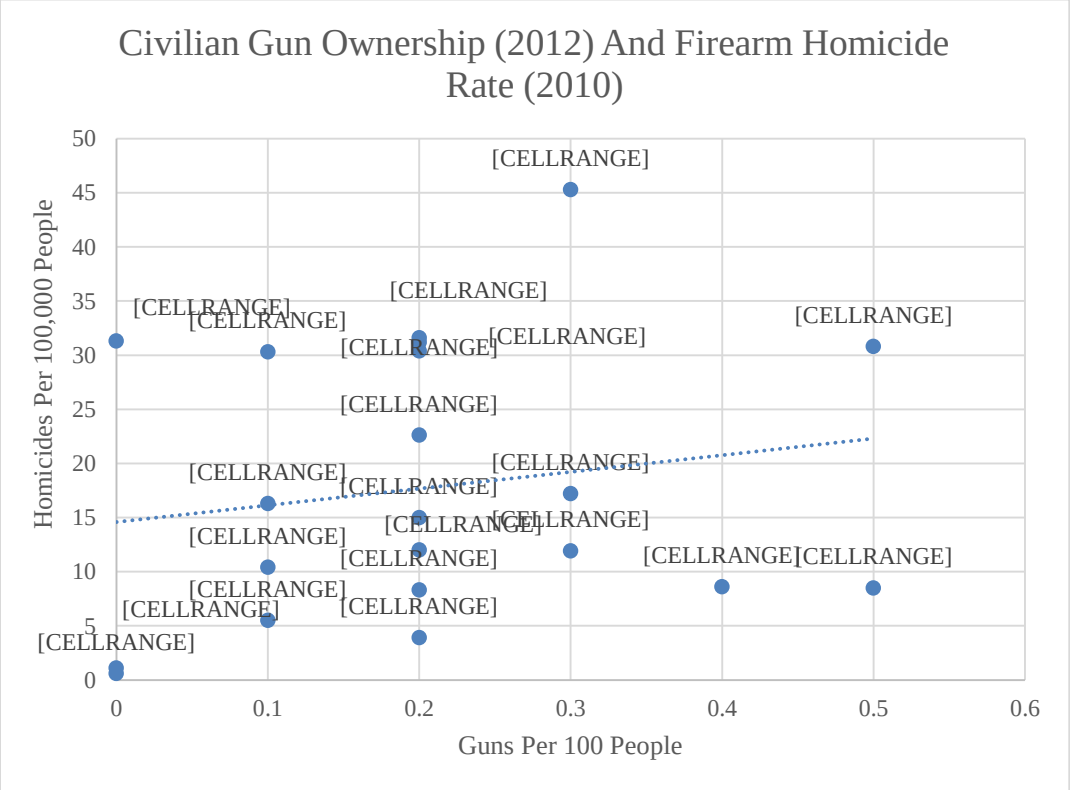

Figure 5

Sources: Grynshteyn 2016, Rogers 2012

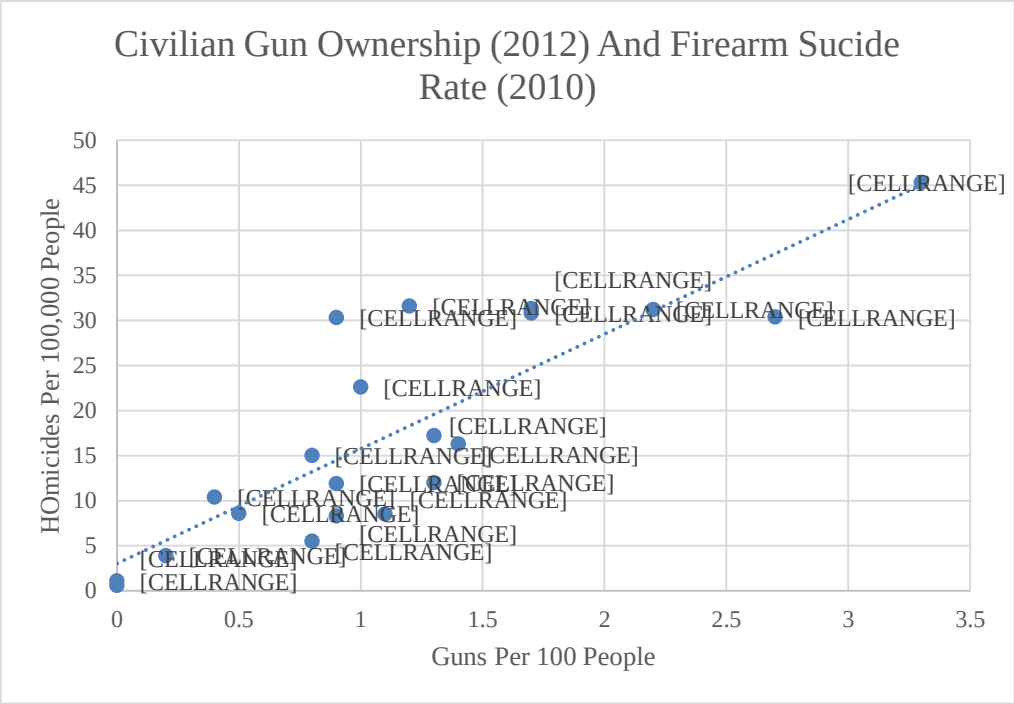

Figure 6

Source: Grynshteyn 2016, Rogers 2012

Which policies would be most effective?

A 2003 review of studies on firearm policy by the Centers for Disease Control and Prevention (CDC) reveals that findings are conflicted. They advise that there is not enough evidence to determine how the reviewed policies affect gun violence. These include laws that restrict access for certain people, impose waiting periods, require licensing and registration, or mandate that a concealed carry permit be granted to any qualified applicant. The CDC notes that the data and methodology used in many studies are flawed and stresses the need for "further high-quality research" (Hahn et al 2003). It has been difficult to complete such research because of a 1996 law which prohibits the CDC from putting funds

toward the promotion of gun control. In response, the CDC has almost completely avoided gun research (Kurtzleban 2016). A logical starting point to addressing gun violence would be to remove these restrictions so that we have more sound research on which to base our policies.

Independent research does indicate that many of the recent, highly publicized policy proposals in response to mass shooting incidents might not do much good. For example, assault weapons and LCMs seem to be a logical target for regulation because they enable someone to kill large numbers of people very quickly. A national ban on several types of assault weapons, passed in 1994, expired in 2004; however, a renewal of the ban might not have made a significant difference. According to most estimates, assault weapons were only used in 2% of

gun crimes before the ban. Large capacity magazines (LCMs) posed a much more significant problem, as they were used in 14-26% of gun crimes before the ban was implemented. Although the ban was followed by a further decrease in assault weapons used in crimes, research conducted in Baltimore, Milwaukee, Louisville

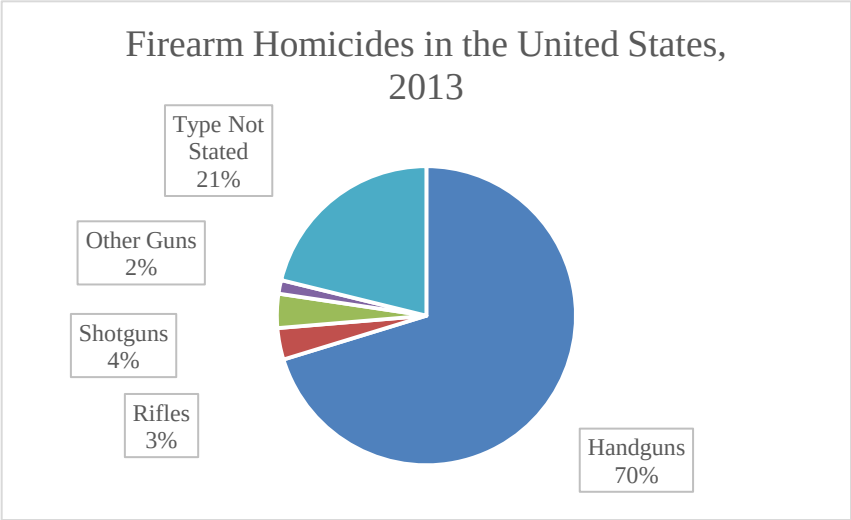

Figure 7

Source: FBI

and Anchorage found that they were replaced by increased use of LCMs. These results suggest that a ban on LCMs might do more to prevent violence than a ban on assault weapons. However, the authors suggest that for many crimes the use of LCMs might not increase the number of casualties (Koper et al. 2004). In

addition, such a regulation would not affect the majority of gun crimes. In 2013, for example, 70% of firearm homicides were committed with handguns (Figure 7).

Politicians and the media have also focused on heavily restricting gun access for the mentally ill. Given the low percentage of homicides that involve mental illness, restrictions purported to protect the public from those with "dangerous" mental illnesses may do more to stigmatize innocent people than they would to save lives. However, the role that mental illness plays in suicide deserves attention. Expanded background checks could be a useful mechanism to avoid providing guns to those at risk of suicide.

The APA also points out that the most reliable predictor of gun violence is violence committed in the past. More consistent background checks on criminal records would help reduce access to guns for these at-risk individuals, regardless of their mental health status. Recent studies have linked a 1995 permit-to-purchase law in Connecticut with a 40% reduction in gun homicides, and the repeal of a similar Missouri law in 2007 with a 23% increase in gun homicides (Rudolph et al. 2015, Webster and Wintemute 2015). These laws required a background check as part of a permit-issuing process, so they may have had a different effect from background checks alone. Daniel Webster, who collaborated on both studies, points out that the permit requirement in itself may have discouraged illegal purchases (Kurtzleben 2016). Regardless, the study results

indicate that the passage of similar laws could help prevent gun violence in the future.

Another promising policy is the implementation of waiting periods, which require a delay between the purchase of a gun and its delivery. This policy aims to obstruct spur-of-the-moment, emotional decisions to kill oneself or others. After the passage of a few days, the rage or depression which inspired the purchaser's lethal intentions might have passed. Luca et al. argue that waiting periods can significantly reduce homicides and may also help prevent suicides. In their research, they compare changes in homicide and suicide rates in states that have implemented waiting period laws to changes in other states during the same period. They associate waiting periods with a 17% reduction in homicides. They also find a 7-11% reduction in suicides. However, they caution that the difference in suicides may result from other variables, and that a reduction in gun suicides may only be replaced with suicides by other means (2017:2).

One of the most striking risk factors in the United States is the availability of guns. Australia's gun policy passed in 1996 is a drastic example of an attempt to curb this factor. In response to a mass shooting in 1996, Australia implemented a "gun buyback," which encouraged Australians to turn in their guns for smelting. Although there is no record of exactly how many guns were destroyed, it is likely that the number of guns in the country was reduced by one third (Alpers 2013). One study finds that, in the following years, firearm death rates in Australia

dropped by half (Alpers and Rosetti 2018). Another finds that the suicide rate was reduced by 80%, and the homicide rate saw a similar decrease (Leigh and Neill 2010). There were eleven mass shootings in the ten years before the new policy was implemented, and there has not been another since (Chapman and Alpers 2006). This policy might not be so successful in the United States, given the tenacity with which many on the far right cling to their gun ownership rights. However, its apparent success demonstrates what might happen if the excessive stock of civilian-owned firearms were to be reduced.

The most effective policies to address gun violence may not directly pertain to gun control. The research highlighted by the APA indicates that people are far more likely to commit gun violence when they feel unsafe and unwanted, and when they lack sufficient opportunities to improve their lives. Policies that fund schools in low-income neighborhoods, help families support their children and help local communities support their members can all help to decrease the risk of violence. When life conditions are better overall, Americans are less likely to feel that violence is necessary.

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