When I was growing up in the 1950s, cars did not have seat belts, shatterproof windows, collapsible steering columns, or air bags. In high school, when schoolmates of mine died in automobile accidents, people said they were driving too fast or too carelessly. Perhaps this was no surprise, it was thought, for, after all, they were teenagers.

In the late 1960s, I went to work for Ralph Nader, then at the height of his engagement with the automobile industry, and subsequently I became the Washington correspondent for Consumers Union. One of my first tasks was to interview the director of a new agency—now called the National Highway Traffic Safety Administration—that was responsible for improving the safety of motorists. Bill Haddon, M.D., M.P.H., one of the pioneers in the field of injury prevention, talked with me for hours about the science of injury prevention and the goals of his new bureau. After working with Nader and talking to Haddon, I began to realize that my schoolmates would probably still be alive if the cars in which they were riding were more forgiving of human error and bad judgment.

In 1975, after receiving a Ph.D. in economics, I took a job at the public health school that had trained Haddon. During the 1980s, inspired by both Haddon and Nader, I created a course that dealt with our scientific knowledge about injuries and its implications for public policy. Although injuries kill far more young people than do diseases, there were then only a couple of injury prevention classes in the entire country. Following a mid-1980s Institute of Medicine report that highlighted both the size of the U.S. injury problem and the lack of support for the field, an injury-control division was established at the Centers for Disease Control and Prevention (CDC). Only then did injury prevention start to become an integral part of public health practice.

Injuries include stairway falls, drownings, poisonings, child abuse, suicides, sports injuries, motor vehicle crashes, and firearm violence. Of these, motor vehicles and firearms are the leading agents of injury death in the

United States, with vehicles first and guns a close second. But while motor vehicles are used by almost everyone, every day, throughout the country and are crucial for our standard of living, the same is not true of firearms. And while a great deal of injury research deals with cars and trucks, until the late 1980s only a minuscule amount of research was devoted to firearm injuries.

Things have changed in the past decade. The public health community is now conducting a substantial amount of research on firearm injuries. This book seeks to provide a synopsis of this growing scientific literature, to describe the public health approach for reducing this injury problem, and to offer an overview of reasonable and feasible policies to reduce gun-related injury and death that such an approach suggests.

The mission of public health is the attainment for all peoples of the highest possible level of health—a state of complete physical, mental, and social well-being. Considering that each year tens of thousands of Americans die from gunshot wounds, the reduction of firearm injuries—and the reduction of the accompanying dread and fear of firearm violence—is clearly within the purview of public health.

Public health is prohealth; it is not anti-stairs, anti-swimming pools, anticars, or anti-guns. Unfortunately, many people who lobby for uncontrolled gun access dichotomize the world—into "progun" and "antigun," "us" and "them," "good guys" and "bad guys," "criminals" and "decent, law-abiding citizens." Dividing people into such categories is anathema to public health, whose mission is to unite diverse groups of people and to improve the health—and the conditions that promote health—for all peoples.

Public health is not anti–gun owner. A little more than one-third of American households currently contain working firearms, and the principal factor affecting whether someone becomes a gun owner is not any personality trait but simply whether the individual was raised in a gun-owning household. Polls show that the policies suggested in this book receive overwhelming support from gun owners and non–gun owners alike.

The text describes the public health approach to injury prevention. The effects of firearms on public health are broad and include both intentional and unintentional shootings, both self-inflicted and inflicted by others. The public health approach encompasses criminal justice (which focuses on homicide and other intentional other-inflicted gun uses), mental health (which focuses on suicide and some aspects of criminal gun use), and safety (which focuses on unintentional shootings). My interest is on the most important public health effects of firearms. Thus, this book does not examine

some of the benefits of shooting, such as the social or recreational benefits, or all the costs, such as the loss of hearing of recreational shooters (Nondahl et al. 2000; Stewart, Konkle, and Simpson 2001) or the environmental lead poisoning caused by shooting ranges (Environmental Working Group 2001). The book also does not examine gun use in wars or by the police.

The book prescribes some specific policies that should reduce injuries from firearms. These policies would do little to affect the limited safety benefits derived from firearms but would substantially reduce the major health and human problems. It is shameful that tens of thousands of Americans die needlessly from guns each year while our gun policy is driven more by rhetoric than scientific information.

The book summarizes the scientific literature on the public health effects of firearm availability and firearm policies. It is important to recognize that no single piece of research is definitive. Only the cumulative effort of many studies leads to increased knowledge and understanding of the real world. Each study has limitations; journal articles in medicine and public health require that authors identify the main aspects of the study that limit the generalizability and validity of the findings. Articles in journals outside of public health do not always include such caveats.

A few articles are discussed in some depth in appendix A. These articles have typically been selected for more intensive analysis because (1) they have received a large amount of publicity, (2) the authors provide little if any discussion of the studies' limitations, and (3) the limitations are so substantial that they often tend to invalidate the authors' strong conclusions.

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The book emphasizes the need for better data. Unfortunately, when the book was completed in the spring of 2003, disaggregated data on firearm deaths were available only through 2000. Thus, much of the discussion here deals with the decade ending in 2000.

I had many reasons for writing this book. The most important were that there did not exist a good summary of the firearms literature from a public health perspective and that many public commentators did not appear to understand the public health approach. But what propelled me most was a 1995 *International Herald Tribune* article that had little to do with crime or injury:

MAMARONECK, NY: When the Canada geese were just passing through, in that lovely "V" formation, people here actually liked them. This was obviously before "Honk if you hate geese" bumper stickers, and way before village officials decided the birds should be shot.

It seems the geese just didn't know when to leave. All of Harbor Island Park—the beach, the docks, the fields—became saturated with their most unwelcome calling cards.

They had just about exhausted the public's good will and stumped village officials, who obtained a federal permit to allow hunters a crack at the problem. (Nieves 1995)

Fortunately, before the shooting started, the town tried an alternative approach. They hired a dog trainer with a couple of border collies, who successfully chased the birds away.

For me, the story illustrated an important point—the immediate reaction to a problem for many people in the United States is to get a gun. Yet it turns out that this response can often exacerbate the problem, while other actions may be far more effective.

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David Hemenway September 2003