

## Why our children are not as safe as we think they are

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Many of us take pride in the belief that New Zealand is a fine place to bring up children. Many of us who trained or worked overseas with young families in tow, cite the fact that the wish for our children to be brought up in a clean and safe environment was a contributing factor in our decision to return to New Zealand. Certainly, compared with many developing countries, our country does appear to provide a relatively safe environment where, in all probability, our children will reach adulthood intact.

But are our children as safe as we imagine them to be? Do we (albeit inadvertently) expose them to unnecessary risks? Do we assess those risks adequately, or make sufficient effort to minimise them? Murphy et al provide evidence to suggest that at least in some areas we do not.<sup>1</sup>

In this issue of NZMJ, we are informed of the remarkably high incidence of young children being run over and injured in driveways in our largest city – Auckland. During the four-year period reviewed, the authors identified 77 separate driveway accidents and six deaths. Their study reveals some features that may be surprising to readers: in over two thirds of these accidents the driver of the vehicle is a parent or relative, and the trauma usually occurs in the driveway of the child's home. Although this type of trauma occurs at low velocity, the injuries often are severe. The vast majority of incidents involve children under four years of age. Maori and Pacific Island children, and children from larger families, appear to be at increased risk. In none of the incidents was the driveway fenced off from the house – inspection of the accidents sites found the driveways were all easily accessible to young children.

Poor visibility at ground level during reversing, a problem characteristic of most vans, four wheel drive vehicles and light trucks, is likely to account for their disproportionately high representation in the statistics.

Knowledge of the above facts should enable various preventive measures to be taken. These might include improving driver awareness of the potential danger to young children during reversing down driveways; changing the design of vehicles to improve rear visibility at ground level; creating physical barriers between homes and driveways (eg fences and self-closing gates); better driveway design in new residential areas; and increased public awareness of the need for supervision of children in driveways. The effect of these interventions could be measured.

Reliable national data are difficult to obtain, but it seems that each year up to four children in New Zealand may die from driveway-related events,<sup>2</sup> and many more receive significant injuries. Yet it has taken an embarrassingly long time for this public health issue to receive any prominence, and it will probably be longer before any effective measures are introduced to reduce the toll.

In some respects, New Zealand lags behind our closest neighbour, Victoria, in developing effective accident prevention programmes for children. For many years, the Victorian Injury Surveillance and Applied Research System (formerly VISS)<sup>3</sup> has collected comprehensive data prospectively on all children with injuries presenting to public hospitals within the state. Armed with accurate information on the patterns and trends of childhood injury, it and the Safety Centre of the Royal Children's Hospital (which commenced 22 years ago as the Child Accident Prevention Centre)<sup>4</sup> have a proud record of introducing measures that have demonstrably reduced the incidence and severity of childhood trauma.

In New Zealand, we have numerous groups (some isolated) involved in various ways in accident prevention in children. The Injury Prevention Research Centre of the University of Auckland and the Injury Prevention Research Unit of the University of Otago are well established and perhaps the best known in academic circles. The Auckland-based Safe Kids, funded to fulfil an advocacy role by the Ministry of Health, has a high profile locally. The National Child Safety Foundation, amongst other things, provides access to safety information on an 0800 number.

The Plunket Society (active in enhancing home safety), and the Community Injury Prevention Projects of local authorities, are examples of other groups that make an important contribution to child safety. But there is no overall strategy for accident prevention in children, and – as the paper contained in this issue typifies – progress in our understanding of childhood injuries tends to rely on the initiative of individuals or small groups on an ad hoc basis.

An adequately-funded and comprehensive injury surveillance system would ensure that accurate data are collected prospectively. (Currently, for example, the Injury Prevention Research Unit largely relies on hospital discharge code data from the New Zealand Health Information Service.) Reliable information should assist in the early recognition of

trends and enable prompt intervention where specific issues or injury patterns are identified. Such programmes have been shown to produce cost savings to the community as a whole (by reducing the frequency and severity of injuries, and the long-term financial implications of their sequelae), as well as reduce the enormous personal suffering that injuries cause. The establishment of such a system would be consistent with the newly-elected government's promise to better resource preventive medicine, and was a priority of the Child Health Strategy 1998. The experience of the Victorians should encourage our Ministry of Health to follow their example and develop a nationwide injury surveillance system in this country. Only by doing so can we ensure that we target our scarce health dollars to those areas where they will be most effective. And, of course, we then can have more confidence that we are truly providing our children with that safer environment on which we have placed so much value.

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