

## Research Priorities for Gun Violence Prevention

Gun violence is a complex problem that requires a comprehensive solution. For decades, as this public health crisis rose to epidemic proportions, legislative and historical barriers suppressed virtually all levels of research into the causes and effects of gun violence injuries and deaths.

With the hope of Congressional approval for research funding on the horizon, Brady is actively working with partners in public health, education, urban development, and academia to ensure comprehensive and data-driven solutions.

Working with our partners, Brady has identified four primary areas of research that need more attention: (1) gun violence as a public health epidemic, (2) gun ownership and access, (3) evidence-based policy solutions, and (4) the relationship between criminal behavior and guns. Within these categories, we have grouped general categories of questions that have emerged from our public health, medical, and research partners.

Broadly, there is a desire for more causal research. Currently, the bulk of information related to gun violence is statistical and limited in nature, including mortality and injury rates and similar data. While this type of data can show us the magnitude of a public health crisis, it falls far short of the in-depth research that delves into the scope -- the why and how -- of this public health epidemic. Interdisciplinary research is needed to understand the complex causes of gun violence and the feasibility of solutions.

In order to address gun violence as an epidemic, research must also address the life cycle of the problem from its source, and understand the different solutions that can lead to a reduction in gun deaths and injuries.

Brady's particular expertise is in seeking to address the issue of gun violence as an epidemic. We do this through data-driven solutions designed to change social norms regarding gun ownership and storage, reform of gun manufacturers and dealers primarily through supply-based programs and litigation and policy change. These activities complement the four broad areas of research needs. Our projects arose from an assessment of community needs over time, and are designed to address existing gaps in the evidence-based research terrain. There is no doubt that additional research in the areas noted below has the potential to provide critical insights into the most meaningful and efficacious manner to address the problem of gun violence in America today.

## ***Gun Violence as a Public Health Epidemic***

1. Interdisciplinary source point research. Health epidemics must be studied at their source. We need to research the manner in which guns are sourced into communities, and examine any correlations between the sources of crime guns and their prevalence in specific communities.
2. What are the most effective methods to disrupt gun violence and its attendant impacts?
3. What kind of programs are most effective at the familial, community, state and national levels to provide meaningful treatment to gun violence survivors? What should be considered over the short, medium and long term, including mental and physical treatment issues? What are the short, medium and long term costs of gun violence to our society and what kind of continual care of victims will put them in the best position to recover from the trauma of gun violence? What are the best methods to fund and sustain such treatment models?
4. What is the relationship between other epidemics (chronic disease, drugs, poverty) and guns? Gun violence is tied to several other epidemics. Some of these receive attention, such as the link between illegal drugs and gun homicide. However, others are less understood, such as the relationship between terminal illness and gun suicide.
5. What are the most effective ways to prevent gun-related suicides? Two-thirds of firearm related deaths are suicides. Are firearm suicides more spontaneous than non-firearm suicides? Do other risk factors vary by method? How do we prevent it in different populations—active military, veterans, those with mental illness, law enforcement or correctional officers, the elderly, or teenagers?
6. What is the “contagion” theory of gun violence? Are those that experience gun violence as a child more likely to engage in gun violence as an adult? Is this different by type of gun violence (homicide, suicide, mass shooting, etc)? Does proximity to gun violence have any impact on future engagement in gun violence?
7. What are the second- and third-order effects of gun violence? How does this differ for individuals exposed to everyday gun violence, suicide, or mass shootings? What about the threat of gun violence? What are the mental or physical health implications in both the short and long term?

8. What is the impact of certain types of gun violence prevention training at schools on the health and wellbeing of children and educators subject to such training? Does it do more harm than good?
9. How do demographic trends relate to gun violence, and what are the explanatory factors? For example, if we are addressing Native American suicide rates, what are other structural or social factors that may impact suicide rates? What does the change in these trends say about the landscape of gun violence?

### ***Gun Ownership and Access***

1. What are the best methods to educate gun owners about the need for safe storage? How have other successful social norm change campaigns (e.g., the “designated driver” campaign or “friends don’t let friends drive drunk”) helped to educate the public about the dangers of risky behavior and changed such behavior? How can we measure the impact of a similar national advertising campaign focusing on safe storage? Over what period of time should we invest in such a campaign and what results would we expect to see judging from other social norm change campaigns?
2. Why do people own guns? How can these motivations be stratified so that key drivers to gun ownership are understood by person/community? Are there policies we could implement that would reduce the belief that people need easy access to guns? How can we change social norms in this area? Do people own guns in cities for different reasons than they own guns in rural areas?
3. What are the biological impacts of gun violence and gun ownership? For example, what sort of exposure to gun violence results in trauma that has physiological consequences? How can we address these? Does gun ownership have a biological impact (i.e. does it make people more or less fearless)?
4. How many guns are in private hands in the United States? There is plenty of good data on the number of gun incidents per year at the city, state and national scales. But we don’t have a number for how many guns are in circulation in the United States. We need this information to put gun violence in better context, and to better understand where the guns are held.
5. What is the best way to protect toddlers from unintentional shootings from a firearm? Studies show that safe firearm storage works, but what safe storage methods are the most effective and most likely to be adopted? Does this vary by demographic? Is there a role for the gun industry in solutions (i.e. design of trigger pulls on a firearm that would preclude toddlers from pulling the trigger)?
6. Who should be prohibited from owning a gun? What evidence do we need to ensure that we are expanding the definition of prohibited purchaser in a

meaningful way? How can we use predictive modeling to prevent dangerous people from accessing guns.

7. How is gun ownership spatially distributed? Within which given geographies do gun owners cluster?
8. How does gun purchasing activity differ spatially? Are there certain regions where people buy from big retailers? Online? Does the type of gun matter?
9. What are effective messages that will resonate with gun owners to show that regulation of guns does not equate with confiscation of guns and will actually benefit them? What are analogous public interest messaging campaigns that should be considered?

### ***Policy and Policy Implementation***

1. What is the public health impact of the variety of state policies being enacted? How are different policies around safe storage, mental health, public education, and background checks impacting firearm injuries and deaths?
2. Do magazine limits actually work? For example, New York State passed a law limiting the number of bullets legally allowed to be loaded in a magazine to seven, and California limits the capacity newly sold magazines to 10. Will such policies have an impact, particularly in the cases of incidents involving a lone, active shooter?
3. What combination of education tools for the public ensures the most receptivity by gun owners to adopt safe storage practices without creating large factions of resistance? Are policies that provide a “carrot”, for example, and incentivize the purchase of safe storage devices for firearms, more effective than those that rely on a “stick”, for example, penalize failure to store guns safely?
4. What combination of policies has proven especially successful in combating gun violence? In the absence of federal action, what policies should states adopt to protect the greatest number of lives and is there some combination that will save far greater lives (e.g. licensing and registration vs. background checks)?
5. What types of intervention programs at the national, state and local level are particularly effective at combating gun violence? How do they work?

## ***Criminal Activity and Guns***

1. How do guns get into the hands of people who use them to commit crimes? More specifically, do most criminals obtain those guns through an unlawful secondary trade in guns or through loopholes in the current system? Were the guns stolen? How do guns move through neighborhoods and social networks?
2. Is there a relationship between levels of gun ownership and levels of crime? Does gun violence generally rise as gun ownership does in a given community, or is the opposite true?
3. What structural issues impact gun violence? How can developers or urban planners create cities that deter gun violence? What aspects of the urban landscape make it easier for criminals to access guns?
4. Why are some neighborhoods hotbeds for gun violence, and what distinguishes those places from others?