

GETTING INJURY PREVENTION ON TARGET

February 1993 saw the release of *Goals and Targets for Australia's Health in the Year 2000 and Beyond*,^[1] commissioned by the Department of Health, Housing, Local Government and Community Services (DHHLGCS). The review was undertaken by a team of public health academics at the University of Sydney, which drew advice from a range of organisations and individuals representing the various sectors addressed by the Report, in the form of written comments and a series of workshops directed towards expanding the range of issues covered and identifying specific goals and targets.

Now that the fanfare is over we can begin to sit back and take a careful look at this report, what it actually contains and what implications it has for the future of injury prevention in this country.

WHAT ARE THE NATIONAL HEALTH GOALS AND TARGETS?

Goals and Targets for Australia's Health in the Year 2000 and Beyond represents the second generation of national health goals and targets, its predecessor having been the 1988 report of the Health Targets and Implementation Committee, *Health for All Australians*.^[2]

The Report provides a foundation for strategic health planning by setting a range of goals; statements about achievable health outcomes based on current knowledge and available resources. Each of these goals is accompanied by a number of more specific and measurable targets which can be used as an indicator for assessing future progress. For example, in relation to sport and recreation related injuries, the goal is "to enhance the safety of sport and recreation". This goal has been translated into a number



"Hey! C'mon! Hold it! Hold it!...Or someone's going to get hurt."

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of specific targets, including a decrease in hospital admissions resulting from sports injuries for people involved in active sport and recreation to the extent of 15% by the Year 2000 (using as a baseline, unpublished data from the Accident Research Centre at Monash University: 54/100,000 per year).

The report has moved beyond a narrow focus on preventable mortality and morbidity. Social and environmental determinants such as socio-economic status, age, gender and ethnicity (including aboriginality) all predict an individual's risk of injury. This analysis is reflected in the framework used to develop the goals and targets. It is a framework which takes account of the importance of inequities in the physical and social conditions which limit the potential for achieving equitable health outcomes. For example, attempts to reduce the rate of injury amongst our older population, must address the fact that a significant proportion of older people live in poorly

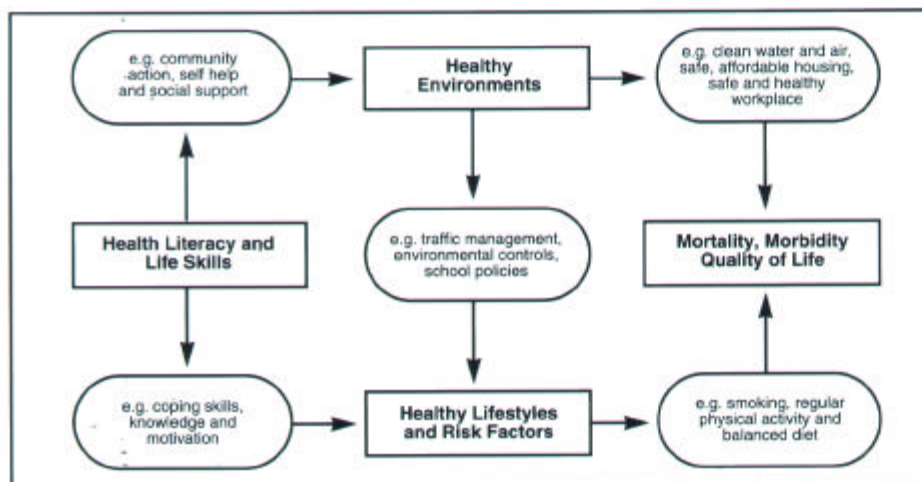
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EDITORIAL

This issue of the *Monitor* has reported on what we see as some encouraging developments in relation to the priority accorded to injury in Australia. There is no doubt that injury is finally receiving the recognition it deserves as a major public health problem. Whilst such developments are obviously great news, they are regrettably happening in extremely straitened times; greater recognition will not automatically be accompanied by the allocation of greater resources.

So far the challenge has been to argue for a recognition of the magnitude of injury relative to other public health problems. The challenge now must be to justify a claim to a reasonable share of resources relative to other health areas. It is up to the injury control community to argue the case.

Figure 1: The Relationship Between the Four Groups of Health Targets



maintained housing and that this problem needs to be tackled if the incidence of injury in the home amongst this group is to be effectively reduced.

HOW DO THESE GOALS AND TARGETS RELATE TO INJURY?

The goals and targets are organised into four sections: preventable mortality and morbidity; healthy lifestyles and risk factors; health literacy and health skills; and healthy environments. A fifth section addressing challenges for the health care system has also been included, (see diagram above). Within these sections, injury has been specifically dealt with as shown in table below:

WHAT WILL IT MEAN IN PRACTICE?

The value of this exercise will ultimately need to be judged against its impact in achieving the goals it proposes. This implies, of course, that the document must be much more than yet another report gathering dust on health practitioners' bookshelves.

A number of factors will determine the level to which the Goals and Targets will have an effect on public health practice: the support of government, a strong commitment from all sectors able to contribute to their implementation, and the development of clear and appropriate strategies for meeting the Targets are some of these.

Tea leaf reading is a doubtful

business, but the patterns augur well for the future of the Goals and Targets. The impact of the Report is likely to be felt on two levels:

Despite the criticisms which have been levelled at the document (and it does have shortcomings, some of which are detailed below), it represents a unique Australian approach to health planning, and is an invaluable reference source. On the basis of its intrinsic merits, it has already influenced health planners.

On another level, recent times have witnessed the Australian health system reorienting itself to concentrate on health *outcomes* (ie measurable changes in the health of an individual or population which can be directly linked to a particular intervention). This reorientation has, in turn, led to a need for adequate *outcome measures* ... Enter the Goals and Targets? In accordance with the new Medicare Agreements Act, 1992, the Australian Health Ministers' Advisory Council (AHMAC) has agreed to develop an implementation strategy encompassing goals, targets and outcome measures. Whilst it remains to be seen just what form AHMAC's goals and targets will take, those proposed by the Nutbeam Team will undoubtedly be given serious consideration. AHMAC's deliberations, to date, have resulted in the identification of four focus

SECTION		
Preventable mortality and morbidity	Injuries - all causes	
	injuries occurring in specific contexts and settings	<ul style="list-style-type: none"> - transport-related injuries - suicide and self-inflicted injury - interpersonal violence - residential injuries - industry-related injuries - product safety - sport and recreation related injuries - injury in non-urban settings
Healthy lifestyles and risk factors	Safety behaviours	
Health literacy and health skills	Safety skills and first aid	
Healthy environments	Transport	- transport related injury
	Housing, home and community infrastructure	- safe housing
	Work and the workplace	<ul style="list-style-type: none"> - occupational health and safety - rehabilitation
	Schools	- healthy environments

areas, of which injury is one, and in an agreed process: in each of the four focus areas, working groups will be established to develop action plans for implementation of the goals and targets. As a first step in the implementation process, DHHLGCS has invited applications from key organisations to undertake a project aimed at analysing each of the four focus areas to identify and map current levels of activity, involvement and investment in each.

Whilst we can't be too sure, at this stage, exactly which goals and targets will provide the framework

for the Australian health system, we can be pretty sure that there will be some. This fact will have important implications for health spending as funding agencies are required to demonstrate that the dollars they dish out reap rewards in terms of demonstrated health outcomes. Changes in the expectations held of funding agencies will affect the types of programs these agencies fund, and their expectations about how programs are to be evaluated.

YES, THE GOALS AND TARGETS DO HAVE SHORTCOMINGS

A range of criticisms has been levelled at the Goals and Targets document; in fact, the consultative process surrounding its development has fostered critical appraisal.

Much of the concern expressed about the exercise has centred around the concept of setting quantifiable targets. For example, on a technical level, it has been suggested that available data on many topics are inadequate for developing baselines. It has also been argued that the process was deficient, in that its reliance on overall national baseline data overlooks regional and local situations where the health issues are very real, but data just aren't

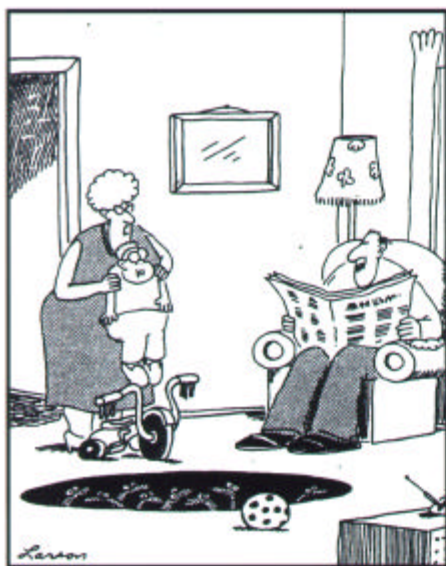
collected.

There has been some apprehension, too, that if specific, quantitative targets find their way into government policy, failure to achieve the targets may mean a reduction of resources in some areas (where resources may already be scarce), such as health promotion.

The Review Team has responded to many of these concerns in their Report. They readily agree that, on a technical level, the specified targets are far from perfect. They hasten to point out, however, that the targets have a *strategic* as well as a *technical* purpose and that setting targets highlights the direction and magnitude of change required to achieve a genuine reduction in health inequalities.

WHERE CAN YOU GET A COPY?

Copies of Nutbeam et al., *Goals and Targets for Australia's Health in the Year 2000 and Beyond* are available from Government Bookshops at a cost of \$19.95. The document can also be inspected in State Health Department libraries. We urge our readers to take a look at this publication



"That time was just too close, George!... Jimmy was headed straight for the snakepit when I grabbed him!"

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INJURY PREVENTION IN THE ACT

In November 1992, funds from the National Better Health Program enabled the establishment of an injury position within the ACT Health Department for a period of 12 months. The focus for this position has been the prevention of falls amongst the elderly. ACTSafe, a falls prevention campaign modelled on the SA Health Commission's campaign 'Make it Safe', has been a major part of this program and has attracted a great deal of corporate support. As the program approaches the end of its 12-month funding period, a forum for health professionals is being organised to examine their role in preventing falls.

It is marvellous to see ACT Health giving priority to injury prevention through the establishment of a program such as this. The *Monitor* trusts that funded injury prevention initiatives in the ACT health sector will continue.

For further information, contact Ms Jenny Paradowski, ACT Health Department, Tel: (06) 279 3993, Fax: (06) 279 3990.

THIRD INTERNATIONAL CONFERENCE

The Department of Health Housing Local Government & Community Services has indicated that it will fund the NISU-based conference secretariat for the three year period leading up to the Third International Conference on Injury Prevention and Control. As part of this arrangement, other aspects of the current Injury Prevention Services Program are also expected to continue.

AUSTRALIAN DIRECTORY OF INJURY CONTROL PERSONNEL

April 1993



Australian Institute of Health & Welfare
NATIONAL INJURY SURVEILLANCE UNIT

Copies of this Directory are now available free of charge from NISU. Contact Renate Kreisfeld or Pam Albany, Tel: (08) 374 0970; fax: (08) 201 7602

NEW RURAL INJURY RESEARCH PROJECT

The Australian Rotary Health Research Foundation has provided funding to commence a research project which aims to investigate the incidence and severity of injury to young people on Australian farms and to develop a pilot injury control program. The project, to be undertaken by Dr Lyn Clarke and Ms Chris Hartigan of the Agricultural Health Unit in Moree NSW, has the potential to make a major contribution to the reduction of rural injury. Particular emphasis will be placed on the high risk group of 15-29 year old males to determine their attitudes and develop appropriate risk reduction programs.

For further information, contact Chris Hartigan, Tel: (067) 529 222

INJURY - A PRIORITY FOR THE NATIONAL HEALTH ADVANCEMENT PROGRAM

Over recent years, much time and effort have gone into arguing for injury to be recognised as a major and preventable public health problem. Finally it seems that injury has left the bench and headed out onto the field.

Injury has passed a series of milestones on the way to recognition: as an identified priority area in the National Better Health Report^[3], *Health for All Australians*^[4], *Goals and Targets for Australia's Health in the Year 2000 and Beyond*^[5] and, recently, under the National Health Advancement Program of the Federal Department of Health, Housing, Local Government and Community Services (DHHLGCS). Funding under the National Better Health Program has also assisted in bringing injury to the fore. Most recently, injury has been identified by the Australian Health Ministers Advisory Council (AHMAC) as one of four focus areas for early implementation of goals and targets.

Now less time need be spent *selling* the concept and more actually *practising* injury prevention. Injury prevention is being given an opportunity to prove its worth and great care must be taken to ensure success. If the job isn't done well enough, it is unlikely that injury prevention will retain its new-found status in the long term.

What is needed to make the most of this opportunity? Resources are, of course, necessary. On the whole, injury prevention initiatives in the health sector have operated on small budgets, and funding has been mainly short-term. The result is that infra-structure and experienced personnel are still lacking. While needs are clear, the source of resources to provide for them is

not. While the new priority accorded to injury means the area will be considered alongside other health issues, injury has come onto the agenda at a time of tightly constrained government budgets, in which any increase in resources for injury control is likely to be at the expense of other aspects of public health, which are also feeling the pinch.

Responsibility for, and activity in relation to, injury prevention is currently very scattered. Work is taking place at national, State and regional levels and across many sectors such as local government and transport. The scattered nature of the work often leads to a duplication of effort and resources, an absence of information sharing, etc. A co-ordinated approach is needed. This hiatus is being addressed by the DHHLGCS, in collaboration with NISU, through the development of a national injury prevention strategy, and the provision of injury prevention information services.

The process of developing the Strategy is still at an early stage. Underlying its development will be an awareness of the need to take account of parallel work undertaken in sectors apart from Health (eg the National Road Safety Strategy). The Strategy will aim to support the implementation of targeted injury countermeasures which address identified injury goals and targets. These initiatives will have implications for a variety of sectors at national, State and regional levels as well as for non-government groups. We will keep you informed of developments.

OOPS!

Unfortunately a couple of errors breached our defences in the last issue. Could you please amend your liftout Guide to State Bicycle Helmet Legislation as follows:

- 1 Legislation in SA became effective on 1 July 1991;
- 2 No exemptions currently apply in NSW; all exemptions were removed on 1 January 1991.

"INJURY PREVENTION: WHAT WORKS?" ... ACCORDING TO RON SOMERS



Ron Somers

The theme of the 2nd World Conference on Injury Control is "Injury Control ... What Works?" We thought it would be interesting, over the next few issues of the *Monitor*, to pose that question to some key practitioners around the Country. We've asked Dr Ron Somers, Head of the Injury Surveillance & Control Unit at the South Australian Health Commission to be our first interviewee. Ron and his colleagues are involved in a variety of safety promotion activities, including training of public health safety specialists, evaluation of product design, identification of community hazards, implementation of interventions, and development of injury prevention policies.

Monitor:

After all your years in injury prevention, Ron, what do you see as the principles that determine success?

Ron:

There are a number of important principles of effective prevention. My experience over the years has led me to identify quite a number

of these, perhaps as many as 40 or 50. All of these are best explained by example, ie real-life cases. Typically, a single example will only relate to a limited number of principles, and therefore I can't easily provide you with a definitive list of the principles I follow. But I'm certainly happy to recall some real examples in order to illustrate a few important ones.

The first example relates to infant changing tables. Our surveillance data showed 50 cases of trauma associated with changing tables, 30 of which had resulted in a head injury. Our raising this issue resulted in, amongst other things, the Child, Adolescent and Family Health Service (CAFHS) replacing the changing tables at all their clinics with safer units.

For me, one of the interesting features of this issue was that we were dealing with a largely unvoiced concern. We had a number of professional people who had, through their work, each reached negative conclusions about the safety of infant changing tables. Yet, because they had not shared their opinions, they believed them to be merely idiosyncratic ones. By publicising this issue we brought into operation what I refer to as the Hans Christian Anderson Principle. When someone, like the little boy in Anderson's story says "Look, the Emperor is naked", everyone gains the confidence to say "Yes, I thought he was naked too" ... "Yes, I thought that was a hazard as well". Sometimes those working in injury prevention need do nothing more than voice the first public concern in order to give people who are already aware of a problem the confidence to act.

Another example relates to the particular sort of terrain we have in the City of Adelaide. Areas of public land are divided up by creeks and canals, and these creeks and canals expose the public to quite a hazardous fall at particular

points. This was an instance where a "quiet" letter and some behind the scenes negotiation had the desired effect. Partly as a result of our encouragement, the risk managers of the Adelaide City Council adopted a policy of progressively erecting protective barriers around the danger points.

This example illustrates a couple of important principles. The process of negotiation in a case such as this relies heavily on the power of imagination; one of the reasons why we often encounter opposition to injury prevention is that the people whom we're trying to influence lack the imagination required to link the nature of a physical hazard to its potential for causing injury. What we've found is that we can assist people in using their imagination when we take the extra steps of measuring, reporting, drawing, photographing, video-taping, etc. In other words, the more visual we can make the hazard, the more we can stimulate people's imagination.

The second important principle which this example illustrates is that one doesn't need statistics in order to act. In this particular case, we had no statistics to tell us, for example, that a drunken adult or a pre-school child had fallen 4 metres from the footpath into the rock bed of a creek. Thank God we didn't! Physical hazards can be evaluated on their physical merits. This is a particularly important principle in dealing with localised hazards which don't generate the enormous statistical evidence that a more general hazard does. In cases where you don't have statistical evidence to point to, you have to argue on the basis of common sense.

A further example of the importance of this principle is the recent drowning of a little girl in a public swimming pool. A suggestion to make the facility safer prior to

continued page 6

that incident would probably have been received with incredulity; the common attitude is that there is no problem unless someone has been hurt. People resort to that sort of excuse when they haven't adopted the philosophy that physical hazards can be evaluated on their physical merits.

Monitor:

How do you see the role of statistics?

Ron:

I actually see statistics being more valuable as a confirmatory

mechanism than as an exploratory one. If data are to be used effectively to confirm hypotheses and motivate field investigations, one has obviously got to have an adequate number of trained, experienced people. Inexperienced people have difficulty making maximum use of data because they haven't learnt to recognise intervention opportunities in the community. When you've got trained people and they've built up some experience, you suddenly find them running to the computer saying "I've got a hunch", and having it confirmed or otherwise.

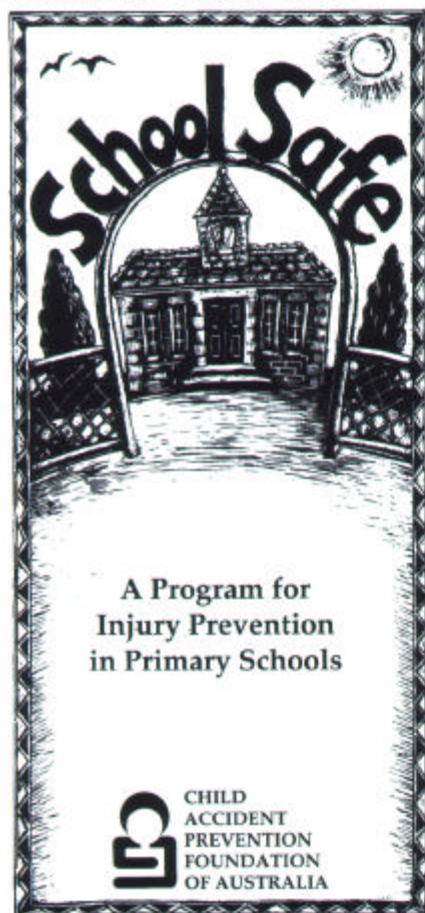
This is preferable to the alternative approach of "Gee, I wonder what I'll work on today; maybe the computer will tell me". In reality it's a little of each, of course, but the more experienced the people, the more they look to data for confirmation.

Ron Somers can be contacted at the Injury Surveillance & Control Unit, South Australian Health Commission, Tel: (08) 226 6361, Fax: (08) 226 6316.

[Editor's note: please tell us if there's anyone in particular you'd like us to interview for a future issue of the Monitor.]

HOT OFF

SCHOOL SAFE: A PROGRAM FOR INJURY PREVENTION IN PRIMARY SCHOOLS



This recent publication from the Child Accident Prevention Foundation of Australia provides a comprehensive resource aimed at assisting primary school communities in improving the safety of their environment.

The School Safe program was developed in 1991 with a grant under the National Better Health Program. The Program was piloted in six Victorian primary schools.

School Safe aims to reduce the incidence and severity of injuries occurring to children at primary school by:

- fostering a belief that accidents are predictable and preventable
- assisting school councils, teachers and parents to identify and treat hazards in their schools
- encouraging primary school communities to make changes to their environment and organisation which can influence behaviour and prevent injuries
- offering curriculum activities that will contribute to the safety education of children.

The *School Safe* publication can be purchased for \$18.00 (with concessions to CAPFA members).

For information, contact Kathy Nolan, School Safe Project Officer, Child Accident Prevention Foundation of Australia, Victorian Division, 10th Floor, 123 Queen Street, Melbourne VIC 3000, Tel: (03) 663 1319.

SAFETY FOR PUBLIC POOLS AND AQUATIC CENTRES

Late last year the South Australian Division of the National Safety Council of Australia (NSCA) produced a manual designed to cover all aspects of safety in public pools and aquatic centres. The manual, *Safety Guidelines for the Operation of Public Pools and Aquatic Centres*, is a very comprehensive one, recommending practices in relation to such things as the training of lifeguards, chemical handling, facility design and first aid procedures.

The guidelines were modelled on an earlier publication prepared by the Victorian Branch of the Royal Life Saving Society of Australia. The SA version was developed through extensive collaboration between water safety experts, industry, local government and interest groups.

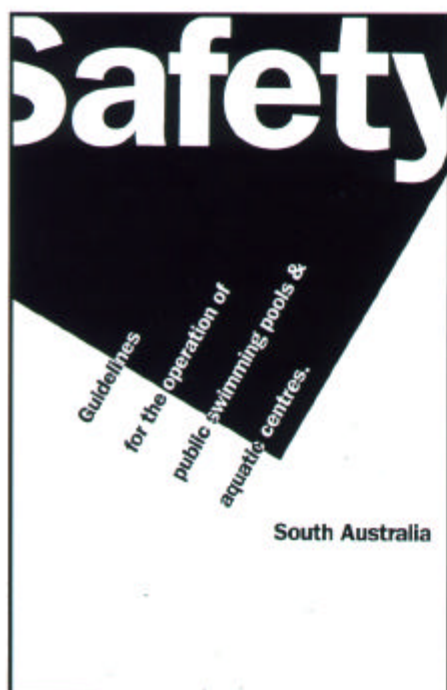
REPORT FROM ATLANTA

With around 1400 registrants and many hundreds of spoken presentations and posters, the Second World Conference on Injury Control was a BIG event!

For Australia, the Conference provided an excellent opportunity for our injury control community to show off its wares. A large contingent of Australians reported on their work. In several areas, in particular, (eg surveillance methods and bicycle helmet and swimming pool fencing legislation) Australian contributions clearly did much to define the current state of the art. The Atlanta Conference was an important confidence building exercise for the Australians present, most of whom received clear reinforcement of the value and quality of their work.

For NISU, the Atlanta Conference was also a vital element in the promotion of the Third International Conference on Injury Prevention and Control to be held in Melbourne in 1996. Participants were bombarded with information, promotional materials and friendly personal contact which left them in no doubt that Australia is where it's all happening with respect to injury prevention. From all the feedback received, it seems that a large turnout can be expected at the Melbourne Conference.

THE PRESS



The result of this process is a series of guidelines which all parties feel they can live with.

The guidelines provide the most up-to-date safety advice, and take account of the rapidly changing nature of aquatic centres as well as the needs of smaller centres.

The publication has received favourable comment from the water recreation industry. In South

Australia, two State authorities have responsibility for 90% of public pools and aquatic centres, and these authorities have actively endorsed the adoption of the guidelines. The guidelines have also begun to have an impact on the legal sector, with both SA and Victorian coroners having made reference to the document.

The South Australian NSCA is currently developing professional training opportunities for managers of public pools and aquatic centres.

For further information about this publication, please contact Elizabeth King, Manager Community Safety, National Safety Council of Australia, PO Box 733 Cowandilla SA 5033, Tel: 08 234 3034. (The cost of the manual is \$25.00 plus postage.)

PATHWAYS TO BETTER HEALTH

This, the seventh Issues Paper coming out of the National Health Strategy, deals with the area of health promotion. The paper presents a review of the current infrastructure, practice and effectiveness of health promotion in Australia and identifies opp-

ortunities for its further development.

Enquiries about this publication can be directed to Ms Jenny Macklin, Director, National Health Strategy, Tel: (03) 604 4060.

TOWARDS HEALTH FOR ALL and HEALTH PROMOTION

This is the recently published evaluation of the four year National Better Health Program established in 1988-89. The Report, undertaken by a Ministerial Panel, presents a review of the NBHP, and makes a series of recommendations for consideration by Commonwealth, State and Territory Health Ministers and by the Department of Health Housing Local Government and Community Services.

Copies of this publication are available from Commonwealth Government Bookshops at a cost of \$16.95.

A NEW AUSTRALIAN DESIGN RULE?

In May and July of 1992, the State Coroner of Victoria conducted investigations into two fatalities resulting from 'classic' rear under-run crashes, ie cases in which a sedan car runs under the rear of a stationary heavy vehicle such as a truck or semi-trailer. Crashes such as these are normally very severe as they result in total crushing of the car's roof structure.

In both of these cases, the Coroner commented on the fact that Australian Design Rules currently require only a limited range of heavy vehicles to be fitted with rear bumpers. It was also commented that Australia currently has no effective regulations for dealing with three major areas of concern in relation to truck design: frontal design, side under-run and rear under-run.

The issue of under-run barriers on heavy vehicles is currently under investigation by the Federal Office of Road Safety. Accident statistics show relatively few incidents related to an absence of under-run barriers and, to date, a completed regulatory impact statement has concluded that a new Australian Design Rule would not be cost effective; it is estimated that the 'payback' period would be 18 years.

Here we have two quite different perspectives on the same problem:

The Victorian Coroner, confronted by two fatalities, has pointed to under-run barriers as a countermeasure which could be successful in preventing deaths in future cases of the same kind. The Federal Office of Road Safety has looked at the same problem but has so far decided that, in relation to other transport safety issues, it would not justify the expense of prescribing under-run barriers, albeit that they are effective. These different conclusions can, to a large extent be attributed to the very different functions and processes followed by the two agencies in question. Coroners' investigations

proceed on a case by case basis. They delve very thoroughly into the circumstances surrounding a particular event and the recommendations they make stem out of this process. On the other hand, good quality mass data on fatal and non-fatal injury enable FORS to see the greater picture and relative incidence becomes an important criterion in defining priorities.

The responses outlined above have focussed primarily on two criteria; *incidence* and *severity*. But these aren't the only criteria commonly applied to injury prevention problems. *Severity*, *incidence*, *community concern*,

manageability of a problem and *cost effectiveness* are all considerations that will, in varying proportions, often determine the way in which a problem is dealt with. It has been suggested that a broader perspective would be more constructive in addressing problems of this kind. The systematic application of *all five* of the criteria referred to above can better inform a decision about the best way to act in response to a given problem.

In the case of under-run barriers, such a process would work something like shown in the table below:

Criterion	Score			Comment
	High	Moderate	Low	
Severity	x			Coroners' investigations and FORS data show that this type of crash is normally extremely severe.
Incidence			x	FORS data fatal and non-fatal mass data show relatively low incidence of type of crash
Community concern		x		Media coverage of crashes such as those in Victoria, and of coroners' findings in relation to these cases, would make it reasonable to assume a moderate level of public support for under-run barriers.
Cost effectiveness			x	It would take several years for savings in terms of a reduction in the cost of this type of crash to outweigh the cost to industry/consumers of mandatory fitting of under-run barriers to all heavy vehicles.
Manageability of problem	x			Under-run barriers would be effective in significantly reducing the severity of such cases.

How should a question like this be resolved? Often there is not a simple answer. The *Monitor* is interested in encouraging consideration and debate in the general community, and amongst health professionals. If you have views on this, please let us know

LEARNING DEATH'S LESSONS

Each year, in Australia, out of a total of 110,000 deaths, approximately 20,000 are reported to State Coroners and for around 5,000 of these deaths, inquests are held.^[6] These referrals are for violent, unnatural or unexpected fatalities which warrant further investigation to establish the identity of the deceased, and the cause and circumstances of death. In the process of pursuing such investigations, coroners amass a vast amount of information derived through technical, medical, scientific and engineering expertise. Traditionally, the purpose of these investigations has been limited to establishing the facts surrounding an individual case. The potential for the information gathered to be used for public health purposes has not been seriously pursued. Yet the potential value of these data is enormous.

The notion that coroner's data is a valuable untapped resource is certainly not a new one. In 1907, William Brend, a doctor of medicine and barrister, decried the fact that little use was being made of such information for public health purposes and urged the systematic collection and collation of data.^[7] These sentiments have subsequently been echoed on many occasions; in law reform inquiries, both here and abroad, by the National Inquiry into Aboriginal Deaths in Custody, and through the frustration of organisations such as Worksafe who realise the potential of coroners' information to contribute to their work but equally realise that the current mechanisms for retrieving this data place most of its potential usefulness beyond their grasp.^[8]

Some information on deaths is currently available to practitioners

and researchers in the form of ABS Mortality data. However, this dataset is extremely limited in its scope, providing only demographic information and the cause of death (in the form of an International Classification of Diseases code). A further shortcoming is that there is a time lag of between one and two years in making it available to users.

Coroners' investigations yield a wealth of information about mortality and, in recessionary times such as these, it seems particularly important that every last drop of value be wrung out of resources which are developed at substantial cost to the nation. In the case of coroner's data, this requires a basic re-orientation of thinking away from viewing coroners' information as having a *single* purpose (ie the elucidation of individual cases), towards viewing it as having a *dualistic* function whereby it retains its role in assisting the coroner to ascertain the facts of individual cases and becomes a useful tool to coroners and others involved in averting preventable deaths. There is much scope for these data to fulfil such a preventative function. For example, in 1991 the Victorian Coroner investigated several cases of death resulting from substance abuse in the form of butane inhalation. In the event of such a case occurring in another State, a national database would provide that State's Coroner with detailed medical and toxicological information, which could assist substantially in structuring investigations and would probably avoid duplication of effort. In addition, the database could enable the identification of a possible trend in substance abuse and provide injury

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AN INJURY BLAST FROM THE PAST

This item appeared in a copy of *The London Times* on 3 March, 1927:

POSSIBLE CAUSES OF FIRE

The burning of our houses is not the only danger we have to fear from remote causes! On Christmas Day, I was seated at the opposite side of the room to the window. The sun's rays at 2.30 pm through the plate glass ignited a celluloid comb in my head and a large patch of my hair was burnt off! — Mrs H S Tew, Hardwick House, Folkestone.

BEEN ABROAD LATELY?

If you've undertaken an injury prevention consultancy or established a connection with an agency working on injury in the Pacific region or any under-developed country, NISU would love to hear from you!

The Secretariat for the 3rd International Conference on Injury Prevention and Control, to be held in Melbourne in February 1996, is keen to gather this information. The theme of the 3rd conference will focus on tailoring injury prevention programs to meet the needs of different socio/political/cultural settings. If you have information to share, please contact either Pam Albany or Renate Kreisfeld at NISU, Tel: (08) 374 0970.

prevention practitioners with a range of information such as an insight into the extent of the problem nation-wide, information about the groups most at risk, etc.

Coroners' records lend themselves well to data systems which include the storage and searching of narrative text. Textual information is rich, and often more useful than coded data. In many circumstances, where records are kept, they are not routinely recorded in text form, presenting a formidable obstacle to this type of data system. Coroners' information is routinely recorded in text form as a part of the standard operations of the office and, hence, incorporation of narrative information would be relatively straightforward and inexpensive.

The fundamental means for transforming coroner's data into a useable preventative health tool is the application of computer technology. The establishment of

computerised coronial databases should also yield substantial benefits in terms of the efficiency and cost of running coroner's operations.

To achieve the preventative potential of coroners' information, there must be sufficient consistency in the data systems employed in different jurisdictions to enable comparable information to be obtained from each.

WHICH STATES HAVE COMPUTERISED THEIR CORONIAL DATA?

Whilst most States have now moved towards computerising coronial records, some still rely on manual filing and retrieval of the data they collect. For the States which have adopted computer technology, there is considerable variation in the comprehensiveness and level of detail recorded. The table below summarises the status of storage

and retrieval systems for coronial data in each State.

TOWARDS A NATIONAL DATABASE

It is encouraging to observe recent moves towards the establishment of useful and useable coronial information facilities at State level. But whilst it is heartening to see steps being taken, it also sets the alarm bells ringing when one begins to consider the implications of disparate State attempts for the future establishment of a *national* coronial database. If the full potential of the information is to be available to coroners, or to others who can use it, steps must be taken NOW to ensure that the efforts of States are co-ordinated so that the end product complies to a standard which will ensure data compatibility between States. It is also time to explore the possibilities for international information sharing.

The idea of establishing a national database was first raised at a National Coronial Seminar held in Canberra in 1991. Since that time, largely as the result of the enthusiasm of interested individuals in Victoria, an *ad hoc* committee was formed in 1992 to research the possibilities for such a facility to be created. Some attempt has been made by members of this Committee to institute communication with agencies in other States, and NISU has been able to contribute to this process. However, the progress of this initiative has rested on the goodwill of individuals (principally from Victoria) who have been prepared to devote their scarce 'spare time' to its furtherance.

WHERE TO NOW?

The concept of a national coronial database has gained credibility and is being seriously considered as a viable possibility. The interest and expertise of a range of individuals and organisations has been harnessed and much fruitful discussion has ensued about the nature and form of such a database. But this is far too important a project to be relegated to the

State	Current status of State coronial data
Queensland	Two separate computerised databases established in 1988. One dataset contains complete information for all coronial cases investigated in the greater Brisbane area. The other dataset contains information derived from a review of documentation received from shires by the Brisbane Coroner. The latter dataset records only demographic details and an ICD cause of death code.
South Australia	All information is currently stored and retrieved manually. It is expected to be at least 2 years before the data will be computerised.
Western Australia	All information is currently stored and retrieved manually. It is anticipated that the process of computerising coronial information will commence in approximately 18 months.
New South Wales	Computerised on-line database established in 1991 stores information for every death reported to coroners in NSW. Data are coded and entered in 2 specialist jurisdictions at Glebe and Westmead Coroner's Courts, and in Newcastle. Information for the remainder of the State is entered by the State Coroner's Office. 32 code records list demographic details, cause of death, E-codes, toxicology, etc. No text or narrative is stored.
Victoria	Computer database established in 1991. Complete information has been coded and entered for 1989-91 inclusive. Data are recorded in the form of codes and text and include demographic details, E-codes, etc.
Tasmania	Computer equipment has been purchased and the process of coding and entering data is expected to begin in the very near future.
Northern Territory	A computerised database has recently been established. The system uses interactive terminals located in each police station throughout the territory. Notification of death and police investigation notes are automatically communicated to the Coroner's office in Darwin and information subsequently entered by the Coroner's office supplements this results in the building of a detailed record for each death investigated.

shoulders of people already heavily burdened with other duties.

A systematic approach is necessary to ensure that the job is done well. In the first instance, NISU advocates employing an appropriate consultant to identify potential users and investigate their needs with respect to such a data source, and to prepare a report for circulation. Subsequent to this, a national seminar should be held with the aim of bringing together representatives from all States to discuss some of the basic issues and concerns, and reach some agreement about the basic content and structure of the database. We would also urge the appointment of a co-ordinator to oversee the project. The co-ordinator would facilitate the necessary liaison and information flow between States and interest groups, and would enable the project to be properly administered and managed.

WHAT ABOUT THE COST?

Obviously the establishment and maintenance of a national database would require finance. One of the tasks for a consultant would be to estimate system costs and potential income.

Whilst government assistance would probably be needed to provide an initial seeding grant to get the project up and running, other possibilities present themselves. A database such as this could be established on a fee for service basis. It is anticipated that many organisations would avail themselves of this information and would be prepared to contribute in this way to its maintenance. Commercial sponsorship is another option. The insurance industry, in particular, is likely to derive advantages through access to information of the kind stored in a national database. Access to a coronial database presents the

insurance sector with many possibilities for improving its risk management process in relation to hazards in the workplace, on the roads, in the marketplace, etc.

At the Second National Coroner's Conference held in Melbourne at the beginning of April this year NISU and other proponents for the establishment of a national coronial data source, were able to illustrate its benefits for coronial practice. All coroners at that meeting gave their full support for the undertaking of a needs analysis and feasibility study. It was agreed that Coroners would seek the endorsement of all State and Territory governments for the concept of a nationally consistent data system, and for a "needs analysis" to better define how it should work. Gaining the support of coroners has been a vital element in this process, and prospects are good for development of this essential part of the infrastructure for injury control in Australia.

We'll keep you posted ...

A NEW DATA STANDARD FOR INJURY SURVEILLANCE

The National Injury Surveillance Unit, working with injury surveillance and prevention practitioners in Australia, has developed a new data standard for routine injury surveillance. The standard is designed principally for use in the emergency departments of hospitals, but is also suitable for use in other settings. The standard is based on extensive experience with injury surveillance using the Injury Surveillance Information System (nearly 700,000 cases recorded in more than 50 hospitals). It is designed to balance the competing needs for simplicity in data collection, for sufficient information to be useful for public health purposes, and for compatibility with other relevant data standards (notably, the International Classification of Diseases, and the National Health Data Dictionary).

The name proposed for the complete standard is the 'National Data Dictionary for Injury Surveillance'. Core items within the dictionary will be referred to as the

'Minimum Data Set for Injury Surveillance'. [An earlier, working name ('basic, routine injury surveillance standard') will no longer be used.]

Several groups active in injury surveillance and prevention in Australia are collaborating with NISU, and with directors of emergency departments and software developers, to incorporate the new data standard for injury surveillance into computerised data collection systems which are being designed to meet the needs of hospital emergency departments for case management data systems.

At a meeting convened by NISU in Sydney on June 25, the four groups most actively involved in the early development and testing of the new standard met to discuss progress to date, and to recommend amendments to the standard based on their practical experience of applying it in software, or for data collection. The groups represented at the meeting were the Monash University Accident Research

Centre, the Sydney region injury surveillance centres, the Queensland Injury Surveillance and Prevention Program, and NISU. In addition, the special data system requirements of small, rural and remote settings were represented by Mr Kevin Wolfenden, active in injury surveillance in the New England Region of NSW, and by Ms Dee-Ann Vahlberg, presently assisting in establishing data collection in the Northern Territory.

Taking account of recommendations made at the meeting, some relatively minor changes are being made to the previously circulated draft standard. A document describing the standard fully, and containing these alterations, will be produced by NISU, as a basis for wider consultation, and for use by interested injury surveillance groups.

Further information can be obtained from NISU

GETTING OUT OF HOT WATER

Examination of surveillance data collected by the NSW Childsafe Centre through twelve accident and emergency departments in Sydney, Gosford, the Hunter and Illawarra areas indicated to the Health Promotion Unit of the NSW Health Department that scalds to young children are a big problem. Scalds are the fourth leading cause of hospital admission (in terms of hospital bed days) in NSW with children under 5 being most at risk. In the majority of these cases (82%), the mechanisms of injury are cups of tea and coffee, kettles, saucepans and hot tap water. The data also showed that the majority of scalds (80%) are sustained in the home, usually in the kitchen, the living room or the bathroom.

Armed with these facts, the Health Promotion Unit, in conjunction with Childsafe NSW, set about developing a prevention strategy which would target the identified risk factors.

The Campaign

The Unit has commenced a three-year program aimed at reducing the incidence and severity of scald injury. This program uses marketing, public policy and product initiatives to address the risk factors and personal behaviours associated with this type of injury.

The first phase of the program was a multi-strategy campaign, the main objectives of which were to raise public awareness of risk of scalding, the main sources of scalds, and simple but effective prevention and treatment measures. The Campaign ran over two months and included several strategies: a television advertisement provided an insight into major scald hazards in a kitchen environment, and a brochure produced in 14 community languages, provided information about the prevention and treatment of scalds. This

brochure, together with posters and other information, was distributed by early childhood nurses, pharmacies and general practitioners. Collaboration with home renovation centres and retailers of 'scald-safe' products aimed to promote safer home environments. The Campaign also relied on the development of skills amongst parents and child care givers through the Early Childhood Injury Prevention Program (ECIPP).

Evaluation

Talk about the need to evaluate health interventions is commonplace and there is an obvious need for us to discover if the things we choose to do are effective. Less common is an appreciation of the difficulties associated with evaluation. The NSW Scalds Prevention Campaign shows just how difficult evaluation can be.

A serious effort was made to evaluate the NSW Campaign. Cross-sectional surveys of random samples of parents and childcare givers were conducted both before and after the campaign. These surveys were undertaken in two States: in NSW and, for comparison, in Victoria, where the campaign was not conducted. A total of 625 people were surveyed on each occasion (250 in Victoria and 375 in NSW).

In undertaking their evaluation, the investigators took into account that differences between the samples selected for NSW and Victoria could affect the results of their evaluation. Six factors which had the potential to influence the analysis of the results were identified: sex, age, education, income, ethnicity and parenthood. Logistic regression was used to control for the influence of these factors.

In most respects, the investigators were satisfied with the results provided by the evaluation. Changes in both States were consistent with expectations and indicated that the campaign's

objectives had been met. Post-test percentages showed

- A high level of campaign penetration. 65% of the NSW sample were aware of the scalds campaign and/or related advertisements. (NSW up 15.6%, VIC up 4%).
- A significant increase in prompted recall of the campaign slogan Hot Water Burns Like Fire (49%). (NSW up 34.2%, VIC up 0.8%).
- A significant increase in campaign exposure via television media (30%). (NSW up 24.2%, VIC down 0.4%).
- An increased perception of the frequency of scalds compared with five other major sources of injury. (NSW up 29.5%, VIC down 13.3%).
- A significant increase in perception of severity of scalds (46%). This was measured by the item "would seek medical advice irrespective of the nature of a scald" (NSW up 7.5%, VIC down 11.6%).

The changes observed in the Victorian sample may be surprising to some. The reasons for them are primarily two-fold:

1 Sampling variations between the two States would account for some of the change. Although logistic regression analysis was used to control for the influence of some factors (such as differences in sex or age), other factors which were not measured by the surveys may have had an impact.

2 It is possible that public health activities or events receiving media coverage in Victoria during the NSW Campaign could have influenced the responses received from the Victorian sample. For example, serious scalds sustained by the daughter of an internationally known music identity, Jimmy Barnes, attracted considerable media attention. Mr Barnes's daughter was receiving skin grafts at a NSW hospital at the time of the Campaign launch and,

although the extent to which this received press coverage in Victoria is not known, based on media coverage in other States one would expect this to have been significant.

The obvious success of the Campaign notwithstanding, some important lessons were learnt. The investigators offer this advice in relation to evaluation:

Evaluation of a public health intervention must take account of its social context. Unlike, say, clinical trials, there are many uncontrolled or unmeasured factors which can mask or enhance changes identified by an evaluation of a public health campaign. One needs to look far and wide at other feasible alternative influences and explanations for an 'effect' or 'lack of effect'. However, we can only speculate on the relative impact of these factors, since they are not readily amenable to statistical manipulation.

Use the best experimental design that resources permit. The use of a quasi experimental control group design, with before and after measures, allowed for a more rigorous series of analyses. By examining the changes in NSW relative to changes in Victoria, allowed the investigators to identify the extra impact of the campaign against the "changing background" in Victoria. The changes in Victoria show that nothing is static, not even a control group.

Identify factors which may affect the evaluation and use statistical techniques to control for their impact. For example, differences in the age, gender or educational profile of two sample groups may account for significant differences in the responses received to some questions.

They also offer some general advice:

Don't expect great gains in a short time frame. The NSW Health Promotion Unit has a three year strategic plan for scalds prevention. The results of the first campaign show advances on a number of risk factors, with further to go on adoption and use of scald safe products.

Use a wide set of prevention strategies. The strategic plan addresses structural, environmental and legislative approaches to reduce the potential for scalds targeted at the factors which contribute most to the problem. To date, the gains that have occurred have been reliant on mainly knowledge and behaviour changes.

We need to be imaginative in looking for possible outcome indicators. For example, when evaluating the effectiveness of programs such as this, it could be argued that one should also look for less commonly monitored indications of hazard reduction such as increased sales of existing protective devices and/or the

development of new protective devices.

Further information about the scalds prevention campaign, or about the NSW Scalds Prevention Strategy, can be obtained from Daniel Gaffney in the NSW Health Department, Tel: (02) 391 9558.

STRATEGIC PERSPECTIVES IN SCALD PREVENTION

One of the many interesting Australian papers presented at the recent Atlanta Conference focussed on scald prevention. The paper, "Strategic Perspectives in Burn and Scald Prevention", by Jerry Moller, draws upon the 1970s and 1980s experience of achieving flammability risk labelling for children's nightwear and draws on the principles of that experience to discuss effective approaches to scald prevention. The paper considers particularly the issues of domestic tap hot water scalds and scalds associated with hot beverages and liquid foods.

Copies of Jerry Moller's paper are available from NISU. Contact Either Renate Kreisfeld or Pam Albany, Tel: (08) 374 0970, Fax: (08) 201 7602.

CONFLICTING PRIORITIES

A recent case of a school nurse who had sustained quite serious burns to her hands as the result of exposure to hot tap water in an ablution block used by students alerted the Injury Prevention Forum of SA to a potentially serious hazard in schools.

When the Forum raised the issue with the Education Department of SA, it brought to light an interesting irony. The Education Department informed the Forum that the temperature of its hot water

systems had deliberately been set at a high level (over 60°C) in an attempt to counteract the risk of legionella infection. The practice is in accordance with recommendations made in Australian Standards AS1056⁽⁹⁾ and AS3666⁽¹⁰⁾. In a genuine attempt to control a perceived hazard in the school environment, the Department had unwittingly created another.

The Forum has suggested to the Education Department that a thermostatic mixing valve be installed in all school ablution blocks. This is a compromise which will allow the Department to continue to comply with the

recommendations contained in AS1056 and AS3666, (which they are keen to do), whilst ensuring that the temperature of the water, as it comes through the taps, is sufficiently low to present no risk of scalding to children.

This little tale illustrates well the difficulties which competing or conflicting priorities can pose. Competition between priorities isn't at all an uncommon problem in injury prevention (although happily the dilemma caused by two public health countermeasures clashing head-on is a reasonably rare one). Most injury practitioners will be

continued on page 15

U.S. AND CANADIAN BICYCLE HELMET PROMOTION PROGRAMS

Returning briefly to the theme of bicycle helmets visited in the last issue, we're reprinting here an item from a recent edition of a US publication, MMWR.^[11] Cyclists' helmets was one of the 'hot issues' at the recent Second International Conference on Injury Control, and the Australian experience was being looked to as the model from which others seek to learn.

Bicycle Helmet Promotion Programs - Canada, Australia, and United States

The use of bicycle helmets substantially reduces the risk for serious head injuries during bicycle-related crashes. Despite this benefit, epidemiologic data indicate a worldwide low prevalence of helmet use.^[12] Strategies to increase the use of bicycle helmets in the United States and other countries include subsidies, legislation, and education. This report summarizes information regarding three strategies to increase bicycle helmet use and the impact of implementing these approaches in Canada (helmet subsidies), Australia (legislation), and the United States (education).

Canada

To assess whether the provision of bicycle helmets at reduced cost increases the use of helmets, the Division of General Pediatrics, Hospital for Sick Children, in Toronto conducted a randomized, controlled study in Toronto from May through September 1992^[13]. Students in three elementary schools in low-income areas were offered bicycle helmets for US\$10. These students were compared with students in similar low-income areas who were not offered subsidized helmets. Reported helmet ownership increased from 10% to 47% among students in the schools where

subsidized helmets were offered, and reported helmet use increased from 6% to 34%. However, there were no statistically significant differences in rates of observed helmet use between these areas (3% before to 18% after the study) and the areas where no subsidy was offered (1%-21%).

Australia

In July 1990, the State of Victoria enacted laws that made bicycle helmet use compulsory. Specifically, these laws required that all persons cycling on roads, footpaths, or separate bicycle paths, and in public parks wear a securely fitted, approved bicycle helmet. During the 10 years preceding enactment of these laws, the State conducted promotional activities to increase helmet use, including educational campaigns, rebate programs, and publicity campaigns on radio and television. Direct observation surveys indicted the prevalence of helmet use among persons aged 5-11 years in Victoria increased from 26% before enactment of the law to 80% following enactment.^[14]

United States

During 1986, the Children's Bicycle Helmet Coalition in Seattle implemented a community-based education program to reduce bicycle-related head injuries among children by promoting the use of helmets.^[15] Components of this program included public and physician education, school safety programs, an outreach campaign for low-income populations, extensive media coverage, and informational brochures in monthly insurance and utility bills. An evaluation of the impact of this program indicated that, from 1986 through 1992, helmet use among 5-15 year-old children increased from 5% to 38%.^[16] In addition, the number of children in this age group treated for bicycle-

related head injuries at the regional trauma center in Seattle decreased 50% from 1990 through 1992.

Reported by: P. Parkin, L. Spence, X. Hu, K. Kranz, D. Wesson, Hospital for Sick Children, L. Shortt, East York Health Unit, Toronto. F. Nassau, A. Anderson, P. Leicester, VIC Roads, Victoria, Australia. A. Young, F.P. Rivara, D.C. Thompson, R.S. Thompson, Harborview Injury Prevention Center, Seattle. Office of the Director, National Center for Injury Prevention and Control, CDC.

MMWR Editorial Note:

Among the 986 million cyclists in the United States,^[17] approximately 950 fatalities and 580,000 emergency department visits occur annually as a result of bicycle injuries.^[18] Approximately 62% of these deaths and 32% of the injuries involve head trauma.^[19] Helmets are effective in reducing head injuries: the estimated risk for head injuries among persons not using helmets is 3.9-6.7 times greater than that among persons using helmets.^[20] However, fewer than 2% of US children and fewer than 10% of all US bicyclists wear helmets.^[21]

The Injury Prevention Program of the World Health Organization is coordinating a worldwide initiative to increase the use of motorcycle and bicycle helmets. The initiative focuses on three approaches: developing and testing helmets, promoting helmet use, and evaluating helmet-use promotion strategies. During the Second World Conference on Injury Control, to be held May 20-23 in Atlanta, scientists and public health professionals will focus on promoting and evaluating helmet use.

familiar with situations where important injury concerns must jostle for recognition against aesthetic, economic or other considerations. It's a very frustrating business. Are there

clever ways of resolving such apparent conflicts? We're going to put this question to one or two very experienced injury preventers and see what they can come up with for the next issue.

Our little tale also raises the issue of balancing the relative risks of

legionella infection against the risk of hot water scalds. This issue has been attracting some interest of late, and we'll be reporting on this topic in our next *Monitor*.

IN WA THE JOINT IS JUMPING!

WA HEALTH'S INJURY CONTROL UNIT

The Injury Control Unit in the WA Health Department has recently been the site of a population explosion. After functioning for several years with one project officer, the size of the Unit has swelled to house a staff of four. It's now a bigger unit with much bigger plans.

Among the major new initiatives is an improved system of routine injury surveillance. Negotiations are underway with all major metropolitan hospitals to integrate the collection of a standard set of injury data into the normal hospital data collection process. There are also plans to establish injury surveillance in country hospitals. To this end, a six month trial of a surveillance system, based on NISU's new data standard, is currently underway at the Kalgoorlie Hospital.

The Unit is also working with two health regions to undertake data collection in some local communities, through nursing posts and general practices, as a first step in developing community-based injury prevention programs. Such data have been collected in the coastal strip from Jurien to Cervantes since January 1993.

Work with Aboriginal communities is endeavouring to place injury firmly on their agendas. It is hoped that, with information and support from the Unit, such communities will be able to develop their own successful injury prevention initiatives.

For further information about the activities of the Injury

Control Unit, contact Mr Wayne Lefler, Tel: (09) 222 4277, Fax: (09) 222 2088

INJURY CONTROL COUNCIL OF WA

Incorporated in May 1992, The Injury Control Council of Western Australia (ICCWA) has a membership which includes most of the organisations that have a role in injury control in the State. The recognition that there was little communication between injury control organisations in WA, led to the formation of ICCWA, the first organisation of its kind in Australia.

ICCWA sees its main aim as providing liaison between community agencies and groups and government departments, to improve communication and reduce duplication of activities.

Since its formation, ICCWA's activities have included undertaking of an injury surveillance project to investigate the data collection requirements of various users of injury statistics in WA and the preparation of a series of position papers on selected aspects of injury to provide the basis for setting priorities for the Organisation.

Most recently, ICCWA, in conjunction with the WA Health Promotion Foundation, has begun to offer grants of up to \$3000 to non-profit community organisations in WA to undertake injury prevention activities in 1993-94.

For further information about ICCWA, contact Ms Zai Scarff, Tel: (09) 222 4116 (Monday, Tuesday or Thursday), Fax: (09) 222 4118

The *Injury Issues Monitor* is the journal of the National Injury Surveillance Unit (NISU), Mark Oliphant Building, Laffer Drive, Bedford Park SA 5042, Tel: (08) 374 0970, Fax: (08) 201 7602. Letters to the Editor are welcome. Editor: Renate Kreisfeld



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National Injury Surveillance Unit

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Trauma Conference and Workshop

14-16 August 1993

Albury-Wodonga

Conference: "Issues in Trauma Management - Rural and Metropolitan", 14-15 August to include papers on surgical, retrieval and intensive aspects of trauma. International guest speakers: Erwin Thal, Professor of Surgery, South Western Medical Centre, Dallas Texas, USA and Dr Rowan Hyde, Intensivist, Director of Retrieval, Waikato Retrieval Service, New Zealand

Workshop: "Data collection and clinical audit in trauma - establishing a minimum data set", 16 August. Principal guest and Workshop leader: Mr Wayne Copes, a world leader in data collection and analysis and trauma scoring, Maryland USA

Contact: Albury-Wodonga Convention Bureau

Tel: (060) 23 8276 Fax: (060) 23 8182

Second International Conference on Recovery from

Brain Damage: "Brain Injury - The Relearning Continuum:

A Kaleidoscope of Stages"

31 August-3 September 1993

Hyatt Hotel, Canberra, ACT

Head Injury Council of Australia Inc. Conference. Topics to include: post coma phase of relearning, diagnosis and assessment, family adjustment and coping, grief management, memory strategies, group activities and relearning, intensive and post intensive rehabilitation, case management, employment, education and training programs which focus on community re-entry and participation.

Contact: Australian Convention and Travel Services Pty Ltd, GPO Box 2200, Canberra, ACT 2601

Tel: (06) 290 2253 Fax: (06) 290 2252

Driver Fatigue and Driving Simulation

16-17 September 1993

Fremantle, Western Australia

Conference organised by the Institute for Research into Safety & Transport, Murdoch University, Western Australia.

Papers are invited from professional and other interested persons working on road safety issues, especially driver fatigue

and simulation research.

Contact: Associate Professor L R Hartley, Conference Convenor, Tel: (09) 360 2398, Fax: (09) 310 1899

Public Health Association Conference

30 September-2 October 1993

Sydney, NSW

State Health Departments have been invited to provide presentations about their injury prevention strategic plans as part of an injury stream at this Conference. An interactive session 'Strategies and progress towards injury health goals and targets' has been proposed

National Road Safety Conference

19-20 October 1993

Canberra, ACT

Two day national conference organised by the National Road Trauma Advisory Council. Delegates from road safety, health, medical, education, enforcement and other disciplines are being invited and involvement by industry and interested community groups is being encouraged. The Conference will address strategic planning for road trauma together with issues specific to road users, vehicles, the driving environment, road trauma and law enforcement. Guest speakers include international and Australian experts in the fields of road safety and trauma.

Contact: Secretariat, National Road Safety Conference, C/- Federal Office of Road Safety, GPO Box 594, Canberra ACT 2601

Tel: (06) 274 7132 Fax: (06) 274 7922

Australian Injury Control Conference

1995

Watch this space!

3rd International Conference on Injury Prevention and Control

18-21 February 1996

Melbourne, Victoria

Although still some way off, this will be a conference not to be missed!

FOOTNOTES

- Nutbeam D, Wise M, Bauman A, Harris E, Leeder S. *Goals & Targets for Australia's Health in the Year 2000 and Beyond*, School of Public Health, University of Sydney, 1993.
- Health Targets and Implementation (Health for All) Committee. *Health for All Australians*, Report to the Australian Health Ministers' Advisory Council and the Australian Health Ministers' Conference, AGPS Canberra, 1988.
- Better Health Commission. *Looking Forward to Better Health*, Volume 1, AGPS Canberra 1986.
- Health Targets and Implementation (Health for All) Committee. *Op. Cit.*
- Nutbeam *et al.*, *Op. Cit.*
- Harrison JE and Frommer ES. "Work Related Fatalities in Australia - Review and Proposals for a Study of Traumatic Work-Related Deaths", Worksafe Australia, National Occupational Health and Safety Commission, July 1986.
- Brend WA, "Bills of Mortality", 5 Trans Med-Legal Society, p 140, 1907.
- Selby H (ed), *The Aftermath of Death*, Federation Press, 1992.
- Australian Standard AS1056-1991 "Storage Water Systems"*, Standards Association of Australia, 1990.
- Australian Standard AS3666-1989 "Air Handling and Water Systems of Buildings - Microbial Control"*, Standard Association of Australia, 1989.
- Centers for Disease Control, *Morbidity and Mortality Weekly Report*, March 26, 1993, Vol 42, No. 11, pp 203-210.
- Weiss BD, Bicycle helmet use by children. *Pediatrics* 1986;177:677-9.
- Parkin P, Spence L, Hu X, Kranz K, Shortt, L, Wesson D. Evaluation of a subsidy program to increase helmet use in children of low-income families. In: Program and abstracts of the Second World Conference on Injury Control. Atlanta: May 20-23, 1993 (in press).
- Nassau F, Anderson A, Leicester P. The introduction of compulsory bicycle helmet wearing and the effect of this regulation on cyclists in Victoria. In: Program and abstracts of the Second World Conference on Injury Control. Atlanta: May 20-23, 1993 (in press).
- Young A. Bicycle helmets: from research to community program implementation and evaluation. In: Program and abstracts of the Second World Conference on Injury Control. Atlanta: May 20-23, 1993 (in press).
- Ibid.*
- Bicycle Institute of America. *Bicycling reference Book*, 1992-1993. Washington, DC: Bicycle Institute of America, 1992.
- Sacks JJ, Holmgren P, Smith SM, Sosin DM. Bicycle-associated head injuries and deaths in the United States from 1984 through 1988. *JAMA* 1991;266:3016-19.
- Ibid.*
- Thompson RS, Rivara FP, Thompson DC. A case-control study of the effectiveness of bicycle safety helmets. *New England Journal of Medicine* 1989;320:1361-7.
- Anonymous. "Bike helmets: unused lifesavers." *Consumer Reports* 1990; 55:348-53