REGIONAL REPORTS

North America

Airbags: friend or foe?

The costs and benefits of airbags in passenger vehicles have received increased attention in the US over the past six months. The potential danger of airbags to children and small adults has long been recognized, it was raised at the 1st public meeting on automatic restraints held by the National Highway Traffic Safety Bureau in 1969. This has been borne out by recent statistics assembled by the National Highway Traffic Safety Administration.

The National potential danger of whom 1987, a ratio of nearly 80 lives lost for every life lost. On the passenger side, airbags prevented 164 deaths during the same time period but the number of the deaths of 33 individuals, 32 of whom were children or infants, producing a ratio of lives saved to lost of only 5:1. Furthermore, NHTSA investigations determined that the crashes in which children were killed by airbags occurred at relatively low speeds.

On 22 November 1996 NHTSA announced a five point plan to address the tradeoffs between adult and child safety revealed by these statistics. It includes: (1) strong warning labels to be displayed on all new cars and on rear-facing child seats; (2) airbags that are 20-35% less powerful to be installed in 1998 model cars; (3) cut-off switches can be continued to be installed in cars without rear seats; (4) automobile dealers and garages can legally disconnect airbags at the owner's request; (5) development of 'smart' airbags that use sensors to adjust the force of airbag deployment to each occupant, with a target of 1999 as the date to start phasing in these devices.

The most controversial of the interim solutions–deactivating and sanitizing airbags by airbag deployment because the benefit to children will be at some cost to adults. NHTSA estimates that in all airbag fleet of passenger cars without any substantial behavioral or design changes, there would be 90 deaths per year to other children caused by airbags with current design, 39 to 83 of which could be prevented by the depowering of 20-35%. Similar estimates could not be made for the potential deaths that would be prevented in 38 infant deaths in rear-facing safety seats. The proposed changes would be likely to benefit properly belted teenagers and adults, but would cause the death of 86 to 280 unbelted occupants whose deaths could be prevented with current airbag deployment.

In the end, value judgments made by NHTSA informed the design of these countermeasures. The reasons for the policy choices were articulated as follows: 'First, it is not acceptable that a safety device cause a significant number of fatalities in circumstances in which fatal or serious injuries would not otherwise occur. Second, it is particularly unacceptable that the vehicle occupants being fatally injured are young children. In confronting the possibility of inevitable short term safety tradeoffs by 45%, airbags alone reduce fatalities by 13%, whereas the combination of airbag plus lap-shoulder belt reduces fatalities by 50% Thus, the best protection is to get the unbelted occupant to buckle up. The increase in fatalities from 1% in 1984 to 0.68% in 1996 resulting enactment of legislation in 49 states illustrates the feasibility of effecting behavior change with a comprehensive program of education and legislation. The combination of safety belts and airbags affords the greatest protection to occupants, and making airbags safer will avoid the tragic loss of children's lives. In the foreseeable future, however, continued efforts to increase seat belt use will yield the highest dividends.

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3 Third Report to Congress. Effectiveness of occupant protection systems and their use. US Department of Transportation.

Africa

Things as they are

The Weekend Argus newspaper is Cape Town's premier Sunday broadsheet but the February 16th issue was hardly conducive to a lazy read on the coming of the cold, dry winter. Column headings included: 'Baby abducted from Malawi home', 'Worcester bomb suspect arrested', 'Police shoot 5 gang- estate residents', 'Manchester United-Ajax Africa peace pading', 'Children's Forum plea for ban on sales of solvents', 'Burning corpse found on municipal dump', 'Civil war spreads in Zaire' and, on page 17, Francesco Zizola's winning World Press Photo of the year depicting a maimed Angolan child clutching a naked doll. And there was more.

On a personal level, bearing witness to the attrition that is so much a part of Africa is confronting the reality of a child safety point of view, it is starkly apparent that our old strategies to protect the young and innocent, previously having owed much to Westerners to be brought to bear on children in Africa. First up, we just have to acknowledge that the scientific definition of injury is going to become progressively more elusive—to the extent whereby the quest for good quality data will become a grueling exercise in a few years from now. And yet the absence of data will not stand up as any excuse for inactivity. If we want to know whether children are 'at risk' or not, a cursory glance through the pages of our Sunday newspapers may have to suffice. Money that might be spent buying computers and funding researchers in Chicago, might be better spent designing cheap, effective child restraints in South Africa or teaching basic first aid to rural mothers in Mozambique.

Moreover, injury classifications and categorisations may have to be scrutinised and modified, where necessary, relinquished. This applies, most immediately, to data that are developed between intentional and non-intentional injury. In the December 1996 issue of this journal, ISCAIP chairman Fred Rivara voiced a strong argument for closer cooperation between the two broad types of injury, particularly because new emerging problems such as firearm injuries, drug self-categorisation. Health resources in southern Africa are too scarce to allow specialisation and duplication based purely on zeal.

News, projects, and events

The first national conference on safe packaging was hosted at the end of February in Cape Town by the Paraffin Safety Association of South Africa—each of the four days was devoted to a specific group of hazards—pesticides and chemicals, paraffin and solvent detergents, asbestos and pharmaceuticals. Recommendations for legislation were eschewed as far as possible in favour of motivating manufacturers and distributors to improve their labelling of products such as child resistant container, hazard labelling, and restricted access in retail outlets. The conference was held at a coastal resort overlooking Noordhoek beach—anyone who remembers seeing the David Lean movie 'Ryan's Daughter' will know what a delightful distraction that view must have offered the delegates. A full description on the conference will follow in my next regional report.

A workshop on 'young road users' was convened in mid-February by the Directorate of Traffic Information with the aim of formulating the first rational business plan for dealing with the safety of road pedestrians in South Africa. This is a serious issue for the country where the slaughter of adult road users has always been the held centre stage when government allocates resources to safety campaigns.

On the particularly the domesticating for the 2004 Olympic bid was announced on 7th March and celebrated in the media to such an extent that a far more significant event was unfortunately relegated to middle pages. At the Cape Town Olympic Games flag ceremony for the Olympic rings, I sat in my garden and toasted my government's resolution taken that same

There must be literally hundreds of books of this sort now in circulation. Probably every major safety group has produced one, but this stands head and shoulders above most of its competitors. Although normally book reviews in this journal deal with scientific publications, and not books, this book has been reviewed because of the journal’s mandate. Our job is to bring important material to all our readers, many of whom are in the trenches and not scientists.

What makes this book special is three features. First, it is comprehensive, without being unduly large. Second, it is beautifully illustrated with a great use of colour and drawings. Third, the messages are straightforward and to the point. A critically important point is made. Care has obviously been taken to ensure that the level of the language used is accessible to most readers. Another essential point is that, so far as I can judge, the advice provided is invariably accurate and up-to-date.

An especially appealing aspect is the organization of each section. Many begin with a vignette or case history, accompanied by a colour photo, presumably of the victim. This is followed by a section presenting the facts, another on prevention, and a third, on first aid. Inside the foldout cover is a summary of ‘life threatening emergencies’ organized along developmental lines: baby, small child, large child.

The injuries covered include: bites and stings, bleeding, bone, muscle and joint injuries, burns, choking, drowning, eye injuries, head injuries, needlestick injuries, poisoning, teeth injuries, and traffic accidents. In addition, there is a section on common childhood illnesses. It includes a good index, and inside the back cover there is a section for emergency contact telephone numbers.

There are, of course, some shortcomings. It is intended primarily for Australian readers, so that, for example, the listing of poisonous plants include many that are not found in Australia. Nevertheless, in almost every other respects, it is useful for English reading parents world wide. I was also a bit disappointed not to find much that urges parents to engage in advocacy as a way to make their homes and playgrounds safer, but perhaps this is a bit unfair, given the intentions of the authors. And, of course, I would have preferred to see less of the awful ‘A word.’

But these are truly trivial concerns and only intended to show that I read it carefully. It is an excellent book; undoubtedly, one of the best of its kind. Despite its modest cost, whether parents who need it most actually rush out to buy it will depend, in part, on how strongly it is endorsed by health professionals and those in child safety programmes.

Safety and First Aid Book is a publication of the Melbourne’s Royal Children’s Hospital Safety Centre. The authors are a public health consultant (Jennifer Brown) and an intensive care paramedic (Tony Walker).