

## **Development of an integrated knowledge resource on Australian Indigenous road safety ([www.healthinonet.ecu.edu.au/roadsafety](http://www.healthinonet.ecu.edu.au/roadsafety))**

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### ***The impact of road injury among Indigenous peoples***

Road injury is likely to be a major cause of mortality among Indigenous peoples in most areas of Australia, but only for Western Australia, South Australia and the Northern Territory are the data considered reasonably complete (Australian Bureau of Statistics, 2002, Macaulay, et al., 2003, McFadden, McKie and Mwesigye, 2000). Based on data collated by the Australian Bureau of Statistics, motor-vehicle crashes and incidents involving pedestrians together were the leading cause of injury death for Indigenous males and females living in these jurisdictions in 1997-2001 (Thomson and Brooks, 2003). The overall rate for Indigenous males was 3.3 times higher than that of their non-Indigenous counterparts, and that of Indigenous females 6.7 times higher. (The identification of Indigenous status is incomplete even for these jurisdictions, so the ratios quoted here may underestimate the real difference between Indigenous and non-Indigenous rates by as much as 30% (Thomson and Ali, 2003).) Death rates from motor-vehicle crashes and incidents involving pedestrians were higher for Indigenous people than for non-Indigenous people in every age group.

A striking feature of the death information from these jurisdictions in 1997-2001 is the much greater contribution of pedestrian deaths among Indigenous people than among non-Indigenous people: the numbers of Indigenous pedestrian deaths were eight times the number expected for males and almost 33 times the number expected for females (Thomson and Brooks, 2003). As well as the much higher contribution of pedestrian deaths, greater proportions of Indigenous people than non-Indigenous people die from single vehicle crashes (Treacy, Jones and Mansfield, 2002).

### ***Factors contributing to road injury among Indigenous peoples***

Various reasons have been given for the overall differences between Indigenous and non-Indigenous people in road injuries. For a start, higher proportions of Indigenous than non-Indigenous people live in remote or rural areas, where greater frequency of long-distance travel, higher speeds on unsurfaced roads, and reduced accessibility to emergency health services can all contribute to motor-vehicle crashes and deaths (Harrison et al. 2001). (Even allowing for these factors, it is likely that the risks of serious road injury are greater for Indigenous than for non-Indigenous people.) As well, relatively high proportions of crashes involving Indigenous people have contributing factors (such as alcohol, over-loaded vehicles and non-use of seat belts) (Harrison, et al., 2001). It has also been suggested that 'differences in lifestyle

and culture in Indigenous persons may exacerbate existing risks by reducing the appropriateness of current safety education programs' ( Cercarelli and Cooper, 2000).

The factors contributing to the much greater impact of road injuries among Indigenous people than among non-Indigenous people are very complex, however, and analysis needs to go well beyond the identification of proximate factors (that is, seat belt use and intoxication) (Brice, 2000). The consistently large proportion of Indigenous deaths from road injury in South Adelaide over the past two decades has been attributed to 'significant social disturbance at the root of individual incidents', with 'road trauma among Aboriginal and Torres Strait Islander people ... as much a feature of class or social disadvantage as of culture or, for example, of popular notions of poor driving in sub-standard vehicles' (Brice, 2000, p.5).

***Responding to the impact of road injury among Indigenous peoples***

Increasing attention has been directed at road injury among Indigenous peoples at both strategic and program levels, since at least the early 1990s (see, for example, (Ella, 1992, Perkins, 1992, Tomasini, 1995). This has resulted in a series of national meetings involving mainly representatives from New South Wales, Queensland, Western Australia, South Australia, the Northern Territory and the Commonwealth. These meetings, which have provided a forum for the sharing of information about road safety initiatives for Indigenous people, have also enabled consideration of general strategies. The 1999 meeting, for example, identified the following areas that would need to be taken into account: State/Territory collaboration; recognition of Aboriginal 'ways of doing things'; recognition of local/regional/state differences; whole of government approaches; community participation and support; agency/community skills development/research data collection and evaluation (R&M Consultants NT, 1999).

These national meetings have been accompanied by the development of a number of specific road safety projects ( Clapham, 2004, Macaulay, et al., 2003, Moller, Thomson and Brooks, 2004, Office of Aboriginal Health and Office of Road Safety, 2000). The geographic spread of these projects is not uniform, however, and 16 of the 25 projects identified by a major national review were located in Western Australia ( Clapham, 2004). And, importantly, there is no systematic sharing of information about these projects – between jurisdictions and, often, between sectors within a single jurisdiction ( Clapham, 2004, Moller, et al., 2004).

As with other areas of injury, Indigenous road safety initiatives involve a variety of sectors (including transport, police, health, and local government agencies), as well as Indigenous organisations, communities and individuals. The national review of injury prevention and safety promotion activities among Indigenous peoples noted that these activities 'will not be successfully implemented or planned by one sector' and that they need to 'link to many sectors and divisions across national, State/Territory and local government' (Moller, et al., 2004, p.2). This is particularly the case as many Indigenous people living near State borders do not recognise these limits. Consequently

they fall between two bureaucracies, and the need for coordination between jurisdictions is highlighted.

The linkage of the many sectors and divisions will require much better sharing of information and knowledge than has been achieved to date. The national review of injury prevention and safety promotion among Indigenous peoples recommended that 'a comprehensive strategy be developed to facilitate the generation, systematic collection and dissemination of knowledge about programs, projects and activities that can enhance the effectiveness, efficiency and coverage' of safety promotion ( Moller, et al., 2004, p.5)

It is against this backdrop that the (Australian) National Road Safety Strategy Panel agreed in 2003 to proceed with the development of 'an internet clearinghouse of resources for Indigenous road safety issues'. After obtaining financial commitments from five jurisdictions – New South Wales, Queensland, Western Australia, South Australia and the Northern Territory – and the Australian Transport Safety Bureau (ATSB), the Western Australian Office of Road Safety was given the responsibility of selecting an appropriate provider.

Following a rigorous national tender process commencing in August 2004, the Australian Indigenous Health *InfoNet* was chosen to develop the resource. The Health *InfoNet* – the leading source of knowledge and information about the health and wellbeing of Australia's Aboriginal and Torres Strait Islander people – had proposed the development of an 'integrated knowledge resource', a concept that goes far beyond that of a clearinghouse. As proposed, the integrated knowledge resource on Indigenous road safety would include four main components: synthesised knowledge about road safety among Indigenous people; other knowledge and information that provides the necessary context about Indigenous road safety; a clearinghouse of publications and resources; and provision for active sharing of knowledge between people involved in the area.

Reflecting the fact that Indigenous road safety is, as noted in the tender request, 'a subset of ...Indigenous issues as a whole', the website aspects of the resource would be incorporated within the broad structure of the Health *InfoNet*'s Internet site. This will maximise the coordination and sharing of information and knowledge about general issues of relevance to road safety, but imposes some structural and navigational limitations on the road safety resource.

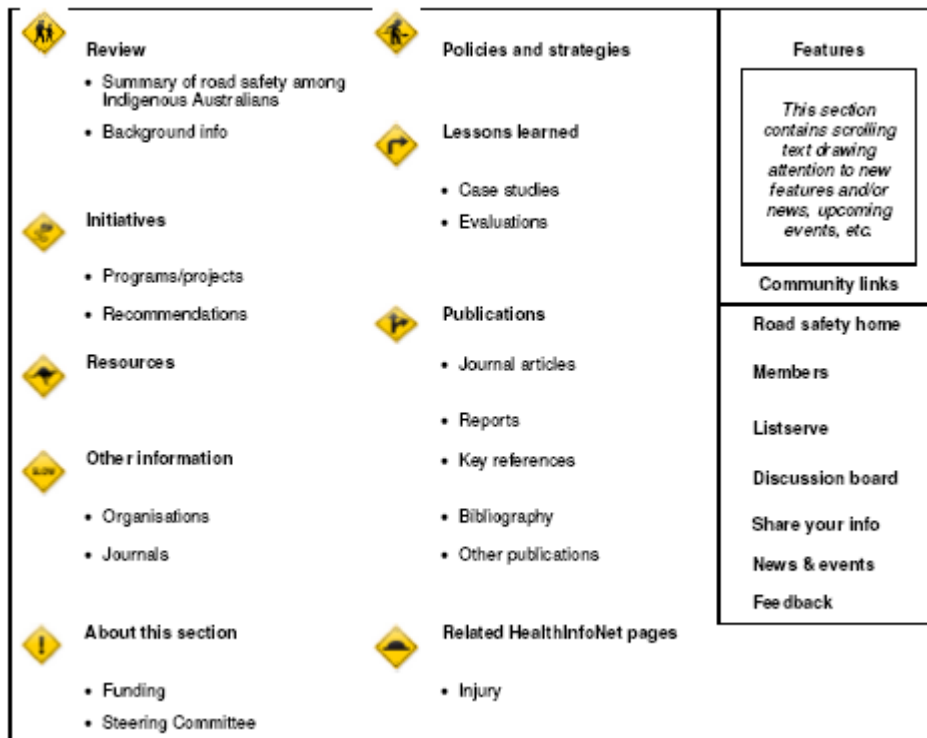
Development of the resource, which commenced in early 2005, is being guided by a Steering Committee comprising representatives of the five participating jurisdictions and the ATSB.

### **Structure and components of the integrated knowledge resource**

As noted above, the website component of the integrated knowledge resource for Indigenous road safety is being incorporated within the broad structure of the Health *InfoNet*'s Internet site. Being a component of the Health *InfoNet*, the road safety website has the same general navigation as the Health *InfoNet*

itself (see [www.healthinonet.ecu.edu.au/roadsafety](http://www.healthinonet.ecu.edu.au/roadsafety)). The sub-structure for the road safety section provides separately for the dissemination of information and knowledge and support of an Indigenous road safety 'community of practice'.

Figure Navigational structure of road safety section of HealthInfoNet website



Dissemination of information and knowledge about aspects of Indigenous road safety is grouped under a number of main components:

- ***Synthesised knowledge about Indigenous road safety*** – ‘Summary of road safety among Indigenous Australians’ provides information about the impact of road injury among Indigenous peoples, factors contributing to road injury among Indigenous peoples, aspects about prevention and management in Indigenous road safety, and policies and strategies. This summary, which is fully referenced and will be subject to peer review, will be updated as new information becomes available. It will be complemented by relevant FAQs (accessible from the ‘Key facts’ button of the HealthInfoNet’s main navigation). For users not familiar with road safety, some general background information is provided.
- ***Policies and strategies*** – details about key government and other policies and strategies to inform development of programs and projects;
- ***Initiatives*** – information about existing programs and projects addressing aspects of Indigenous road safety;
- ***Lessons learned*** – information about particular initiatives addressing Indigenous road safety, and factors contributing to their success (or

lack of success, as it is also important for people to learn from each other about things that haven't worked);

- **Resources** – information about resource materials addressing various aspects of road safety;
- **Publications** – the main 'clearinghouse' part of the section, which includes details about formally published materials (that is, published in journals and by commercial publishers) as well as those in the 'grey literature' (produced by government agencies, non-governmental organisations, universities (including theses), and independent research centres). This section also includes a list of 'key references' in the area, and a downloadable EndNote library of the HealthInfoNet's bibliography relating to Indigenous road safety;
- **Other information** – providing about organisation and journals of relevance to Indigenous road safety (and links where available); and
- **Related HealthInfoNet pages** – links to other relevant material on the HealthInfoNet site.

Support of the Indigenous road safety community of practice includes:

- **Members** – names and contact details of members of the road safety community of practice (subject, of course, to individual preferences about the provision of this information on the website);
- **Listserve** – an electronic distribution list that enables people to carry on a discussion when they are in different parts of the country or world;
- **Discussion board** – this feature enables members to discuss in more detail specific topics related to road safety (such as driver training and licensing, and use of restraints). The discussion board provides for ongoing dialogue about issues, with members being able to see previous messages 'posted' to the discussion board and add their views;
- **Provision for sharing information** – information about literature, programs, projects, etc. can be sent to the HealthInfoNet for adding to the site;
- **News and events** – this information is provided in two ways: in the scrolling text of the 'Features' section; and under the 'News & events' in the 'Community links' section. Information about specific news and events is also disseminated via the listserve;
- **Grant information** – general information about grants is accessible in the 'Resources' section of the main HealthInfoNet site (one of the buttons in the yellow navigation on the left hand side of the HealthInfoNet site);
- **Training programs** – information about training programs is accessible in the 'Our services' section of the main HealthInfoNet site (one of the buttons in the yellow navigation on the left hand side of the HealthInfoNet site);
- **Provision for feedback** – users can send messages to the HealthInfoNet from the 'Feedback' section.

### **Oversight of development of the resource**

As noted above, development of the resource is being guided by a Steering Committee comprising representatives of the five participating jurisdictions

and the ATSB. The Steering Committee, coordinated by the Western Australian Office of Road Safety, provides guidance on general and specific aspects of the knowledge resource, including reviewing draft content; facilitating access to the information collections of government agencies concerned with road safety and related aspects of Indigenous health and wellbeing; and advising on Indigenous road safety matters.

A Community and Professional Reference Group is also in the process of being established. This Group, which will include representatives from Indigenous communities and organisations and from professional and research groups involved in road safety, will provide guidance about the resource and also facilitate the sharing of information and knowledge among the great diversity of people and agencies involved in the area. As such, it will have an important role in supporting the Indigenous road safety community of practice.

Ensuring the quality of the resource is being addressed in three main ways. First, the *HealthInfoNet* has documented procedures for all aspects of its day-to-day operations. These procedures ensure that all materials have been subjected to quality control checks before being added to the site. The nature of the checks varies to some degree. All important content additions are checked by the Director, who brings to the function more than 25 years of involvement in the area of Indigenous health and wellbeing, and substantial editorial experience. This experience enables him to provide high levels of both technical and editorial expertise in ensuring the quality of materials added to the site.

Second, the Steering Committee and the Community and Professional Reference Group will both provide oversight about the quality of the material in the resource as well its overall development. Third, specific peer-review of any substantial materials to be added to the resource will be provided by one or more of the *HealthInfoNet* Consultants, a network of around 100 people with expertise in various areas of Indigenous health and wellbeing. Depending on the nature of the material to be added, the Consultants can also play a more direct role in the development of the material itself. The *HealthInfoNet* has a number of Consultants involved in the area of road safety, and other relevant people will be invited to assist in this very important area.

## **Conclusions**

As noted above, recent reports have highlighted the lack of systematic sharing of knowledge and information relating to road safety between jurisdictions and, often, between sectors within a single jurisdiction ( Clapham, 2004, Moller, et al., 2004). The development of this integrated knowledge resource, which involves the systematic collection, generation, and dissemination of knowledge about programs, projects and activities in the area of road safety addresses the identified need to 'enhance the effectiveness, efficiency and coverage' of safety promotion activities in the area (Moller, et al., 2004, p.5).

## References

Australian Bureau of Statistics (2002) *Deaths Australia, 2001*. (3302.0) Canberra: Australian Bureau of Statistics

Brice GA (2000) *Australian Indigenous road safety: a critical review and research report, with special reference to South Australia, other Indigenous populations, and countermeasures to reduce road trauma*. Adelaide: A report to the Aboriginal Health Council of South Australia & Transport SA supported by the Safety Strategy, Transport SA Urban Planning & the Arts

Cercarelli L, Cooper LM (2000) *Process evaluation of the Open Load Space Project, July 1999 to March 2000*. Perth: Road Accident Prevention Research Unit, Department of Public Health, The University of Western Australia

Clapham K (2004) *Injury prevention activity among Aboriginal and Torres Strait Islander peoples: Volume 2, Programs, projects and actions*. Canberra, ACT: Department of Health and Ageing

Ella L (1992) *Aboriginal Community Road Safety Project Report*. Roseberry, NSW: Road Safety Bureau, Roads and Traffic Authority NSW and the NSW Better Health Program, NSW Health Department

Harrison J, Miller E, Weeramanthri T, Wakerman J, Barnes T (2001) *Information sources for injury prevention among Indigenous Australians: status and prospects for improvements*. Canberra: Australian Institute of Health and Welfare

Macaulay J, Thomas R, Mabbot N, Styles T, Edmonston C, Sheehan M, Schonfeld C (2003) *Australian Indigenous Road Safety: contract report for Australian Transport Safety Bureau*. Retrieved 26 November 2004 from <http://www.atsb.gov.au/road/pdf/indigenous.pdf>

McFadden M, McKie K, Mwesigye S (2000) *Estimating road trauma in the Australian Indigenous population*. Canberra: Australian Transport Safety Bureau

Moller J, Thomson N, Brooks J (2004) *Injury prevention activity among Aboriginal and Torres Strait Islander peoples: Volume 1, Current status and future directions*. Canberra: Department of Health and Ageing

Office of Aboriginal Health and Office of Road Safety (2000) *The way ahead: road safety directions for Aboriginal road users in Western Australia*. Perth, WA: Office of Aboriginal Health and Office of Road Safety, Western Australia

Perkins N (1992) *Protect your relations: Aboriginal community road safety evaluation report*. Canberra: Roads & Traffic Authority, Road Safety Bureau

R&M Consultants NT (1999) *Report of the Second National Aboriginal and Torres Strait Islander Road Safety Meeting, Darwin, 18-19 March 1999*. Darwin, NT: R&M Consultants NT

Thomson N, Ali M (2003) Births, deaths, and hospitalisation. In: Thomson M, ed. *The health of Indigenous Australians*. South Melbourne: Oxford University Press:44-74

Thomson N, Brooks J (2003) Injury. In: Thomson N, ed. *The health of Indigenous Australians*. South Melbourne: Oxford University Press :442-466

Tomasini R (1995) *Aboriginal road safety awareness project*. Paper presented at the National Road Trauma Advisory Council Conference. 21 April 1995, Canberra

Treacy PJ, Jones K, Mansfield C (2002) Flipped out of control: single-vehicle rollover accidents in the Northern Territory. *Medical Journal of Australia*;176(6):260-263



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**Abstract:**

Road injury is a major cause of mortality and morbidity amongst Australia's Aboriginal and Torres Strait Islander peoples. The National Aboriginal Road Safety Working Group has acknowledged that there is a lack of information about the circumstances of Aboriginal and Torres Strait Islander people's experience of road trauma. To combat this, an internet-based clearing house is being developed to effectively share information about Indigenous road safety amongst stakeholders and the community.

In September 2003 Western Australia offered to coordinate the development of this project. A steering committee of representatives from Western Australia, Northern Territory, South Australia, Queensland, New South Wales and the Australian Transport Safety Bureau drew up a project proposal and appointed a contractor to develop the resource.