FIREARM INJURY PREVENTION

Executive Summary

Position Paper of the AMERICAN COLLEGE OF PHYSICIANS December 1996

The American College of Physicians believes that gun violence and the prevention of firearms injuries and deaths is a public health issue of major and growing concern. It must be dealt with as a high priority public health issue, as well as a criminal justice concern. Physicians must become more active in counseling patients about gun safety and involved in community efforts to restrict the ownership and sale of handguns. This position paper outlines some of the steps that can and should be taken. It reaffirms previous recommendations and sets forth additional public policy positions.

The paper reaffirms the following recommendations of the 1995 position paper, *Preventing Firearm Violence: A Public Health Imperative*: ¹

- 1. The College supports legislative and regulatory measures that would limit the availability of firearms, with particular emphasis on reducing handgun accessibility. These measures should support restrictions to make handgun ownership more difficult, to reduce the number of handguns in homes, and to eliminate assault weapons.
- 2. The College urges internists to inform patients about the dangers of keeping firearms, particularly handguns, in the home and to advise them on ways to reduce the risk of injury. If a gun is kept in the home, internists should counsel their patients about the importance of keeping guns away from children and should recommend voluntary removal of the gun from the home.
- 3. The College supports the development of coalitions that bring different perspectives together on the issues of firearm morbidity and mortality. These groups, comprising health professionals, injury prevention experts, parents, teachers, police, and others, should build consensus for bringing about social and legislative change.
- 4. The College supports efforts to improve and modify firearms to make them as safe as possible, including the incorporation of built-in safety devices (such as trigger locks and signals that indicate a gun is loaded). The College also supports efforts to reduce the destructive power of ammunition.
- 5. The College encourages further research on firearm violence and on intervention and prevention strategies to reduce injuries caused by firearms.

The following new positions are added:

- 1. Gun violence and the prevention of firearm injuries and deaths is a public health issue that demands high priority for public policy.
- 2. Internists should be involved in firearm injury prevention both within the medical field and as part of the larger community.
 - Internists should discuss with their patients the dangers of firearm ownership and the dangers of having a gun in the home.
 - Physicians should obtain training relating to firearms injury prevention, including education concerning adolescent assault, homicide and suicide.
 - Physicians should support community efforts to enact legislation restricting the possession or sale of firearms.
 - Violence prevention and gun control is a high priority issue for the American College of Physicians.
 - The College must take an active role in providing education and training for internists concerning all aspects of violence prevention, including firearm injury prevention.
- 3. The American College of Physicians favors strong legislation to ban the sale, possession and manufacture for civilian use of all automatic and semi-automatic assault weapons. Existing exceptions to the assault weapons ban for hunting and sporting purposes should be more narrowly defined.
- 4. The American College of Physicians supports law enforcement measures, including required use of tracer elements or taggants on ammunition and weapons, and identifying markings such as serial numbers on weapons, to aid in the identification of weapons used in crimes.
- 5. The sale and possession of handguns should be restricted.
- Sales of handguns should be subject to a waiting period, satisfactory completion of a criminal background check, and proof of satisfactory completion of an appropriate educational program on firearm safety.
- The scheduled expiration of the waiting period and background check provisions of the Brady Act must be eliminated.
- Handguns should not be sold to minors, persons with criminal records, or persons who are known threats to themselves or others.
- Permits to carry concealed weapons should be issued only to persons with special justifiable needs, such as law enforcement personnel.
- The College supports a ban on plastic guns that cannot be detected by metal detectors or standard security screening devices.
- All firearms should incorporate safety features to make them as child-proof as possible.
- The College favors strong penalties and criminal prosecution for those who sell guns illegally.

FIREARM INJURY PREVENTION

Position Paper of the AMERICAN COLLEGE OF PHYSICIANS December 1996

Background: An Epidemic of Gun Violence

.2.3.4.5.6.7.8

The epidemic of gun violence in the United States has been widely reported. The statistics are appalling. From 1968 through 1991, the number of firearm-related deaths increased by 60% (from 23,875 to 38,317). Since 1991, the number of annual firearm fatalities has remained relatively constant. Nevertheless, the National Centers for Disease Control and Prevention predicts that by the year 2003, gunfire will have surpassed automobile accidents as the leading cause of traumatic death in the United States. This is because there has been a steady decrease in the death rate from motor vehicle injuries, due in large part to implementation of preventive safety measures in the design and marketing of automobiles.

Physicians are directly affected by the rising incidence of firearm injuries. In a recent survey of ACP members, 87.7% reported that they personally knew someone or had seen someone who had been injured in a gun incident. Approximately 12% of internists reported being personally threatened with a gun, and almost an equal number reported that someone in their family had been personally threatened. In 1994, 39,720 Americans were killed with firearms. Handguns were used to murder 13,593 people; 20,540 Americans committed suicide using firearms, and 1,610 people were killed accidentally with guns. For each fatality involving firearms, there are twice as many people with firearm-related injuries who require hospitalization and five times as many requiring outpatient care. One study estimates that there were 151,373 persons treated in hospital emergency rooms in the United States in a one-year period for non-fatal gun-related injuries.

Handgun homicides increased 25% from 1990 to 1994. Almost half of all murders of those under the age of 18 in 1994 involved handguns; a decade earlier, handguns were involved in one-quarter of such murders. ¹³ Today, 70% of the murder victims aged 15 to 17 years old are killed with a handgun.

Firearms were involved in 65% of the suicides in 1992 among those under the age of 25. Suicides among this age group have been increasing and the acquisition of guns make suicide attempts more successful. From 1980 to 1992, the suicide rate for 15-19-year-olds increased 28%; for black males in this age group, the suicide rate increased 165%. Among all children aged 10-14, the suicide rate increased 120%. Firearm-related deaths accounted for 81% of the increase in the overall suicide rate among those under age 25. A study in Oregon from 1988 to 1993 found that 78% of suicide attempts with firearms were fatal, compared to a 0.4% fatality rate in suicide attempts by drug overdose.

The financial costs of both fatal and non-fatal firearm-related injuries in 1990 were estimated to be \$20.4 billion. ¹⁶ This included \$1.4 billion for direct medical care for non-fatal injuries and \$19 billion for indirect costs associated with morbidity and mortality (including lost future earnings). The direct costs alone were estimated to be \$4.0 billion in 1995. ¹⁷ A recent one-year study showed that the average hospitalization for non-fatal firearm injuries in California lasted six days in 1991. Per-patient charges averaged \$17,888. Publicly sponsored programs paid for the care of 56% of these patients; 25% were uninsured. Males accounted for 90% of the hospitalizations, and 72% of the males were aged 15 to 24 years. Black males were eight times more likely than white males to be hospitalized with a firearm-related injury, and black males aged 15-24 were 14 times more likely. ¹⁸

But, the statistics mask the magnitude of the human pain and suffering involved and the tremendous amount of human and health care resources consumed by the epidemic of firearm violence. In the movies and on TV, gunshot victims usually die instantly or quickly recover. Reality is quite different. Recovery can be very limited and may involve lifelong disability. The financial costs can be staggering, and must often be absorbed by public or non-profit hospitals or otherwise paid by taxpayers through Medicaid. At George Washington Medical Center, a typical gunshot patient spends 16 days in the intensive care unit. Beach day in the intensive care unit can cost \$1,500. Hospital medications cost another \$13,580; x-rays add \$2,738; and miscellaneous supplies such as bandages and tubing add \$16,280 more. Nursing care, physical therapy and other services cost thousands more. The hospital bill alone easily can exceed \$100,000.

More than half of gunshot victims require expensive emergency surgery, such as laparotomies (average cost \$41,000) and thoracotomies (average cost \$26,000); about a fifth require subsequent surgery. 18 Victims with spinal-cord injuries typically become paraplegics; those shot in the neck can become quadriplegics. These victims must have constant assistance in all of the activities of daily living: eating, bathing, dressing, caring for their bodily functions and Someone must change their catheters, tracheotomy tubes and bladder bags. movement. Someone must suction their lungs several times a day to prevent pneumonia. They are prone to infections and their muscles must be exercised to prevent atrophy. Years of rehabilitation, physical therapy and occupational therapy are required to maintain muscles and perform even minor tasks. Many labor to regain the ability to breathe independently, others remain ventilator dependent. The National Spinal Cord Injury Statistical Center estimates that average medical costs for a high quadriplegic are \$417,067 (in 1992 dollars) in the first-year and \$74,707 for each year thereafter. For a paraplegic, the first-year costs are \$152,396 and \$15,507 for each subsequent year. Lifetime medical costs for a 25-year old quadriplegic would amount to \$1.3 million (in 1992 dollars); for a 25-year old paraplegic the lifetime costs would be \$427,700. 20

Physicians are extremely concerned about these preventable injuries and unnecessary loss of human lives and their consumption of health care resources. The American College of Physicians believes that gun violence and the prevention of firearms injuries and deaths is a public health issue of major and growing concern. It must be dealt with as a high priority public health issue, as well as a social and criminal justice issue. Internists must become more active in counseling patients about gun safety and involved in community efforts to restrict the ownership and sale of handguns. This position paper outlines some of the steps that

can and should be taken and sets forth public policy positions of the American College of Physicians.

Definitions

Firearms is a generic term encompassing all "guns". The Bureau of Alcohol, Tobacco and Firearms classifies firearms as rifles, shotguns and other long guns, and handguns. A revolver is a handgun that generally carries 5 or 6 rounds of ammunition in a rotating (revolving) cylinder and must be reloaded manually when the cylinder is empty. Semiautomatic weapons reload automatically, but the trigger must be squeezed after each firing. They generally carry their ammunition in detachable magazines of variable capacities (a magazine for a 9-millimeter semiautomatic pistol can carry up to 36 rounds). Reloading can be accomplished quickly by simply replacing the pre-loaded ammunition clip. Automatic firearms reload and fire continuously while the trigger is held. Military-style assault weapons are automatic or semiautomatic firearms designed as combat weapons with a large magazine capacity and capable of a rapid rate of fire.

Previous ACP Positions

In the Fall of 1993, the Illinois Chapter of the ACP submitted a resolution to the ACP Board of Governors calling for a ban on the sale and possession of handguns and all assault type weapons and that the ACP support other gun control measures as recommended by law enforcement experts and as indicated by the results of epidemiological studies. The Board of Governors strongly supported the concept of the resolution and recommended that its sentiment be conveyed to the Health and Public Policy Committee which was in the process of developing a position paper, *Preventing Firearm Violence: A Public Health Imperative*. The paper, published last year, outlined some preventive approaches that could be taken, and offered five recommendations for action. In light of the continuing epidemic of firearm-related violence, the American College of Physicians reaffirms each of the following policy statements:

- 1. The College supports legislative and regulatory measures that would limit the availability of firearms, with particular emphasis on reducing handgun accessibility. These measures should support restrictions to make handgun ownership more difficult, to reduce the number of handguns in homes, and to eliminate assault weapons.
- 2. The College urges internists to inform patients about the dangers of keeping firearms, particularly handguns, in the home and to advise them on ways to reduce the risk of injury. If a gun is kept in the home, internists should counsel their patients about the importance of keeping guns away from children and should recommend voluntary removal of the gun from the home.
- 3. The College supports the development of coalitions that bring different perspectives together on the issues of firearm morbidity and mortality. These groups, comprising health professionals, injury prevention experts, parents,

teachers, police, and others, should build consensus for bringing about social and legislative change.

- 4. The College supports efforts to improve and modify firearms to make them as safe as possible, including the incorporation of built-in safety devices (such as trigger locks and signals that indicate a gun is loaded). The College also supports efforts to reduce the destructive power of ammunition.
- 5. The College encourages further research on firearm violence and on intervention and prevention strategies to reduce injuries caused by firearms.

Existing Gun Control Laws

State and local laws vary widely concerning the registration, licensing, sale and possession of firearms. Some prohibit sales of particular weapons to minors or those with criminal records, others place licensing requirements and limits on hunting, some prohibit carrying concealed weapons, still others place restrictions on who can buy specific types of guns, how many can be purchased within a given period, and who can sell or transfer them. Differences among state laws are cited as one reason for illegal trafficking in guns.

The first major federal gun control law had been the Gun Control Act of 1968 (PL 99-308), which was passed in response to public outrage following the assassinations of Rev. Martin Luther King, Jr. and Sen. Robert F. Kennedy. That law banned rifles and shotguns from interstate commerce and established federal licensing requirements for firearms dealers. However, in 1986, Congress repealed the ban on interstate sales of rifles and shotguns and eased the licensing requirements for firearms dealers. Federal law also authorized the Secretary of the Treasury to bar importation of weapons not "particularly suitable for or readily adaptable to sporting purposes." Under rules issued in 1989 by the Department's Bureau of Alcohol, Tobacco and Firearms, about 43 types of foreign-made assault weapons were banned from importation.

In 1993, after seven years of debate, Congress passed the "Brady Bill," requiring a 5-day waiting period for the purchase of a handgun. The waiting period was designed to provide a cooling-off period of five business days to deter crimes of passion and to allow local police time to check whether the applicant was prohibited by state or federal law from purchasing a gun. However, the waiting period provisions are scheduled to expire five years after enactment. It authorized \$200 million per year to help states computerize their records, and presumably a national computerized instant check system will be in place when the waiting period provisions expire. ²³

The Federal Crime Bill of 1994 (PL 103-322) banned the manufacture, sale, or possession of 19 specific semiautomatic weapons, copies of those guns, and semi-automatic weapons with at least two features associated with assault weapons (e.g., a bayonet mount, flash suppresser, grenade launcher, or folding or telescoping stock). It also banned large-capacity ammunition devices (e.g., magazine clips) that hold more than 10 rounds of ammunition. Violators are subject to a fine of up to \$5,000 and/or five-years in prison. The ban applies for

ten years. The law also prohibits the sale of handguns to minors without parental permission, prohibits the possession of firearms by persons subject to certain restraining orders involving threats of domestic violence, and tightened federal firearms dealer license requirements.

The 1994 Crime Bill also specifically exempted 670 semi-automatic guns claimed to have sporting purposes. It permits the sale and possession of all semiautomatic weapons and ammunition produced before the law went into effect, and exempts pawn brokers and their customers from the five-day waiting period required under the Brady Law, when a customer is redeeming his or her own handgun. The bill also made it a federal crime to interfere with a hunter lawfully hunting on federal land.

ACP Research on Firearm Violence

The 1993 resolution by the ACP Board of Governors recommending that the sale and possession of handguns and assault weapons be made illegal prompted the ACP Board of Regents to undertake a survey of College members regarding their opinions on gun control. A very preliminary survey was conducted during the ACP annual meeting in Miami Beach in April 1994. Survey responses indicated strong support for gun control legislation, but responses were obtained only from a small self-selected sample of meeting attendees.

To develop further policy recommendations reflecting the experiences and opinions of a cross section of members, a more scientific and comprehensive survey was needed. In the fall of 1994, the ACP Health and Public Policy Committee appointed a Task Force on Violence to implement and oversee the survey. Working with the ACP Research Center, a grant proposal and survey instrument were developed.

In 1995, with funding provided by the Joyce Foundation and the National Head Injury Foundation, and in cooperation with the American College of Surgeons, the College commissioned the National Opinion Research Center (NORC) to conduct a national survey of internists and surgeons regarding their clinical experiences with victims of gun violence, awareness of gun-related issues and concerns, patient counseling practices related to gun safety, and attitudes about policy options to reduce firearm injuries. ¹¹

An initial survey questionnaire containing 84 items was developed by the ACP and pretested by NORC interviewers in December 1995. Data was collected from 31 members of ACP and 20 members of ACS. The survey instrument was then revised based on feedback during the pretest and reduced to 51 items to achieve a target average completion time of 12 minutes. Additional changes were made before the final version was given to telephone interviewers for further testing.

A starting sample size of 1,031 was sought from each College to achieve a representative response rate within 5% of the total membership population with 95% probability. Ineligibles deleted from the sampling pool included international members, anyone in the military, semi-retired and retired members, disabled members, residents, associates, honorary fellows, candidate fellows, interns, and students.

The national telephone survey was conducted by 18 experienced NORC interviewers in January and February 1996. Interviewers made 8,919 calls, averaging 9.7 calls for each completed interview. An overall cooperation rate of 82.5 % was obtained with interviews completed for 457 internists and 458 surgeons. Statistical analyses of the survey data were then conducted using standardized weighting to reflect the numbers of internists and surgeons in the population from which the samples were drawn. Banner cross-tabulations were then produced for each question using weighted sampling values.

Preliminary Findings:

Basic demographics

- Gender: 87% male; 13% female
- Race: 79% White; 9% Hispanic; 8% Asian/Pacific Islander; 3% African American; and 1% refused to answer or did not know
- Age: 43% age 25-44; 24% age 45-54; and 32% age 52 or older
- Geographic Location: 21% Midwest; 27% Northeast; 33% South; and 19% West

Personal history, background and experience

- 43% grew up with a gun in the house
- Childhood setting: 16% inner city; 25% urban (but not inner city); 38% suburbs; 21% rural
- 29% have a gun in their home (internists 19.5%, surgeons 43.6%). Primary reason: 5% collect guns; 14% hunting; 6% protection; 2% target practice; 2% other reasons

Work Settings

- Primary employment site: 44% hospital; 2% HMO; 23% group practice; 19% solo practice; 12% not in direct patient care
- Site of practice: 52% large city; 8% suburb; 18% medium-size city; 10% town with population of 5,000 to 750,000; and 1% town of less than 5,000.

Gun behavior/experience/attitudes

	Agree or	Disagree or	Neutral/
	Strongly Agree	Strongly Disagree	No Answer
"Gun control legislation reduces firearm injuries	74%	22%	4%
or death"			
z p - z z z z z z z y	76%	22%	2%
restricted"			
"It is appropriate for doctors to counsel patients	80%	6%	1%
about gun safety" *			
"Laws regarding the sale of firearms should be	81%	17%	2%
made more strict:"			

^{*} Percentages do not add to 100%, because the 12% of respondents who do not provide direct patient care were not asked this question.

Answers to policy questions

Internists Agreeing

"Firearm injury is a public health issue"	94%
"Doctors should be involved in firearm injury prevention"	84
"Gun violence is a bigger problem these days"	87
"Violence prevention should be a priority issue"	88.5
"Gun control legislation will help to reduce risks of injury or death to patients"	82
"Support community efforts to enact legislation restricting the sale or possession of	84
handguns"	

Current Counseling Practices

- Less than one-fifth of doctors involved in direct patient care (18.8% of internists and 19.6% of surgeons) discuss firearm ownership and storage as part of patient safety counseling
- Only 5% of internists and 2% of surgeons frequently talk to patients about having a gun in the house
- Almost 3/4 of internists and surgeons never talk to patients about guns in the home
- Only 14% of internists reported having had training relating to adolescent assault or homicide; 47% had training related to domestic violence; 68% for suicide; and 24% for conflict resolution
- 63% of internists expressed interest in receiving additional education in firearms injury prevention

Internists

Support for Actions to Deal with Gun Violence and Regulate Firearms *

	111161 111515
	favoring
Mandatory registration of automatic weapons	97.3%
Should anyone be allowed to buy a handgun? (answered "no")	94.8
Ban plastic guns that cannot be detected by metal detectors	94.2
Mandatory safety training prior to buying gun	93.1
Mandatory registration of handguns	92.6
Require child-proofing of guns if feasible	92.5
Mandatory registration of semi-automatic weapons	91.1
Stricter laws on sale of guns	88.6
Complete ban on the manufacture, sale, or possession of semi-automatic assault guns	87.0
Restrict the possession or sale of handguns	83.7
Mandatory registration of rifles	80.8
Mandatory registration of shotguns	80.2
Licenses to carry concealed firearms only for people with special needs	77.0
Police permit should be required before purchase of gun	73.0
Handgun sales after a waiting period and background check	69.4
Makers/sellers of assault rifles should be liable for gun injuries	62.8
Ban handguns except for police and authorized persons	56.9

^{*} Table shows percentages supporting pro-regulation positions. Those who opposed the measures, refused to answer or had no opinion make up the remainder of responses.

Comparison With Surveys of the General Public

ACP internists are half as likely to own guns (20%) as the public at large (41%). ²⁴ Although gun owners and non-owners were polarized in their views regarding restrictions on the sale and possession of handguns, they showed little difference in their opinions concerning the appropriateness of doctors providing firearm safety counseling or other actions to deal with gun violence. National public opinion polls have shown a similar convergence of views. Data derived from 14 opinion surveys conducted nationwide by telephone and in-person between 1959 and 1996, indicate that although the views of gun owners and non-owners differ widely concerning a ban on handguns (53% of non-owners favor, but only 25% of gun owners favor), there is much agreement between gun owners and non-owners concerning the need for gun regulation. ²⁴

Our survey asked doctors if gun control legislation would help reduce risks of injury or death to patients; 82% of ACP members agreed or strongly agreed. This compares to findings of a *Gallup/CNN/USA Today* poll showing that 68% of Americans believe that stricter laws would reduce the number of accidental deaths and suicides from guns. We asked if anyone who wants to should be allowed to buy a handgun; 95% of our members said "no". The *Gallup/CNN/USA Today* poll showed that 90% of the public favor preventing people with criminal records from owning or purchasing guns; 89% favor prohibiting gun sales to persons younger than 18 years of age; 88% support the Brady Act (mandatory 5-day waiting period prior to purchasing a gun); and 82% favor the registration of handguns. Almost 70% of ACP members think that a waiting period and a background check should be required prior to the sale of a handgun; the remaining 30% thought that the purchase of a handgun shouldn't be allowed even after taking these precautions.

A recent *Harris* poll revealed that 81% of Americans oppose repeal of the ban on assault rifles. ²⁶ Similarly, our survey showed that 87% of internists favor a complete ban on the manufacture, sale or possession of semi-automatic assault guns such as the AK-47. More than 90% of internists support registration of both automatic and semi-automatic weapons, and approximately 80% also favor registering rifles and shotguns.

Despite widespread support for registration and restrictions on gun sales and ownership, there is little public support for a complete ban on handguns. Only 39% of respondents to the *Gallup/CNN/USA Today* poll favored a ban on handguns (25% of gun owners and 53% of nonowners) and only 20% support making all guns illegal. These results are similar to the ACP/ACS survey which indicate that few doctors think that people should be unable to obtain a handgun after satisfying both a waiting period and a background check.

Summary of Research Findings

Internists overwhelmingly view gun violence as a public health issue. They see the problem of gun violence as worsening and consider violence prevention to be a priority issue. Internists believe that gun regulation can reduce gun injuries and deaths, and that doctors should support community efforts to restrict the ownership and sale of handguns. Members of the American College of Physicians supported by wide margins almost all of the proposed regulations of firearms identified by the questionnaire. The only regulatory positions not overwhelmingly supported were to hold the makers or sellers of assault rifles legally liable for

gun injuries, to ban all handguns except for police and other authorized persons, and not to allow the purchase of handguns even after satisfactory completion of a waiting period and background check.

Internists agree by wide margins that they should be involved in firearms injury prevention and that violence prevention should be a priority issue for the American College of Physicians. However, less than 20% of the members of ACP who are involved in direct patient care provide injury prevention counseling concerning firearms ownership and storage. Nearly three-quarters of internists and surgeons never discuss the dangers of gun ownership with their patients; very few doctors report frequently talking to patients about having guns in the home. Although nearly half of the ACP respondents had received some training concerning domestic violence and more than 2/3 had training concerning suicides, very few (14%) had any training related to adolescent assaults and homicides. However, doctors expressed considerable interest in receiving additional education in firearms injury prevention.

New Policy Positions of the American College of Physicians

In light of the survey of its membership and the continued need to reduce and prevent firearm injuries, the American College of Physicians adopts the following new public policy positions:

1. Gun violence and the prevention of firearm injuries and deaths is a public health issue that demands high priority for public policy.

Rationale:

The preventable loss of almost 40,000 lives a year and the preventable injury of over 150,000 people per year due to firearms and the resulting pain, suffering, cost, and consumption of human and health care resources demand that firearm injuries be considered a public health issue requiring immediate attention. The fact that such large proportions of firearm injuries and deaths occur among children and young adults, makes it even more compelling to initiate preventive health care measures to halt the firearms injury epidemic. Firearms are becoming the leading cause of trauma-related death and disability in the United States; in seven states and the District of Columbia firearm-related deaths equaled or exceeded deaths from motor vehicles. Deaths from brain trauma resulting from motor vehicle accidents decreased by 25% from 1984 to 1992, largely due to adoption of preventive safety and marketing measures. Meanwhile, death rates for firearm-related brain trauma increased by 13%. A national effort must be devoted to reducing firearm injuries and deaths.

- 2. Internists should be involved in firearm injury prevention both within the medical field and as part of the larger community.
 - Internists should discuss with their patients the dangers of firearm ownership and the dangers of having a gun in the home.
 - Physicians should obtain training relating to firearms injury prevention, including education concerning adolescent assault, homicide and suicide.

- Physicians should support community efforts to enact legislation restricting the possession or sale of firearms.
- Violence prevention and gun control is a high priority issue for the American College of Physicians.
- The College must take an active role in providing education and training for internists concerning all aspects of violence prevention, including firearm injury prevention.

Rationale:

From 1985 to 1993, firearm homicides increased 212% among 15 to 19-year olds; for the general population the age adjusted rate increased by 56%. ²⁹ The rate of firearm homicides for white adolescent males more than doubled; the rate for black teenagers more than tripled. More US teenagers die from gunshot wounds than from all natural causes combined. In 1990, approximately 6% of male respondents to a Youth Risk Behavior Survey stated that they had carried a firearm in the preceding 30 days. Three years later, gun carrying among this age group had increased to 13.7%. ³⁰

The growing incidence of gun acquisition by teens and the increasing firearm homicide rate among those under age 25 suggest that education and training to provide appropriate counseling for this age group and their parents are essential. However, our survey revealed that slightly less than half (47%) of the ACP physicians had received formal education or training regarding domestic violence, and only slightly more than half (53%) had received education concerning child abuse. Nearly 68% had received education or training regarding suicides, but only 14% had received education concerning adolescent assaults or homicides. Interest in receiving additional education in areas of firearm injury prevention was expressed by 63% of our ACP survey respondents.

The membership of the American College of Physicians overwhelmingly agrees (84%) that it is appropriate for physicians to provide safety counseling to patients. Yet, slightly less than half (49%) of practicing ACP internists provide injury prevention counseling *frequently* or even *sometimes*, and very few (15%) *usually* discuss firearm ownership or storage as part of their patient safety counseling. Although it may not be practical or necessary to include such counseling in every patient encounter, internists should be prepared to offer such patient education, as appropriate, within an overall regimen of preventive health care.

One step that the College has already taken is to make available free counseling kits about the hazards of firearms. These kits, developed by the American Academy of Pediatrics, include a monograph on the gun violence epidemic, suggestions for further reading, a counseling tip sheet, a cassette tape containing vignettes of realistic counseling situations, patient education brochures and office posters. The kits are available without charge from the Center to Prevent Handgun Violence, 1225 Eye Street, NW, Washington, DC 20005; phone (202) 289-7319; fax (202) 408-1851. The College is also a member of the Handgun Epidemic Lowering Plan (HELP), a network of individuals and organizations "committed to ending the growing epidemic of death, disability and suffering due to handguns." The HELP Network promotes a public health approach to the handgun epidemic and a reduction in the availability of handguns. For

more information contact: HELP, Children's Memorial Medical Center, 2300 Children's Plaza #88, Chicago, IL 60614; phone (773) 880-3826; fax (773) 880-6615.

ACP must also assume a leadership role in working to promote firearm injury prevention. 88.5% of the ACP membership agree or strongly agree that violence prevention should be a priority issue for the American College of Physicians.

3. The American College of Physicians favors strong legislation to ban the sale, possession and manufacture for civilian use of all automatic and semi-automatic assault weapons. Existing exceptions to the assault weapons ban for hunting and sporting purposes should be more narrowly defined.

Rationale

From 1985 to 1994, US domestic production of 9-mm pistols increased 13-fold; annual sales increased to nearly 743,000 pistols. When the 1994 Crime Bill went into effect, there were more than 3 million 9-mm semiautomatic pistols in circulation. Many of these are used by law enforcement officers, but it is estimated that the number in criminal hands has nearly doubled since 1987. Although assault weapons are a very small percentage of the firearms in circulation, they are involved in a disproportionate number of crimes. ³¹

Since the late 1980s, semiautomatic pistols have increasingly replaced revolvers in crimes involving firearms. Nationwide data on the types of weapons used in crimes are not available, but reports from major cities indicate that semiautomatic pistols, 9-mm in particular, are becoming the weapon of choice among today's criminals. In Philadelphia, the proportion of firearm homicides involving semiautomatic pistols rose from 24% in 1985 to 39% in 1990. Medium or large-caliber weapons (pistols of 9-mm or greater) accounted for 4% of these homicides in 1985, but 26% in 1990. In Chicago, the proportion of homicides involving semiautomatic pistols rose from 15% in 1986 to 46% in 1992. In Los Angeles, gang-related homicides involving semiautomatic pistols rose from 5% in 1986 to 44% in 1994. In Milwaukee, 9-mm semiautomatic pistols were involved in 7% of firearm homicides in 1990, but 23% in 1994.

The increasing numbers of fatalities from semiautomatic weapons is due not only to the availability of these weapons. but also to their deadliness. At-scene mortality rates for gunshots involving semi-automatic weapons rose from 5% in 1985 to 34% in 1990. Meanwhile, at-scene mortality rates from shootings involving revolvers declined from 42% to 18%. ¹⁰ The proportion of victims with multiple gunshot wounds admitted at a trauma center in Washington, DC rose from 25% in the early 1980s to 45% in 1990. ³² In Chicago, the proportion of victims with multiple gunshot wounds increased from 5% in 1984 to 20% by 1988. ³³

The 1994 Crime Bill banned the sale and possession of only the most deadly assault weapons for which there was no plausible sporting purpose. It only banned 19 specific semi-automatic weapons that had features associated with assault weapons. An unconscionable 670 other rapid-fire semi-automatic guns were allowed to remain in private hands and on the streets. These weapons, which produce a rapid spray of bullets, qualified as having "sporting purposes,"

since they did not have features such as a bayonet mounts, flash suppressers, grenade launchers, or folding or telescoping stock. The definition of "sporting purposes" needs to be more narrowly redefined and licensing and registration provisions enforced to assure that guns in private hands for hunting or target shooting are used only for those purposes..

The American College of Physicians seeks to reduce the availability of weapons designed to kill and maim human beings. The College therefore opposes any effort to weaken or repeal the existing ban on military-style assault weapons, and favors legislation to strengthen and further restrict the sale or possession of all semi-automatic and automatic weapons and their ammunition.

4. The American College of Physicians supports law enforcement measures, including required use of tracer elements or taggants on ammunition and weapons, and identifying markings such as serial numbers on weapons, to aid in the identification of weapons used in crimes.

Rationale

Absent a complete ban on the sale and possession of firearms, steps must be taken to restrict the availability of these deadly weapons and to assist law enforcement authorities in identifying those who use them in criminal activities. Most states and municipalities already require registration of firearms and the licensing of gun owners. Registration, use of taggants, and encryption of identifying markings will help assure that guns are used as intended if they are to remain available for hunting, target shooting, gun collecting, self-defense, or other purposes. These measures also facilitate reporting of stolen weapons and aid police in their identification and recovery.

- 5. The sale and possession of handguns should be restricted.
- Sales of handguns should be subject to a waiting period, satisfactory completion of a criminal background check, and proof of satisfactory completion of an appropriate educational program on firearm safety.
- The scheduled expiration of the waiting period and background check provisions of the Brady Act must be eliminated.
- Handguns should not be sold to minors, persons with criminal records, or persons who are known threats to themselves or others.
- Permits to carry concealed weapons should be issued only to persons with special justifiable needs, such as law enforcement personnel.
- The College supports a ban on plastic guns that cannot be detected by metal detectors or standard security screening devices.
- All firearms should incorporate safety features to make them as child-proof as possible.
- The College favors strong penalties and criminal prosecution for those who sell guns illegally.

Rationale

As many as 223 million firearms are estimated to have been produced or imported into the United States since 1899. Approximately 192 million firearms (70 million rifles, 57 million shotguns and other long guns, and 65 million handguns) are estimated to be currently in private hands. This abundance of guns is a public health hazard. The annual toll in morbidity and mortality associated with firearms is unacceptable. Guns in the home pose a particular threat, not so much to intruders as to members of the household. Having a gun in the home increases the risk of death by suicide by a factor of five. The risk of homicide is three times greater in households with a firearm, and the homicide risk is greatest from family members and close acquaintances. A study of homicides in Tennessee, Ohio and Washington showed that homes where homicides occurred were more likely to contain firearms than neighboring homes that were not the scenes of homicides.

Most ACP members (57%) favor enactment of a law that would ban the possession of handguns except by the police or other authorized persons. An overwhelming number (84%) favor restricting the possession or sale of handguns, and nearly all (95%) agree that not everyone should be allowed to buy a handgun. The College supports measures, such as the Brady law, that will restrict the sale of handguns.

Since the Brady law went into effect on February 28, 1994, more than 100,000 convicted felons and other prohibited purchasers have been blocked from buying a handgun.* ³⁷ However, the waiting period provisions of the law are scheduled to expire five years after enactment. The expiration date was established in large part because it was anticipated that by 1999, a nationwide computerized system would be in place that would allow instant checking of criminal records. But there was another reason for requiring a waiting period, and that was to provide time for would be purchasers to cool off. The need remains for this deterrent to crimes of passion and potential suicides.

National public opinion polls also indicate widespread support for restricting access to guns. ²⁴ Approximately 90% of Americans (including 92% of gun owners) think that people with criminal histories should be prohibited from owning or purchasing guns. There is almost a similar level of support (89%) for prohibiting sales of guns to children younger than 18 years of age.

Most Americans (69%) also agree that stricter laws would reduce the number of people killed by guns in arguments, and 68% think that stricter laws would reduce the number of accidental deaths and suicides from guns. More than half (58%) believe that stricter laws would reduce violent crime. Our internists share even stronger views. More than 91% support stricter laws on the sale of guns. Almost 3/4 agree or strongly agree that gun control legislation reduces firearm injuries and death (74%) and that the sale and possession of handguns should be restricted (76%).

There is evidence to support these views. Adoption of a gun licensing law in Washington, DC in 1976 resulted in an abrupt decline in firearm-related deaths by both homicide (-25%) and suicide (-23%). No similar reductions were found in homicides or suicides by other means and there were no similar reductions in firearm-related deaths in adjacent metropolitan areas in Virginia and Maryland. Although the District of Columbia continued to experience a

14

high homicide rate and the rate surged again in the late 1980s corresponding to the spread of "crack" cocaine, the law prohibiting the purchase, sale, transfer or possession of handguns by civilians is attributed with preventing an average of 47 deaths each year after the law was implemented. ³⁸

A comparison of firearm-related homicide and suicide rates in Seattle, Washington and adjacent Vancouver, British Columbia showed striking differences between the two cities with similar demographic characteristics and criminal activity, but with different handgun control laws. Vancouver, which had tougher controls on handguns, had a homicide rate from handguns that was one-fifth of Seattle's. However, the rates of homicides by methods other than handguns were not substantially different between the two cities. The rate of suicide by handgun for young adults in Seattle was six times higher than in Vancouver.

Http://www.ojp.usdoj.gov/bjs/pub/press/phc96.pr

^{*}From Feb. 1994 to December 1996, an estimated total of 250,000 illegal firearm sales, including 173,000 handgun purchases, were blocked by the Brady Act. Source: U.S. Dept. of Justice. Brady Act Background Checks Prevent 173,000 Illegal Handgun Purchases Since February 1994 Implementation; Sept. 9, 1997.

Laws restricting the frequency and volume of firearm sales can also be effective in stemming the illegal supply of guns. In July 1993, a Virginia law became effective limiting purchases of handguns to one per month from licensed dealers. The law was designed to cut down on the illegal trafficking of guns. Previously, there were no limits on the number of handguns that an individual could purchase, and Virginia was considered to be a major source of guns to the illegal gun market in the Northeastern United States. Analysis of data from the Bureau of Alcohol, Tobacco, and Firearms on guns recovered from crime scenes in certain northeastern states (NY, NJ, CT, RI and MA) revealed that almost 35% of the guns that had been purchased prior to implementation of the law originated in Virginia, but Virginia was the source of only 15.5% of recovered guns that had been purchased after the law was implemented.

The high incidence of injuries and mortality among children and young adults from firearms highlights the need to restrict gun sales among this age group and to adopt design features that will make guns difficult to operate by children. The annual number of homicides and suicides among school-age children has doubled within the past decade. Children are increasingly at risk of being shot even while at school. Homicides are the predominant cause of death at school (80%), and firearms account for 3/4 (77%) of the deaths. Handguns accounted for 89% of the weapons that could be identified in firearm-related deaths at school; half were automatic or semiautomatic guns. One study indicated that 12% of students reported carrying a weapon onto school property at least once within the 30-day study period and 4% reported missing school because they felt unsafe.

Reducing the exposure of children and young adults to firearms clearly is a preventive action that can help save lives. The rationale for prohibiting the sale of guns to those with criminal records, histories of mental problems and those subject to a restraining order for domestic violence or stalking incidents are similarly obvious.

Limiting permits for carrying concealed weapons to only those who have legitimate reasons, such as law enforcement officers, is in the public interest, and is self-explanatory. Likewise, banning plastic guns (not toys) that are designed to evade detection by standard security devices such as metal detectors and airport x-ray machines will help prevent injuries from these weapons.

The College also favors gun safety training programs, and requiring proof of satisfactory completion of such courses prior to being allowed to purchase a firearm. ACP supports community programs to encourage people to voluntarily surrender their firearms. Such programs could provide financial incentives for people to turn in guns and should provide amnesty from prosecution for any violations of laws prohibiting their possession.

Conclusion

The growing incidence of firearm violence has reached epidemic proportions. This paper has presented a brief overview of the data on firearm injuries and the findings of a national telephone survey of a statistically representative sample of members of the American College of Physicians. It presents previously adopted positions of the ACP as well as new positions. The new positions reflect survey responses indicating widespread support (generally 80% or more) of the ACP membership. Internists overwhelmingly believe that gun violence and the prevention of firearm injuries and deaths are public health issues of increasing concern. They also overwhelmingly agree that physicians should be involved both in counseling patients and supporting community actions to reduce injuries and deaths involving firearms.

In 1991, the editor of the New England Journal of Medicine suggested that society should evaluate the risks and benefits of restricting access to firearms, much as physicians consider options in medical decision-making. ⁴⁶ He observed that personal ownership of firearms has both benefits and risks, but "when we exceed some threshold level of firearm-induced injuries and deaths, we should be willing to restrict their use." Despite surveys of gun owners indicating that they believe guns provide them with protection, studies show that suicides, criminal homicides and accidental deaths in the home outnumber deaths attributable to self-defense by forty to one. Other perceived benefits include enjoyment of the sport of target shooting, hunting, and gun collecting. Advocates maintain that they have an inalienable right to bear arms that is guaranteed by the Bill of Rights. Some argue that infringement of this right will jeopardize other freedoms. Other benefits are thought to include a sense of independence and feelings of control and even social status. However, the risks are very clear. The staggering toll from firearms, particularly among the young, has been outlined in this paper and is unacceptably high. Clearly the "killing threshold" ⁴⁶ for severely restricting firearms has been passed.

REFERENCES

Preventing firearm violence: a public health imperative. American College of Physicians. Ann of Intern Med. 1995;122:311-13.

² Adler KP, Barondess JA, Cohen JJ, Farber SJ, Foreman S, Gambuti G, et al. Firearm violence and public health. Limiting the availability of guns. JAMA. 1992;271:1281-83.

³ **Fontanarosa PB.** The unrelenting epidemic of violence in America. Truths and consequences {Editorial}. JAMA. 1995; 273:1792-93.

⁴ **Annest JL, Mercy JA, Gibson DR, Ryan GW.** National estimates of non-fatal firearm-related injuries. Beyond the tip of the iceberg, JAMA. 1995; 273: 1749-54.

⁵ **Center to Prevent Handgun Violence.** Caught in the Crossfire: A Report on Gun Violence in Our Nation's Schools. Washington DC: Center to Prevent Handgun Violence; 1990.

⁶ Common Core of Data [public-use database]. Washington DC: National Center for Education Statistics, US Dept of Education; 1994.

⁷ **US Dept of Justice, Bureau of Justice Statistics.** Sourcebook of Criminal Statistics --1994. Washington, DC: US Dept of Justice; 1995.

⁸ **National Centers for Health Statistics.** Annual summary of births, marriages, divorces and deaths: United States, 1994. NHCS Monthly Vital Statistics Report. 1995;43.

⁹ **Fingerhut LA, Jones C, Makue DM.** Firearm and motor vehicle injury mortality: variations by state, race and ethnicity: United States 1990-91. In: Advance Data From Vital and Health Statistics of the National Center for Health Statistics. Rockville, MD: U.S. Dept. of Health and Human Services, Public Health Service, Health Resources Administration, 1994;242:1-12.

Wintemute GJ. The relationship between firearm design and firearm violence. JAMA. 1996;275:1749-53.

¹¹ Cassel CK, Nelson B. Internists' and surgeons' attitudes toward guns and firearm injury prevention. Ann Intern Med. 1998;128:224-30.

¹² **Rice DR, MacKenzie EJ.** Cost of Injury in the United States: A Report to Congress. San Francisco: Institute for Health and Aging, University of California; Baltimore, MD: Injury Prevention Center, Johns Hopkins University;1989.

- ¹³ **Lawrence GA.** Child Victimizers: Violent Offenders And Their Victims, Bureau of Justice Statistics, March 1996.
- ¹⁴ Suicide among children, adolescents, and young adults United States, 1980-92. MMWR Morbidity and Mortality Weekly Report. 1995;44:289-91.
- ¹⁵ From the Centers for Disease Control and Prevention. Fatal and non-fatal suicide attempts among adolescents -- Oregon, 1988-1993. JAMA. 1995;274:452-3.
- Max W, Rice DP. Shooting in the dark: estimating the costs of firearm injuries. Health Affairs (Millwood). 1993;12:171-85.
- ¹⁷ **Kizer KW, Vassar MJ, Harry RL, Layton KD.** Hospitalization charges, costs and income for firearm-related injuries at a university trauma center. JAMA. 1995;273:1768-73.
- ¹⁸ Vassar MJ, Kizer KW. Hospitalizations for firearm-related injuries. JAMA. 1996;275:1734-39.
- Headden S. Guns, money and medicine. U.S. News & World Report. 1 July 1996.
- ²⁰ National Spinal Cord Injury Statistical Center
- ²¹ **Cook PJ, Ludwig J**. Guns in America: National Survey of Private Ownership and Use of Firearms. National Institute of Criminal Justice Research in Brief. Rockville, MD: U.S. Dept. of Justice, Office of Justice Programs, National Institute of Justice; 1997.
- ²² Assault Weapons Ban is Dropped; Waiting Period on Handguns Blocked. 1990 CQ Almanac. Washington, DC: Congressional Quarterly; 1991:500-501.
- ²³ President Signs "Brady" Gun Control Law. 1993 CQ Almanac. Washington, DC: Congressional Quarterly; 1994:300-303.
- ²⁴ **Blendon RJ, Young JT, Hemenway D.** The American public and the gun control debate. JAMA. 1996;275:1719-22.
- ²⁵ Gallup/CNN/USA Today poll. Storrs, CT: Roper Center for Public Opinion Research; December 1993.

²⁶ Harris poll. New York, NY: Louis Harris & Associates; March 1996.

- Sosin DM, Sniezek JE, Waxweiller RJ. Trends in death associated with traumatic brain injury, 1979 through 1992. Success and failure. JAMA. 1995;273:1778-80.
- Ash P, Kellermann AL, Fuqua-Whitley D, Johnson A. Gun acquisition and use by juvenile offenders. JAMA. 1996;275:1754-58.
- Youth risk behavior surveillance: United States, 1993. MMWR Morbidity and Mortality Weekly Report, 1995;44(SS-1):1-25.
- ³¹ Gun control advocates claim victory. Lawmakers enact \$30.2 billion anti-crime bill. 1994 CQ Almanac. Washington, DC: Congressional Quarterly, 1995:273-94.
- Webster DW, Champion HR, Gainer PS, Sykes L. Epidemiologic changes in gunshot wounds in Washington, DC, 1983-1990. Arch Surg. 1992;127:694-98.
- General Accounting Office. Trauma Care: Lifesaving System Threatened by Unreimbursed Costs and Other Factors. Report to the Chairman, Subcommittee on Health for Families and the Uninsured, US Senate Committee on Finance. Washington, DC: General Accounting Office; 1991. Publication no. GAO/HRD-91-57.
- Zawitz MW. Guns Used in Crime: Firearms, Crime, and Criminal Justice --Selected Findings.
 No. 5. Rockville, MD: U.S. Department of Justice, Bureau of Justice Statistics; 1995.
 Publication No. NCJ-148201.
- ³⁵ **Kellermann AI, Rivara FP, Somes G, Reay DT, Francisco J, Banton JG, et al.** Suicide in the home in relation to gun ownership. New Engl J of Med. 1992;327:467-72.
- ³⁶ Kellermann AI, Rivara FP, Rushforth NB, Banton JG, Reay DT, Francisco JT, et al. Gun ownership as a risk factor for homicide in the home. New Engl J of Med. 1993;329:1084-91.
- ³⁷ **Sarah and James Brady.** Remarks to the Democratic National Convention, Chicago. Washington Post. 27 August 1996.
- Loftin C, McDowall D, Wiersema B, Cottey TJ. Effects of restrictive licensing of handguns on homicide and suicide in the District of Columbia. N Engl J Med. 1991;325:1615-20.

Deaths resulting from firearm- and motor vehicle-related injuries: United States, 1968-1991. MMWR Morbidity and Mortality Weekly Report. 1994;43:37-42.

³⁹ **Sloan JH, Kellermann AL, Reay DT, Ferris JA, Koepsell T, Rivera FP, et al.** Handgun regulations, crime, assaults, and homicide. A tale of two cities. N Engl J Med. 1988;319:1256-62.

- Weil DS, Knox RC. Effects of limiting handgun purchases on interstate transfer of firearms. JAMA. 1996;275:1759-61.
- ⁴² Homicides among 15-19 year-old males -- United States, 1963-91. MMWR Morbidity and Mortality Weekly Report, 1994;43:725-27.
- Suicides among children, adolescents, and young adults -- United States, 1980-92. MMWR Morbidity and Mortality Weekly Report, 1995;44:289-91.
- ⁴⁴ Kachur SP, Stennies GM, Powell KE, Modzeleski W, Stephens R, Murphy R, et al. School-associated violent deaths in the United States, 1992 to 1994. JAMA. 1996;275:1729-33.
- Kann L, Warren CW, Harris WA, Collins JL, Douglas KA, Collins ME, et al. Youth risk behavior surveillance United States, 1993. MMWR CDC Surveil Summ. 1995;44:1-56.
- ⁴⁶ **Kassirer JP.** Firearms and the killing threshold. N Engl J Med. 1991;325:1647-50.
- ⁴⁷ **Kellermann AL, Reay DT.** Protection or peril? An analysis of firearm-related deaths in the home. N Engl J Med. 1986;314:1557-60.

Sloan JH, Rivara FP, Reay DT, Ferris JAJ, Kellermann AL. Firearm regulations and rates of suicide. A comparison of two metropolitan areas. N Engl J Med. 1990;322:369-73.