

Toward a Safer World by 2040

The JAMA Summit Report on Reducing Firearm Violence and Harms

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IMPORTANCE Since the start of the 21st century, more than 800 000 firearm deaths and more than 2 million firearm injuries have occurred in the US. All categories of firearm violence—homicide, suicide, unintentional—result in reverberating harms to individuals, families, communities, and society. The collective responsibility of society is to safeguard the health and safety of its members, including from firearm harms. The JAMA Summit on Firearm Violence convened 60 thought leaders from a wide array of disciplines to chart an innovations roadmap that will lead to substantial reductions in firearm harms by 2040.

OBSERVATIONS The vision for 2040 is a country where firearm violence is substantially reduced and where all people and communities report feeling safe from firearm harms. The vision centers on practical solutions with an understanding of the country's constitutional protections for firearm ownership. Achieving the 2040 vision will require expansion of proven evidence-based strategies and the development of new, innovative approaches rooted in equity, accountability, and collective responsibility. Discussions centered on projecting a safer world, community violence interventions, technologic innovations, federal and state-level oversight of firearms, ethical considerations, and primordial prevention of firearm violence. The Summit charted a roadmap of 5 essential actions in the next 5 years to achieve this vision: (1) focus on communities and change fundamental structures that lead to firearm harms, (2) harness technological strengths responsibly, (3) change the narrative around firearm harms, (4) take a whole-government and whole-society approach, and (5) spark a research revolution on preventing firearm harms.

CONCLUSIONS AND RELEVANCE A safer world will require investing in the discovery, implementation, and scaling of solutions that reduce firearm harms and center on the people and communities most affected by firearm violence.

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JAMA Summits are part of the mission of JAMA and the JAMA Network to advance some of the most pressing issues in science, medicine, and public health. On March 25-26, 2025, a JAMA Summit on Firearm Violence convened a broad group of 60 thought leaders from medicine, nursing, public health, criminology, sociology, social work, history, engineering, law, industry, political science, community violence interventionists, and public policy. Invitations were extended based on known expertise and referrals to the Summit planners. While the participants did not include firearm rights advocates, it did include members of industry and firearm owners. The goal was to chart an innovations roadmap that will lead to substantial reductions in firearm violence, injuries, and harm in the US by 2040. Sessions included Projecting a Safer World for 2040, Community Violence Interventions, Innovations in Technology to Enhance Safety, Innovations in Federal and State-Level Oversight of Firearms and Ammunition, Importance of Ethical Consideration When Working With all Communities, and Innovations in Primordial Prevention of Firearm Violence. This article presents a summary of these discussions and a vision for achieving a safer future.

Society's Broad Goals for Health and Safety

Firearm violence must be understood within larger societal and historical contexts. Interpersonal and intrapersonal violence does exist in society. Firearms are not a cause of violence but, because of their high lethality and ability to injure large numbers of people, result in serious harm when combined with violent acts. The conception that harm from firearms stems largely from personal choice can lead to less attention being paid to root causes and policies that could significantly mitigate harms from firearm misuse. Understanding and acting on fundamental issues are key in achieving large-scale and sustained reduction in firearm violence incidence, health effects, and impact. A safer world will require investing in the discovery, implementation, and scaling of further solutions that reduce firearm harms and center on the people and communities most affected by firearm violence.

Current Problem of Firearm Harms in the US

Since the start of the 21st century, more than 800 000 firearm deaths and more than 2 million firearm injuries have occurred in the US.¹ Almost 400 million firearms are in civilian circulation.² In 2023, almost 9 million firearms were manufactured in the US, 95% of which were for the domestic market, and close to 6 million firearms were imported to the US.³ The Federal Bureau of Investigation reported a record peak of nearly 40 million background checks for new firearms purchases in 2020.⁴ Nearly 80% of homicides and 55% of suicide deaths involve firearms.¹ State-by-state variation in firearm mortality is significant; an important contributor to this variation is state policy laws governing firearm purchase, carry, storage, and relinquishment.⁵

Suicide deaths from firearms constitute the majority (58.4%) of firearm-related deaths in the US,⁶ but account for a small number of injuries because the case-fatality ratio is about 90%.⁷ Firearm suicide death rates increased steadily throughout the 21st cen-

tury, reaching an all-time high (7.63 per 100 000) in 2023, with large increases among adolescents⁸ and non-Hispanic Black and Hispanic persons.⁹ White males 70 years and older have the highest rate of firearm suicide deaths.¹⁰

Firearm homicide rates, after peaking in 2021, have declined dramatically. Provisional data for 2024 reveal a 29% decline from this peak, and early 2025 data from law enforcement agencies¹¹ and the Gun Violence Archive¹² show that this trend to the lowest rates since 1960 continues. Similar reductions in firearm homicides occurred in the early 1990s; neither of these large variations were predicted by scientists and the forces behind these reductions are not well understood. In addition, the incidence of political firearm violence is increasing.¹³

Nonfatal shootings and uses of firearms far outweigh firearm homicides and suicide deaths and occur primarily in the settings of assault and robberies. Firearm harms extend beyond physical injury to psychological injury that includes those who witness a school shooting or experience the death or injury of a loved one. Where there is nonrandom clustering of violence, a lack of safety consumes daily activities and prevents securing resources and seeking opportunities. The indirect firearm harms may be debilitating and are expensive for individuals, communities, and society. A 2025 study indicates that an average household in the US would be willing to pay \$744 for a 20% reduction in the state rate of firearm violence.¹⁴

What Is the Vision for a US Substantially Safer From Firearm Harms by 2040?

To address the problem of firearm harms in the US, the JAMA Summit participants thought deeply about 4 questions: What is the vision for the US that is substantially safer from firearm harms by 2040? What are some key innovations and action steps to achieve it? What are the barriers to achieving this vision and potential adverse consequences of some interventions? What are the most important next steps?

Our vision for 2040 is a country where firearm violence is substantially reduced and where all people and communities report feeling safe from firearm harms. This vision centers on practical balanced solutions toward mitigating firearm violence with an understanding that the US is a country that includes constitutional protections for firearm ownership.¹⁵ Although some Supreme Court decisions have lessened restrictions on ownership and cuts to federal funding for community-level interventions have occurred, actions at the local community, municipality, and state level indicate that effective action is possible.

Numerous studies have identified a broad array of policies, programs, and strategies that reduce 1 or more forms of firearm violence (Table).^{16-47,49,50,53,62,63,70-80} These include firearm-specific interventions (eg, background checks, safe storage laws, extreme risk protection orders) and broader public health measures (eg, policies that regulate alcohol sales, increase economic opportunity, address urban/rural blight). In addition, community violence intervention (CVI) programs, focused deterrence initiatives, and hybrid models that combine targeted law enforcement with supportive social services have strong evidence of impact when implemented with fidelity. Achieving the 2040 vision will

Table. Evidence Base for Interventions That Demonstrate Significant Reductions in Firearm Violence

	Evidence for reductions in firearm violence by type of outcome		
	Homicides/violence	Suicide deaths	Other outcomes
Firearm policies			
Firearm purchaser licensing	Rudolph et al, ¹⁶ 2015 Crifasi et al, ¹⁷ 2018 McCourt et al, ¹⁸ 2020 Hasegawa et al, ¹⁹ 2019 Doucette et al, ²⁰ 2024 Webster et al, ²¹ 2020 Webster et al, ²² 2014 Crifasi et al, ²³ 2024	McCourt et al, ¹⁸ 2020 Crifasi et al, ²³ 2024 Crifasi et al, ²⁴ 2015	Crifasi et al, ²⁵ 2023 Ward et al, ²⁶ 2024 Crifasi et al, ²⁷ 2016
Safe storage of firearms, including strong child access prevention	Azad et al, ²⁸ 2020	Azad et al, ²⁸ 2020 Webster et al, ²⁹ 2004 Hamilton et al, ³⁰ 2018	Ward et al, ²⁶ 2024 Webster et al, ³¹ 2000 Hepburn et al, ³² 2006
Strong domestic violence restraining orders, including firearm removal	Zeoli et al, ³³ 2018 Diez et al, ³⁴ 2017 Wallace et al, ³⁵ 2021		
Licensing restrictions for concealed carry of firearms in public	Doucette et al, ³⁶ 2023 Doucette et al, ³⁷ 2024 Donohue et al, ³⁸ 2019 Donohue et al, ³⁹ 2025		Crifasi et al, ²⁵ 2023
Extreme risk protection orders (red flag laws)		Swanson et al, ⁴⁰ 2024 Kivisto et al, ⁴¹ 2018 Dalafave et al, ⁴² 2021	
Community violence intervention (CVI) programs			
CeaseFire, Safe Streets, Cure Violence, Communities Partnering 4 Peace	Skogan et al, ⁴³ 2008 Webster et al, ⁴⁴ 2013 Roman et al, ⁴⁵ 2018 Webster et al, ⁴⁶ 2023 Center for Neighborhood Engaged Research & Science, ⁴⁷ 2023		
Outreach, cognitive behavioral theory-based behavior change, employment readiness and success supports, life coaching (Chicago READI)	Bhatt et al, ⁴⁸ 2024		
Comprehensive CVI, violence interruption; mental health supports; housing, education, and job assistance; Chicago CRED, Advance Peace	Ross et al, ⁴⁹ 2023 Matthay et al, ⁵⁰ 2019		
Environmental changes			
Cleaning and greening blighted urban spaces	Branas et al, ⁵¹ 2018 Heinze et al, ⁵² 2018 Moyer et al, ⁵³ 2019		
Improved street lighting	Chalfin et al, ⁵⁴ 2022 Mitre-Becerril et al, ⁵⁵ 2022		
Stabilizing vacant homes and vacant home prevention	Branas et al, ⁵⁶ 2016 South et al, ⁵⁷ 2023 South et al, ⁵⁸ 2021		
Vacant building demolition	Jay et al, ⁵⁹ 2019 Jay et al, ⁶⁰ 2022		
Land bank ownership and stewardship of vacant properties	Bushman et al, ⁶¹ 2023		
Alcohol policies			
Restrictions on alcohol sales	Nicosia et al, ⁶² 2023		
Increased taxes on alcoholic beverages	Tessler et al, ⁶³ 2019		
Social and economic policies			
Income assistance, increasing minimum wage	Rowhani-Rahbar et al, ⁶⁴ 2022 Merrill-Francis et al, ⁶⁵ 2024	Asa et al, ⁶⁶ 2025 Merrill-Francis et al, ⁶⁷ 2024	
Nutrition/food assistance	Johnson et al, ⁶⁸ 2025	Sokol et al, ⁶⁹ 2024	

(continued)

Table. Evidence Base for Interventions That Demonstrate Significant Reductions in Firearm Violence (continued)

	Evidence for reductions in firearm violence by type of outcome		
	Homicides/violence	Suicide deaths	Other outcomes
Policing interventions			
Increasing police force size	Chalfin et al, ⁷⁰ 2022 Chalfin et al, ⁷¹ 2017		
Violent group take-downs/precision policing	Chalfin et al, ⁷² 2021		
Problem-oriented policing to change environmental conditions at hot spots	Braga et al, ⁷³ 2019 Braga et al, ⁷⁴ 2018 Braga et al, ⁷⁵ 2011		
Recovering guns from shooting hot spots	Sherman et al, ⁷⁶ 1995 Rosenfeld et al, ⁷⁷ 2014 McGarrell et al, ⁷⁸ 2011 Cohen et al, ⁷⁹ 2002		
Focused deterrence/group violence reduction strategies	Braga et al, ⁷⁴ 2018 Braga et al, ⁸⁰ 2024		

require expansion and further implementation of these proven strategies and development of new approaches.

Key Innovations, Action Steps, Barriers, and Potential Adverse Consequences in Achieving This Vision

Below are high-level summaries of the discussion among the Summit participants. The views in this report reflect the overall consensus of Summit participants, while allowing for differing individual perspectives on specific components.

Projecting a Safer World for 2040

The Summit explored the evolving nature of firearm violence in the US and its broad societal impacts, noting substantial variations in the rates of firearm violence over the decades from the last half of the 20th century and into the 21st century. Contextualizing underlying reasons for these variations is important to inform programs and policies that could lead to a safer world for 2040.

Three key points emerged. First, a renewed focus on social change and addressing declining trust in police and governmental institutions among younger populations is needed. Second, while firearms are a leading cause of death among youth, most people who die of firearm injury are adults, and there is an emergence of adult-onset firearm carriers who did not carry as adolescents.⁸¹ The reasons for this need to be better understood. Third, there is a need to examine the intersection of individual trajectories of firearm use within the context of larger, often disorienting, social changes that have deepened political and normative divisions.

Public perception is that crime is rising, despite declines in homicide rates. This discrepancy between perception and reality plays out in the intense societal tensions on whether increased civilian firearm possession makes the US safer,⁸² which is reflected in state-level policies. Significant variations in permissiveness in acquisition and right-to-carry laws may be a factor contributing to higher firearm death rates in permissive states and increases in thefts moving firearms into the illegal firearm market.⁸³

Summit participants recommended guiding principles for effective policy and programs to reduce firearm harms. First, collective institutional responses to restore public trust and address legal cynicism are needed. Despite deep divisions in beliefs, the ability to use evidence, listen to various perspectives, and thoughtfully discuss potential policy solutions is critical. Policies that focus on both high-risk groups and the entire population should be considered. Second, it is essential to enforce existing evidence-based policies. Third, firearm harms disproportionately affect marginalized groups, often residing in disenfranchised neighborhoods. To maximize the impact of policies it is essential to consider the intersecting identities of race, ethnicity, sex, age, sexual identity, and socioeconomic status.

CVI

Community violence is defined as intentional acts of interpersonal harm that generally occur in public spaces.⁸⁴ While definitions vary,⁸⁵ CVI refers to a menu of multidisciplinary approaches that use evidence-informed strategies to reduce near-term violence through tailored community-centered initiatives and engaging individuals and groups at high risk for violence involvement to disrupt cycles of violence and retaliation.⁸⁶

CVI uses trauma-informed principles by centering the voices of survivors of structural racism, harm, and systematic exclusion who often live in disproportionately affected communities.⁸⁷ CVI programs use different models including behavioral science interventions, enforcement strategies, fellowship programs, victim services, and violence interruption.⁸⁸ Some programs have demonstrated measurable impacts⁸⁶ on reducing firearm homicides or shootings in a variety of US cities, while others have not shown such effects. There is a need to enhance capacity building, provide training and technical assistance, and develop rigorous qualitative and quantitative measurement tools and evaluation frameworks to support communities in implementing effective CVI strategies. Additionally, mechanistic research to understand factors that contribute to changes in individuals' life trajectories (eg, mentoring, job opportunities) is crucial to maximize the impact of CVI programs as shown by behavioral economics.⁸⁹ Because social media can escalate online conflicts to offline street violence,⁹⁰ an important



opportunity for innovation is to overcome challenges in implementing CVI within the context of online conflicts.

Scaling up community and individual-based interventions often fail to produce population-level firearm violence reductions. This may be due to lack of consistent and sustained funding to scale, difficulties in implementing at scale, or designs that are successful in small research studies but cannot translate to larger communities. Scaling CVI also requires strengthening the services offered to those at highest risk such as housing or relocation, financial assistance, job training and placement, and therapeutic support. Interventions may also not be adopted by groups at highest risk. Scaling up may reveal difficulty in obtaining stakeholder engagement, and potential exacerbation of intervention-related harms. Research on scaling up as well as hybrid efficacy-effectiveness studies that incorporate a focus on implementation are needed.

Moving from individual and piecemeal approaches to community-level change by investing in people and communities that have long been disinvested is key. Ultimately, CVI seeks to alter trajectories by addressing immediate needs and then cultivate pathways for success. Initiatives about how CVI may be an entry point to fundamental services such as housing assistance, legal aid, educational opportunities, living wage, and employment readiness are essential and require multisectoral funding strategies including public and private sources.

Innovations in Technology to Enhance Safety

The Summit explored innovations in firearms, self-protection, and prevention strategies, recognizing that technological innovations hold both promise and peril. Smart guns are biometrically activated firearms that can be fired only by an authorized user.⁹¹ If ad-

opted, smart guns may reduce firearm injuries and limit firearm entry into secondary illegal markets. Smart guns could be of value, for example, in reducing unintentional childhood firearm injuries or adolescent firearm suicide deaths in homes where a firearm is kept loaded and unlocked for self-protection.

Technologies such as privately made firearms from kits, 3-dimensional printing of unserialized firearms, or those constructed with nonmetal-based polymers require new detection technologies and regulatory oversight.⁹² Recent policy changes have had some success in reducing the use of these weapons in crimes. Manufacturers advertised the lack of federal oversight for weapons part kits before the Bureau of Alcohol, Tobacco, Firearms and Explosives passed regulations clarifying that these kits were subject to the same federal restrictions as other firearms, a change the Supreme Court upheld in *Bondi v VanDerStok*.⁹³

Ballistics imaging has improved with 3-dimensional technology and resulting leads improve the apprehension of shooters.⁹⁴ Microstamping holds promise to provide additional information linking firearms to crimes and homicides.⁹⁵

The Summit discussed artificial intelligence (AI) and its use in monitoring, integration with robotics, identifying future risks, and intervention delivery. Unobtrusive AI-driven technology to detect concealed weapons in restricted public spaces (eg, entertainment venues) is currently used to detect unauthorized, concealed weapons without the intrusive processes associated with traditional airport-style security.⁹⁶ Challenges include issues around data privacy, ownership and sharing, and potential infringement of civil liberties. Increased monitoring could result in unintended effects. For example, facial recognition technology has higher error rates for faces of Black individuals, leading to wrongful arrests.⁹⁷

Emerging AI-controlled robotics are offering nonlethal alternatives to home security⁹⁸ or home defense⁹⁹ and protection¹⁰⁰ at steadily declining cost and increasing consumer interest. Robots can now provide nonlethal home defense by monitoring, documenting, and automatically calling 911.¹⁰¹ AI can also predict people and locations at high risk for violence and deliver interventions when coupled with well-prepared community violence interventionists.

Innovations in Federal and State-Level Oversight of Firearms and Ammunition

An important strategy to address firearm harm is to focus on firearms and ammunition as consumer products—manufactured, distributed, sold, and brought into homes and cars and carried into and across communities. This focus can inform and provide federal and state policies and oversight opportunities through a product-focused lens.

The firearm industry is a commercial determinant of health. Industries, when misaligned with public health and safety goals, can undermine health and safety, as did the tobacco industry, which used strategies like funding research to dispute product harms, promoting industry-friendly education, and framing public health problems as issues of individual responsibility.^{102,103} The firearm industry markets products based on lethality, concealability, and other features and targets different demographic groups by playing on fears. For example, the popularization of weapons like the AR-15 for personal protection is the result of targeted marketing strategies that exploit fear and a perceived need for self-defense.¹⁰⁴

Strengthening oversight for consumer protection is needed. The 2024 Surgeon General's Advisory¹⁰⁵ called for consideration of firearms as consumer products.¹⁰⁶ It will be important to lay the groundwork to have the US Consumer Product Safety Commission assume at least some responsibility for firearms as consumer products¹⁰⁷—further contributing to safety.

State-level consumer protection statutes, such as Unfair and Deceptive Trade Practices Acts (UDAP), can be leveraged effectively. Families of the Sandy Hook Elementary School victims successfully used Connecticut's UDAP law to sue the manufacturer of the AR-15-style rifle used in the mass shooting, citing the company's militaristic advertising. The 2022 settlement of that case reflects the viability of UDAP litigation, predicated on irresponsible marketing practices that cause harm, to hold industry accountable. Such suits can fall under a narrow exception to the arms industry's immunity from suit, created by a 2005 federal law. States like New Jersey have brought successful lawsuits against firearm retailers by leveraging recent state laws that require gun dealers and manufacturers to implement stricter procedures for firearm and ammunition sales.¹⁰⁸

States can require gun manufacturers to disclose more information, report defects, and offer remedies to consumers similar to regulations for other consumer products. Some states have explored and adopted taxation strategies for firearms and ammunition.¹⁰⁷ Public health informed lawsuits can also be effective. The successful lawsuit by the City of Baltimore against Polymer80, the largest US manufacturer of ghost gun kits, resulted in a large reduction in ghost guns in Baltimore.¹⁰⁹

Public health science and laws on federal, state, and local levels focusing on firearms as consumer products can complement other strategies to lessen firearm harms. Public health strategies have, for example, successfully reduced motor vehicle deaths and injuries, with efforts focused on regulating the safety features of cars in addition to road design and behavior change.

Importance of Ethical Consideration When Working With Communities

Community-engaged research centers the voices of those impacted by firearm violence, seeks to empower communities, prioritizes community impact, and ensures meaningful participation throughout the research process.¹¹⁰ These principles assisted scholars in community-engaged firearm violence research, AI, and CVI in crafting foundational considerations when using AI in public safety and social media.

Interdisciplinary approaches are important to understand how technology, language, and race intersect. Multidisciplinary teams embedded in communities would comprise social and computer scientists, social workers, linguists, ethicists, violence interventionists, and persons with lived experience, with full participation of individuals most proximate and impacted by firearm violence to help define and interpret context and to challenge preexisting assumptions. Contextual analysis of social media used by a community needs to center on emotional and cultural meanings before engaging tools such as AI.¹¹¹

Power sharing, prioritized in the co-design and building of emerging technology with communities most impacted by firearm harms, can include the co-creation of research questions, methods and intellectual property agreements. Researchers' presence in the

community allows important listening opportunities and demonstration of accountability to the community.

Systematic community engagement is necessary to develop a nuanced approach to conceptualizing how community is defined and requires firearm violence researchers to build and promote trust, transparency, and fairness in online digital neighborhoods. Advancing healing and systems that prioritize care over surveillance, reckoning with the tensions between the public health framing of technology, including AI, and applications such as digital stop and frisk are needed.¹¹²

Social media platforms should treat community participation in tool development as thought partners. These platforms can be incentivized to engage in violence prevention and collaborate with CVI organizations to provide access to data with equitable privacy agreements with the creation of advisory groups at the upper echelons of decision-making. Further, universities can be intentional about engaging in the AI space and building AI tools to lessen firearm harms, not totally conceding AI to the private sector.

Humanistic qualities in AI can complement human decision-making by understanding when human judgment should override the algorithm combining social science and computer science.

Innovations in the Primordial Prevention of Firearm Violence

Primordial prevention addresses the most upstream, root-level causes of adverse outcomes—well before they take shape—by changing the structures and systems that give rise to them.^{113,114} This means transforming the fundamental social, environmental, and economic contexts that foster violence. This upstream approach is relevant to all types of firearm harms and applies across urban and rural settings. The current moment demands bold, systems-level interventions¹¹⁵ that prioritize housing stability, economic opportunity, environmental improvement, and equitable policies.

One key arena is the built environment. Rigorous studies show that greening vacant lots, remediating abandoned buildings, and improving street lighting can meaningfully reduce firearm violence. Randomized controlled trials in Philadelphia found that addressing vacant places significantly reduces firearm assaults, particularly in low-income neighborhoods. Similar effects have been seen in other cities, like New York City, New Orleans, and Detroit. These interventions work by signaling care and oversight, removing spaces where illegal firearms are stored or used, and supporting community cohesion and outdoor safety.^{51,52,54-61,116,117}

Other upstream strategies that focus on economic policy, such as baby bonds, income supports, and increased minimum wages, are designed to repair long-standing financial precarity, especially in neighborhoods that have a history of segregation and disinvestment. Economic interventions can improve the health and lives of people who have been chronically disempowered and can affect the communities in which they live.^{64-69,118,119} However, there is limited evidence that they reduce firearm violence.^{117,120}

These strategies are also about power. The Summit emphasized that real progress will come from centering the voices and needs of those most affected by firearm violence—people and communities often left out of decision-making. Shifting institutional power, including universities and health care systems, is essential to restoring trust and reducing the fear that drives firearm acquisition and misuse.¹²¹⁻¹²⁴

Trust is a foundational determinant of safety. Communities, whether urban or rural, share a growing cynicism toward systems that are perceived as unresponsive or punitive. Mistrust fuels a cycle of fear, self-protection, and further disconnection. Reimagining systems of justice and care, from how schools are funded and land is owned to how health care systems support their local communities, can disrupt that cycle.¹²⁵

Primordial prevention interventions require a commitment to scalability, equity, and sustainability and should not rely on individual goodwill or voluntary participation alone. Instead, they should be designed to benefit all residents, particularly those without power or voice. Bold innovation, rigorous evaluation, and participatory design with communities can help ensure that upstream strategies are transformative and lasting.

What Are the Most Important Next Steps?

Five important steps are necessary in the next few years to achieve our vision for a safer world in 2040 (Box). No single strategy will address all firearm harms because the types of firearm injury and factors associated with firearm harms vary in complex and nuanced ways.

Focus on Communities and Change Fundamental Structures That Lead to Firearm Harms

Summit participants outlined the transformative possibilities of upstream prevention to achieve our vision for 2040. The promise of primordial prevention lies in its power to shift the very conditions under which violence becomes possible and simultaneously improves health and safety. By restoring trust, redistributing power, and redesigning context, these innovations can help build a future where firearm injury is not just treated, but prevented. For example, policies about housing, health care payment, policing, school funding, and domestic violence are important to evaluate and inform criminal justice and health/public health strategies to reduce firearm violence.^{126,127}

A broad systems-thinking approach is needed, moving away from narrow, incremental research to more comprehensive and impactful solutions. This is true for all types of firearm violence across the urban-rural continuum. Approaches that involve the whole population regardless of risk and also interventions that focus on the highest risk groups should be considered and can be simulated for population-level effect.¹²⁸ Engaging communities to be partnered collaborators—developing ideas and attending to local, cultural, and developmental issues—will make solutions more acceptable, implementable, and sustainable.

A supportive infrastructure is required for the permanence of community-based interventions, including CVI, suicide intervention resources, and their future evolutions. A strong and professional CVI workforce will need to be built through academies, health care systems, and training programs and be incorporated into city governments as a specialized unit, working as mediators and conflict resolution experts within their communities.

Reimagining systems of justice and community care are essential to address the root causes of fear for personal safety, mistrust of agencies, and legal cynicism. Building trust involves redesigning structures and systems, including health care systems and other community support systems to show genuine

Box. Five Important Steps to Achieving a Safer World in 2040

Focus on Communities and Change Fundamental Structures That Lead to Firearm Harms

A broad systems-thinking approach is needed that engages communities as partnered collaborators with the supportive infrastructure required for permanent community-based interventions with a strong and professional CVI workforce.

Harness Regulatory and Technological Opportunities Responsibly

Innovations such as multi-biometric “personally authorized” firearms, robotics, passive firearm detection systems, and AI for upstream prevention combined with a consumer product approach to firearms can strengthen safety in homes and communities.

Change the Narrative on the Preventability of Firearm Harms

There is a need for a normative shift in how people understand, prevent and respond to increasing firearm availability, firearm carrying in public places, and firearm harms. Work is needed to better communicate with the public about firearm safety and risks. Changing attitudes and beliefs about firearm ownership, safety, and the likelihood of surviving to adulthood may help reduce multiple drivers of injury.

Take a Whole-Government and Whole-Society Approach

Coordinated action aligned with scientific insight can accelerate harm reduction. Given the state-by-state variability in firearm deaths, states have the opportunity to lower the burden of firearm harms by modeling laws shown to be effective in other states.

Spark a Research Revolution on Preventing Firearm Harms

There is a need for more basic science, agent-based modeling, better measurement of intervention impacts in firearm research, and a framework to evaluate the effectiveness and necessity of new technologies and interventions in preventing firearm harms.

care for individuals and help them move from survival to thriving. This integration is crucial for addressing the structural issues that perpetuate violence in certain neighborhoods and includes leveraging spillover effects to amplify the impact of behavioral interventions across social networks, gangs, and neighborhoods, such as the Rapid Deployment and Development Initiative Chicago⁴⁸ and the Becoming A Man program.¹²⁹

Harness Regulatory and Technological Opportunities Responsibly

Emerging technologies are central to reaching a safer 2040. Encouraging innovations such as multibiometric personally authorized firearms and robotics, passive detection systems, and AI for upstream prevention hold promise but will require technological literacy and rigorous evaluation. It will be essential to work toward a consumer product approach for firearms to strengthen safety in homes and communities.^{105,106}

The integration of technology across programmatic, regulatory, economic, and training initiatives will be important to move the field forward. Understanding the adoption, affordability, equity, effectiveness, and unintended consequences of new technologies will be critical. A broad array of disciplines needs to be involved in reducing firearm harms—those with substantive mathematics and engineering expertise, cognitive neuroscience, philosophy and

ethics, and implementation science to name a few. Establishing robust partnerships across all sectors of society will help catalyze responsible technological innovation.

Developing frameworks for evaluation,¹³⁰ attending to how AI is trained so that it does not instill human biases, understanding where and how AI is embedded across technologies, and examining the nature of human-technology interactions to safely, ethically, and optimally achieve a safer society are key actions. Training about how AI can be used responsibly is needed for health care professionals, community violence workers, suicide interventionists, and all those working to prevent firearm harms. Robust funding of the intersecting fields of firearms, robotics, AI development, and other technologies is key to understand the complexities of their human use and to inform policy and regulatory development around their use.

Change the Narrative

Building support for solutions requires policymakers, the judiciary, and the public to see and understand the problem in new ways. To expand how people understand and discuss the issue, society needs a normative shift in how people understand, prevent, and respond to increasing firearm availability, firearm carrying in public places, and firearm harms. This is equally a criminal justice problem as well as an environmental, social, economic, and health and safety issue. Providing readily available examples of promising collaborative interventions across the socioecological spectrum will help reframe the idea that firearm harm can be prevented or mitigated.

Perceptions that crime is increasing remain steadfast even when it drops substantially.¹³¹ The drivers of this misperception and strategies that could better align perception and reality need to be better understood. Similarly, there is a persistent belief that law enforcement activities and more stringent punishment are the only ways to reduce community firearm violence. Highly focused and fair law enforcement, especially in strategic collaboration with street outreach, social services, and public health, can significantly reduce firearm violence when properly implemented. Scientific evidence shows that police departments can be effective in reducing firearm violence when adequately staffed and focused on the small number of people and places at greatest risk.¹³² While several promising studies show that law enforcement can disrupt illegal firearm markets and improve arrest rates for shootings,¹³³ additional policy experiments are needed to determine whether these actions reduce firearm violence.^{134,135} Moving forward, the policing profession needs to promote evidence-based strategies that minimize the costs and maximize the benefits of law enforcement. This requires members of law enforcement to respect individual rights and dignity and embrace community problem-solving principles when addressing the behaviors of people and places at risk of firearm violence.

Law enforcement has an important deterrence role, particularly when employing innovative behavioral interventions before violence erupts,⁸⁷ but it is vital that it complements, not crowds out, public health strategies. Focused deterrence strategies identify individuals and groups driving firearm violence and partner with community-based organizations and city agencies who can promptly provide key social services and supports to facilitate transitions away from violence.

Work is needed to better communicate with the public about firearm safety and risks. Changing attitudes and beliefs about fire-

arm ownership, safety, and the likelihood of surviving to adulthood may help reduce multiple drivers of injury. People's beliefs about firearm ownership and safety are often shaped by personal experience and biases and community-acquired knowledge about firearm acquisition and risky behavior. Yet, current media, including social media, rarely share messages about firearm safety and harm.¹³⁶

Narrative change about the preventability of firearm suicide is essential. The suicide prevention field has made strides in some areas of suicide deterrence, such as the installation of nets on bridges and lethal means counseling.¹³⁷ Unfortunately, stigma around firearm suicide remains high, and few (including health care professionals) understand or are empowered to act on temporary reduction of access to firearms among people at risk of suicide. Changing norms around talking about and acting to prevent the most common mechanism for death by suicide is essential.

Take a Whole-Government and Whole-Society Approach

The White House Office of Gun Violence Prevention, while short-lived (September 2023-January 2025), demonstrated that coordinated action aligned with scientific insight can accelerate harm reduction.¹³⁸ This has set a precedent for future administrations and inspired calls to establish a permanent interagency office. Its closure in January 2025 marked a significant shift in federal firearm violence prevention policy, but its accomplishments remain a model for ongoing efforts at the state and local levels.

Given the state-by-state variability in firearm deaths, states have the opportunity to lower the burden of firearm harms by modeling laws shown to be effective in other states. In a democratic society, self-governance requires that people work with others to improve communities they care about and believe that they can influence policymaking. Building grassroots organizations that develop civic capacity and organized constituencies for change is important. Committed individuals within organizations are vital in working within ever-changing political circumstances.¹³⁹ In such times, organized constituencies knowledgeable about firearm harms are important, have solutions to offer, and are motivated to advocate for them.

The next generation of leaders will need to work with and within government to turn data into actionable policy and foster democratic agency and civic engagement as upstream factors for healthier and safer communities. To maximize effectiveness, consistent funding for innovation, improved systems for timely and accurate data acquisition, rapid information dissemination, and community-lived experienced voices to generate public engagement are critical.

Spark a Research Revolution on Preventing Firearm Harms

The Summit called for more basic science, agent-based modeling, better measurement of intervention impacts in firearm research, and a framework to evaluate the nonnegotiables that determine the effectiveness and necessity of new technologies and interventions in preventing firearm harms. The field needs to capture other outcomes—not just reductions in victimization but also other metrics such as community well-being, civic participation, and broader health and social outcomes. To spark this research revolution, consistent and adequate federal and state funding is critical, and improved collection, analyses, and dissemination of actionable data at the local, state and federal level is needed.

Limited research has been conducted on scaling the full range of interventions that have some evidence in reducing firearm harms. Given the wide variation in states, localities, and communities, one of the core issues facing the implementation of a new intervention is whether something that worked elsewhere will work in a new setting. Successful scaling involves a different set of skills from designing and evaluating programs and requires new collaborative relationships of policymakers, communities, professional associations, and the private sector.¹⁴⁰

Conclusion

A safer world will require investing in the discovery, implementation, and scaling of solutions that reduce firearm harms and center on the people and communities most affected by firearm violence. The Summit participants are confident that these combined actions can lead to a safer world by 2040.

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