DEATH BY THE BARREL
T HIS PARTICULAR GUN STORY took place, ironically enough, at the 1997 convention of the American Public Health Association in Indianapolis. There, among a group of white-collar professionals and academics, a seemingly minor incident quickly led to mayhem. While eating dinner at the Planet Hollywood restaurant, a patron bent to pick something up from the floor. A small pistol fell from his pocket, hit the floor, and went off. The bullet struck and injured two convention delegates waiting to be seated; both women went to the hospital.

"Why manufacture guns that go off when you drop them?" asks professor of health policy David Hemenway '66, Ph.D. '74. "Kids play with guns. We put childproof safety caps on aspirin bottles because if kids take too many aspirin, they get sick. You could blame the parents for gun accidents but, as with aspirin, manufacturers could help. It’s very easy to make childproof guns."

Logic like this pervades Hemenway’s new book, Private Guns, Public Health (University of Michigan Press), which takes an original approach to an old problem by applying a scientific perspective to firearms. Hemenway, who directs the Harvard Injury Control Research Center at the School of Public Health (www.hsph.harvard.edu/hicrc), summarizes and interprets findings from hundreds of surveys and from epidemiological and field studies to deliver on the book’s subtitle: A Dramatic New Plan for Ending America’s Epidemic of Gun Violence. The empirical groundwork enables Hemenway, whose doctorate is in economics, to sidestep decades of political arm-wrestling over gun control.

"The gun-control debate often makes it look like there are only two options: either take away people’s guns, or not," he says. "That’s not it at all. This is more like a harm-reduction strategy. Recognize that there are a lot of guns out there, and that reasonable gun policies can minimize the harm that comes from them."

Hemenway’s work on guns and violence is a natural evolution of his research on injuries of various kinds, which he has pursued for decades. (In fact, it could be traced as far back as the 1960s, when, working for Ralph Nader, L.L.B. ’58, he investigated product safety as one of “Nader’s Raiders.”) Hemenway says he doesn’t have a personal issue with guns; he has shot firearms, but found the experience “loud and dirty—and there’s no exercise”—as opposed to the “paintball” survival games he enjoys, which involve not only shooting but “a lot of running.” He also happens to live in a state with strong gun laws. “It’s nice,” he says, “to have raised my son in Massachusetts, where he is so much safer.”

STATISTICALLY, the United States is not a particularly violent society. Although gun proponents like to compare this country with hot spots like Colombia, Mexico, and Estonia (making America appear a truly peaceful kingdom), a more relevant comparison is against other high-income, industrialized nations. The percentage of the U.S. population victimized in 2000 by crimes like assault, car theft, burglary, robbery, and sexual incidents is about average for 17 industrialized countries, and lower on many indices than Canada, Australia, or New Zealand.

"The only thing that jumps out is lethal violence," Hemenway says. Violence, put H. Rap Brown, is not "as American as cherry pie," but American violence does tend to end in death. The reason, plain and simple, is guns. We own more guns per capita than any other high-income country—maybe even more than one gun for every man, woman, and child in the country. A 1994 survey numbered the U.S. gun supply at more than 200 million in a population then numbered at 262 million, and currently about 35 percent of American households have guns. (These figures count only civilian guns; Switzerland, for example, has plenty of military weapons per capita.)

“It’s not as if a 19-year-old in the United States is more evil than a 19-year-old in Australia—there’s no evidence for that,” Hemenway explains. "But a 19-year-old in America can very easily get a pistol. That’s very hard to do in Australia. So when there’s a bar fight in Australia, somebody gets punched out or hit with a beer bottle. Here, they get shot.”

In general, guns don’t induce people to commit crimes. "What guns do is make crimes lethal," says Hemenway. They also make suicide attempts lethal: about 60 percent of suicides in America involve guns. "If you try to kill yourself with drugs, there’s a 2 to 3 percent chance of dying," he explains. "With guns, the chance is 90 percent."

Gun deaths fall into three categories: homicides, suicides, and accidental killings. In 2001, about 30,000 people died from gunfire in the United States. Set this against the 43,000 annual deaths from motor-vehicle accidents to recognize what startling carnage comes out of a barrel. The comparison is especially telling because cars are a way of life,” as Hemenway explains. "People use cars all day, every day—and ‘motor vehicles’ include trucks. How many of us use guns?"

Suicides accounted for about 58 percent of gun fatalities, or 17,000 to 18,000 deaths, in 2001; another 11,000 deaths, or 37 percent, were homicides, and the remaining 800 to 900 gun
deaths were accidental. For rural areas, the big problem is suicide; in cities, it’s homicide. (“In Wyoming it’s hard to have big gang fights,” Hemenway observes dryly. “Do you call up the other gang and drive 30 miles to meet up?”) Homicides follow a curve similar to that of motor vehicle fatalities: rising steeply between ages 15 and 21, staying fairly level from there until age 65, then rising again with advanced age. Men between 25 and 55 commit the bulk of suicides, and younger males account for an inflated share of both homicides and unintentional shootings. (Males suffer all injuries, including gunshots, at much higher rates than females.)

Though assault weapons have attracted lots of publicity from Hollywood and Washington, and NRA stands for National Rifle Association, these facts mask the reality of the gun problem, which centers on pistols. “Handguns are the crime guns,” Hemenway says. “They are the ones you can conceal, the guns you take to go rob somebody. You don’t mug people at rifle-point.”

And America is awash in handguns. Canada, for example, has almost as many guns per capita as the United States, but Americans own far more pistols. “Where do Canadian criminals, and Mexican criminals, get their handguns?” asks Hemenway. “From the United States.” Gang members in Boston and New York get their handguns from other states with permissive gun laws; the firearms flow freely across state borders. Interstate 95, which runs from Florida to New England, even has a nickname among gun-runners: “the Iron Pipeline.”

**The ways in which people die by guns** would not make a good television cop show. Rarely does a suburban homeowner beat a burglar to the draw in his living room at 3 a.m. Few urban pedestrians thwart a mugger by brandishing a pistol. “We have done four surveys on self-defense gun use,” Hemenway says. “And one thing we know for sure is that there’s a lot more criminal gun use than self-defense gun use. And even when people say they pulled their gun in ‘self-defense,’ it usually turns out that there was just an escalating argument—at some point, people feel afraid and draw guns.”

Hemenway has collected stories of self-defense gun use by simply asking those who pulled guns what happened. A typical story might be: “We were in the park drinking. Drinking led to arguing. We ran to our cars and got our guns.” Or: “I was sitting on my porch. A neighbor came up and we got into a fight. He threw a beer at me. I went inside and got my gun.” Hemenway has sent verbatim accounts of such incidents to criminal-court judges, asking if the “self-defense” gun use described was legal. “Most of the time,” he says, “the answer was no.”

Ask criminals why they carried a gun while robbing the convenience store and frequently the answer is, “So I could get the money and not have to hurt anyone.” But as Hemenway explains, “Then something happens. Maybe somebody unexpectedly walks in, or the storeowner draws a gun. Your heart is racing. Next thing you know, somebody is dead.”

Researchers have interviewed adolescents in major urban centers, where many inner-city kids carry guns. When asked why, the reason they most often give is “self-defense,” adding that getting a gun is easy, something one can often do in less than an hour. Yet when researchers asked a group of teenagers, more than half of whom had already carried guns, what kind of world they would like to live in, Hemenway says that almost all of them replied, “One where it’s difficult or impossible to get a gun.”

Most murderers are not hired killers. Instead, killings happen during fights between rival gangs or angry spouses, or even from road rage, and leave deep regret in their wake. “How often might you appropriately use a gun in self-defense?” Hemenway asks rhetorically. “Answer: zero to once in a lifetime. How about inappropriately—because you were tired, afraid, or drunk in a confrontational situation? There are lots and lots of chances. When your anger takes over, it’s nice not to have guns lying around.”

Many suicides, similarly, are impulsive acts. Follow-up interviews with people who survived jumping off the Golden Gate Bridge reveal that few of them tried suicide again. One survivor volunteered this epiphany after jumping: “I realized that all the problems I had in life were solvable—except one: I’m in midair.” In the United States, suicide rates are high in states with an abundance of guns—southern and western mountain states, for example—and lower in places like New Jersey, New England, or Hawaii, where guns are relatively scarce. Nine case-control studies have shown that guns in the house are a risk factor for suicide. Firearms turn the agonizing into the irreversible.

**Virtually all industrialized nations** have stronger firearms laws than the United States. We have no national law, for example, requiring a license to own a gun (though some states require one). Almost all other countries have licensure laws, and many demand that gun owners undergo training, also not required here. Hemenway scoffs at the rote objection, “A determined criminal will always get a gun,” responding, “Yes, but a lot of people aren’t that determined. I’m sure there are some determined yacht buyers out there, but when you raise the price high enough, a lot of them stop buying yachts.”

In most of these United States, many types of gun sale trigger neither a background check nor a paper trail. “You can go to a gun show, flea market, the Internet, or classified ads and buy a gun—no questions asked,” Hemenway says. It is illegal to sell a firearm to a convicted felon or for criminal purposes, although sting operations have proved that some licensed vendors flout even this proscription. “In 1998, police officers from Chicago (where possessing a new handgun is illegal) posed as local gang members and went firearms shopping in the suburbs,” Hemenway writes. “In store after store, clerks willingly sold powerful handguns to these agents, who made it clear that they intended to use these guns to ‘take care of business’ on the streets of Chicago.”

Some civil lawsuits have targeted gun manufacturers, seeking

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**DEATH COMES EARLY**

| Homicide, suicide, and unintentional gun deaths among 5- to 14-year-olds: the United States and 25 other high-income populous countries, early 1990s (rates per 100,000) |
|---|---|---|---|
| **United States** | **Other Countries** | **Ratio** |
| Gun homicides | 1.22 | 0.07 | 17 to 1 |
| Non-gun homicides | 0.53 | 0.23 | 2 to 1 |
| Gun suicides | 0.49 | 0.05 | 10 to 1 |
| Non-gun suicides | 0.35 | 0.35 | 1 to 1 |
| Unintentional firearm deaths | 0.46 | 0.05 | 9 to 1 |


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**Tables by Stephen Anderson**
damages for the death and disability resulting from the use of firearms. In one sense, such plaintiffs are in the bizarre position of suing manufacturers for making products that perform as advertised. Yet there may be parallels to the legal assault on tobacco, another product that can be lethal when used as directed. “For decades, there were no plaintiff victories beyond the appellate level” in the tobacco litigation, Hemenway notes. “Reasonable suits might allege things that the manufacturers could do to make guns safer.”

Many such changes are possible. Fairly small tweaks in design and engineering could save countless human lives—in much the same way that the 1985 law requiring a third brake light (the upper back light) on cars reduced rear-end collisions. For starters, making childproof guns is, well, child’s play. Even a century ago, gunsmiths made pistols that would not fire unless the shooter put extra pressure on the handle while pulling the trigger, a required strength beyond that of a child’s hand.

Many times a teenaged boy will find a gun such as a semi-automatic pistol in his home and, after taking out the ammunition clip, assume that the gun is unloaded. He then points the pistol at his best friend and playfully pulls the trigger, killing the other kid. He then rediscovered the gun, more so that the trigger—fact that more than 90 percent of the boys in the latter groups had received gun-safety instruction.

Hence product redesign may do more good than safety education. Hemenway suggests such changes as a magazine safety, so that when you remove the clip, the gun does not work. Or make guns that visually indicate if they are loaded—just like you can tell if there is film in a camera.” A different design solution could help police, who often find that guns recovered from crime scenes are untraceable because it’s “pretty easy to obliterate the serial number,” Hemenway notes. “Often you can just file it off. You could make it hard to remove a serial number. You won’t eliminate the problem, but you can decrease it.”

One of Hemenway’s main goals is to help create a society in which it is harder to make fatal blunders. He compares it to cutting down on speeding autos. “You can arrest speeders, but you can also put speed bumps or chicanes [curved, alternating-side curb extensions] into residential areas where children play. Just as you can revoke the license of bad doctors, but also build a medical environment in which it’s harder to make an error, and the mistakes made are not serious or fatal.”

Yet even if such interventions became public policy, there would be no way to evaluate their impact without meaningful data. Consider the 1994 law that bans assault weapons, which is due to expire this year. “We don’t know if homicides have gone up, down, or stayed the same as a result of this law,” Hemenway says. “Or take unintentional gun deaths, of which there are about two a day. We don’t know if they tend to occur indoors or outdoors, whether the victim is the shooter or another person, whether they involve long guns or handguns, if they occur in the city or country, or if patterns have changed over time.”

This ignorance about gun deaths stands in sharp contrast to the wealth of useful data available on motor-vehicle fatalities, for which more than 100 pieces of information per death are collected consistently in every state. Shortly after its creation in 1966, the predecessor of the National Highway Traffic Safety Administration began to record information like the make, model, and year of the car, speed limit and speed of car, where people were sitting, use of seatbelts and more recently airbags, weather conditions—these data and many more are available to researchers on the Web. Consequently, Hemenway says, “We know what works. We know that speed kills, so if you raise speed limits, expect to see more highway deaths. Motorcycle helmets work; seat belts work. Car inspections and driver education have no effect. Right-on-red laws mean more pedestrians hit by cars.”

This kind of detailed information allows researchers to statistically evaluate the effects of laws. Regarding those right-on-red laws, for example, Hemenway explains, “If you only [tracked] traffic deaths, you wouldn’t see this pattern. You need data on pedestrian deaths, and pedestrian deaths at intersections!”

In 1998, Hemenway and the Harvard Injury Control Research Center launched the pilot for what has become the National Violent Death Reporting System (NVDRS) in an attempt to assemble a similar database documenting violent deaths, including those by firearms. They funded 10 sites to organize a consistent, comparable set of data, using information that already existed. Vital statistics like age and sex were commonly available. The police have a good system for homicide data. Medical examiners’ (coroner’s) reports are a rich source of information but are not part of any system and aren’t linked to anything else; the same is true of crime lab reports. The new system will also provide important suicide data. (Currently, once a death is defined as a suicide, the police investigation ends, so “all we have are death certificates,” says Hemenway. “They tell you nothing about the circumstances.”)

Two years ago, the Centers for Disease Control (CDC) took over administration of NVDRS; Hemenway estimates that funding the whole system for all 50 states would cost about $20 million. He will continue this work, but he is also getting involved with international firearms problems. Although high-income countries (other than the United States) generally don’t have severe gun problems, the developing world faces major issues with guns in places like Jamaica, Colombia, and South Africa. The goal at home and abroad, he says, is “to make sure the guns we have are safe, and that people use them properly. We’d like to create a world where it’s hard to make mistakes with guns—and when you do make a mistake, it’s not a terrible thing.”

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