I’d like to thank Doctors Barry Levy and Carol Allen for the honor of being asked to speak on the topic of gun violence prevention at this session of the American Public Health Association’s Annual Meeting. I have a limited time to speak, so my presentation is going to be heavy on general principles and light on details. I’ll be posting a more detailed presentation with references on both the APHA and Americans Against Gun Violence websites.

For the framework of my talk, I’m going to focus on four questions: 1) How serious is the problem of gun violence in our country; 2) What are the main causes of the problem; 3) What are the most important steps needed to solve the problem; and 4) Are we taking the most important steps? And if not, why not?

In seeking to answer these questions, in addition to referencing numerous other sources of information, I’m going to refer to two particularly relevant documents published by the APHA: an amicus curiae (friend of the court) brief filed by the APHA in conjunction with the American College of Preventive Medicine, the American Trauma Society, and the American Association of Suicidology, in the 2008 case of District of Columbia v. Heller;¹ and a “Gun Violence Fact Sheet” subtitled, “Gun Violence is a Public Health Crisis” posted on the APHA website.²

As the subtitle of the APHA fact sheet implies, and as I’m sure everyone here knows, gun violence is indeed a serious public health problem in the United States. The problem usually gets the most public attention following horrific mass shootings, like the Sandy Hook Elementary School mass shooting in Newtown, Connecticut, in December of 2012, in which 20 six and seven year old children, the school principal and 5 other female members of her staff, and the shooter’s mother were killed; the Marjory Stoneman Douglas High School mass shooting in Parkland, Florida on Valentine’s Day, 2018, in which 14 students and 3 staff were killed and 17 other students and staff were wounded; and the worst mass shooting in US history to date, the Las Vegas Harvest Festival mass shooting...
shooting in October of 2017, in which 59 people were killed and over 400 people were wounded;

There’s no government agency that I’m aware of that systematically tracks mass shootings, but Mother Jones magazine does. Here’s a bar graph (Figure 1) created from data on the Mother Jones website showing the number of mass shootings (blue bars with numbers above them), the number of fatalities (red bars), and the total number of victims (gray bars) for seven five-year epochs, from 1983 through 2017.

![Mass Shootings by 5-Year Epoch](image)

**Figure 1**

During most of this time period, Mother Jones used the definition of a mass shooting as one in which at least four people, not including the shooter, were killed. As you can see, the number of mass shootings per five-year epoch has risen steadily, from four in the first epoch to 33 in the most recent epoch, but the number of fatalities and total casualties has risen much more steeply as a result of the perpetrators using increasingly efficient weaponry to carry out their crimes. From this graph alone, I think most of us would agree that mass shootings are a serious public health problem in our country.

But mass shootings account for only a tiny fraction of gun deaths in the United States. There’s no widely accepted definition of what constitutes a mass shooting, but if one uses the most stringent definition as one in which at least five people, not including the perpetrator, are killed, mass shootings account for about 0.3% of gun related deaths. If one uses one of the least stringent definitions as a shooting in which at least four people are wounded but not necessarily killed, mass shootings account for about 1% of all gun related deaths. On an average day in the United States, 109 people are killed with guns
and two to three times this many people suffer non-fatal but often devastating, life changing gunshot wounds.

Figure 2 shows the number of U.S. residents killed per year from 1968 through 2018, the most recent year for which data are available from the CDC. Adding up all the bars on this graph, the total number of civilian gun-related deaths since 1968 is over 1.6 million. The total number of U.S. soldiers killed in all the wars in which our country has ever been involved, from the Revolutionary War to the current time, is about 1.4 million. In other words, since 1968, more U.S. civilians have died of gunshot wounds that all the U.S. soldiers killed in all the wars in which our country has ever been involved.

![Figure 2 Annual U.S. deaths from gunshot wounds, 1968-2018](image)

Putting the number of deaths due to gunshot wounds in perspective with civilian deaths from other causes, the CDC published a study more than two decades ago showing that from 1980-1991, gunshot wounds were the fourth leading cause of potential years of life lost under the age of 65 (YPLL-65), behind non-firearm related accidents (mainly motor vehicle crashes), cancer, and heart disease. Following the publication of this and other studies in the mid-1990’s documenting the seriousness of gun violence as a public health problem in our country, Congress reacted not by passing more stringent gun control laws, but by cutting the CDC’s funding. You can no longer find figures for gunshot-related years of potential life lost before age 65 on the CDC website. As the Figure 2 shows, though, the annual number of firearm related deaths declined from 1993 through 1999 and then started rising again. Since 1999, the annual rate of firearm related deaths has increased 15%, while annual rates of deaths from motor vehicle crashes, cancer, and heart disease have all declined by about 20%.

No one knows for sure why the number of gun deaths declined from 1994 through 2001, but the beginning of the decline coincided with the enactment of the Brady Act, requiring background checks for gun purchases through federally licensed firearm dealers, but not through private parties. The years 1994-2004 also coincide with the years that the federal assault weapons ban was in effect. I’ll discuss both the Brady Act and the federal assault weapons ban in more detail later in my presentation.
Unlike Covid-19, which rarely causes serious morbidity in children and youth, gun violence disproportionately affects young people in our country. Gunshot wounds are the second leading cause of death for children and youth in our country, behind motor vehicle crashes; and in teens age 14-17, gunshot wounds are the leading cause of death, exceeding deaths from motor vehicle crashes by 23.5.

The threat of gun violence also has a significant adverse psychological effect on American children and youth. Teens rate the threat of getting shot as one of their top three fears; nearly half of all teens know someone who has been shot; and children and youth exposed to gun violence suffer long-term adverse psychological effects, including sleep disorders, difficulty concentrating, poor academic performance, and diminished career aspirations.6

To get a firsthand sense of the adverse psychological effects that gun violence is having on American children and youth, I invite you to read some of the winning essays in our annual Americans Against Gun Violence National High School Essay Contest, which are posted on the Americans Against Gun Violence website. Here’s an excerpt from the winning essay in our 2020 contest:

…I’ve grown up in a generation of children where our greatest fears aren’t tests, but rather forgetting to say goodbye; where every single word said must be thought out since no one knows which words might be our last; where our core curriculum includes learning to cower under counters and calm our classmates’ crying….

In order to understand and address the causes of gun violence, it’s important to consider the circumstances of fatal and non-fatal gunshot wounds (Table 1). This table breaks down fatal and non-fatal gunshot wounds in 2014 into four different categories. As you can see from the top row in this table, for fatal gunshot wounds, intentional self-harm (suicide) accounted for almost twice as many gun deaths as assaults (homicide). For non-fatal gunshot wounds, though, intentional self harm (suicide attempts) accounted for less than 5% of all shootings, and assaults outnumbered suicide attempts by almost 20:1. The reason for this dramatic difference in the breakdown of fatal and non-fatal gunshot wounds is obvious. When people try to kill themselves with a gun, they almost always succeed with the first shot.

<table>
<thead>
<tr>
<th></th>
<th>Assault</th>
<th>Self Harm</th>
<th>Accident</th>
<th>Legal Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal</td>
<td>32.6%</td>
<td>63.5%</td>
<td>1.7%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Non-fatal</td>
<td>74.6%</td>
<td>4.1%</td>
<td>19.7%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Combined</td>
<td>62.3%</td>
<td>21.5%</td>
<td>14.4%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Table 1 Circumstances of Fatal and non-fatal gunshot wounds, 2014

The table also shows that accidents account for far more non-fatal than fatal shootings, and that legal intervention or self defense is relatively rare. The bottom row shows that if one combines both fatal and non-fatal shootings, assaults account for about three times as many shootings as intentional self harm.
You might wonder why I chose the year 2014 as the source of data for this table. I accessed this data from the CDC’s WISQARS database in 2016, and there’s always a delay of about two years before the CDC posts firearm data from previous years. After I had accessed this data in 2016, though, the CDC not only stopped posting complete data concerning non-fatal GSW’s, it also deleted some data from previous years. Based on my compiling similar data for more than a decade, though, I can assure you that the relationships shown in this table between fatal and non-fatal gunshot wounds have held fairly steady during the years when the CDC was reporting complete data in both categories.

While it’s important to distinguish between assaults, intentional self harm, and accidents in determining the root causes of these different categories of shootings, the final common pathway through which all of these deaths and injuries occur is the same - it’s with guns. Handguns account for 80-90% of gun homicides and 70-80% of gun suicides and fatal accidents, with rifles and shotguns accounting for most of the remainder. Although so-called “assault weapons” have become the murder instruments of choice for the perpetrators of mass shootings, they account for relatively few shootings on any average day.

Of course, there are many other factors to be considered concerning the epidemiology of gunshot wounds, including gender differences (men are much more likely than women to be the perpetrators and victims of gun violence); racial differences (gun homicide rates are much higher in African Americans than in Caucasians, suicide is more common in Caucasians); age differences (homicide rates peak in late teens and early adulthood, suicide in older age groups); the impact of mental illness and substance abuse (illicit drug and alcohol screens are frequently positive in both victims and perpetrators); urban versus rural environments, and so on. Some of these epidemiologic factors are discussed in more detail in the APHA amicus brief and Gun Violence Prevention Fact Sheet, but for the sake of brevity, I won’t go into any more detail on these factors at this point in my presentation.

**International Comparisons**

In seeking guidance for addressing the Covid-19 pandemic, public health and infectious disease experts in our country (but not necessarily the leaders of our federal government) have looked to the experiences of other countries, and not just democratic ones, to help devise effective measures to limit the morbidity and mortality caused by this coronavirus. There’s no reason why we should not similarly seek guidance from other countries in addressing our country’s epidemic of gun violence. The APHA’s Gun Violence Prevention fact sheet makes reference to a study showing that 82% of all gun related deaths in the 23 high income democratic countries in the Organization for Economic Cooperation and Development (OECD), including 91% of all gun deaths in children and youth under 15 years of age, occur in the United States. This same study shows that the overall rate of gun related deaths in the United States is 10 times higher than the average rate in the other OECD countries, 12 times higher than in Australia, and 60 times higher than in Great Britain; that the overall U.S. homicide rate is seven times higher than in the other OECD countries, driven by a gun homicide rate that is 25 times higher; and that if it weren’t for a U.S. gun suicide rate that is eight times higher than in the other OECD countries, the United States would have one of the lowest suicide rates of any democratic country.
The revelation that children in the United States are killed by guns far more often than children in other OECD countries is nothing new. A study published by the CDC in 1997 showed that children under 15 years of age in the United States were being killed by guns at a rate that was 12 times higher than in the other high income democratic countries of the world.\textsuperscript{13} As I’ve mentioned previously, Congress responded to this and other similar studies not by passing stringent gun control laws comparable to those in other high income democratic countries, but by cutting the CDC’s funding. A more recent independent study published in 2018 showed that high school age youth in the United States are being murdered by guns at a rate that is 82 times higher than in the other OECD countries.\textsuperscript{14}

So what accounts for the extraordinarily high rate of gun violence in the United States as compared with all the other high income democratic countries of the world?

Some commonly cited factors include: A) a culture of violence in the United States and pandering to violence in the popular media; B) socio-economic disparity and institutional racism; C) drug and alcohol abuse; and D) mental illness. The factor which is discussed least often in my experience is: E) the extraordinarily lax gun control laws in the United States as compared with laws in other high income democratic countries and the related extraordinarily high number of privately owned guns in circulation in our country.

I would be the first to agree that there is a culture of violence in our country that needs to change, but I was surprised to learn - and you may be surprised too - that the rate of non-fatal assault in the United States is about average as compared with other high income democratic countries, and much lower than in many countries with far lower rates of overall homicide and gun homicide (Figure 3).\textsuperscript{15}
The reason for our much higher homicide rate, of course, is the fact that assaults are committed with guns far more often in the United States than in other OECD countries, and assaults with a gun are about 12 times more likely to be lethal than assaults with other commonly used weapons.¹⁶

Economic disparity in our country, as measured by something called the Gini coefficient, is a little bit higher in the United States than in some other OECD countries, but lower than in Britain, which has 1/60th the rate of gun deaths as in the United States.¹⁷

The level of institutional racism is difficult to measure and compare among different countries, but as extremely troubling as the rash of recent officer involved shootings of African Americans in our country has been, shootings by police officers account for a very small fraction of all gun homicides in the Black population. In 2018, the most recent year for which data are available, police shootings accounted for 3% of all gun homicides in persons categorized as “Black” or “African American,” while they accounted for 8% of all gun homicides in persons categorized as “White.”¹⁸ FBI data also show that in 2018, in cases in which the murderer was identified, 81% of victims were killed by someone they knew,¹⁹ and 82% were killed by someone of their own race.²⁰

The lifetime prevalence of any self-reported mental disorder or substance abuse is a little bit higher in the United States than in most other high income democratic countries, but it’s not clear whether this reflects a true difference in the prevalence of mental disorders and substance abuse in our country or just greater self-reporting.²¹ And even if the higher prevalence of these disorders is real, while mental illness and substance abuse are clearly issues that need to be addressed, the United States is not an extreme outlier in these areas as compared with other high income democratic countries.

The category in which the United States is an extreme outlier is in the number of privately owned guns per capita as compared with all other high income democratic countries (Figure 4).²²

![Figure 4: Estimated # of Privately Owned Guns Per 100 Population](chart.png)
The United States is the only OECD country in which there are more privately owned guns than people. And the extraordinarily high number of guns in the United States is due, in turn, to our extraordinarily lax gun control laws as compared with the laws in other high income democratic countries.

It should come as no surprise, and yet it is rarely mentioned, that there is a direct relationship between the number of guns per capita and the rate of gun violence. Figure 5 looks just like Figure 4, but instead of the bars representing rates of per capita gun ownership, they represent rates of gun deaths for the different countries, with the United States again being an extreme outlier.

Combining the data from these two graphs into a scatterplot (Figure 6) with the number of privately owned guns per capita on the vertical axis and the rate of gun deaths on the horizontal axis makes it even clearer that there is a direct relationship between these two variables; and that the United States is an extreme outlier in both categories.
So just how does the approach to gun control in the United States differ from the approach in the other high income democratic countries of the world?

In every other advanced democratic country, a person seeking to acquire a gun must first prove that he or she has a legitimate reason to own a firearm and can handle one safely before being allowed to purchase one. This kind of guiding policy is termed “restrictive.” And most other advanced democratic countries, realizing that there is no net protective value in owning or carrying a gun, do not accept “self defense” as a legitimate reason for owning a firearm.

In the United States, however, it has long been the policy that anyone of a certain age who seeks to acquire a gun can legally do so unless the government can prove through a rudimentary background check that he or she falls into one or more narrow categories of persons being prohibited from owning firearms. This guiding policy is termed “permissive.”

In all other OECD countries, all firearm owners must be licensed and their guns must be registered. In the United States, there is no federal requirement for licensing of gun owners and no requirement for gun registration (with the exception of fully automatic machine guns). Requirements for firearm licensing and registration in the 50 states are uncommon and spotty.

The response to mass shootings in other high income democratic countries has been prompt and definitive. It took the Australian government just 12 days to decide to ban civilian ownership of all automatic and semi-automatic firearms after the 1996 Port Arthur mass shooting, and there were no further mass shootings in Australia for the next 22 years. New Zealand reacted in a similarly swift and definitive manner following the 2019
Christchurch mosque mass shootings. Great Britain already had a ban on civilian ownership of automatic and semi-automatic rifles, but after the mass shooting committed with handguns at the elementary school in Dunblane, Scotland in 1996, it took the British government less than two years to decide to ban all civilian handgun ownership. There have been no further school shootings since the ban went into effect.

In the United States, by contrast, as former Arizona Congresswoman Gabrielle Giffords, who was critically wounded herself by a gunshot to the head in a mass shooting in January of 2011, stated after the 2012 Sandy Hook Elementary School massacre:

In response to a horrific series of shootings that has sown terror in our communities, victimized tens of thousands of Americans, and left one of its own bleeding and near death in a Tucson parking lot, Congress has done something quite extraordinary — nothing at all.

In truth, though, Congresswoman Giffords’ words were too kind. Congress has done worse than “nothing at all.” When the CDC supported studies in the 1990’s documenting the seriousness of the gun violence epidemic in our country, Congress cut the CDC’s funding and placed a prohibition on the use of federal funds to advocate gun control. That prohibition was renewed every year through 2018. In 2004, instead of strengthening the 1994 federal assault weapons ban, Congress allowed it to expire. In 2005, Congress passed a bill giving gunmakers unprecedented protection from products liability lawsuits.

Four Deadly Myths

Given the extraordinarily high rate of gun violence in the United States and the fact that our lax gun control laws and high number of privately owned guns are the factors that most clearly distinguish our country from the other high income democratic countries of the world, why don’t we adopt stringent gun control laws comparable to the laws in the other OECD countries? This is a question that I’ve been wrestling with for over two decades as I’ve worked with a variety of organizations on the gun violence issue, and I’ve come to the conclusion that there are four myths that are the main obstacles to our taking definitive action to stop the epidemic of gun violence in our country.

Myth #1: The Second Amendment was intended to confer an individual right to own guns

The first myth is that the Second Amendment was intended to confer an individual right to own guns. Back in the day when we used to have discussions like this one in person rather than via Zoom, I’d ask the audience what the Second Amendment says. Inevitably, I’d hear several people say, “The right to bear arms.” Occasionally, I’d hear someone mumble something about “a well regulated militia.” The entire text of the Second Amendment reads:
A well regulated militia, being necessary to the security of a free state, the right of the people to keep and bear arms, shall not be infringed.

I’d then ask the audience to answer a multiple choice question. When was the first time in U.S. history that the Supreme Court ever ruled that the Second Amendment confers any kind of individual right to own a gun unrelated to service in a well regulated militia? A) 1876; B) 1886; C) 1939; D) 1980; or E) 2008? Most people would be afraid to hazard a guess, and almost no one would know that the correct answer was 2008 when a narrow 5-4 majority of the court ruled in the case of District of Columbia v. Heller that Washington DC’s partial handgun ban violated the Second Amendment. The other four dates in the multiple choice question are the years of Second Amendment cases in which the Supreme Court ruled that the Second Amendment did not confer an individual right to own a gun.

Specifically, in the 1939 case of United States v. Miller, the Supreme Court ruled unanimously:

> With obvious purpose to assure the continuation and render possible the effectiveness of [a well regulated militia] the declaration and guarantee of the Second Amendment were made. It must be interpreted and applied with that end in view.

Quoting from another section in Miller, the Supreme Court reiterated in the 1980 case of Lewis v. United States:

> The Second Amendment guarantees no right to keep and bear a firearm that does not have “some reasonable relationship to the preservation or efficiency of a well regulated militia.”

As I noted at the beginning of my presentation, the APHA filed an amicus brief in the Heller case. In that brief, the APHA noted, somewhat timidly:

> [The APHA and partner organizations on the brief] are aware of, but take no position on, the argument that the Second Amendment only protects a right to keep and bear arms for use in a well regulated militia.

Other commentators on the Heller decision have been less timid. The majority opinion in the Heller decision, which was written by the late Supreme Court Justice Antonin Scalia, has been publicly condemned by respected constitutional authorities as a “radical departure” from prior legal precedent, an example of “snow jobs” produced by well-staffed justices, and as “gun rights propaganda passing as scholarship.” In his book, The Making of a Justice, the late Supreme Court Justice John Paul Stevens wrote, “Heller is unquestionably the most clearly incorrect decision that the Court announced during my [35 year] tenure on the bench.” Stevens also noted that the proper interpretation of the Second Amendment had been “so well decided” in Miller, Lewis, and in scores of lower court cases that the late Supreme Court Chief Justice Warren Burger had called the gun lobby’s ongoing misrepresentation of the Amendment “One of the greatest pieces of fraud – I repeat the word, ‘fraud’ – on the American public by special interest groups that I have ever seen in my lifetime.”
The *Heller* decision is worse, though, than even these harsh criticisms might indicate. In creating a constitutional obstacle, where none previously existed, to the adoption of stringent gun control laws in the United States comparable to the laws in all the other high income democratic countries of the world, *Heller* is literally a death sentence for tens of thousands of Americans annually. One does not have to be a constitutional lawyer to know that *Heller* was wrongly decided. Anyone with basic proficiency in the English language should be able to understand that, as the Supreme Court stated in *Miller* and reiterated in *Lewis*, the right to keep and bear arms conferred by the Second Amendment is inextricably linked to service in a well regulated militia. Public health advocates should not be timid about openly stating that *Heller* was wrongly decided and should be overturned.

**Myth #2: Honest, law-abiding people should own guns for protection**

I believe that a second major obstacle to the adoption of stringent gun control measures in our country is the myth that honest, law-abiding people should own or carry guns for protection. Figure 7 is a full page advertisement the Colt Firearms placed in the Lady’s Home Journal in 1992 implying that when a mother tucks her child into bed at night, she should have a Colt handgun stuffed into the pocket of her robe.44

As absurd as this ad may seem, this kind of misinformation campaign waged by the gun lobby and the associated gun industry has been effective. A Gallup poll conducted in 1993 showed that 52% of Americans correctly believed that having a gun in the home made the home a more dangerous place for household members. By 2014, though, 62% of Americans mistakenly believed that having a gun in the home made the home safer.45 Another Gallup poll in 1959 showed that 60% of Americans supported banning civilian ownership of handguns. By 2016, the percentage of Americans who supported banning handguns had dropped to 23%.46

The APHA’s *amicus* brief in the 2008 case of *District of Columbia v. Heller* presents extensive evidence refuting the myth of “guns for protection,” including evidence that guns in the home increase the risk of suicide, homicide, and death from accidental shootings; that at the regional and state levels, higher rates of gun ownership are associated with higher rates of suicide and homicide; and that the gun lobby vastly overstates the frequency with which guns are used in self defense.47 And since 2008, additional evidence has been amassed that confirms beyond any reasonable doubt that guns in the homes and communities of honest, law-abiding people are far more likely to be used to harm them than to protect them. An example of this additional evidence is a meta-analysis of 16 studies published through 2013 on the subject of the association between access to a gun in the home and the risk of a violent death in the home. The study showed that that
access to a gun in the home was associated with an increased odds ratio of 3.2 for death by suicide of a household member and an increased odds ratio of 2.0 for death due to homicide.\textsuperscript{48}

Law enforcement data also continue to show that guns are far more likely to harm innocent civilians than to protect them. In 2018, the most recent year for which expanded homicide data are available from the FBI, there were 14,123 criminal homicides in the United States.\textsuperscript{49} Guns were the weapons used in 73\% of these murders, and handguns were used in 93\% of gun related murders in cases in which the type of firearm was identified. There were just 298 justifiable homicides committed with guns by civilians in self defense in 2018.\textsuperscript{50} In other words, FBI data show that in 2018, guns were used by private citizens to commit murder 34 times more often than they were used to kill someone in self defense.

Although the APHA’s \textit{amicus} brief in the 2008 \textit{Heller} case refutes the “guns for protection,” argument, the APHA’s Gun Violence Prevention Fact Sheet makes no mention of the fact that guns in the homes and communities of honest, law-abiding people are far more likely to be used to harm them than to protect them. Elsewhere on the APHA website, the term, “keeping guns out of the wrong hands” is used.\textsuperscript{51} This term can also be found on the websites of many other U.S. gun violence prevention organizations. The use of the term, “keeping guns out of the wrong hands” could possibly be interpreted as a tacit endorsement of the notion that the “right hands” are those of honest, law abiding people who keep guns in their home in the belief that a firearm confers a net protective benefit for family members, despite the extensive evidence that this is a mistaken belief. I believe that public health advocates should openly refute the “guns for protection” argument and avoid using terms such as, “keeping guns out of the wrong hands,” unless they specify that in the United States, as in most other high income democratic countries, the “right hands” should be limited to those of carefully vetted hunters and target shooters who store their traditional sporting rifles locked up and unloaded while not practicing their sports - not the hands of misinformed members of the general public who keep loaded handguns in their homes or carry them on their persons “for protection.”

\textbf{Myth #3: We can stop our country’s epidemic of gun violence without substantially reducing the number of privately owned guns in circulation}

A third major obstacle to the adoption of definitive gun control laws in our country is the mythical notion that we can reduce levels of gun violence in the United States to “reasonable” levels without adopting stringent gun control laws comparable to the laws in other high income democratic countries and without reducing the number of privately owned guns per capita to comparable levels. I put the word, “reasonable,” in quotes, recognizing that there may be some legitimate debate as to what constitutes a “reasonable” level of gun violence. Over the many years that I’ve been working on the gun violence issue, many people have asked me why other gun control advocates and I don’t just reach some “reasonable” compromise with the NRA. I reply by asking them, when it comes to massacring first grade children in a classroom, what constitutes a “reasonable” compromise – 10 children instead of 20? After the 1996 Dunblane Primary massacre in which a teacher and 16 children were killed, the British government decided that the only reasonable number was zero, and they banned all handguns. As I previously noted, there have been no further school shootings since the ban went into effect in 1998.
I doubt that many APHA members would agree that the rate of assault that result in serious bodily injury but not death is currently at a “reasonable” level in the United States. As you may recall from earlier in my presentation, though, the U.S. rate of such assaults is currently about average as compared with the other high income democratic countries of the world. By analogy, I hope that you’ll agree with me that while we might not consider it to be entirely satisfactory to have a rate of gun related deaths in the United States that is just average as compared with the other high income democratic countries of the world, a rate of gun deaths that is higher than average would be unreasonably high. And again, recalling an earlier part of my presentation, to just reduce the average rate of gun deaths in our country to an average level for other OECD countries, we’d have to reduce our current rate by a factor of 10.

Figure 8 is the same scatterplot I showed earlier in Figure 6, with dots representing individual OECD counties, rates of annual gun deaths per 100,000 population on the horizontal axis, and the number of privately owned guns per capita on the vertical axis. On this graph, though, I’ve added a computer generated best fit line that demonstrates the direct relationship between rates of gun deaths and per capita gun ownership.

![Graph showing scatterplot with USA circle in upper right corner](image)

*Figure 8. Circles represent individual countries*

Those who argue that we can reduce rates of gun deaths in our country to reasonable levels without reducing the pool of privately owned guns are essentially arguing that we can ignore this best fit line, as well as studies confirming a statistically significant positive correlation between rates of gun deaths and per capita gun ownership, and move the lonely USA circle in the upper right corner of this graph horizontally to the left on the gun death rate axis without moving it downward on the vertical guns per capita axis. If we were able to accomplish such a remarkable shift, it would be a feat of true American exceptionalism, as the USA circle would still be in a lonely position in the upper left corner on this graph representing the only high income democratic country in the world that has...
ever been able to attain a “reasonable” rate of gun deaths while still maintaining an extraordinarily high number of privately owned guns.

Let’s look at what action the APHA Gun Violence Prevention Fact Sheet, subtitled “Gun Violence is a Public Health Crisis,” proposes that we take to address this public health crisis. The Fact Sheet contains a number of somewhat vague, general recommendations, including “a comprehensive public health approach that keeps families and communities safe;” “developing, implementing and evaluating interventions to reduce risk factors and build resilience;” “institutionalizing successful prevention strategies;” and “commonsense gun policies.” The fact sheet contains only three recommendations, however, for specific actions other than additional research and ongoing surveillance. These three recommended actions are:

1. “Requiring criminal background checks for all firearms purchases”
2. “Reinstating the federal ban on assault weapons and high-capacity ammunition magazines, which expired in 2004”
3. Adoption of the Extreme Risk Protection Order Act of 2019

That’s the full extent of any specific actions that the APHA Gun Violence Prevention Fact Sheet recommends to address the “public health crisis” of gun violence in our country. I’d like to discuss these three measures in some detail. First, though, I’d like to note the curious statement in the APHA Fact Sheet that precedes these recommendations:

Importantly, prevention does not require predicting who will be violent.

While it is true, as other high income democratic countries have recognized, that it’s impossible to predict with any acceptable degree of accuracy who will or will not kill or injure himself, herself, or others with a gun, as I’ll discuss below, all three action items in the APHA Fact sheet are inconsistent with the above statement that precedes these three recommendations.

With regard to background checks, the APHA Fact Sheet correctly notes that federal law does not require background checks for private gun sales, including sales at gun shows, although some states have passed laws that close this “gun show loophole.” It’s been estimated that as a result of the gun show loophole, as many as 40% of all gun sales are done without a background check. It should be noted, though, that while there never should have been a gun show loophole in the first place, closing it now would not reduce the number of privately owned guns already in circulation, nor would it be likely to reduce rates of gun violence in the United States to levels anywhere near the average for other high income democratic countries of the world.

Advocating background checks is clearly inconsistent with the statement that “[Gun violence] prevention does not require predicting who will be violent.” The explicit purpose of background checks is to create an instrument to predict who is likely to use a gun in the future to harm himself, herself, or others, and to prohibit these individuals from legally acquiring a gun. And even if background checks were required for all gun purchase, such checks, as they are currently done in the United States, are extremely crude predictive instruments.

Under current federal background check criteria, even most individuals who have gone on
to commit mass shooting were able to pass background checks and legally obtain the firearms that they used in their crimes. Most background checks are done instantly through a computer search of a federal database to see if the prospective gun buyer is on a list of individuals who meet certain narrow criteria for being prohibited from owning a gun. The main criteria are a history of conviction for a felony or a domestic violence misdemeanor; a history of involuntary commitment for mental illness; addiction to illicit drugs; or being subject to an active court restraining order for harassing, stalking, or threatening an intimate partner. There have been several high profile cases in which even individuals who fell into one of these categories were still able to pass federal background checks because the responsible authorities did not report the individuals’ exclusionary conditions to the national database.

As I’ve previously discussed, in all other OECD countries, background checks are a secondary safeguard, not a primary one. Under the restrictive guiding policy of all other OECD countries, the prospective gun purchaser must first prove that he or she has a legitimate reason for owning a gun and can handle one safely, and “self defense” is not considered to be a legitimate reason for owning a gun in many of these countries. If the person passes the initial screen for being eligible to purchase a gun, in countries like Australia and Great Britain, an extensive background check is done by police, including in person interviews with the prospective gun purchaser and people who know the prospective purchaser.

With regard action item 2, the APHA’s recommendation to reinstate the federal assault weapons and large capacity magazine ban that went into effect in 1994 and expired in 2004, there is clearly no legitimate reason for civilians to own automatic or semi-automatic firearms that are specifically designed to kill and maim large numbers of people in a short period of time. This being said, it is doubtful that the federal assault weapons ban had much effect during the 10 years that it was in force. The ban defined a large capacity magazine (LCM) as one that held more than ten bullets and an assault weapon as a semi-automatic firearm that could accept a detachable magazine and that had at least two other features typically included on military weapons, such as a pistol grip, a thumb-hole in the stock, or a bayonet mount. The ban grandfathered in millions of LCM’s and assault weapons that were already in circulation, and it specifically exempted 86 different makes of semi-automatic firearms that did not meet the definition of an assault weapon, but that were potentially just as deadly. Moreover, U.S. gun manufacturers subsequently produced new models of firearms with minor variations on the banned weapons, mocking the ban by giving the new weapons names like “AB” for “after ban” or “PCR” for “politically correct rifle.” A report to the U.S. Department of Justice summarized the shortcomings of the assault weapons ban with the statement:

The [assault weapons] provision targets a relatively small number of weapons based on features that have little to do with the weapons’ operation, and removing those features is sufficient to make the weapons legal.

As I’ve previously discussed, the annual number of gun deaths declined during the years that the assault weapons ban was in effect, but it’s unlikely that much if any of this decline was due to the weak federal assault weapons ban, which was mainly intended to prevent mass shootings. Even before the assault weapons ban went into effect, it was unusual for the kinds of firearms defined as “assault weapons” to be used in assaults other than mass shootings. And it was not surprising, given the weak nature of the ban, that the number of mass shootings and the number of people killed in mass shootings did not go
down while the ban was in effect. 62

I would also like to note that the APHA’s recommendation to reinstate the 1994 federal assault weapons ban - presumably with the same grandfather clause – like the APHA’s background check recommendation, is inconsistent with the statement that “[Gun violence] prevention does not require predicting who will be violent.” Grandfather clauses include a tacit assumption that the fact that someone has not already committed a crime or tried to harm himself or herself with a gun accurately predicts that he or she will not do so in the future. This assumption is clearly counterfactual. The mere mention of a possible gun ban with a grandfather clause does, however, accurately predict a surge in the sales of the type of gun(s) in question prior to the anticipated date that the ban is to go into effect.

As I’ve also previously noted, following the mass shootings committed with semi-automatic rifles in Australia in 1996 and New Zealand in 2019, both countries moved swiftly to ban civilian ownership of all semi-automatic rifles - not just so-called “assault weapons” - with no grandfather clause. People who already owned semi-automatic rifles were required to surrender them in return for monetary compensation, and the weapons were destroyed. Great Britain already had a ban on semi-automatic rifles, but after the 1996 Dunblane Primary School mass shooting, which was committed with handguns, Britain banned all handguns, with no grandfather clause. Rather than reinstating the weak 1994 federal assault weapons ban, Congress should pass a comprehensive ban on civilian ownership of all semi-automatic rifles comparable to the bans adopted by Australia and New Zealand; and a ban on civilian ownership of all handguns comparable to the one adopted by Great Britain.

U.S. federal appeals courts have already put bans on large capacity magazines on hold, citing the Heller decision, 63 and it’s likely that the gun lobby would be able to find judges who would declare a complete ban on all semi-automatic rifles unconstitutional as well. A complete handgun ban would clearly run afoul of Heller. This is not to say, though, that it would be fruitless for Congress to pass a ban on all semi-automatic long guns comparable to the bans in Australia and New Zealand. Even if a Second Amendment challenge on such a ban were to go to the Supreme Court and be ruled unconstitutional by the current majority, the publicity surrounding such a case could help highlight the rogue nature of the Heller decision and help engender public support for overturning it.

The third and final recommended action in the APHA Gun Violence Prevention Fact Sheet is that Congress enact a bill to provide a mechanism for “extreme risk protection orders” (ERPO’s). As the Fact Sheet notes, “ERPO’s allow family members or law enforcement to petition a judge to temporarily remove a firearm from a person deemed at risk of harming themselves or others.” California has had an ERPO law in effect since 2016, and a study was done of the effectiveness of this law from 2016-2018. 64 During this period of time, ERPO’s were used in 414 cases, and 52 firearms were temporarily recovered. During this same period of time, though, more than two million guns were sold in California; 65 the rate of gun deaths remained steady at over 3,000 per year; 66 and there were five mass shootings in which 31 people were killed and 46 people were wounded. 67 Clearly, while ERPO’s may not be entirely ineffective, the enactment of a federal ERPO bill would not lead to a significant reduction in gun deaths in the United States. The APHA’s endorsement of ERPO’s is also clearly inconsistent with its statement that “[Gun violence] prevention does not require predicting who will be violent.”
The three action items advocated by the APHA in its Gun Violence Prevention Fact Sheet are typical of the positions of all of the best known U.S. gun violence prevention (GVP) organizations.  Like the APHA, these organizations have largely abandoned the use of the term, “gun control,” in favor of terms such as, “commonsense firearm regulations” or “smart gun laws.” Currently, no national organization other than Americans Against Gun Violence openly advocates overturning the Heller decision and adopting stringent gun control laws in the United States comparable to the laws in other high income democratic countries. In fact, in a pamphlet entitled Truth About Gun Violence, under the heading, “Slippery Slope to Confiscation,” one of the most prominent and best funded U.S. GVP organizations stated:

Nevermind that no serious organization advocates for mass firearm confiscation….or that collecting America’s 357 million firearms would be a logistical impossibility….In reality, smart gun laws are about saving lives and ensuring responsible gun ownership, not taking away guns.

I think that it’s important to note that the GVP organization that published this statement resulted from the merger a few years ago of two separate organizations – one with high name recognition that was founded in 2013 and another with less name recognition, the Law Center to Prevent Gun Violence, that was founded in 1993 after a mass shooting at a law office in San Francisco. Prior to the merger, the Law Center to Prevent Gun Violence had posted a statement on its website in which it noted that gun violence is much more common in the United States than in other industrialized nations and that:

The reasons for this great disparity are clear: Americans own far more civilian firearms – particularly handguns – than people in other industrialized nations, and U.S. gun control laws are among the most lax in the world.

The 180 degree shift in the above position statements before and after the merger of two GVP organizations suggests the possibility that name recognition and the fundraising advantage that such name recognition conferred may have played a role in the switch. My own experience in working with a variety of medical organizations over the past couple of decades has led me to believe that a fear of alienating donors, including gun control opponents within their own organizations, may also prevent the leadership of these organizations from adopting definitive, evidence based positions on gun control. In a book written in 2001 entitled, “Every Handgun is Aimed at You: The Case for Banning Handguns,” Joshua Sugarmann, executive director of the Violence Policy Center based in Washington DC, suggested another reason why GVP organizations might hedge their positions. Sugarmann wrote:

America’s gun lobby would be on the run, if only the gun control advocates would bother to chase them. Instead, trapped by their perception of the politically achievable, gun control advocates are always on the defensive….They nibble around the edges of half-solutions and good intentions dramatically out of sync with the reality of gun violence in America.

I believe that this statement was true in 2001 and that it’s even more true today. I would also argue that with regard to “commonsense firearm regulations,” given the evidence I’ve discussed up to this point, it defies commonsense to not advocate adopting stringent gun control laws in the United States comparable to the laws that have long been in effect in all the other high income democratic countries of the world.
Myth #4: We need more research

Finally, I’d like to address what I believe to be the fourth main obstacle to taking definitive steps to stop our country’s epidemic of gun violence: the myth that we need to await the results of “more research” before adopting stringent control laws in the United States comparable to those in other OECD countries. In its Gun Violence Prevention Fact Sheet, the APHA tacitly endorses this myth in bold type in the two headings, “Continued Surveillance,” and “More Research.” And like Myth #3, this fourth myth is also endorsed by all the other major GVP organizations in the United States, with the exception of Americans Against Gun Violence.

Under “Continued Surveillance,” the APHA Fact Sheet states that funding to support the National Violent Death Reporting System “will provide a more complete picture of gun violence in the United States.” The Fact Sheet doesn’t explain, though, why we need a “more complete picture” than the one we already have of what the APHA describes in the Fact Sheet as “a public health crisis.”

Under the heading of “More Research,” the Fact Sheet cites a lack of evidence concerning “right to carry laws;” “violence prevention programs for children;” “the link between firearms policy and suicidal behavior;” and “the effects of different gun safety technologies.” In fact, however, there is already extensive evidence showing that liberal “right to carry laws” not only do not reduce crime, but are associated with increased rates of gun violence;73 that so-called “gun safety” programs for children and youth do not prevent firearm related deaths and injuries but are used by the gun lobby and the associated gun industry to build their future customer base;74 that lax gun control laws and easy access to guns are independent risk factors for suicide;75 and that “gun safety technologies” are largely ineffective because, as the National Research Council has pointed out, “Firearms, after all, are designed to injure.”76

The “More Research” section of the APHA Fact Sheet concludes with the sweeping generalization:

We must expand the collection of data and research related to gun violence and other violent crime deaths in order to better understand the causes and develop appropriate solutions. Congress should continue to provide unrestricted funding for research into the causes of gun violence.

There was already enough research, though, in 2008 for the APHA to state in its well referenced amicus brief in support of banning handguns in the case of District of Columbia v. Heller that the main cause for our country’s extraordinarily high rate of gun violence as compared with other high income democratic countries was:

…not that Americans are necessarily more violent. Nonfatal violent crime rates in this country are similar to those in most other high-income, developed countries, but “[e]very other high-income country has fewer guns (especially handguns), stronger gun control regulations, and much lower homicide rates.”77

There was also already enough research in 2000 for the American Academy of Pediatrics to take the position, in a paper with 72 supporting references, that:
Firearm regulation, to include bans of handguns and assault weapons, is the most effective way to reduce firearm-related injuries.78

And finally, there was already enough research in 1968 for the late Senator Thomas Dodd of Connecticut to state on the floor of the U.S. Senate:

Pious condolences will no longer suffice….Quarter measures and half measures will no longer suffice….The time has now come that we must adopt stringent gun control legislation comparable to the legislation in force in virtually every civilized country in the world.79

Unfortunately, we haven’t heeded Senator Dodd’s advice, and as I’ve previously noted, since 1968, more U.S. civilians have died of gunshot wounds than all the U.S. soldiers killed in all the wars in which our country has ever been involved. Now, 52 years after Senator Dodd issued the above statement, more research, in the absence of the adoption of stringent gun control laws comparable to the laws in other high income democratic countries, is only going to document more senseless, preventable firearm related deaths and injuries.

**In Conclusion**

I’d like to now return to the four questions I posed at the beginning of my presentation.

1) How serious is the problem of gun violence in our country? It’s a very serious public health problem, and it’s growing worse.

2) What are the main causes of the problem? The root causes of violence are complex, but the final common pathway with which all gun violence is committed is simple – it’s with guns. And most of all the homicides and suicides in our country are committed with guns, and particularly with handguns. Clearly, the main reasons for our extraordinarily high rate of gun violence as compared with all other high income democratic countries are our lax gun control laws and the extraordinarily high number of privately owned guns in circulation.

3) What are the most important steps needed to solve the problem? The most important steps are to adopt stringent gun control laws like those in other high income democratic countries - including a complete ban on civilian ownership of all automatic and semi-automatic rifles and a complete ban on civilian ownership of handguns, with no grandfather clauses. And in order to ban handguns, we must overturn the Supreme Court’s rogue 2008 *Heller* decision.

4) Are we taking the most important steps? No. Definitely not. In fact, we’re hardly even talking about taking the most important steps. And why not? My own theory is that there are four widely accepted myths that are the main obstacles to taking definitive steps to end our country’s epidemic of gun violence:

1. The myth that the Second Amendment was intended to confer an individual right to own guns.
2. The myth that honest, law-abiding people should own guns for protection.
3. The myth that we can reduce rates of gun violence in our country to reasonable levels without adopting stringent gun control laws comparable to those in other high income democratic countries and without substantially reducing the number of privately owned guns in circulation; and
4. The myth that we need more research before adopting definitive gun control laws.

I’ll leave you with one final thought. Before the Covid-19 pandemic, when I used to talk in person with groups of people about gun violence prevention, someone would usually come up to me at the end of my presentation and say something like, “You know, that was nice and all, but we’ll never be able to adopt gun control laws like those other countries.” I would reply that I’m sure that one day we will adopt such laws. The only question is, how many more innocent people will be killed and maimed with guns before that day arrives. I hope that you’ll join me in committing to do everything within our power as health professionals to help make that day come sooner rather than later.

Thank you.
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