injury

PREVENTION

Journal of the International Society for Child and Adolescent Injury Prevention

Editorials

Product safety: getting tough or being nice?

For a long part of its history, injury prevention in childhood has been almost synonymous with home safety, and that, in turn, is largely a matter of concern about the safety of products. Pioneering work by our honorary editors among others often involved calling attention to the dangers of various products and urging the authorities to take action. Sometimes this involved educating the public, sometimes it required setting safety standards, and occasionally stiff regulation was needed.

In keeping with this theme, this issue includes some unusual elements. First, there is the Special Feature—a superb overview of the topic by Farquhar, based on the presentation he gave at the ISCAIP meeting in Amsterdam. The feature examines various aspects of product regulation through the eyes of someone who is, by heart and training, a consumer advocate. But like so many in the product safety field, his position with the European Union also requires good judgment and a degree of inventiveness. All are needed to achieve the tricky balance between protecting the safety of consumers, especially children, and satisfying the demands of a myriad of government bureaucracies.

A second unusual element is the link between the feature and this issue's Classics. I chose two papers on children's sleepwear flammability and the use of safety standards (p 313 and 317).^{1,2} This choice was easy because I learned so many useful lessons about the politics of advocacy from this example. I watched while groups in the US struggled to bring this to the attention of Congress and then became involved in a similar, extended, and often bitter battle, in Canada. (Researchers should take heart from these Classics; both are essentially descriptive papers quantifying the problem; but, in the great scheme of things, until this was done and done well, pedestrian as it may seem scientifically, little more was likely to happen by way of action toward prevention.)

Third, to help balance the picture presented by Farquhar, I asked Malcolm Barrow, one of our editors who was formerly an employee of the Department of Trade and Industry in the UK, someone from the Consumer Product Safety Commission in the US, and someone from the Product Safety Branch in Canada, to each write a short commentary describing how they determine a product is dangerous and how they decide whether it requires mandatory or voluntary regulation. Added to this is a contribution describing how a non-governmental standard setting body (the Canadian Standards Association) operates.

The work described in the Classics kept the ball rolling that had been set in motion by earlier papers on this topic. The flammable clothing problem is not, of course, an

American issue alone. In fact, pride of place may well belong to our parent journal, the *BMJ*, that published a paper on this topic in 1956.³ In that paper Colebrook *et al* noted that 80% of all burn deaths among children in England were related to clothing ignitions. Although the US introduced the Flammable Fabrics Act in 1953, one reviewer described it as “a standard that was famous for allowing 99% of all fabrics involved in serious cases to pass”.⁴ The same review of the situation in the US in 1971 concluded that government and industry had responded “slowly (and inadequately)”.

Collectively, these and other publications set in motion the most promising solution—flammability standards and means to enforce them. Oglesbay's paper addressed this problem in 1969 and lauded many countermeasures, but none were evaluated.² Furthermore, as the editor of the issue in which this paper appeared noted, several questions remained unanswered: why had nine years elapsed between the time the problem was first identified and the first legislation; why that legislation was so inadequate as to require amendment; and why this, in turn, took another 13 years!

In the US, it was only in 1973 that a specific standard for children's sleepwear was enacted. The paper published in 1977 by McLoughlin, now a member of our editorial board,¹ showed that since 1973 “and coincident with promulgation of strict ... standards... a dramatic decline in the number of children referred [to a pediatric burn unit] has taken place”. Another publication echoed this conclusion, showing that simply requiring manufacturers to agree to the new standard resulted in a net improvement of nearly 75%.⁵

Despite all the evidence from elsewhere, in dismal contrast, it was not until 1984 that the Canadian Institute of Child Health (CICH) and the Canadian Pediatric Society (CPS) persuaded the Minister of Consumer and Corporate Affairs (CCAC) to convene a committee to examine the need to increase the stringency of the Canadian sleepwear standard by making it similar to that in the US. The manufacturers refused to accept any standard that would eliminate the materials responsible for the most severe burns. In other words, Canadian children were judged to be thicker skinned than American children, which may be true metaphorically, but was never true biologically.

Soon after, Canada's stalwart safety advocate, Stanwick, published a paper documenting that about 21 children under 9 experience the enduring nightmare of a sleepwear burn each year.⁶ Even this failed to persuade, nor did subsequent meetings held with CCAC involving a variety of consumer groups.

So CICH and CPS began a letter writing campaign to the minister, and a few months later, *voilà*, a communiqué

appeared announcing “tougher flammability regulations planned for children’s nightgowns and robes”. But, typically, the needs of the corporate sector won out over those of children; the same communiqué added that the revised regulations would not come into effect for another two years “to ensure that industry has time to adjust to these new requirements and minimize adverse impact”. No one bothered to ask how the children burned during this period were supposed to adjust. In the interim, no doubt to salve guilty consciences, CCAC and CPS began a joint venture to notify parents of the dangers by putting posters in pediatrician’s waiting rooms. The messages were classic blame-the-victim genre: requests for parents to select the right sleepwear, to keep matches away from children, not allow them to climb on stoves, and, best of all, to teach the children what to do if they caught on fire!

Although this editorial has focused on clothing burns, this is only as one example. The issue of product safety and the possible need for regulation is, of course, much broader. By sheer coincidence, after planning this issue, I received the latest edition of *Hazard* (March 1998), that exemplary publication from the Victorian Injury Surveillance System.⁷ It features reports on the enforcement (or lack thereof) of legislative and regulatory injury prevention strategies in Australia. The examples given relate to dog bites, pool fencing, a ministerial request for voluntary withdrawal of babywalkers from the market, and the enforcement of helmet laws. A common pattern was evident: little or varied enforcement and little compliance

with voluntary measures.⁷ Notably, an editorial comment after the concluding piece in which the Australian Competition and Consumer Commission (ACCC) is described, adds: “Unfortunately, most safety standards in Australasia are voluntary and are therefore outside the jurisdiction of the ACCC. Action is therefore required to increase compliance with important voluntary standards or to mandate them”.

Personally, I remain convinced that in most instances mandatory regulations, strictly enforced, with appropriate penalties, are, in the long run, the best way to ensure product safety. But my convictions rest on few data and I may be wrong. The case for voluntary standards may be more compelling than I realize. Those who disagree are urged to present their views. I suspect that, as in most matters, some mixture will be the answer. We will never know until further research is conducted. The *Hazard* report is a large step in this direction but many more such studies are needed.

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A Christmas “bumper bundle”

Alert (and regular) readers will quickly discover that this issue is unusual in several other respects. Apart from the product safety theme, there are more pages than usual, and a wider selection of original articles—a veritable “bumper bundle”. (For readers who did not grow up in the 1940s, a “bumper bundle” was a special, fat version of a comic book, usually appearing around Christmas.)

To a great extent, the large number of papers is a tribute to authors who either write succinctly, or accept, graciously—or otherwise—cuts recommended by the reviewers or the editor. What impresses me about these papers is the diversity of topics and countries represented. They epitomize what the journal strives for—a truly broad and international perspective on injury prevention.

Finally, this issue marks a special occasion in the journal’s history, the publication of its first supplement, *Action on Injury: Setting the Agenda for Children & Young People in the UK*. This part of your bumper bundle is extremely important. The papers presented in it were prepared for a conference in conjunction with the Royal College of General Practitioners, the Royal College of Paediatrics and Child Health, and the Faculty of Public Health Medicine. Importantly, the conference was sponsored by the Department of Health in England. The title is

symbolic. It suggests that the UK is now poised to take action on the prevention of injuries, much as Sweden did over 40 years ago, and other countries, such as the US, Australia, and New Zealand have done more recently.

At the time of writing the conference had not yet taken place. Consequently, it is impossible to predict what specific reactions the policy makers will have to the proceedings. I am confident, however, that they will be positive.

The importance of this publication and the conference that prompted it do not apply only to the UK. Similar conferences should be held in every country that does not now have a concerted plan to prevent childhood injury. For such plans to work, health authorities must cooperate with all the other parties involved in this noble goal. This must be a concerted effort; one that involves all the key sectors in the world of safety. We will be watching the developments in the UK with great interest and fervent hope. For now, we thank those who took the initiative to bring this about and to the health authorities that supported it.

I B PLESS
Editor

Guest editorial

International injury control conferences: surely we can do better?

The Fourth World Conference on Injury Prevention and Control has come and gone and planning is well under way for the fifth conference in Delhi. I have been fortunate to attend three of the four conferences to date. When I return home from these conferences my colleagues invariably ask "what was it like?" "worth going?" I regret to say I have never been effusive in response, even with respect to the Melbourne conference where I had a small hand in assisting with planning the scientific programme. So why have I been not been effusive in my praise? I will illustrate by reference to previous conferences but especially the recent conference in Amsterdam, for no other reason than it is fresh in my mind.

One of the reasons I attend such conferences is to strengthen my current contacts and establish new ones, "network" as they say. There is no substitute for previous face to face contact when communicating by mail, especially if you want assistance from the recipient of your correspondence! It has also been my experience that the establishment of positive interpersonal relationships is critical to collaborative endeavours.

Being from an English speaking country I am naturally drawn to communicating with others in countries where English is the first language for both oral and written communication. I have, however, often wondered to what degree this language limitation has hindered my learning of new and interesting developments in other countries. By definition, international conferences afford the opportunity to address this problem, albeit in a small way.

It was thus my expectation that the Amsterdam conference would provide an excellent opportunity to "network" with Europeans whose first language is not English. I was thus surprised at the small size of the European contingent relative to the US contingent, which had a greater distance to travel.

While I doubt that cost was a barrier to European participation it would have been a significant consideration for many of those contemplating coming from outside Europe, especially from the southern hemisphere. If we wish to increase participation in these meetings more attention must be given to reducing the costs of all aspects of the meeting.

In view of the importance of networking, one area which warrants attention is the cost of the dinners. The cost was very high in Amsterdam and I know that this deterred many people. I am sure a simpler and thus less expensive dinner would have satisfied the majority. In many areas some of the fixed costs are difficult to reduce, and while costs in some other areas by themselves represent a small part of the overall cost they can add up to significant amount. As one colleague said to me "how many of these fancy conference bags do you need?"

Given that these meetings are in some sense "public health" meetings it is appropriate that we provide nutritious food and small to moderate servings. The efforts in Amsterdam were in marked contrast to what could be described as excesses at some of the previous conferences.

Another reason I attend these conferences is to recharge my batteries, to be inspired, to be challenged, and to be

stimulated by new ideas. I have always assumed that plenary sessions are intended to make a significant contribution in this respect. Regrettably most of the plenary speakers at this conference, and the previous two international conferences I have attended, failed to do any of the above. If the studious reading of abstracts, tourist brochures, newspapers, and the like during these sessions is anything to go by I am not alone. Of perhaps greater concern is that it was abundantly clear that a number of speakers were not abreast of recent developments in injury control.

Presenting one's work to one's colleagues serves several purposes. For many it is critical to securing approval and funds to attend. Organisers of these conferences are thus faced with somewhat of a dilemma when reviewing an over subscription of abstracts, many of which can be quite poor. One method of dealing with this is to assign some abstracts to poster sessions. That strategy was used extensively at Amsterdam. I spent a considerable time scanning the abstracts and identifying those I particularly wanted to visit. In a number of cases I was disappointed to find there was no poster displayed. I understand from some authors that they took umbrage at having their paper relegated to a poster and as consequence withdrew their paper. In several cases I was pleasantly surprised at the quality and significance of some of the work displayed. In my opinion it was superior to much of that presented at the oral sessions I attended. A number of posters presented research findings which challenged conventional wisdom on specific aspects of injury control. For example, small craft water safety literature recommends that if your craft overturns and you are unable to rectify the situation you stay with the craft until, hopefully, assistance arrives. The authors of one poster I visited argued that their research had shown that under adverse conditions where immediate rescue is unlikely, especially for good swimmers wearing a floatation device, it is preferable to swim immediately for shore rather than stay with the boat or swim after a delay. Given the significant contribution that drowning makes to injury mortality in many countries, and the paucity of evidence supporting many drowning prevention strategies, this poster deserved an oral presentation and an ensuing audience discussion.

One of the problems planners face is having too many parallel sessions which result in low average attendances and a high proportion of attendees wishing to hear two presentations which are running at the same time. There is no easy solution to this but it does raise the question as to why abstracts are selected for an oral or poster presentation. It is my impression that selection for a poster presentation is second prize. But why should this be so? Why not encourage all those selected for oral presentations to also have a poster. In this way those who are unable to attend a presentation would have the opportunity to learn more about the project than a written abstract can convey and, equally important, interact with the authors. This would, however involve extra cost and effort for the presenter.

This matter raises the obvious question about the criteria used for the selection of abstracts for oral presentation.

Those for research papers should be different for programmatic papers. Moreover, they need to be made clear well in advance of the abstract submission date.

An associated issue which must be grappled with by future organisers, is that there are two main types of attendees at these meetings, researchers and programmatic people. While they share some common conference needs and expectations there are some important differences. This is well illustrated by one session I attended where a researcher having made his presentation was searchingly queried by several members of audience about his study design and analyses. During the discussions a member of the audience leaned over to me and said "I hate these sessions where all these academics argue with one another about things I have not a clue about". Constructive criticism is of course part of the day-to-day exchange of scientific investigation. Researchers clearly have some needs which are different to programmatic people. Oral sessions should be planned and advertised to reflect this.

There appeared to be two types of symposia. One appeared to be based on a selection of abstracts which were submitted for consideration as oral presentations. The other type appeared to be proactively managed and was intended to present a synthesis of the state-of-the-art on a specific issue. It was often difficult to determine in advance what type a symposium it was. An example of what I assume was a proactively organised symposium was "Societal Costs of Injury". This was, without a doubt, the best attended session I went to for the entire conference. If a fire officer had entered, or at least tried to get through the entrance, they undoubtedly would have called a halt to proceedings.

A feature of the Amsterdam conference was the "pre" and "post" conferences. I was also fortunate to attend the International Collaborative Effort (ICE) on Injury Statistics, a small pre-conference at which there was a "state of the art" session on measuring injury severity. I suspect that had this been part of the main conference it would have been over subscribed.

Injury control research has developed rapidly over the last decade or so. For many of us who are expected to be knowledgeable in a number of areas it is becoming extremely difficult to keep abreast of developments. Attending a traditionally organised proffered paper session on, say, injury severity may bring one up date on some specific issues. However, you would be unlikely to obtain the same insight as you would from a proactively managed session which has as its objective an overview of the state-of-the-art on injury severity.

Another state-of-the-art session I attended was "Best Evidence for Effective Injury Interventions". This was on 7:00–8:30 pm after a full day of plenaries and symposia. The fact that it was relatively well attended, despite its scheduling, is further testimony to the demand for such sessions. In this case it was described as a "Round Table", although in no sense did I feel I was sitting around a table discussing a range of issues relevant to the presentations.

Injury can be viewed from a variety of perspectives. These include the nature of injury (for example thermal, drowning), type of event (for example motor vehicle crash, fall), intent (for example assault), activity (for example sport, work), place (for example farm, school), and risk factors (for example alcohol). Given the variety of perspec-

tives, and that they are not mutually exclusive, conference organisers face a challenge in designing a programme that will attract attendees from a wide cross section of the injury control community. One approach would be to reduce the emphasis on traditional themes by having sessions with cross cutting themes. This certainly was the intention for the Australian conference and it appears also to have been the case in Amsterdam. While there is some merit in this approach we simply cannot afford to ignore the fact that potential participants, and their funders, are looking for evidence that there will be sufficient content to warrant their attendance. By way of illustration, there was no mention in any of the publicity material beforehand of any session devoted specifically to occupational injury. Given the enormous personal and social burden of occupational injury in most countries, and the large number of agencies charged with managing this problem, we are missing an opportunity to exchange experiences.

Of course some could argue that international "all cause" injury conferences will never satisfy the majority of people working solely in specialist areas. They have their own national or international conferences, which in some cases are bigger than the "all cause" conferences.

While that is undoubtedly true, many of us are working in a variety of areas and simply could not afford the time or money to attend all such relevant meetings. We thus need to hear from experts in a variety of fields at one meeting. We also need to share experiences and learn from one another. For example, many of the issues associated with undertaking research or implementing a programme in one area may be applicable to another. The encouragement of "pre" and "post" conferences offers an opportunity to meet both needs.

In summary my prescription for the future would be:

- (1) Devote only one half day to plenaries. Ensure speakers are leaders in injury control, have a vision for the future, and are able to challenge the audience to join with them in this vision.
- (2) Develop criteria, and advertise well in advance, for acceptance of abstracts for proffered paper sessions. Encourage all those selected to also have a poster presentation.
- (3) Have oral proffered paper sessions which: have a very strong research theme, others which are very strong on programmatic matters, and combined programmatic and research streams on clearly defined issues.
- (4) Make a clear distinction between proffered paper sessions, symposia, and round tables, and provide strong direction to those offering to organize the latter.
- (5) Ensure there is a core of the traditional streams (for example occupational, motor vehicle traffic).
- (6) Continue to encourage "pre" and "post" conferences.
- (7) Proactively organize more "state of knowledge and practice sessions" on specific issues (for example drowning, injury severity measurement). Ensure that these are distinguishable from proffered paper sessions. These would be a substitute for plenaries.
- (8) Get the costs down!

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ISCAIP report

One too many: alcohol and risk of injury

Working in a trauma center in Seattle, I am often confronted by the problem of alcohol and its role in injury. As many as 45% of our adult trauma patients are intoxicated at the time of their injury, and at least one half of these have chronic alcohol abuse or dependency.¹ Attention to the impact of alcohol on injuries to children and adolescents has to date been very limited. I believe it is a problem that our Society and this Journal should not ignore.

Children and adolescents are placed at risk of injuries in a number of ways. First, adults with problem drinking place children in their care at increased risk of injury. Bijur and her colleagues, using data from the US National Health Interview Survey, found that children of mothers classified as problem drinkers had more than twice the risk of injury than children of mothers who were non-drinkers.² This risk of injury was increased to nearly threefold when mothers with problem drinking were married to men who were moderate or heavy drinkers. Children under the age of 5 are the group at greatest risk of death in house fires; this risk is doubled when the adults in the household are impaired by alcohol at the time of the fire.³ The Centers for Disease Control has recently demonstrated that one quarter of children who die in motor vehicle crashes in the US are due to cars driven by an intoxicated driver.⁴

Alcohol also plays a part in the injuries of adolescents. The proportion of adolescents who are found to be intoxicated at the time of injury has been reported in various studies to be one fifth of motor vehicle drivers,⁵ one fifth to one third of self inflicted injuries,⁶ one half of assaults,⁷ and 70% of those with gunshot wounds.⁸ A recent Canadian study in this journal reported that alcohol intoxication increased the risk of fatal injury fivefold among teen drivers involved in motor vehicle crashes.⁹ The risk taking behavior evident by drinking and driving not surprisingly extends to seat belt use; Spain and colleagues found that only 7% of intoxicated adolescents involved in motor vehicle crashes were restrained.⁵

The problem of alcohol and trauma, in my view, has not generated the type of response it deserves. During the 1970s and 1980s, much of the focus of injury control was on "passive prevention", with an emphasis on changing the environment and product to decrease the risk of injury. Problem drinking is clearly a behavioral issue, which requires much more complicated solutions. What should be our response, as professionals responsible for the prevention of injuries to children and adolescents? Here are some suggestions.

- *Better understand the magnitude of the problem*—Only a few studies have examined the extent to which children have been the innocent victims of problem drinking by care-taking adults.² Further studies should be undertaken to understand the frequency and epidemiology of the problem. In many countries, routine blood alcohol testing of injury patients is not done, because "alcohol is not a problem". It is hard to know whether it is a problem without routine testing of all adolescents and adults.
- *Identify alcohol problems*—Many screening instruments are available to identify adults who are at risk of alcohol

abuse and dependency.¹⁰ These should be applied in a far more routine fashion when alcohol problems may exist. Unfortunately most of these have only been developed for adults; appropriate screening tools for adolescents are needed.

- *Brief interventions for problem drinkers*—The World Health Organization strongly supports the use of brief interventions for problem drinkers.¹¹ These 15–30 minute interventions have been shown to be remarkably successful in reducing alcohol consumption by problem drinkers.¹² They should be viewed as injury prevention tools; a recent randomized controlled trial conducted at our trauma center indicates that brief interventions can decrease repeat episodes of trauma by 50%.
- *Advocate for effective legislative strategies*—There are a number of studies that clearly are effective in decreasing the risk of drunk-driving. These include random breath tests, whereby police stop motorists at checkpoints and administer breath alcohol tests; administrative revocation of licenses, which insures swift and immediate punishment; lower blood alcohol concentration limits for teens; and raised drinking ages (now 21 across the US). In our communities, we should act as advocates for the implementation of these effective laws.

Some readers may feel that this editorial is not appropriate for *Injury Prevention*. If we are truly dedicated to decreasing morbidity and mortality from injuries to children and adolescents, I believe we cannot fail to study, understand, and intervene on one of the most important direct causes of injuries to individuals in this age group in most parts of the world.

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OPINION

Leadership in injury prevention and control

Shaun Peck

Who should be the leaders in injury prevention and control? The purpose of this opinion piece is to suggest that the public health trained physician is uniquely qualified and can and should take a leadership role in injury prevention. Debate and discussion are welcomed. If there are other means that continued leadership can be generated in injury prevention and control, let us hear them. This opinion is not intended to create a sense of territorial ownership, but to emphasize the knowledge, skills, and experience of the public health trained physician and the benefit of their involvement as an enabling person in injury prevention and control.

The public health physician has training in epidemiology and in assessing the health of population groups—in contrast to the focus on the health of individuals or parts of individuals (like hearts or kidneys), which is the training of many physicians and health professionals. The focus on population groups means there is understanding of the benefits of surveillance and a constant emphasis on prevention and control measures including health promotion. The population approach in recent years has increasingly emphasized the variations in health, disease, and injury between population groups. It also emphasises the effects of the social determinants of health outside the health care delivery system such as education, poverty, employment, and early childhood development that influence a public health issue. He/she has knowledge of the health care system and how it operates, and they will have knowledge and experience in applying a public health approach to an issue. This public health approach includes the process of involving many sectors (intersectoral approach) in addressing issues and creating collaboration between those who have an interest and can make a difference in addressing an issue.

The challenge for those of us involved in injury prevention and control in all jurisdictions, in every country, is to increase the effective actions being taken towards injury prevention and control and to establish injury prevention as a significant public health goal for that jurisdiction. The jurisdiction may be anywhere from a national government or organization to the local community or group (like a sports team).

Every country has its own unique governance structure and hierarchical or non-hierarchical ways of making decisions and creating public health policy. To illustrate this—in

Canada the British North America Act of 1867 made the provinces and territories primarily responsible for the delivery of health, education, and social services. From the beginning of this federation consisting of federal/provincial/territorial governments, the role of the national (federal) government has been one of providing cost shared or seed funding, advice, and consultation to support the development of health programs (with a few exceptions) by the provinces such as hospital insurance and Medicare.

At this time in Canada, all of the provinces and territories are undergoing some type of health “reform” in which there is decentralization and some would say devolution of the responsibility for health services, including preventive health services, to health regions. This is happening in many parts of the world.

To move ahead in developing actions for injury prevention and control, therefore, requires initiatives at the federal, provincial, and regional (local) level. At each level of governance there will be other players (stakeholders): national organizations, provincial organizations, and local organizations who play a part in injury prevention and control.

There is always at least one public health trained physician who has legislated responsibilities at the regional and provincial levels in Canada. This also applies in most developed countries. The national (federal) government has public health trained physicians in consultative roles. Our emphasis in Canada is to assist and support as much as possible activities at the regional and local level while at the same time ensuring that there is collaboration between the many stakeholders at the provincial level and national (federal) level.

When it comes to outbreaks of communicable disease, there is a public health physician who has the legislated mandate to take action to protect the health of the public. Most public health legislation was created to control such diseases as smallpox and polio, but today is used to support the control of such outbreaks as foodborne illness, meningitis, measles, and waterborne illness. For non-communicable diseases and injuries this “old” legislation can be applied under such terms as alleviating health hazards, but it rarely is. Because there is no clear decision making role and they may not have significant resources available to them, some public health physicians may be reluctant to be involved in injury prevention and control.

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This may be exacerbated by the restructuring of health delivery systems that cause those involved to have their time taken up with organizational management rather than public health issues. It would be rare to find a public health physician who does not believe, based on the burden of illness/injury, that progress needs to be made in injury prevention and control and that it is a significant public health problem.

In all the countries where the readers of this journal practice, significant public health policy decisions are made by elected officials or by boards/agencies appointed by elected officials. The public health trained physician will be involved in the development of those public health policies. Their input is invaluable because of their knowledge base, understanding of the health system, behavioural factors affecting health, focus on the health of the population and prevention measures. The public health physician, as well as many others involved in injury prevention and control, understands the pre-event factors of injury and injury prevention (for example Haddon's matrix and the four "Es": education, engineering, enforcement, and evaluation). He/she will also have had experience in communicable disease epidemiology and addressing such issues as teenage pregnancy, heart disease, and other non-communicable diseases. The approach

has been successful and will be successful in injury prevention and control. The challenges, however, in injury prevention and control are that there are many stakeholders and players, and those players that can most make a difference, for example those working in the transportation, water related injuries, home injuries, poisonings, agricultural injuries, violent injuries, etc, all have their own set of associated organizations that are hopefully collaborating to increase effective strategies to prevent injuries. The leadership of the public health physician can provide that necessary forum for collaboration. The public health physician has the knowledge of how to prevent injuries and how to access data on injuries and the skills and abilities to bring the many players together. What the public health physicians do not have is the means at their disposal to create some of the most effective engineering and other solutions for injury prevention. They do have, however, a good knowledge of health promotion and of ways of effecting public education and effecting behaviour change. The public health physician should increasingly take a leading role in injury prevention and control at all levels of government and in collaboration with agencies and the private sector.

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DISSENT

Who should be the leaders in injury prevention and control? Anyone with an interest preventing injury!

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The question of which group should be the leaders in injury prevention and control is one that raises important issues. The argument of this Dissent is that looking for a group to act as general leaders narrows our frame of reference and may well move us away from the practice and the forms of analysis that have been important in previous success in preventing injury.

Thinking of physicians trained in public health as the leadership group in injury confuses the concept of a leadership role with that of *the* leadership role. It also mixes the argument that physicians should increase their involvement in injury prevention and take a greater leadership role with the idea that that role should be pre-eminent.

What constitutes leadership in injury prevention?

If the challenge is to increase effective action on injury prevention what qualities in leadership are required to meet this challenge?

A primary requirement in leadership is drive and determination. A person who is not interested will not act. But motivation can come from many causes, social concern, commercial necessity, as well as professional interest, and the list of those with an actual or potential interest in injury prevention is long.

Leadership also needs direction. Effort must be directed at issues of moment in a way that gives some prospect of success. But it isn't necessary that leaders be technically adept, they

simply need to understand the value of analysis and have the ability to seek advice and to take that advice into account.

A range of other skills will have an influence on whether leadership will be effective: the ability to build partnerships; the ability to integrate single interest programs into wider alliances; the ability to find information on what works and what does not; the ability to generate a high profile for issues or action; the ability to be creative and the ability to make connections with centres of power.

In looking for leadership we do not need to nominate any single profession, we need to look for people and organisations with leadership qualities.

Is knowledge of the health sector a key part of injury control?

One of the arguments for physicians as leaders is that they understand public health and the health sector, but how central are these attributes in the context of injury prevention?

The introduction of electrical safety switches in Australia illustrates another paradigm. Electricity authorities, industry, and organised labour worked out that electrocution deaths were a problem, they developed and implemented standards, practices, and regulations relating to the use of safety switches and, allowing for a little rhetorical flourish, electrical deaths started to fall well before the first injury prevention specialists become involved. Similarly, fire authorities built the case for smoke alarms and developed alliances with the media, with insurers, with building control authorities that resulted in an increase in the percentage of Victorian homes with smoke alarms from around 5% to above 75% in less than a decade.

On the basis of this experience public health people in general and physicians in particular are not the only potential injury prevention leaders. It is also questionable whether, on a range of matters including product safety, violence prevention, transport and pedestrian safety, and building standards and regulation, physicians are likely to make the best leaders.

Doesn't intersectoral collaboration imply that other sectors can lead?

Within injury prevention intersectoral collaboration is spoken of as a fundamental tenet of success. If this collaboration is real, rather than a comfortable fable we tell ourselves, then why shouldn't other sectors be leaders as well as followers?

Victorian bicycle helmet wearing programs and laws were developed on a 10 year plan by a cross sectoral group with bipartisan political support. Given the degree of intersectoral collaboration that was required to develop and implement this and other road safety programs that have been responsible for a substantial

part of the reduction in injury deaths, there is no basis for thinking that the leadership skills available within public health are unique.

Doesn't deciding who are leaders independent of particular circumstances prejudice the issue?

One of the consistent lessons in successful injury prevention efforts is that analysis of injury issues needs to be made on a case by case basis. Deciding where leadership can or should come from, before making such analysis is not consistent with this experience. Just as the focus of action and the priorities for action vary from issue to issue and change over time the locus and style of leadership required is also likely to change.

The leadership required to get an issue on the agenda may be different from that required to develop or to implement an intervention. For example public health professionals played a key part in investigating and putting nursery product injuries on the public agenda in Australia, now that the case has been made, the leadership in preventive action is coming from an industry group convinced that there is commercial value and practical need for an industry code of safe practice.

Why is it poor practice to pick a leadership group?

In putting this dissenting view I am not arguing that public health physicians are unimportant or that they should not be more involved, or that they should not take leadership roles. The history of injury control shows their worth as partners and as leaders. The essence of the argument here is that leadership groups cannot be selected in advance or separated from an analysis of particular issues.

There is an aphorism, said to be a Russian proverb but I cannot vouch for this, that says "if the only tool you have is a hammer, then every problem is a nail". In thinking of any one group as leaders we are that much less likely to think of alternatives and to overlook the other tools in the tool box. To the extent that this occurs the valuable lessons from Haddon and those who came after, that each situation has to be analysed according to its own circumstances, will be diminished.

Public health physicians have a leadership role to play in injury prevention and their interest and involvement should be encouraged. So too should all insurance brokers, plumbers, psychologists, engineers, economists, ergonomists, retailers, manufacturers, and so on who have leadership potential.

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