VIOLENCE: AMERICA'S UNCIVIL WAR—PRESIDENTIAL ADDRESS, SIXTH SCIENTIFIC ASSEMBLY OF THE EASTERN ASSOCIATION FOR THE SURGERY OF TRAUMA

C. William Schwab, MD

HERE WE STAND just a few days from the inauguration of our 42nd President of the United States; a presidency that was won on a platform that called for "change" to set America straight on a new path toward goodness, righteousness, and justice for all. Our society, it seems, wanted new leadership—despite a decade that is unparalleled in history for world-wide change. Today, we enjoy less risk of full-scale international war than ever before. Yet at a time when Americans have never been as safe from the threat of nuclear war, we are at the greatest risk of harming ourselves and each other. Violence-doing harm and killing one another-is at epidemic proportions, and I hope to convince all of you that it is worse in scale than any previous war, and is truly American and grotesquely uncivil in its characteristics. It is a widespread epidemic in all communities, passively accepted by us, inspired by the media, no longer confined to our streets, no longer a minority problem no longer a their problem. It is our problem.

Let me start by trying to define the magnitude of the problem. It is not simple, because there is no central repository for data on violence and largely we have to use violent crime as a measure. Of the violent crimes, those that result in death—homicide, suicide, and aggravated assault—provide the best and possibly only quantitative data. Our best source comes from murder.

Murder occurred at an all-time high rate in 1991, with 24,703 murders. That was a 5.4% increase since 1990. Although the murder rate was up 6% in our major cities, the largest increase, 21%, was registered in medium-sized cities. But even suburban and rural America felt the surge of man killing man. In a more dramatic view, over a 5-year period, the United States experienced a 23% increase in the murder count. Who were these people? About 80% were males and 50% were between the ages of 15 to 34 years, thus showing a disproportionate toll on our nation's young. By race, 50 of every 100 victims were black and 47 of every 100 were white.

As in all previous years, firearms, specifically handguns—a truly American culture characteristic—domi-



C. William Schwab, MD

nated as murder weapons. In fact, a firearm was used in seven of ten murders, with 55% of the total deaths resulting from handguns.

I will return to firearms in a minute, but I want to complete my description of the magnitude of the murder epidemic in our country, and I remind you that homicide is only the tip of the iceberg. Almost half of the murder victims in 1991 knew their murderer, and 34% were acquainted with their assailants; 12% were members of the same family; 28% of the murders of women were by husbands or boyfriends; arguments resulted in 32% of homicides, whereas only a fifth occurred as a result of criminal activity such as during a robbery or an arson attempt. As to the offenders, where data are available 55% of all those arrested for murders were under the age of 25 years. In fact, currently one third of all the violent crimes nationwide are committed by adolescents, people under the age of 21 years!

Murder is the tenth leading cause of death in the United States. Homicide ranks third among people 15 to 34 years of age. But even more striking, it is the leading cause of death for young black men, and recently the lifetime risk of homicide for black men in this country

C. William Schwab, MD

Presented at the Sixth Annual Scientific Assembly of the Eastern Association for the Surgery of Trauma, January 14–16, 1993, Longboat Key Florida

Address for reprints: C.W. Schwab, MD. University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania 19104.

The Journal of Trauma

November 1993

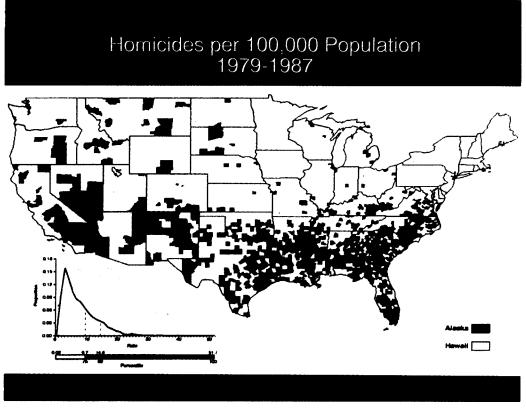


Figure 1. Homicides in the United States per 100,000 population, 1979–1987.

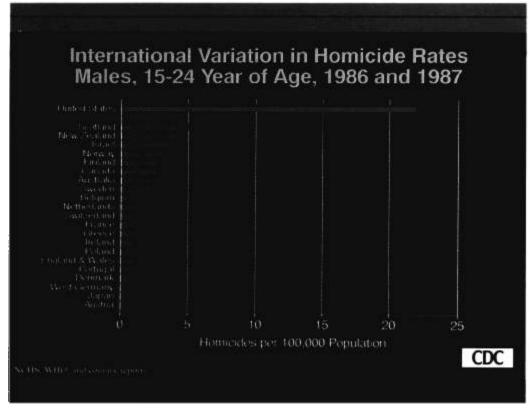


Figure 2. Comparison of homicide rates by country.

was calculated at a rate of 1 in 21! These trends are not population linked. For comparison, the United States population increased by 20% from 1960 to 1980 and the homicide rate from guns alone increased by 160%. These

are not urban based. This CDC map shows diffuse involvement throughout America (Fig. 1). This map displays the concentrations of murder by community for a 10-year period ending in 1987. The red, blue, and white

9-mm Pistols

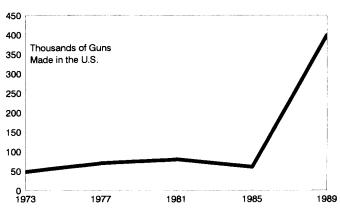


Figure 3. Escalation in production of 9-mm semiautomatic pistols.

each signify a different percentile, with red representing communities having the highest incidence, that is, they rank above the 90th percentile for murders with a rate of 14.6–51.7 homicides per 100,000. The blue areas are the communities that rank between the 75th and 89th percentiles or 9.7–14.6 deaths per 100,000, and the white areas are those with significant numbers of deaths with a range of 0.02–9.7 per 100,000 (9.4 per 100,000 being the national average). If I had the 1990 or 1991 data figures, we might all be impressed at the spread of coloration. By comparison with other industrialized societies, the murder rate in the United States is six times that of Europe and seven times that of Japan (Fig. 2).

Time does not allow me to discuss each type of violent act, but the national trends for suicide, firearm assaults, rape, spouse abuse, child abuse, elder abuse, and on and on and on, are just as sickening and deplorable. We Americans are at war with ourselves—friend against friend, man against woman, brother against brother. Uncivil, this epidemic surely is!

Possibly the most American feature of this war, after its immense proportion, is the type of weaponry being used. As a nation, we are scaling down our military. As a population, we are arming up, and, as I have shown, harming ourselves at an astronomical rate. As an industry, the United States leads the world in the manufacturing of weapons and firearms, and at home handguns are the most popular and profitable. Each year the number of handguns and firearms for sale swells by about 5 million, of which one half are handguns. The National Rifle Association (NRA) proudly now estimates that currently there are about 210 million cartridge firing weapons in the United States; 65 million handguns, 70 million rifles, and 70 million shotguns. Of these, 30 million are semi-automatic (most commonly 9-millimeter handguns). Two out of every three households in the United States have a firearm. Is it any wonder that death by bullet is an epidemic!

The interdependence between the soaring homicide

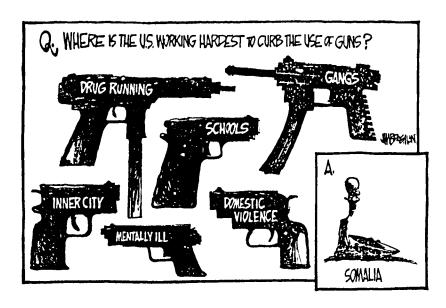
and suicide rates and firearms is supported by sound evidence. The fact is that the availability of a firearm almost guarantees that violence will be lethal! In an article in *The New England Journal of Medicine* entitled, "Handgun Regulations, Crime, Assault and Homicide: A Tale of Two Cities," the authors compared the rates of firearm homicides in Seattle with passive handgun ownership laws with those of Vancouver, just a few miles away, a province with tight Canadian gun restrictions. The findings: the higher homicide rate in Seattle was almost exclusively accounted for by an increase in firearm homicides "south of the border."

Although we fear street crime, the fact is that firearm death, as I have mentioned, is *more* likely to occur in one's home and at one's own hand or at the hand of a relative, acquaintance, or loved one. After excluding suicide, guns kept in the home—largely perceived as a means of protection—were involved in the death of a family member 18 times more often than that of an intruder and of the 24,703 homicides in 1991 only 327 were considered justifiable homicide, that is, private citizens defending themselves.

With all of this as a background, I want to focus on what I believe is the most prevalent preventable pathogen in the United States—the handgun bullet! Handguns—now numbering 65 million—alone account for 24,000 deaths annually. Daily, handguns kill 65 American men and women. Daily, handguns kill one child. This toll far surpasses that of HIV. Handguns lead the list for premature death. Handguns are used in 700,000 violent crimes and cause an estimated 100,000 personal injuries per year.

Now, some would say that people are violent—not weapons—but let me demonstrate how the lethality of the current weapons renders us, the medical corps, impotent. First of all, more guns mean more crime and death. Second, the gun type affects the wound, the wounding pattern, and the killing potential. In 1985, 9millimeter semi-automatic pistols were made commercially available. Since then, production has skyrocketed to in excess of a half a million per year (Fig. 3). Michael McGonigal from our group yesterday reported on the effect of the changing weaponry on the homicide epidemic in Philadelphia. He showed that since 1985, the 9-millimeter with its characteristics of easy concealment, low weight, rapid semi-automatic firing mechanism, and 15-17 bullets per clip has dominated as a means to kill more bullets per body, more simultaneous wounding, more tissue destruction, more bleeding, and more death. You may recall two of his subtle points—2.7 shots per body and three times as many people die at the scene in 1990 versus 1985 if shot by an automatic weapon. The last observation is made by us with the depressing fact that between 1985 and 1990, Philadelphia saw the implementation of an effective trauma care system. Yet this clear advantage for life saving—the trauma care system—seems to have been lost because of the weaponry

Jim Borgman / Cincinnati Enquirer



Rob Rogers / The Pittsburgh Press

WHICH OF THESE IS MORE LIKELY TO BE BANNED?

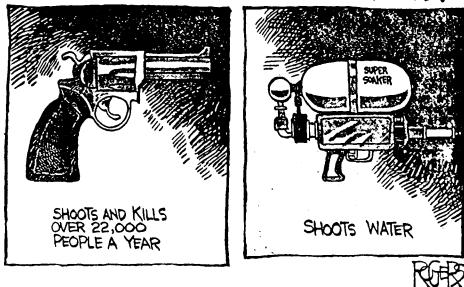


Figure 4. Where are America's priorities about guns? Jim Borgman reprinted with special permission of United Features Syndicate. Rob Rogers reprinted with permission of UFS, Inc.

that should never have been released to a civilian population.

Our country is not witnessing a wave of homicide and gunshot wounds, but a flood, with the water line, or I should correctly state the blood line, constantly rising. Accordingly, if there are 360 of you in front of me, one of you will die from a bullet and it will most likely be fired from a 9-millimeter handgun! I would contend that it is time that we, the trauma surgeons, take a stand on guns. Since antiquity, surgeons and physicians have been

on the alert for pathogens, whatever their nature, and have acted on the premise that the identification of any harmful environmental agents would lead to measures that could and would eliminate and control them. But we seem to be lost, without direction, or afraid to respond to the bullet as a pathogen. I ask you, my fellow physicians, where are we? Where are America's priorities about guns (Fig. 4)? Communities are rapidly moving to restrict squirt gun sales but they are doing nothing about handguns. And our current undertaking to control guns

within this world (Somalia). Show me any other disease in the history of modern man with an annual death toll of 24,000 people that would not precipitate prompt action by government, medicine, and the American public. This country needs our sound medical leadership to reset our health priorities. If we can restrict pharmaceuticals, if we can place age restrictions on cigarettes, alcohol, and even driving to ensure the health of Americans, why can't we restrict or forbid handguns?

The Brady bill or some similar federal gun control legislation is needed immediately, not as an encompassing act but rather as a "giant first step," to say that we Americans will do something to slow gun violence. This first step must occur if we are to put a stop to the NRA's strangling hold on gun control. No practicing physician in his or her right mind would support a group that interfered with legitimate medical research. How can any of us then support either actively or passively a group that blocks our efforts to eradicate this most vicious pathogen, the bullet?

But the Brady bill will act only as an accelerator and the fight needs continuation to face a myriad of gun control problems that only the federal government can address. To mention a few-the lack of control of interstate gun sales permitting some southern states to have literally no restrictions on the wholesale gun business. Two of the states, Virginia and Florida, welcome EAST members but because of their lax laws presently supply more than 40% of the military style weapons now being used on the streets of the northeastern major urban areas. Simultaneously, to achieve true gun control, we need laws that make the guns in circulation safer and especially child proof. Guns need anti-firing devices, locks, and so on. The technology is here. All we need to do is precipitate action. But a giant first step is pivotal. If other nations can enact effective gun control, so must the United States of America.

Because of the strong family nature of this association, I want to focus on something that I think affects each and every one of us personally—our children. Earlier I said that violence was inspired by the media. The media-our TV and movies-have a profound effect on each and every one of us. If one looks at the homicide rate in the United States over the past century, one is struck with the surge of violent death occurring after 1960. Many believe that to a great degree this is being inspired by media violence. As early as 1961 and 1963, data were available that clearly linked film violence with heightened aggressive tendencies. In 1980, an ABC study documented that 22% of juvenile crime was suggested by a television program. In 1981, the Supreme Court of the United States of America acquitted a 9-year-old boy of armed bank robbery because he performed it almost exactly the way he saw it the day before on television. Simultaneously, our children's exposure to this is so great that I defy any of you to escape it. Consider that in a single week there are 43 hours of "war" cartoons for our

very young, and in each hour, 48 acts of violence. Consider that more than 90% of all American first graders are TV regulars and that the average high school student is glued to the tube for 8 hours a day. And last, a recent estimate showed that in the 10 years between ages 5 and 15, each American child will witness 13,400 humans in some way demolished! Is it any wonder that in 1991, one third of all violent crime was committed by adolescents or that homicide, suicide, and aggravated assault lead the list for the cause of death, arrests, and imprisonments of those between the ages of 15 and 25 years? This evening, flip on the tube, go through the 40-odd channels and from the prime time hours choose from these "amusements" for your children: "Cops," "Inside Edition," "Rescue 911," "The Fugitive," "Local Crime Front," "Defense," "Hard Copy," "Top Cops (Mental Patient Wields Machete)," "NYPD," Highlander II, Lethal Weapon II, Stalin, Dead On, Brute Force, "America's Most Wanted," "The Streets of San Francisco." Or turn on "objective reporting"—the local news—and witness the sensationalism of violence and the romanticism of the gun!

The escalation in violence cannot be blamed totally on Hollywood, however. And I believe we are culpable. Since the mid-1960s, we, the American public, have insisted on a movie rating system and youth attendance restriction for sex in the cinema. Yet, until recently, no efforts have been made to apply the same approach to violence. In December, largely thanks to the efforts of U.S. Senator Paul Simon, the three major networks agreed to a set of proposed standards as a governance for television violence. This television violence act takes specific aim at trying to reduce youth crime by restricting the exposure of youths to "violence on television." Accordingly, the act proposes production guidelines that will require that violence-murder, rape, and assault-be portrayed as having significant and serious consequences. In addition, caution would be urged in any theme or plot that eroticized violence. Hopefully, this initial step of bringing morality back to television, i.e., "crime doesn't pay" or

Respiratory Tuberculosis: Mean Annual Death Rates

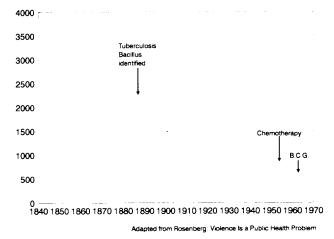


Figure 5. Mean annual death rates from tuberculosis, 1840-1970.

662 The Journal of Trauma November 1993

United States Homicide Rates

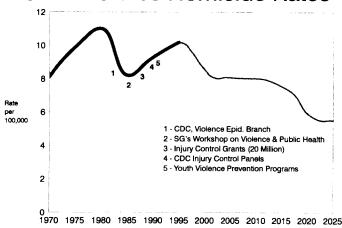


Figure 6. Homicide rates in the United States from 1970 predicted through 2025.

United States Homicide Rates

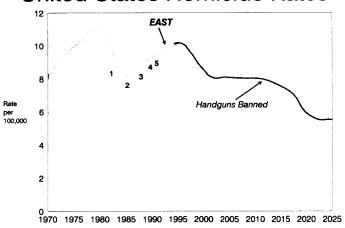


Figure 7. Two events that may be related as we look back from the future.

violence isn't a hero, may lead to an "air bag" effect and protect the psyches of American youths before they are injured. But this and other efforts will require our support. It is time for us to demand restrictions on violence and at least limit our children's access to it!

The other forces that fuel the violence epidemic are just as poignant, and just as seemingly difficult to understand and address. They seem to be unsolvable and they leave us with a desperate situation and one that has caused many American leaders to despair and abandon the issues.

But let me try to provide you with a ray of hope. History shows us that physicians have faced similar overwhelming epidemics, which, during their time, appeared as full of despair as violence, youth crime, and the gun mess appear to us.

From medical school, most will recall the hideous problem of tuberculosis associated with the industrial revolution (Adapted from Rosenburg, ML: Violence is a public health problem. In Maulitz, RC (ed): *Unnatural Causes: The Three Leading Killer Diseases in America*.

New Brunswick, Rutgers University Press, 1988, pp 147-168). Also, most will erroneously connect the use of antimicrobials and vaccination for the last 40 years with the eradication of this disease. But the truth is that the greatest decline in the tuberculosis rates actually took place some 100 years before the development of effective chemotherapy or any vaccination program (Fig. 5). In fact, the greatest decline was realized as the public, thanks to health officials, came to understand that poor sanitation, nutrition, housing, and overcrowding all contributed to the spread of TB. Armed with this knowledge of risk factors, risk groups were identified and public education was implemented. People changed their lifestyles and their behavior, thus saving many, many lives. Although it is still early, these same principles of public health, I believe, are beginning to be applied to violence. First and foremost, 10 years ago, the Centers for Disease Control (CDC) in the Department of Health and Human Services identified violence as a public health problem and moved this issue from the traditional approach of law enforcement alone. Violence prevention became the primary action focus, and the principles of surveillance, epidemiologic analysis, and programs for intervention were designed, implemented, and evaluated. The same proven principles that had been successful in previous epidemics, such as tuberculosis, smallpox, and more recently, motor vehicle crashes, began to be applied. If I could imagine looking back to 1992 from 50 or 100 years in the future, hopefully, I might see our violence epidemic and its death rate plotted like this (Fig. 6). What we would see is this extremely high death rate of the 1970s, 1980s, and 1990s, but then as the century turns, a decline and, hopefully, within the early 21st century, a more precipitous decline in the number of deaths from violence. Similar to tuberculosis, I believe, there are already a few significant activities that are taking place. First and foremost, the CDC's establishment of a violence epidemiology branch and from this a subsequent national workshop on violence; the current and the previous Surgeon Generals' focus on the violence epidemic; the establishment of injury control grants, many of which have been awarded to study violence. Recently the formation of injury control panels, one dedicated to violence prevention that outlined for our government an agenda for change. And, last, youth violence has been singled out as an area that requires our maximal efforts. In 1991, a CDC-sponsored national program was initiated to guide communities in youth violence prevention programs. Specific and detailed steps, learned from earlier individual demonstration projects, were made available to help state and regional officials organize and initiate intervention to prevent youth violence. These programs hope to help community leaders identify target groups and enact strategies to save America's next and future generations. In Philadelphia, our own Health Department held its first coalition meeting just a month ago.

But, returning to this graph (Fig. 7), two other impor-

tant events could be noted. I have arbitrarily picked the year 2015 for the handgun legislation to take place, as I believe another 20 years will be required to convince our frightened Congress that guns, like the automobile, like cigarettes, like alcohol, kill, and the best interest of society is and will be served with severe restrictions on them. But the bigger event, I hope, is that which occurs here. The EAST was founded to improve the fate of the injured. Our members represent every major trauma center and most communities east of the Mississippi River. Sitting in this room and concentrated on our rolls are the brightest, youngest, and most energetic group of traumatologists that I know. This group can do something about violence. We can have a major effect on the downward curve of this graph. I have strongly suggested speaking out and demanding gun control legislation and media violence restrictions. But the greatest effect each and every one of us can have is within our own communities. We need to be the catalysts who provoke change. Each of you is uniquely and expertly qualified to stimulate and implement the necessary actions within your home towns.

To make this point that you, the individual, can do something, let me share with you what one surgeon is doing in a well known American urban ghetto, Harlem. Applying the principles I have mentioned, Barbara Barlow, with the Harlem Hospital and community leaders over the past 10 years, has fought endlessly to restore community to Harlem. To ensure that these kids are safe, playgrounds have been restored, youth activities have been provided, and a sense of pride and hope given. She led the study of Harlem's epidemic of violence and then specifically designed violence prevention programs in schools and churches. Teens are being taught conflict resolution without guns. Younger children in a program called "Kids, Injuries and Street Smarts" are taught by New York City EMS providers to stay in school, don't do drugs, and how to avoid guns and the dangers of guns. These are just a few of her efforts. For their Health District, over the 3-year period of 1988 through 1991, the incidence of gunshot, stab, and assault injuries has come down. This surgeon's leadership has made a difference in her community.

Emerson wrote, "our chief want in life is someone who will make us do what we can." Doctor Barlow's efforts and other similar projects scattered about this country are that smaller glimmer of hope that I see and that I offer to you as the beacon. We must all do "what we can." All it will take is your time, your dedication, and the most available talent that I see in each and every one of you, your leadership. Return home and organize your hospital, your outreach program, your colleagues, the police department, and public safety and social services; form a coalition and start the drive against violence and especially gun violence. It is through these efforts that death by bullets, violence, and the tragic premature ending of so many American lives will be halted. Trauma

surgeons are the professionals who can make a difference in this great American crisis, a crisis with both danger and opportunity. The danger is to do nothing and continue to only do the "usual and customary." But the opportunity is far greater for the true purpose of medicine—to use our skills for all the sick and with all our might better man's time on this Earth. The time is ripe and the time is now.

BIBLIOGRAPHY

Violence Prevention

- Brumas M: City doctor joins coalition to ban handguns in U.S. The Birmingham News, June 27, 1992, p A6
- Cauchon D, Moss D: Doctors vow to wage war on violence. USA Today, June 10, 1992, p A1
- Chafee JH: Ban handguns! The Washington Post, June 9, 1992, p A15
- National firearms policy. Congressional Record. April 30, 1992, 138:57
- Dewar H: Chafee pushes handgun confiscation. The Washington Post, June 2, 1992
- Forum on Youth Violence in Minority Communities: Setting the Agenda for Prevention: Summary of the Proceedings. Atlanta, Georgia, December 10-12, 1990, pp 225-280
- Harlem Hospital: Preventing playground injuries through community action. Leadership Quarterly, 1 (3): 9-14, Winter 1990
- Harlem playground renovation helps reduce injuries. Pediatric News, 25 (11):26, 1990
- 9. Kids' art at harlem hospital. N.Y. Hospital and Health News, 1 (5): December 1989
- Koop CE, Lundberg GD: Violence in America: A public health emergency. In Violence, A Compendium from JAMA, 267: 124, 1992
- 11. Krug AS: Reasons why the U.S. senate should reject H.R. 7, The "Brady Bill", and approve a substitute "Staggers bill". *National Rifle Association*. Washington, DC 1991
- Larson K: The art of healing: painting is therapy for disabled youths in a Harlem program. New York Magazine, January 7, 1991, pp 36-41
- Mulligan JE: Former chief justice supports Chafee's gun control legislation. Providence Journal (RI), June 27, 1992
- A playground grows in Harlem. Columbia Community Affairs, December 1991
- Prevention of Violence and Injuries Due to Violence. Position Papers from the 3rd National Injury Control Conference: "Setting the National Agenda for Injury Control in the 1990's," Washington, D.C., Department of Health and Human Services, April 22– 25, 1991, pp 160-253
- A Tree Grows in Harlem (Harlem Rehab with Barbara Barlow). Texaco Today, No. 2, 1991, p 35
- Webster DW, Wilson MEH, Dugan AK, et al: Firearm injury prevention counseling: A study of pediatricians' belief and practices. *Pediatrics*, 89 (5): 902, 1992
- West HI: Doc's got Rx for Harlem; Her mission is to make neighborhood playgrounds safe. New York Daily News, July 15, 1990, p 27
- Young J. Quick on the Draw, (Art Rehab). New York Daily News, September 30, 1990
- Zausner R: Traffic deaths decline during seat belt law's first year. Philadelphia Inquirer, December 17, 1988, p B1

Guns/Gun Control

- Ardelson L: The gun and the sanctity of human life; or the bullet as pathogen. Arch Surg. 127: 659, 1992
- 2. Bureau of Alcohol, Tobacco and Firearms, Department of the Treasury. AFT News-Firearms. Washington, D.C.
- Carter WA Jr: Arming yourself to treat gunshot wounds. JEMS, September 1990, 35-49

- Chartrand S: Gunshot wounds, labeled epidemic. New York Times, June 11, 1992, p B10
- 5. Claiborne W: Canadian lawmakers vote overwhelmingly for strict gun control. *Philadelphia Inquirer*, November 8, 1991, p A2
- Cosco J: Gun dealers refuse blame for problems. The Virginian Pilot, Vol. 178, August 5, 1991, p A2
- Cosco J: Virginia failing to slow illegal gun sales. The Virginian Pilot, Vol. 178, August 5, 1991, p A1
- 8. D'Orso M: Violent crime rises, more women are seeking protection with handguns. *The Virginian Pilot, Ledger-Star*, Vol. 178, August 4, 1991, pp J1:J12
- Dumas K: The black view on gun control. Black Enterprise, September 1991, p 33
- Farnham A: Inside the U.S. gun business. Fortune Magazine, June 3, 1991, pp 191-194
- Geehern C: Arms and the man; The Connecticut Valley's oldest industry retools after hitting bottom in the 1980's. New England Business, August 1990
- Goodman H: Hill case exposes gap in gun laws. Philadelphia Inquirer, April 14, 1991, p C1
- Gorenstein N: Yeakel talks tough on crime and specter. Philadelphia Inquirer, September 1992, p B1
- Green F: Mom and pop shop is big draw. The Richmond Times-Dispatch, August 1992, p A1
- Hickey G, Green F: Lax laws lure gun trade to state; city reputed to be prime hub for trafficking. The Richmond Times-Dispatch, July 20, 1992
- 16. Horowitz J: Yes: Justice for victims. ABA Journal, July 1991, p 36
- Horowitz J: The second amendment allows militias to have guns— Not you. Philadelphia Inquirer, December 20, 1991, p A19
- Johnson K, Stone A: Nation's cities face mounting crime woes— Boy's slaying spurs another effort to help. USA Today, October 21, 1992, pp A1-2
- Kopel DB: Why gun waiting periods threaten public safety. Independence Issue Paper Number 4-91, Golden, Colo., Independence Institute, March 25, 1991
- Krug AS: The "assault weapon" issue; An exercise in disinformation. National Rifle Association, delivered at Children's Hospital in Philadelphia, Oct. 19, 1992
- Krug AS: Firearm accidents, criminal misuse and suicide: An overview. National Rifle Association, delivered at Children's Hospital in Philadelphia, Oct. 19, 1992
- LeDuc D: Gun advocates protest assault-weapon ban. Philadelphia Inquirer, March 11, 1990, p B1
- LeDuc D: Florio pushing gun ban. Philadelphia Inquirer, March 10, 1990, p B1
- Morgan E, Kopel D: The assault weapon panic: "Political correctness" takes aim at the Constitution. Independence Issue Paper Number 12-91. Golden, Colo., Independence Institute, October 10, 1991
- 25. On the Ballot: Guns and AIDS. Time Magazine, November 7, 1988
- 26. Reclaim America from NRA. Philadelphia Inquirer, April 14, 1986
- Schwab CW: Contemporary urban warfare: The demise of the university trauma center. Congressional Record, Washington D.C., 1990
- Sloan JH, Kellerman AL, Reay DT, et al: Handgun regulations, crime, assaults and homicide. N Engl J Med 319: 1256, 1988
- Squirt, you're dead: The new water rifles may soak you, but it's real guns that kill. Time Magazine, June 22, 1992, p 11
- Stranahan SA: For women of fashion who plan on stashing. Philadelphia Inquirer, November 1992, pp A1; A12
- 31. Tharoone S: Americans and their guns. World Press Review, June 1992, p 39
- 32. Thompson M: U.S. becomes world's top arms seller. *Philadelphia Inquirer*, October 15, 1992, p A3
- Umhoefer DE: Council passes gun ordinance on 16-0 vote. The Milwaukee Journal, November 27, 1990, p A1
- Webster DW, Champion HR, Gainer PS, et al: Epidemiologic changes in gunshot wounds in Washington, D.C., 1983-1990. Arch. Surg. 127: 694, 1992
- Weil D, Hemenway D: Loaded guns in the home; Analysis of a national random survey of gun owners. In Violence, a Compendium from JAMA, 267: 33, 1992
- Zimring F: Firearms, violence and public policy. Sci Am Vol 265, 5: 48, 1991

General Statistics-Violence

- 1. Ball RA: EMS under siege. J Emerg Med Serv 16: 59, 1991
- Benedetto W: Cops cope with bad rap. USA Today, August 6, 1991, p A9
- Dayaratna S: Social problems and rising health care costs in Pennsylvania. Pennsylvania Blue Shield Institute, November 1992
- Fleming AW, Sterling-Scott RP, Carabello G, et al: Injury and violence in Los Angeles: Impact on access to health care and surgical education. Arch Surg 127: 185, 1992
- Gammage J: Teen is slain for coat; Neighbors left in fear. Philadelphia Inquirer, November 12, 1992, p A1
- Goodman RA, Mercy JA, Rosenberg ML: Drug use and interpersonal violence. Am J Epidemiol 124:851, 1986
- 7. Gordon W, Gest T, Friedman D: Cops under fire. U.S. News and World Report, December 3, 1990, pp 32-44
- 8. Katz J, Spiegal C: Violence from the street spilling over into hospitals. *Philadelphia Inquirer*, November 5, 1991, p C11
- 9. Krajick K: Arms race on Hill Street. Newsweek Magazine, November 19, 1990, pp 58-59
- Landsberg M: For many cities, 1991 was the deadliest year. Philadelphia Inquirer, January 4, 1992
- Linz D, Donnerstein E: Research can help us explain violence and pornography. Chronicle of Higher Education, September 30, 1992, p. 82
- 12. Magic bullets. The New Republic, April 15, 1991, pp 7-9
- Marwick C: Guns, drugs threaten to raise public health problem of violence to epidemic. In Violence, A Compendium From JAMA, 267: 4, 1992
- Mason J: From the Assistant Secretary for Health, U.S. Public Health Service. In Violence: A Compendium from JAMA, 267: 23, 1992
- Matza M: Armed thieves taking occupied cars. Philadelphia Inquirer, September 20, 1991, p A1
- Mercy JA, O'Carroll PW: New directions in violence predictions: The public health arena. Violence and Victims, 3: 285, 1988
- 17. Meredith N: The murder epidemic. Science '84 5: 42, 1984
- Plagens P, Miller M, Foote D, et al: Violence in our culture. Newsweek Magazine, April 1, 1991, pp 46-52
- 19. Randall T: Coping with violence epidemic. JAMA 263: 2612, 1990
- Reported violent crimes in U.S. hit peak in '88. The Virginian Pilot, August 7, 1989, p A5
- Rosenburg ML: Violence is a public health problem. In Maulitz RC (ed): Unnatural Causes: The Three Leading Killer Diseases in America. New Brunswick, Rutgers University Press, pp 147– 168
- Rosenburg ML, Fenley MA: Violence in America, A Public Health Approach. New York, Oxford University Press, 1991
- Rosenburg ML, Stark E, Zahn MA: Interpersonal violence: Homicide and spouse abuse. In Last JM (ed): Public Health and Preventative Medicine, ed. 12. 1986, pp 1399-1426
- 24. Rooting out the violent. U.S. News and World Report. November 23, 1992, pp 46-48
- Salholz E, Cerio G: Short lives, bloody deaths. Newsweek Magazine, December 17, 1990, p 33
- 26. Salmi J: Mirror on the U.S. World Press Review, June 1992, p 38
- Smith RS, Fry WR, Morabito DJ, et al: Recidivism in an urban trauma center. Arch Surg 127: 668, 1992
- 28. Staley S: Cities are learning—Revitalize or else. The World and I, 20-21
- Fenley MA, Gaiter JL, Hammett M, et al: The Prevention of Youth Violence; A Framework for Community Action. Atlanta, Georgia, U.S. Department of Health and Human Services, Centers for Disease Control, 1993
- 30. Wheeler DL: University of Maryland conference that critics charge might foster racism loses NIH support; Institutes freeze funds for meeting intended to explore genetic factors in crime. Chronicle of Higher Education, September 2, 1992, p A6
- Wiegand G: Crime statistics say center city is getting safer. Philadelphia Inquirer, April 14, 1991, p B1

Homicide

- Loftin C, McDowell D, Wiersema B, Coffey T: Effects of restrictive licensing of handguns on homicide and suicide in the District of Columbia. N Engl J Med 325: 1615, 1991
- Homicide Deaths and Rates per 100,000 for Years 1983-1989.
 National Center for Health Statistics Mortality Data Tapes for Number of Deaths, U.S. Bureau of Census, 1992
- Sitton L: Blacks decline in city homicides. Philadelphia Inquirer, January 5, 1992, p B1
- Stark E: Rethinking homicide: Violence, race and the politics of gender. Int J Health Serv 20: 3, 1990

Media

- Boldt DR: You need a quick remote control to zap out the raunch on television. Chicago Tribune, October 13, 1992
- Brownworth VA: Turn off TV violence, Simon says. Philadelphia Inquirer, December 30, 1992, p A7
- Daniel M: TV made it look so easy, convicted robber says. Philadelphia Inquirer, December 12, 1992
- Kaplan D, Joseph N: 'Live, From San Quentin...' [Should A TV Station Broadcast an Execution!]. Newsweek Magazine, April 1, 1991, p 61
- Miedzian M: How we tune out children from television violence. Philadelphia Inquirer, August 14, 1992, p A15
- Myrick HA: Is the violence the media's fault? Philadelphia Inquirer, November 4, 1992, p A15
- Plagens P: Violence in our culture: As America binges on make believe gore, you have to ask: "What are we doing to ourselves?" Newsweek Magazine, April 1, 1991, pp 46-51
- Ryan D: Tallying the price society pays for violent films. Philadelphia Inquirer, August 18, 1992, p D3
- Tuchscherer P: TV Interactive Toys: The New High Tech Threat to Children: Fight Back Without a Gun—Arm Your Children With Knowledge. Mt. Rainer, Md., Pinnarroo Publishing, 1988
- 10. Wilkins JA: Breaking the TV Habit. New York, Scribner's, 1982

EMS

- Beck M, Glick D, Joseph N, et al: State of emergency: Hospitals are seeking radical solutions to ease walk-in patient overload. Newsweek Magazine, October 14, 1991, pp 52-53
- Clark M, Hager M, Shapiro D, et al: Trauma in the emergency room. Newsweek Magazine, February 16, 1987, pp 74-77
- Hagland MM: Violent incidents lend new apprehension to ED work. Hospitals 30-32, Feb. 20, 1992
- McNamara P: The sagging: Emergency departments on the brink of crisis. Hospitals 26-40, Feb. 20, 1992

- Morrissey TB, Bryd RC, Deitch EA: The incidence of recurrent penetrating trauma in an urban trauma center. J Trauma 31: 1536, 1991
- Organ C Jr: Trauma: The motor end plate of violence. Arch Surg 127: 651, 1992
- Rich S: Patients awaiting admission. Philadelphia Inquirer, August 27, 1991, p A3
- Skolnick AA: Congress acts to resuscitate nation's financially ailing trauma care systems. In Violence, A Compendium From JAMA, 267: 5, 1992

Kids and Schools

- Barlow B: Children shooting children. New York State Pediatrician, 4, Spring 1990
- Dockler M, Tepas JJ Jr, Pieper P, et al: Caught in the crossfire: An analysis of gunshot wounds in Jacksonville's children. In Jacksonville Medicine, The Journal of the Duval County Medical Society, A.A. Seals, Editor, Jacksonville, Florida. 43: 432, 1992
- Graham M, Macklin WP: Stray shot kills girl, 11, during birthday party. Philadelphia Inquirer, November 23, 1992, p A1
- Lee FR: Violent deaths of children unite a mothers' group. The New York Times Metro, September 12, 1992
- Loyd L: Court told how teen was slain. Philadelphia Inquirer, November 5, 1992, p B6
- Martin D: Pediatrics and playgrounds: For the love of children. Metropolitan News, New York Times, July 20, 1991, p L1
- Mezzacappa D, Paolantoni SA: Two girls stabbed at city schools. Philadelphia Inquirer, December 3, 1992, p A1
- 8. Moore A: Let's deal with youth violence as a health and crime problem. *Philadelphia Inquirer*, October 1992
- Morganthau T, Annin P, McCormick J, et al: It's not just New York. Newsweek Magazine, March 9, 1992, pp 25-29
- Nordland R: Deadly lessons. Newsweek Magazine, March 9, 1992, pp 22-24
- Novello AC: Violence is a greater killer of children than disease. Public Health Rep 106: 231, 1991
- Paolantonio SA: Fear, violence in city schools. Philadelphia Inquirer, December 3, 1992, p A1
- 13. Tepas JJ Jr, Pieper P, Dokler ML: Injury is no accident; The pediatric perspective of modern trauma care (Annual Report of the Jacksonville Pediatric Injury Control System). Jacksonville Medicine, The Journal of the Duval County Medical Society. A.A. Seals, Editor, Jacksonville, Florida. 43: 428, 1992
- You can help get drugs out of schools. USA Today, September 29, 1992, p A13
- Why fight? Schools can teach non-violence. USA Today, September 29, 1992, p A13