



Why We Need to Take a Public Health Approach to Gun Violence

The public health approach has been effectively applied to problems facing our society such as deaths and injuries from tobacco and motor vehicles. Such an approach focuses on injury prevention by examining interventions such as enhancing product safety, changing social norms, and passing new regulations and laws. It also engages with as many people and institutions as possible and emphasizes shared responsibility. We must apply such a public health approach to gun violence to reduce gun deaths, injuries and the devastation they cause.

Gun violence takes a devastating toll on U.S. society:

- Over 32,000 people in the U.S. are killed in firearms related fatalities every year in the U.S. ⁱ
- More than 80,000 people suffer nonfatal injuries from guns. ⁱⁱ
- In 2013, 33,563 people in the U.S. died from guns, and 84,258 were injured.
- In 2013, firearms were the third-leading cause of injury-related deaths nationwide, trailing only poisoning and motor vehicle accidents. ⁱⁱⁱ
- Each year, firearm deaths and injuries cost our society over \$174 billion. ^{iv}

Yet, firearms are the only consumer products that are not subject to any health or safety standards or government consumer product safety regulation.

There are many lessons to be learned from public health successes that have significantly reduced the number of deaths related to tobacco usage and motor vehicle crashes:

Tobacco Usage

- Between 1966 and 2010, the prevalence of cigarette smoking among U.S. adults was reduced by more than half, from 43% to 19%, through the combined effect of taxation, public education, and product regulation. ^v
 - Taxation discouraged consumption and raised revenue to help meet the long-term health costs of tobacco use.
 - Strategic use of media, education, celebrities, peers, teachers, and physicians shifted public perception of smoking from glamorous to harmful.
 - Product warning labels and physician counseling yielded greater awareness of health risks.
 - Federal regulation of the manufacturing, marketing and sale of tobacco products improved product safety.
 - Tobacco control programs and policies were responsible for preventing more than 795,000 lung cancer deaths in the United States from 1975 through 2000. ^{vi}

Motor Vehicle Fatalities

- Since the 1950s, motor vehicle fatalities per mile driven have fallen by 90% in the United States, due to the combined effect of government regulation and product safety improvements. The U.S. now has one of the lowest rates of death per vehicle-mile in the world. ^{vii}
 - Data and research identified injury trends and allowed for targeted interventions: for example, graduated licensure emerged in response to data on elevated risks among younger drivers.
 - Driver-oriented safety measures like licensing, speed limits, seat belt use, and drunk-driving laws were supplemented by product and environmental improvements like safety glass, padded interiors, air bags, crash cushions, anti-lock breaks, and highway medians.

- These broad-based safety and preventive measures proved far more effective in reducing collisions than an exclusive focus on individual drivers.
- Motor vehicle deaths in the U.S. declined from 42,624 in 1999 to 35,612 in 2013.^{viii}

Public Health Approaches to Combating Gun Violence

- Like motor vehicle injury and tobacco-related illness, gun violence can be reduced through common-sense preventive measures:
 - **National Violent Death Reporting System:** Like the Fatality Analysis Reporting System for motor vehicles, the National Violent Death Reporting System and other data-collection efforts could be expanded in order to identify trends in gun violence so resources can be directed to correct them.
 - **Firearm Product Safety Improvements:** Just as the auto industry introduced safer vehicles, gun manufacturers could improve product safety through measures like unique tamper-resistant serial numbers, magazine safety locks, childproof triggers, drop tests, recall authority, and microstamping (a.k.a. “DNA for guns”).
 - **Tougher Penalties for Safety Violations:** Legislation requiring stricter penalties for violations could deter gun violence through enhanced penalties for safety violations, as they did with drunk driving.
 - **Taxation:** As with tobacco-related injuries and deaths, taxation could help meet the societal health costs of gun violence and provide funding for safety programs.
 - **Media Messaging and Public Education:** Media outlets could change depictions of gun use in advertising and programming and conduct educational campaigns on the risks and consequences of gun violence, in the tradition of the tobacco control movement.
 - **Physician Education:** As with poison control and tobacco use, routine physician education and counseling could improve awareness of gun safety practices and curb at-risk behaviors.
 - **Universal Licensing and Background Checks:** As with motor vehicles, universal licensing and background checks, subject to periodic renewal, would ensure that users continue to meet safety standards.
 - **Firearm Marketing Regulations:** Just as the Food and Drug Administration regulates the manufacturing, marketing and sale of tobacco products, a designated regulatory body could be established to standardize the design, marketing and sales of firearms as well as regulating distribution and after-sales.
 - **Enhanced Oversight of Gun Dealers:** Just 1% of federally licensed gun dealers sell more than half of the guns recovered by police and traced to crimes. Improved dealer licensing, oversight and inspection would reduce illegal gun trafficking by such rogue gun dealers.
 - **Insurance:** Just as motor vehicle operators are required to obtain insurance, so could gun owners. When a driver has an accident, his or her insurance rate increases. Gun owners should be required to buy insurance and if their guns are stolen, used in homicides, or involved in accidental shootings, their insurance rates should increase and damages should be paid to the victim.

A public health approach applying these common-sense measures is an effective and practical way to reduce gun deaths and injuries.

ⁱ Hoyert DL, Xu J. Deaths. Natl Vital Stat Rep. 2012;61(6):1-65.

ⁱⁱ Nat'l Ctr. for Injury Prevention & Control, U.S. Centers for Disease Control and Prevention, *Web-Based Injury Statistics Query & Reporting System (WISQARS) Injury Mortality Reports, 1999-2013, for National, Regional, and States (2014)*, http://webappa.cdc.gov/sasweb/ncipc/dataRestriction_inj.html Note: Users must agree to data use restrictions on the CDC site prior to accessing data.

ⁱⁱⁱ Nat'l Ctr. for Injury Prevention and Control, U.S. Centers for Disease Control and Prevention, *Web-Based Injury Statistics Query & Reporting System (WISQARS) Leading Causes of Death Reports, 1999-2013, for National, Regional, and States (RESTRICTED)*, at http://www.cdc.gov/injury/wisqars/leading_causes_death.html.

^{iv} Ted R Miller, PhD, Principal Research Scientist, Children's Safety Network Economics and Data Analysis Resource Center, at Pacific Institute for Research and Evaluation, December 2012 miller@pire.org, 240-441-2890; <http://www.pire.org/documents/GSWcost2010.pdf>

^v Centers for Disease Control and Prevention (CDC). Vital signs: current cigarette smoking among adults aged ≥ 18 years—United States, 2005-2010. *MMWR Morb Mortal Wkly Rep.* 2011; 60(35):1207-1212.

^{vi} National Institutes of Health; <http://www.nih.gov/news/health/mar2012/nci-14.htm>.

^{vii} Hemenway D. The public health approach to motor vehicles, tobacco, and alcohol, with applications to firearms policy. *J Public Health Policy.* 2001;22(4):381-402.

^{viii} Nat'l Ctr. For Injury Prevention & Control, U.S. Centers for Disease Control and Prevention, Web-Based Injury Statistics Query & Reporting System (WISQARS) Injury Mortality Reports, 1999-2013, for National, Regional, and States (2014), http://webappa.cdc.gov/sasweb/ncipc/dataRestriction_inj.html. Note: Users must agree to data use restrictions on the CDC site prior to accessing data.