

ORIGINAL ARTICLE

Are medical societies developing a standard for gun injury prevention?

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Context: Following heightened gun violence in the 1990s, many medical societies in the United States adopted policies on the topic.

Objective: Identify points of firearm violence policy agreement among large medical organizations.

Design: Fourteen national medical societies—clinical focus, demonstrated interest in gun injury prevention, >2000 members—were selected for policy review in 2002. Policies were categorized on areas covered and items within these. *Consensus areas* were addressed by $\geq 7/14$ societies. *Consensus items* were included by $\geq 7/14$ societies, *shared items* by 5–6.

Results: There were five *consensus areas*: access prevention, gun commerce, research, public education, and clinical counseling. There were four *consensus items*: restricting gun access by enforcing existing laws, restricting access to all guns at the point of sale, restricting access to handguns at the point of sale, and creating a national database on gun injury and death. *Shared items* promote violence prevention, clinical education on risks of guns in the home, treating guns as consumer products, restricting gun access to children, bans on automatic weapons, and promoting trigger locks.

Conclusions: Large medical societies in the United States agree on key approaches for reducing gun injury mortality and morbidity. Future research will be needed to track the evolution of this emerging standard for physician action, which now includes the consensus areas and items. It promises to be, in effect, a medical standard of care for gun injury prevention. The United States experience may be useful to others working on gun injury prevention.

In the early 1990s the epidemic of gun violence in the United States reached unprecedented levels.¹ In 1993, the number of Americans injured by firearms peaked with 39 595 deaths and another 104 390 non-fatal injuries.^{1–3} Older white males (75+ years) and young African-American males (aged 15–24) were found to be at particularly high risk (from gun suicide and gun homicide, respectively).^{1,3} The economic costs of this gun violence have been estimated to be as high as \$100 billion a year, and the commitment of scarce resources to the treatment of gun injury placed significant stresses on the healthcare system.^{4,5}

Mobilization of the health sector to prevent gun injuries became a priority. As early as 1985, organized medicine and allied health agencies had begun to treat violence as a public health problem, and this included a focus on gun violence.⁶ Utilizing the public health paradigm, policies and programs were crafted to reduce the risks and rates of firearm morbidity and mortality. In 1992, the American Academy of Pediatrics took strong policy stances on gun injury prevention,^{7,8} and began a series of physician and parent education initiatives.

During the 1990s, other medical societies drafted position statements in support of various gun injury prevention strategies.

The HELP Network⁹ was founded in 1993 to develop and inform a national network of medical and health organizations promoting messages and strategies for gun injury prevention.^{10,11} In recent years, HELP has been joined by another network of medical organizations, Doctors Against Handgun Injury (DAHI).¹² The organizations have overlapping goals and membership; HELP focuses more on education and information dissemination, while DAHI emphasizes national legislative issues.

Along with these developments, there emerged a more developed literature,^{13,14} increasing awareness by physicians of the health consequences of the epidemic,^{15,16} and related policy advocacy within medical societies. Policy statements

designed to confront the epidemic of gun violence became common among medical societies. Such policy statements are developed by clinical societies to document organizational positions on clinical and public policy topics. They are published in medical journals and organizational newsletters, and provide a basis for member education and policy activity (such as lobbying on state or national legislation). The policy statements on gun injuries—like those on many other topics—inevitably vary across societies in details, reflecting the organizations' constituencies, agendas, and internal protocols for policy development.

Over the last few years, the international community has focused increasing attention on the toll of small arms and the need to reduce this. Health approaches are emerging as part of the growing world effort (see www.iansa.org). The United States experience with health based approaches to gun injury reduction may be helpful to that work.

At this time it is relevant to ask what similarities exist in medical society policies despite the differences. These might constitute an emerging national standard for gun injury prevention in the medical profession. This paper addresses this question by describing an inventory of the policy statements of 14 HELP and DAHI members.

METHODS

In the summer and fall of 2002, national medical societies with a clinical focus, demonstrated interest in gun injury prevention, and more than 2000 members were selected for policy review. Fourteen medical societies from among the 127 HELP and 12 DAHI members met these selection criteria, representing 765 600 physicians (not excluding duplicate memberships). The organizations selected for review are presented in table 1.

Policy position statements from the 14 societies were collected and evaluated for content. Published position statements made by these organizations were located by

Table 1 National medical societies selected for policy review

Society	Year founded	No of members	Affiliated gun injury prevention organization, 2002
American Academy of Child and Adolescent Psychiatry (AACAP)	1953	6500	HELP
American Academy of Family Physicians (AAFP)	1947	94300	HELP
American Academy of Pediatrics (AAP)	1930	57000	DAHI, HELP
American College of Emergency Physicians (ACEP)	1968	22000	DAHI, HELP
American College of Physicians (ACP)	1915	115000	DAHI, HELP
American College of Preventive Medicine (ACPM)	1954	2000	DAHI
American College of Surgeons (ACS)	1913	64000	DAHI
American Medical Association (AMA)	1847	294000	HELP
American Medical Women's Association (AMWA)	1915	10000	DAHI
American Psychiatric Association (APA)	1844	37000	HELP
National Hispanic Medical Association (NHMA)	1994	26000	DAHI
National Medical Association (NMA)	1895	25000	DAHI
Society of Critical Care Medicine (SCCM)	1970	10,000	DAHI
Society of General Internal Medicine (SGIM)	1978	2800	HELP

literature searches performed on the PubMed system (<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>). The goal of the search was to characterize these organizations, not to fully inventory all medical organizational policies. Search terms included the name of the respective organization, "policy statement", "position paper", "firearm", "firearms", "gun", "guns" and "injury prevention". The organizations' websites were also searched for the above terms to identify unpublished or updated statements. In the event of "dead" links or unidentifiable positions on gun injury prevention, the organizations were called to ensure that we collected any official yet unpublished organizational policies.

After the policy statements were collected, they were independently evaluated by the investigators to determine which of six broad categories of gun injury prevention policy they were addressing (that is, access prevention, gun commerce, research, public education, clinical counseling, physician education. These categories were determined *a priori*, and the labeling was refined during the process of policy statement evaluation (for example, "sales and distribution" became "gun commerce"). The content of the categorized policy statements were considered detailed if content items were more specific than would be indicated from the general category itself. For example, the American College of Surgeons' (ACS) Statement on Firearm Injuries states,¹⁷ "...the [ACS] supports efforts to enhance the responsible sale, manufacture and distribution of firearms..."

This was determined to be a *basic gun commerce* statement. The same ACS statement includes a more *detailed public education* statement:

"... [the ACS] supports educational programs about conflict management and the avoidance of violence".

Many statements addressed more than one category. Such a statement often had "basic" content in one category and "detailed" in another. An example of a statement that was deemed *basic* in two categories (that is, *physician education* and *public education*), and *detailed* in another (that is, *clinical counseling*), comes from an early American Academy of Child and Adolescent Psychiatry (AACAP) policy¹⁸:

"[AACAP supports] education of families through the media, schools, and physicians about the risks of gun ownership and proper safety precautions The most effective measure to prevent firearm-related deaths and injuries to children and adolescents is the elimination of guns from homes and communities. This is particularly critical for homes or families in which the threat of personal violence exists. The AACAP also supports all efforts to educate children and the general public about the danger of guns, and the increased risk of accidental injury and death associated with gun ownership".

When an organization (for example, the Society of Critical Care Medicine) stated that it subscribed to DAHI policies but had no existing statement of its own (personal communication, 2 August 2002), DAHI policies were evaluated.

Any disagreement among the authors on how to characterize the policies was resolved by discussion. During preparation of this manuscript in the summer of 2003, policies were again reviewed to assure that this presentation reflects any policy updates. However, organizations that joined HELP or DAHI after the original inventory were not included.

Once categorized, organizational policy statements were evaluated to determine if there were any *consensus areas* in policies—that is, ones that were shared by a majority of the groups, and also if there were *consensus items* (detailed policies shared by half or more of the societies) or *shared items* (those shared by at least a third of the groups).

To determine shared points of policy within categories, the text of each statement was compared against several content items (see table 2). Each organizational statement was assessed for every content area it addressed. In cases where it was not clear to the individual reviewers how a statement should be tabulated, consensus was reached through discussion.

Points of shared policy were defined as *consensus items* if they were shared by seven or more of the 14 selected organizations, and *shared items* if they were shared by five or six organizations.

In this paper, we use the terms "policy statement", "policy", "position statement", "statement", and "position" interchangeably.

RESULTS

There were no content areas that were addressed by all 14 societies. There were five *consensus areas*: access prevention (11/14 policies), gun commerce (10/14), research (9/14), public education (9/14), and clinical counseling (8/14). Physician education for gun injury prevention was the only area of policy that did not have a consensus level of support. All policies related to access prevention were detailed; policies in three of the other four consensus areas consisted of detailed recommendations and calls to action. Figure 1 summarizes these findings.

Evaluation of the policies at the content item level identified four *consensus items* and six *shared items* (table 3).

Other content items that had some agreement below the level of *shared* included those in the following content areas. Public education: risks of guns in home (four societies), need for safe storage (3), gun safety, (3), school based (4),

Table 2 Policy content areas and items

Content area	Content item
Public education	Risk of firearms in home
	Safe storage
	Gun safety
	Violence prevention
	Hunter safety
	School based Community based
Clinical counseling	Risks of guns in home
	Safe storage
	Child access
	Removal of guns from home
	Identify high risk patients
Physician education	Training to identify high risk
	Training in violence prevention
	Students
	Residents
Access prevention	Restrict access to high risk users (for example, children)
	Restrict access at point of sale for all guns or specific types
	Enforcing existing laws
	Personal liability
Gun commerce	Treat guns as a consumer product
	Trigger locks
	Childproofing
	Tracing, taxes
Research	National data system
	Program and policy evaluation

community based (4); clinical counseling: need for safe storage (4), child access prevention (3), identifying those at high risk (3); physician education: violence prevention training (4), training to identify high risk (3), resident training in prevention (3); access prevention: restricting access to “high risk” individuals (3), holding owner liable (4); gun commerce: childproof guns (4), taxes on gun sales (3); and research: evaluation of prevention programs and policies (4).

DISCUSSION

There is broad consensus among the large national and clinically focused medical societies studied that gun injuries are a medical concern, that public policy is essential for effective gun injury prevention, and that specific prevention steps are needed in the areas of reducing gun access and research on gun injuries and their prevention.

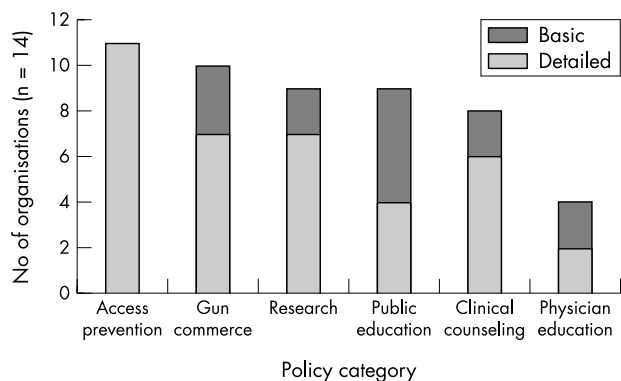


Figure 1 Summary of organizational gun injury prevention policies by category and level of detail.

Table 3 Gun injury prevention positions in 14 medical societies

Gun injury prevention positions	Content items (No of organizations)
Consensus policy items	● Access prevention
	● Enforcing existing laws (9)
	● Restrictions for all guns at the point of sale (9) ● Restrictions for only handguns at the point of sale (8)
Shared policy items	● Research
	● National data system (7)
Shared policy items	● Public education
	● Violence prevention (6)
	● Clinical counselling
	● Risks of guns in home (6)
	● Access prevention
	● Restricting access to children (5)
	● Ban on assault weapons (5)
Shared policy items	● Gun commerce
	● Treat guns as a consumer product (6)
	● Trigger locks (5)

The greatest and most detailed consensus concerns the importance of reducing access to guns. This emphasis is consistent with research findings that access to guns at the individual,¹⁹ household,²⁰ and state²¹ level is directly related to risk of gun injury and death in the United States.

The other area that contained consensus items relates to research, reflecting the commitment of the medical profession to collecting detailed data on gun injury and death, evaluating access-reducing measures, and improving the science and effectiveness of gun injury prevention.

A curious finding is the lack of consensus on the importance of educating physicians on gun injury prevention. It is not clear how medical societies expect their policies to be implemented by their members without such education. It is possible that policy reticence on this reflects the need for research; if so, this emphasizes the societies’ consensus in that area. Another possibility is that the societies have not yet turned their attention to applying the positions that they have developed. Further study will be needed to examine how societies educate their members about their policies.

The societies’ consensus is weaker for items than for areas. This is likely due to the fact that an independent process is used to develop each statement.

Methodological issues

The organizations chosen for study include many of the most prominent ones in organized medicine. They were selected from among all members of the two extant networks that address gun injury as a health problem. Large medical groups that do not belong to these networks are thus not included in this report. The conclusions can therefore be generalized only to the groups that are publicly addressing gun injury prevention—that is, the leaders in this area. Many other medical and allied health and health advocacy organizations (that is, the American Public Health Association, the American and Eastern Associations for the Surgery of Trauma, Physicians for Social Responsibility, etc) also have related policies, and we are not aware of any large medical societies that take a markedly different approach.

Due to the way organized medical organizations work, it is unlikely that there will ever be unanimity on the details of how best to address gun injury prevention. Still, the evolution of these policies over time can be used to track the development of a medical standard of care for the profession’s approaches to the reduction of gun injury—the second

Key points

- Many large medical societies in the United States now agree that the work of physicians includes reducing gun injury mortality and morbidity.
- These groups prioritize five approaches to gun violence prevention: access prevention, gun commerce, research, public education, and clinical counseling.
- The groups also prioritize four specific action items: enforcement of existing laws concerning access, closing the “gun show loophole”, restricting access to handguns at the point of sale, and creating a national database on gun injury and death.
- These areas and items constitute an emerging standard for excellent physician practice.
- Other nations pursuing health based approaches to gun injury reduction may find this information useful.

leading cause of injury death in the United States. This report does not speak to the trajectory of that evolution, which will need to be addressed by future research.

This study also did not address the effects of organizational policy statements on the behavior of clinicians, researchers, advocates, or others. There is some evidence that organizational statements do affect physician attitudes and behavior.^{22 23} This is an area that needs more exploration in general, and specifically regarding firearm injury prevention.

This study was limited to medical groups in the United States. Future research will need to examine how medical groups are handling this issue internationally.

CONCLUSIONS

At least 14 clinically oriented large medical societies serving national constituencies have policies supporting gun injury prevention. Among these, there is consensus on the need for access prevention and changes in gun commerce. There is also consensus on research, public education, and clinical counseling, and on specific items related to access prevention—restricting access to guns through the enforcement of existing laws, restricting access to all guns at the point of sale (that is, closing the gun show loophole), and restricting access to all handguns at the point of sale—and for a national database to improve research on gun injury prevention. These items indicate that there is an emerging—but not yet firmly established—medical standard for dealing with epidemic gun injuries in the United States. We believe this emerging standard is, in effect, a medical standard of care for gun injury prevention. Other nations pursuing health based approaches to gun injury reduction may find this information useful.

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APPENDIX

POLICY STATEMENTS REVIEWED FOR THIS REPORT AACAP

- Policy Statement: PS-44, Children and Guns: 10/28/00.
- Policy Statement: PS-23, Firearm Safety: 10/90.

AAFP

- Policy Statements on Firearms, Handguns, and Violence 1995, 1998, 1999, 2000.

AAP

- Policy Statement: RE9233, Firearms and Adolescents: 4/92.
- Policy Statement: RE9234 4/92, Firearm Injuries Affecting the Pediatric Population.
- Policy Statement: RE9832, The Role of the Pediatrician in Youth Violence Prevention in Clinical Practice and at the Community Level: 1/99.
- Policy Statement: RE9926, Firearm-Related Injuries Affecting the Pediatric Population: 4/00.

ACEP

- Policy #400233, Firearm Injury Prevention: 2/01.
- Policy #400174, Violence Free Society: 10/00.
- Policy #400276, Injury Control/Trauma Data Banks (9/99).

ACP

- Position Paper: Firearm Injury Prevention 2/98.

ACPM

- Preventing Handgun Injury: 11/02.

ACS

- Statement on Firearm Injuries, ST-12: 2/00.

AMA

- Policy Statements: H-145.000 (145.978-145.999), Firearms: Safety and Regulation.

AMWA

- Resolutions Crime, Violence, and Civil Disobedience 1990.1 and 1993.1.

APA

- Reference No 200107, Position Statements based partially on the DAHI Endorsement: 10/2001.
- Reference No 930008, Position Statement on Homicide Prevention and Gun Control: 12/93.
- Reference No 200110, Position Statement on Prevention of Violence.

DAHI

- Position Statements 2003.

NMA

- Policy# 340.1, Violence Prevention Curriculum in Schools.

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LACUNAE

An interesting judicial decision

We have often argued that responsibility for injury prevention involves many jurisdictions. In a recent court decision in Canada, the court appeared to agree. The case of a child who was rendered paraplegic following a car crash was influenced by the Walking Security Index developed by Professor Wellar, which takes account of road features, traffic volume, and driver compliance with traffic laws in rating intersections for pedestrian security. Accordingly, the \$12 million award in damages was based on the jury's conclusion that the city was 45%, the driver 35%, and the former police chief 20% responsible for the "accident" (submitted by Barry Pless).

On jaywalking...

The implication of the term "jaywalking" is that the individual is not showing sufficient "respect" for the power of motor vehicles and the frequency of lapses in attention of those piloting them.

"...it is all about the asymmetry of power on our streets (which) ... results in the law requiring pedestrians always ... to yield to motorists (and cyclists). In fact, "in many jurisdictions, it is not enough for the pedestrian to yield; crossing anywhere without an active or passive 'control' is simply forbidden even if there is no 'traffic' ... to make the crossing dangerous" (abridged from Pednet). (Submitted by Barry Pless, who notes that all of this is a pity because he remains convinced it is safer to cross mid-block than at intersections with lights or stop signs that are not adequately enforced.)