

Congressional Testimony: The Social and Health Costs of Gun Violence and Mass Shootings David Satcher, MD, PhD September 26, 2019

"WITH YOUNG Americans being gunned down at a rate far beyond anything seen in other developed countries, it would be hard to imagine a more fitting activity for a U.S. government agency concerned with the public's health than firearms research." This is how I started an <u>article I wrote in 1995</u>. And so here we are today. We are losing 60,000 lives a year from violence with close to 40,000 from firearms. 50% of suicides are by firearm and 75% of <u>homicides are by firearm</u>. All preventable.

Violence as a public health issue is not new and health approaches to violence prevention aren't either. They are not innovative, ground-breaking, or a promising practice - they are best practice, they are scientifically proven, they are common sense and they save lives and money. In the words of our young people it's 'ENOUGH'. We know 'Enough'. We've heard 'Enough'. We've seen 'Enough'. It's time to act.

When I was Surgeon General from 1998 to 2002, my first site visit was to Columbine to respond to the tragic mass school shooting. Soon after, I wrote about youth violence as a health issue while also issuing a report on suicide prevention. The Violence Against Women Act and the Kellerman research were released around the same time. The Kellerman research documented that having a gun in the home meant we were less safe. Despite the wave of research findings and calls for preventive action at the turn of the century, this country responded to these opportunities to improve the nation's health not with health approaches but by defunding the Centers for Disease Control and Prevention's ability to research this known health issue. When it comes to public health research there have been many instances where people disagree with the results, but this has led to additional research to either prove or disprove the findings. Secondary studies will often change populations, geographies or other components to see if the same results are yielded, but what they don't do is stop the research when a potential health threat is discovered. The Dickey Amendment damaged our nation's health - it is nearly impossible to know to what extent because so much data, ideas and systems were stifled from identifying what cost savings and life savings measures were needed to improve our health. Since its founding in 1946, the CDC, which I had the honor of leading, has been at the forefront in researching, driving, supporting, and expanding strategies proven to address the leading causes of death, injury, and suffering including seatbelts, helmets, tobacco, sanitation and more. Without the Dickey Amendment, the power of this agency could have been used to prevent the mass shootings in Parkland, Orlando, Las Vegas as well as the daily gun violence



tragedies that occur in cities like Baltimore, St. Louis, Chicago and more. Before he passed, Congressman Dickey himself admitted publicly that he regretted his decision and believed that it should be reversed. You have the power to right this wrong.

The public health system nationally and locally has built a foundation to not only research, but intervene and prevent this epidemic.

- More than 10 years ago, the Department of Health and Human Services and the Centers for Disease Control and Prevention published a paper entitled "<u>The History of Violence</u> <u>as a Public Health Issue</u>" stating that as early as 1965 homicide and suicide were listed in the top 15 leading causes of death.
- Violence was highlighted as a public health priority by the Office of the Surgeon General as early as 1979 in the Surgeon General Julius Richmond's landmark report.
- During my time as Surgeon General, I released several reports that advanced and highlighted the need for greater investment in prevention efforts including in 1999 <u>a Call</u> <u>To Action To Prevent Suicide</u> and in 2001 a report on <u>Youth Violence</u>.
- Globally, violence is known as a health issue as well. The World Health Organization's paper on <u>Violence: A Global Public Health Problem</u> found violence is among the leading causes of death for people between the ages of 15 and 44 worldwide, "...the cost of violence translates into billions of US dollars in annual health care expenditures worldwide, and billions more for national economies in terms of days lost from work, law enforcement and lost investment." They also stated "Violence can be prevented and reduced pregnancy-related complications, workplace injuries, infectious diseases, and illness resulting from contaminated food and water in many parts of the world." In the most definitive words, the paper states, "Violence can be prevented. This is not an article of faith, but a statement based on evidence."
- More global efforts have come from the United Nations with a paper on <u>Youth Violence:</u> <u>The Health Sector Role in Prevention and Response</u>, which found that worldwide some 200,000 homicides occur among youth 10–29 years of age each year, which is 43% of the total number of homicides globally each year. Homicide is the fourth leading cause of death in people aged 10-29 years, and 83% of these homicides involve male victims. For each young person killed, many more sustain injuries requiring hospital treatment. In one study, from 3–24% of women report that their first sexual experience was forced. When it is not fatal, youth violence has a serious, often lifelong, impact on a person's physical, psychological and social functioning. Youth violence greatly increases the costs of health, welfare and criminal justice services; reduces productivity; and decreases the value of property.

Again, we know Enough, we've seen enough. It's time.

I, along with many others, have been advocating for the role of public health in ending the violence epidemic in the United States for several decades now. At its core, public health is focused on population-level solutions to address conditions, illnesses, and circumstances that greatly impact health, well-being, and quality of life. This means that we look to prevention as the solution and implement evidence-based and cross-disciplinary approaches to address some of the most urgent issues facing our communities. This data driven and scientific approach inherent to all public health efforts is what has proven to us that these approaches work to address violence. When we invest in prevention, we save lives, reduce injuries, increase well-being, and save money.

The costs of violence are largely the costs of underinvestment. The cost of violence is hard to calculate with precision because beyond the direct costs of death and injury, as the leaders of <u>the Movement towards Violence as a Health Issue</u>, (which I Chair) stated "exposure to violence increases the risk of medical illness, including asthma, hypertension, heart disease, cancer, and strokes. Violence also contributes to psychiatric illness, including depression and post-traumatic stress disorder. Those who are exposed to violence are more likely to sleep poorly, to smoke, and to become socially isolated – all added risk factors for early death. Like lead poisoning, violence impairs the ability of children to learn. Like people exposed to influenza spread influenza, violence causes more violence, expressing itself as outbreaks of retaliations and clusters of suicide. Like tobacco use, violence spreads through social networks, becoming increasingly acceptable and commonplace. Like the Ebola virus, violence generates fear, distrust, and panic-- stigmatizing communities where clusters of cases occur and limiting opportunities for communities to come together."

Violence accounts for several adverse childhood experiences. The study done by <u>CDC and</u> <u>Kaiser Permanente</u> in the mid-1990s found that being a victim or exposed to violence from age 0-5 increases one's likelihood of substance abuse, chronic health issues and can decrease life expectancy. It can also increase the likelihood of <u>later involvement in violence</u>. The impacts on a person's life trajectory are substantial and show up in many ways that are still needed to be better understood through research today.

We do know the social costs are enormous. As are the financial costs. Multiple sources estimate the total costs to be in the billions of dollars. <u>CDC estimates</u> that suicide costs \$50.8 billion and homicides cost \$26.4 billion. <u>Giffords Law Center estimates</u> the cost of gun violence alone to be around \$229 billion annually. The cost of reported domestic violence cases per year is estimated to be \$460 billion <u>according to the Washington Post</u>.

The costs on the health system are substantial. From <u>2010-2015</u>, <u>Medicare and Medicaid</u> covered 45% of health care costs related to firearm injury with the uninsured being held



responsible for 20% of the total. This number obviously will go up once we get recent data on the impact of Medicaid expansion as the uninsured population has gone down significantly.

With roughly 100,000 firearm injuries each year and I must pause here to note that this is the closest estimate possible because there is no standard collection for data on non-fatal shootings. There is also no standard collection for mass shootings either. The FBI does not have a definition for mass shootings. But we do have telling data on costs - it is estimated that hospital charges cost \$2.8 billion annually with \$95,000 per patient admitted to the ED. This is a gross underestimate because the long-term cost including physical rehabilitative services and mental health services such as treating post-traumatic stress disorder are not factored in. While on the topic of mental health, I must address a key issue: We do have data on the clear linkage between trauma and health outcomes and we also have data on mental health and violence. There is linkage, but it's not how the media or many political leaders portray it. People with mental health issues are more likely to be involved in violence, but as victims, not as perpetrators. This common conflation is dangerous and further stigmatizing this health issue. Other stigmas including the overt or covert racism in our media as it relates to the epidemic of gun violence among black and brown men is also causing significant harm. These young people are in turn, not being asked what happened or being given opportunities to process their untreated trauma which has shown to be at the same level as people who served multiple terms fighting for our country overseas. They are being treated unfairly by the media, the health system and the police. The police are also not thriving in our current system. They are exposed to trauma regularly and many are not treating it in healthy ways - instead it shows up in increased alcohol abuse, domestic violence and the brutality we see on the news far too often.

Our health care workers are also impacted by violence in numerous ways. For hospitals specifically, it is "estimated that proactive and reactive violence response efforts cost U.S. hospitals and health systems approximately \$2.7 billion in 2016. This includes \$280 million related to preparedness and prevention to address community violence, \$852 million in unreimbursed medical care for victims of violence, \$1.1 billion in security and training costs to prevent violence within hospitals, and an additional \$429 million in medical care, staffing, indemnity, and other costs as a result of violence against hospital employees."

"... because violence costs the United States hundreds of billions of dollars each year in medical costs and lost productivity alone, effective approaches are especially worth the investment. The economic harm of trauma ripples through communities, undermining investment in small businesses, depressing housing values, and diverting resources that could be used for vital support to education and the quality of life. Violence also diminishes opportunities for health within our communities. When parks aren't safe, kids can't play in them. When neighborhoods



aren't safe, supermarkets and other businesses won't invest in them. The enormous human and financial costs of violence far exceed the current or proposed federal spending on effective health approaches."

While our knowledge of what works to effectively prevent various forms of violence continues to grow, we have extensive research on numerous program models and approaches that have shown significant success. Despite their track records of success, these efforts have yet to be institutionalized as critical components of our nation's prevention strategy and have yet to receive the sustainable funding necessary for their expanded and sustained success. As outlined in the Framework on Violence Prevention created by the Movement towards Violence as a Health Issue, we must build a health system that addresses all forms of violence that allows for integration of best practices across all agencies in communities, led by people most impacted by the problems to implement comprehensive solutions that save lives in sustainable, equitable manners. Here are a few of the components outlined in the Framework:

"Rigorous evaluations of health approaches to violence prevention and intervention have found reductions in injuries, shootings, and deaths – as well as new attitudes and safer norms. For example:

- A Chicago program using public health methods to interrupt violence, reduce risk and change neighborhood norms reduced homicides and shootings by up to 70% and retaliations by 100%. In Baltimore, one historically violent neighborhood went over 22 months without a homicide when implementing the same model.
- An Oakland, California hospital-based violence intervention effort that incorporated trauma-informed care and case navigation resulted in 98% of the clients not being reinjured and 70% not being arrested. With an ever-growing base of support for prevention and intervention from healthcare practitioners, we've seen the rapid growth of hospital-based violence intervention programs (HVIPs) - many of which are members of the Health Alliance for Violence Intervention (<u>HAVI</u>).
- A Richmond, California initiative based on public health analysis that provided supports including mentoring, life skills and subsidized internships to those at highest risk reduced homicides by 75% and gun assaults by 66%.
- Youth exposed to an adolescent dating violence prevention intervention in North Carolina showed from 56% to 92% less dating violence victimization compared to controls with the effects sustained for four years.
- A health-based parenting program delivered in communities of 100,000 children under 8 years of age experienced an average of nearly 700 fewer cases of childhood maltreatment over 2 years.
- A nurse-visiting program delivered to children born to high risk unmarried teens saw 80% fewer cases of child abuse and neglect in Elmira, NY and in Memphis, TN yielded 79% fewer hospital days for child injuries than in comparison groups.



• Cities across the country are using the public health approach to address violence across all sectors. In Minneapolis, this comprehensive strategy was designed by city agencies, community, civic and business groups and hundreds of young people. Initial findings suggest that the adoption of the model in 20 neighborhoods with highest rates of violence correlated with a decrease of 57% in individuals under 18 (involved in the intervention) arrested or suspected in violent crimes while killings of people under 24 fell by 76%."

The health system is stepping up in other ways. Kaiser Permanente and the American Hospital Association recently funded the National Academies of Science to identify Health Systems Interventions to Prevent Firearm Violence. Kaiser subsequently invested \$2 million in research on gun violence prevention and intervention while producing a report that <u>highlights major</u> <u>findings of research nationwide including</u>: " In New York, providers administering the Columbia Suicide Severity Rating Scale instrument and, if the score indicated a significant risk, the care team creating a safety plan addressing lethal means, including a routine assessment of access to firearms, and recording that in the EHR. This process, implemented in 2014, was supported by provider training and tools embedded in the EHR. By 2015, health systems were monitoring provider performance and using it as part of physician performance-based compensation."

<u>Blue Shield of California Foundation</u> has led work on domestic violence - an issue that impacts over 58% of the state. Much of the \$40m of annual grants goes to prevent and intervene in this space.

At the federal level, several pieces of legislation have been introduced, but have yet to be advanced as described by my panelists. I helped craft the work for the Public Health Violence Prevention bill with Congressman Quigley's office. That bill has not been put forth for vote, which is the same as many other bills that would fund the necessary health approaches to violence prevention.

While federal legislation to effectively address this public health emergency being faced by communities across the country has not progressed, an increasing number of states are proactively taking up the issue. This has included the passage of legislation in <u>Maryland</u>, <u>Pennsylvania</u>, <u>New York</u>, <u>New Jersey</u>, <u>Massachusetts</u>, <u>Illinois</u>, <u>and California</u>. Much of this legislation is specifically focused on increasing investment in evidence-based health programs aimed at addressing various forms of violence and these states have invested well over \$100 million this year alone.

Leading health organizations and agencies are calling on the federal government to act. Some examples of this are: APHA has issued a Policy Statement entitled <u>Violence is a Public Health</u> <u>Issue: Public Health is Essential to Understanding and Treating Violence in the U.S.</u>, the



American Medical Association issued a statement and called <u>gun violence "a public health</u> <u>crisis"</u> and the American Academy of Family Physicians (AAFP) also called for action in their statement entitled <u>Violence as a Public Health Concern</u>.

So, we have a crisis on our hands. And I come to you, as I have many times before, asking you on behalf of the public health field, and your constituents and the young people who are screaming ENOUGH in our streets - now is the time. Let's stop this epidemic - let's save money, but more importantly let's save lives. Let's invest in what works and move away from traditional approaches that rely on the criminal justice system. Let's see the integration of proven practices as our primary response. Let's build this system so that it is more than enough for our youth to realize their potential - to grow up safely and are proud to be part of this country.

Suggested attachments:

https://www.sprc.org/sites/default/files/migrate/library/surgeoncall.pdf

https://stacks.cdc.gov/view/cdc/7545#

https://static1.squarespace.com/static/56ba1e014c2f858bf88b6dff/t/58f10478ebbd1aeb69e 75ac6/1492190328732/2017.04.13 Paper1wrefs.pdf

https://static1.squarespace.com/static/56ba1e014c2f858bf88b6dff/t/58f104c6e3df28353c5 a821d/1492190406476/2017.04.13 Paper2.pdf

https://apha.org/policies-and-advocacy/public-health-policy-statements/policydatabase/2019/01/28/violence-is-a-public-health-issue

Reference links:

https://www.washingtonpost.com/archive/opinions/1995/11/05/gunning-forresearch/05b6584f-5c26-4a80-b564-cccf5f1c2ddd/?noredirect=on

https://www.pewresearch.org/fact-tank/2019/08/16/what-the-data-says-about-gun-deathsin-the-u-s/

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https://www.ncbi.nlm.nih.gov/m/pubmed/9715182/

https://www.cdc.gov/violenceprevention/pdf/history_violence-a.pdf

https://www.sprc.org/sites/default/files/migrate/library/surgeoncall.pdf

https://www.ncbi.nlm.nih.gov/books/NBK44294/

https://www.who.int/violence_injury_prevention/violence/world_report/en/chap1.pdf

https://www.un.org/youthenvoy/2015/12/youth-violence-is-a-global-public-healthproblem-who/

https://static1.squarespace.com/static/56ba1e014c2f858bf88b6dff/t/58f10478ebbd1aeb69e 75ac6/1492190328732/2017.04.13 Paper1wrefs.pdf

https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/about.html

https://www.childwelfare.gov/pubpdfs/riskprotectivefactors.pdf

https://www.cdc.gov/injury/wisqars/overview/cost_of_injury.html

https://lawcenter.giffords.org/resources/the-economic-cost-of-gun-violence/

https://www.washingtonpost.com/opinions/the-cost-of-domestic-violence-isastonishing/2018/02/22/f8c9a88a-0cf5-11e8-8b0d-891602206fb7_story.html



https://www.healthaffairs.org/do/10.1377/hblog20171031.874550/full/

https://gunsandamerica.org/story/19/08/04/what-is-a-mass-shooting-why-we-struggle-toagree-on-how-many-there-were-this-year/

https://www.aha.org/guidesreports/2018-01-18-cost-community-violence-hospitals-and-health-systems

www.cureviolence.org

https://static1.squarespace.com/static/56ba1e014c2f858bf88b6dff/t/58f10478ebbd1aeb69e 75ac6/1492190328732/2017.04.13 Paper1wrefs.pdf

https://static1.squarespace.com/static/56ba1e014c2f858bf88b6dff/t/58f104c6e3df28353c5 a821d/1492190406476/2017.04.13 Paper2.pdf

http://www.nationalacademies.org/hmd/Activities/PublicHealth/HealthSystemsInterventionstoPreventFirearmInjuryandDeath/2018-OCT-17.aspx

https://thehavi.squarespace.com

https://blueshieldcafoundation.org

www.giffords.org

https://apha.org/policies-and-advocacy/public-health-policy-statements/policydatabase/2019/01/28/violence-is-a-public-health-issue



https://www.ama-assn.org/press-center/press-releases/ama-calls-gun-violence-publichealth-crisis

https://www.aafp.org/about/policies/all/violence-public-health.html