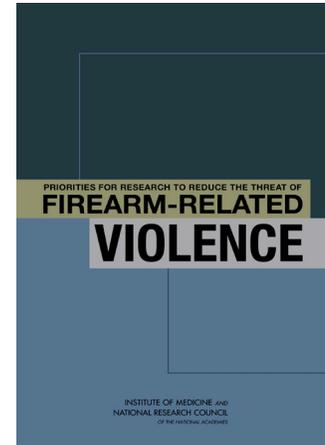


Priorities for Research to Reduce the Threat of Firearm-Related Violence

The committee offers priorities for a proposed public health research agenda that aims to provide a robust knowledge base to help bolster the United States' approach to minimizing the consequences associated with firearm violence.



Characteristics of Firearm Violence

Priority: Characterize the scope of and motivations for gun acquisition, ownership, and use, and how are they distributed across subpopulations.

Examples of information that could be examined:

- Collect data about gun ownership, acquisition, and use for various groups within the U.S. general population.
 - Focus on those at greatest risk of causing injury.
 - Focus on those at greatest risk of injury—urban and rural youth, racial/ethnic minority populations, and those living in concentrated poverty.
- Collect data about the sources (for example, gifts, purchases), means (for example, theft, trafficking), and legality of possession by various groups, particularly including offenders.

Priority: Characterize differences in nonfatal and fatal gun use across the United States.

Examples of topics that could be examined:

- What are the characteristics of non-self-inflicted fatal and nonfatal gun injury?
 - What attributes of guns, ammunition, gun users, and other circumstances affect whether a gunshot injury will be fatal or nonfatal?
 - What characteristics differentiate mass shootings that were prevented from those that were carried out?

- What role do firearms play in illicit drug markets?
- What are the characteristics of self-inflicted fatal and nonfatal gun injury?
 - What factors (for example, storage practices, time of acquisition) affect the decision to use a firearm to inflict self-harm?
 - To what degree can or would prospective suicidal users of firearms substitute other methods of suicide?
- What factors drive trends in firearm-related violence within subpopulations?
- What factors could bring about a decrease in unintentional firearm-related deaths?

Risk and Protective Factors

Priority: Identify factors associated with juveniles and youths having access to, possessing, and carrying guns.

Examples of topics that could be examined:

- Which individual and/or situational factors influence the illegal acquisition, carrying, and use of guns by juveniles?
- What types of weapons do youths obtain and carry?
- How do youths acquire these weapons, e.g., through legal or illegal means?
- What are key community-level risk and protective factors (such as the role of social norms), and how are these risk and protective factors affected by the social environment and neighborhood/community context?

- What are key differences between urban and rural youth with regard to risk and protective factors for firearm-related violence?

Priority: Evaluate the potential health risks and benefits (for example, suicide rates, personal protection) of having a firearm in the home under a variety of circumstances (including storage practices) and settings.

Examples of topics that could be examined:

- What are the associated probabilities of thwarting a crime versus committing suicide or sustaining an injury while in possession of a firearm?
- What factors affect this risk/benefit relationship of gun ownership and storage techniques?
 - What is the impact of gun storage methods on the incidence of gun violence—unintentional and intentional—involving both youths and adults?
 - What is the impact of gun storage techniques on rates of suicide and unintentional injury?

Priority: Improve understanding of risk factors that influence the probability of firearm violence in specific high-risk physical locations.

Examples of topics that could be examined:

- What are the characteristics of high- and low-risk physical locations?
- Are the locations stable or do they change?
- What factors in the physical and social environment characterize neighborhoods or sub-neighborhoods with higher or lower levels of gun violence?
- Which characteristics strengthen the resilience of specific community locations?
- What is the effect of stress and trauma on community violence, especially firearm-related violence?
- What is the effect of concentrated disadvantage on community violence, especially firearm-related violence?

Firearm Violence Prevention and Other Interventions

Priority: Improve understanding of whether interventions intended to diminish the illegal carrying of firearms reduce firearm violence.

Examples of research questions that could be examined:

- What is the degree to which background checks at the point of sale are effective in deterring acquisition of firearms by those who are legally disqualified from owning one?
- What is the public health impact of removing firearms from persons who develop a disqualifying characteristic, for example, mental illness, with potential for violence?

- Do programs that focus on changing norms in a community decrease illegal gun carrying?

Priority: Improve understanding of whether reducing criminal access to legally purchased guns reduces firearm violence.

Examples of topics that could be examined:

- Are there methods to enhance the reporting of stolen guns in order to reduce illegal access?
- To what degree would mandatory reporting of transfer of private ownership of guns be effective in reducing illegal access?
- To what extent do focused interventions (for example, “server training,” straw-purchase stings) targeted at high-risk retailers found to be disproportionately associated with gun crimes reduce illegal access?
- How do firearms move from federal firearms-licensed dealers to high-risk/criminal possessors? How can we develop detailed analyses of this illegal area of firearm distribution?

Priority: Improve understanding of the effectiveness of actions directed at preventing access to firearms by violence-prone individuals.

Examples of topics that could be examined:

- What would be the effects of altering environmental alcohol availability, such as reducing the number of off-premise alcohol outlets, on firearm violence?
- How effective are policies and enforcement of laws preventing gun sales to people with specific psychiatric diagnoses?
- To what extent does enforcement of laws requiring removal of firearms from the homes of people with a history of intimate partner violence reduce homicide and injury?

Priority: Determine the degree to which various childhood education or prevention programs reduce firearm violence in childhood and later in life.

Examples of topics that could be examined:

- Are school-, family-, and community-based risk-reduction and health-promotion programs effective in reducing firearm violence?
- Are gun safety programs effective in reducing unintentional injury to children from firearms?
- Are school personnel (for example, nurses, resource officers, teachers) effective at detecting students at risk of causing firearm violence?

Priority: Do programs to alter physical environments in high-crime areas result in a decrease in firearm violence?

Examples of topics that could be examined:

- Is there a correlation between alcohol sales for off-premises consumption and firearm violence in high-risk neighborhoods? Do laws and enforcement regarding sales of alcohol affect gun violence?

- What are the effects on firearm violence of community engagement programs to improve the physical environment? Is there a reduction in firearm violence among youth living in neighborhoods where community policing is practiced?
- For community programs that are considered to have sufficient effectiveness in reducing gun violence, what are the factors that affect adoption, fidelity vs. adaptation, and sustainability or scale-up of programs so that they have a public health impact?

Impact of Gun Safety Technology

Priority: Identify the effects of different technological approaches to reduce firearm-related injury and death.

Examples of topics that could be examined:

- What is the projected impact of passive technologies on reduction of firearm violence, and which of the technologies will have the greatest impact on one or more of the types of harm from firearm violence (homicide, suicide, and unintentional injury)?
 - Are there feasible mechanisms to child-proof and what is the projected impact of these technologies?
- How would potential technologies impact professional sectors (for example, police and private security) in performing their duties effectively?
- How compliant would firearm owners be with safety technologies, or would owners disable technologies to assure their ability to use the firearms in an emergency?

Priority: Examine past consumer experiences with accepting safety technologies to inform the development and uptake of new gun safety technologies.

Examples of topics that could be examined:

- Are there lessons from the adoption of other public health interventions involving passive technology improvements that could facilitate the acceptance and dissemination of passive gun safety technologies? Would consumer engagement accelerate acceptance and dissemination of gun safety technologies?
- What were the key factors that led to eventual population-level acceptance of various public safety technologies? Were these factors different for passive versus active technology changes? Were these factors different when active and passive technologies were combined?
- In previous product safety efforts, how long did it take for the safety feature to become reliable and how did that timeframe impact consumer acceptance? Would this experience of timing and acceptance impact projections of gun safety technology implementation?

- To what extent did additional costs associated with safety features influence consumer acceptance and adoption?

Priority: Explore individual state and international policy approaches to gun safety technology for applicability to the United States as a whole.

Examples of topics that could be examined:

- What can be learned from various state or international policy approaches to implementing passive and active gun technology changes, and what has been the impact of these changes on firearm violence?
 - What can be learned about the effects of these changes on the types of firearm-related injuries and deaths?
 - What was the impact of these approaches on consumer adoption and acceptance?
- What have been the adoption rates and effectiveness of active protection technologies among law enforcement users?

Video Games and Other Media

Priority: Examine the relationship between exposure to media violence and real-life violence.

Examples of topics that could be examined:

- Synthesize evidence from existing studies and relevant databases that would reveal long-term associations between violent media exposure in childhood and subsequent adolescent or adult firearm-related violence. Studies should focus on evidence regarding the consistency and strength of these associations and the sensitivity of effect-size estimates.
 - Is there a relationship between long-term exposure to media violence and subsequent firearm-related violence? To what degree do violence-prone individuals disproportionately expose themselves to media violence?
 - If such a relationship exists, is it causal and who is most susceptible?
 - If a plausible case can be made that the relationship is causal, what kinds of people are most susceptible to the effects of media violence?
 - If the relationship is causal, which dimensions of media exposure are driving the relationship (for example, competitiveness, violence, particular violence subtypes or contexts)?
 - Are the magnitude and consistency of the plausibly causal relationship sufficient to suggest a public health research agenda on interventions related to media violence?



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