
A “Call to Arms” for a National Reporting System on Firearm Injuries

The first step in addressing any public health problem is collecting the data that help you describe the extent and nature of the problem. This requires systematic surveillance.

Christoffel and Gallagher¹

Recent shootings at schools in Mount Morris, Mich; Littleton, Colo; Jonesboro, Ark; and other cities have riveted public attention. The attention is well deserved, given the seriousness of the tragedies and the youth of both

victims and assailants. The total number of victims in school shootings each year, however, is typically less than one day's death toll attributable to firearms in the United States. Every day in the United States, about 90 peo-

ple are killed with guns in suicides, homicides, and accidents, and another 175 are injured.²

Through news reports, we learn much about the boys and young men who carried out these school shootings, the weapons they used, how they were acquired, and what sparked the attacks—far more than we know about the roughly 30 000 other firearm deaths that occur annually. The United States, whose firearm injury death rate is 5 to 10 times higher than that of other industrialized countries, does not have a national reporting system to track the incidence and characteristics of these tragic events with the detail needed to help us learn how to reduce gun injuries. Although gun suicides outnumber gun homicides, the information on suicide and accidental gun deaths is even sparser than that available on homicides.

A Reporting System for Fatal Firearm Injuries

Ongoing data about the factors surrounding gun injuries are crucial to understanding the problem, designing strategies to address it, and evaluating whether those strategies work. The enormous benefits that can be provided by such a data system are well known in the field of motor vehicle safety. The National Highway Traffic Safety Administration has created data systems on vehicle crashes (most notably the Fatality Analysis Reporting System [FARS]) that have permitted the scientific evaluation of a wide variety of interventions, such as drunk driver legislation, child restraint laws, and vehicle crash survivability standards. Ralph Hingson, executive vice president of policy for Mothers Against Drunk Drivers (MADD), recently stated, “There’s no question that much of the progress we’ve made on drunk driving couldn’t have happened without FARS. We used it as the ruler against which to evaluate what was working and what was not.”³

FARS has been so useful because the data collected are comparable across jurisdictions and are readily available to researchers for analysis. We need an analogous system for firearm injuries, a system that, like FARS, is coordinated and funded at the national level with data collection occurring at the state level, where many of the programs and policies aimed at preventing injuries are administered.

Debates about firearm policy, in contrast to motor vehicle policy, are currently driven more by rhetoric than by data, in part because the data simply do not exist. For example, while legislators frequently consider proposals to reduce the availability of broad classes of firearms, such as so-called “Saturday night specials” and assault weapons, we have no way to measure how many people are shot or killed with these weapons or whether those numbers

have risen or fallen following legislative action. Trigger lock mandates have been proposed in some states to reduce children’s unauthorized access to guns. Yet we do not have a system that can tell us how many children are wounded in gun accidents in each state, let alone what specific circumstances and weapon types were involved. A national, state-based reporting system would give us the answers to these and other questions and provide the basis for objectively evaluating public policies aimed at reducing the nation’s firearm injury problem.

Pilot-Testing a National Reporting System

A promising step toward developing a national firearm injury reporting system occurred in 1994, when the Centers for Disease Control and Prevention (CDC) provided funding for 7 states to develop local data collection systems.⁴ However, funding for the system was withdrawn in 1997 after a campaign by groups lobbying to curtail CDC’s involvement in gun research. Since then, private foundations have stepped in as a temporary measure to support surveillance efforts. The Joyce Foundation, the Open Society Institute, the John D. and Catherine T. MacArthur Foundation, the Annie E. Casey Foundation, the David and Lucile Packard Foundation, and the Irene Diamond Fund have supported the newly established National Firearm Injury Statistics System (NFISS) at Harvard University. NFISS is providing funds to 9 local injury reporting programs. The programs are participating in a joint effort of NFISS and the Medical College of Wisconsin to develop and test a model uniform reporting system for fatal firearm injuries, an analog to FARS.

The pilot system is collecting data on deaths occurring in the year 2000 in 6 states and several metropolitan areas. Information on characteristics of the victims, suspected shooters, precipitating circumstances, and firearms is being gathered. Much of the information sought in an ideal reporting system is already contained in existing coroners’ and medical examiners’ reports, police reports, death certificates, and crime lab reports, but these documents are stored in disparate file drawers and incompatible computer programs. The pilot system assembles this information, stripped of personal identifiers, into one uniformly coded electronic database. The goal is to expand this pilot system into a national, state-based system that will become the responsibility of a federal agency. A longer-range goal is to extend the system in 2 directions: to include all homicides and suicides, regardless of injury mechanism (e.g., stabbing or overdose), and to include non-fatal weapon injuries as well.

We are not alone in advocating such a reporting system. A proposal for a firearm fatality reporting system appeared in the CDC’s *Cost of Injury* report to Congress in 1989 and in the *Journal of the American Medical Association* in 1992 and 1996.^{5–7} Researchers at the Medical College of Wisconsin have already demonstrated the feasibility of such a system in one locale.⁸ A recent report of the Institute of Medicine, *Reducing the Burden of Injury*, calls for a national reporting system for intentional injury deaths.⁹

Lessons From State and Local Surveillance Systems

Existing local surveillance programs already provide evidence of the utility of objective data in better understanding the problem, planning prevention strategies, and evaluating those strategies. Listed below are some examples.

Understanding the Problem

The distribution of gunshot wound victimizations in New York City’s neighborhoods in the 1990s—documented by the New York City Health Department’s emergency department reporting system¹⁰—followed a contagion model, with gun violence in one neighborhood spreading to bordering neighborhoods. There was no similar contagion effect for knife assaults. Reducing the number of guns used in crime in one area may have beneficial spillover effects on neighboring areas.

Informing Prevention Strategies

Data from emergency department-based reporting systems, such as those operated by the Massachusetts Department of Public Health¹¹ and the Emory University Center for Injury Control,¹² have been used by local police departments to identify gun violence “hot spots”—specific neighborhoods to be targeted for intensive enforcement and homicide reduction initiatives.

Researchers from the Emory University Center for Injury Control analyzed more than 100 fatal and nonfatal unintentional gunshot injuries and learned that approximately 40% could have been prevented if guns in the home had been made inaccessible to children and if all new handguns had been required to incorporate basic safety features.

Evaluating Policies and Programs

Five specific gun makes were identified as accounting for almost 50% of the fatalities in the Milwaukee area, according to the Medical College of Wisconsin’s Fatal Firearm Injury

Reporting System.¹³ These makes accounted for only 6% of the guns turned in during the Milwaukee gun buyback program. The buyback program may have been beneficial in other respects, but it had no significant impact on the weapons most commonly linked with fatal shootings.

In the Milwaukee area, gun types targeted by the Clinton Crime Bill of September 1994 (18 USC 922) were involved in 9% of the homicides that occurred between 1991 and September 1994, according to the Medical College of Wisconsin's reporting system.¹⁴ After the Crime Bill became law, between September 1994 and the end of 1996, these gun types were still involved in 9% of homicides, providing some evidence that the Crime Bill's provisions had no measurable impact.

A Call to Arms

Existing systems show the promise of a national reporting system for informing rational gun policy. To realize this promise, public health advocates should encourage state and city governments to develop or expand firearm or intentional injury reporting systems. These integrated systems should include data from death certificates, medical examiners' reports, police reports, crime laboratories, and hospitals, and they should be designed to protect the confidentiality of injury victims. In addition, public health advocates should encourage the federal government to assume its proper role as the national coordinator of a uniform, ongoing national firearm injury reporting system, with funding and coordination provided by a federal agency and data collection occurring at the state level.

Improved collection of data about our firearm problem is a goal that deserves support from participants on all sides of the public debate on gun policy. An editorial appearing in the *Milwaukee Journal Sentinel* sums up the need for the information: "Since 1980, there have been only 137 polio cases in the United States while an estimated 120,000 Americans are injured or killed every year by

firearms. Yet government does a better job of tracking polio. That's appalling and must change if this country is going to effectively and fairly address the problem posed by misuse of firearms."¹⁵ □

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