SPLINTERS & FRAGMENTS

A Cook County (Chicago) Hospital study found a significant increase in children aged under 16 years admitted with penetrating wounds between 1987 and 1993. In what the authors describe as an epidemic, trauma admissions for penetrating injuries increased from 14.6% in 1987 to 36.2% in 1993. The increase was almost entirely due to gunshot wounds (Journal of Trauma 1995; 39: 487–91).

Norwegian researchers studied over 9000 children aged 6 months to 6 years, half of whom attended day care centres in the small town of Stavanger, to assess the safety of day care centres. Previous studies have compared injuries in day care settings with all other injuries; this study compares injuries in day care centres with injuries in the home, after excluding injuries in other locations. For the age group 6 months to 2 years, day care centres recorded lower injury rates and most incidents were self-inflicted. Injuries such as bruises, poisonings and intoxications took place at home. For children aged 3 to 6 years, however, injury risks in day care and in the home were similar (Pediatrics 1996; 97: 43–7).

Two babies, out of a total of 14 presenting to the Staten Island University Hospital after injuries in baby walkers, suffered skull fractures and vision threatening ocular damage from preretinal haemorrhages. Both had fallen down stairs. The parents of the 6 month old boy who fell down six steps did not believe he was agile enough to reach the stairs while they were supervising. The parents of the 8 month old girl believed that the stairguard they had installed was locked (Archives of Pediatric and Adolescent Medicine 1995; 149: 1275–6).

Balloons are great fun but they can also be deadly as a Pittsburgh study reveals (JAMA 1995; 274: 1763–5). The study involved 165 children who had aspirated or inhaled objects which were removed endoscopically, and 449 deaths due to foreign bodies reported to the US Consumer Product Safety Commission over a 20 year period. 70% of the morbidity involved food: nuts, pieces of fruit and vegetables, seeds, popcorn, and meat. Non-food items removed from airways and oesophageal tracts included coins, pen caps, pieces of plastic, batteries, bones, and glass. Two thirds were under 3 years of age. Of the children who died, 29% had inhaled balloons or pieces of balloon, and were far more likely to be aged more than 3 years. Deaths from cylindrical objects, especially toys, could be prevented by increasing the diameter of small parts of toys from 3.17 cm to 4.44 cm and the length to 7.62 cm.

Children should be prohibited from riding in shopping carts as presently designed according to a report from Columbus, Ohio (Archives of Pediatric and Adolescent Medicine 1995; 149: 1207–10). Using data from the US Consumer Product Safety Commission, they estimated 25 000 children a year are injured in falls from shopping carts, about the same number as are injured in baby walkers. Widening the wheel base and lowering the centre of gravity, attaching a stroller-like carrier to the carts, or providing child care facilities in stores are possible strategies to consider to prevent these falls.

A Columbia University study of children shot in Harlem, New York, identified a 400% increase in gunshot wounds among 10 to 16 year old children in just one year from 1986 to 1987. The researchers studied the characteristics of survivors of gunshot wounds and found that they engaged in extracurricular activities less often than their control peers, had less work experience, were more likely to have dropped out of school and been involved with the criminal justice system, and were more likely to have used marijuana. The cases were also less likely to be living with a parent in a home environment and more likely to have had a parent die (Journal of Pediatric Surgery 1995; 30: 1072–6).

How much health information produced for the public is readable? The fact is that much of the currently available information is difficult to read, particularly by parents whose children have the poorest health. The Step to Health project in Norwich, England, has developed guidelines for the presentation of written material which includes good, practical advice such as knowing your audience, identifying the essence of the information, making the layout and design simple, using graphics to illustrate points, avoiding the passive voice, keeping sentences short and vocabulary simple, and choosing the right font type and spacing. To those critics who say that making information simple patronises those who are literate, the authors reply that well written information is likely to be appreciated by all if excessive concentration is not required (Archives of Disease in Childhood 1996; 74: 180–2).

The January 1996 issue of Pediatric Annals (25) carries several articles on childhood poisoning including acute iron poisoning (treatment options are discussed), the non-toxic ingestion (which can be a precursor to other, more serious, ingestions), inhalant abuse (solvents, aerosols, adhesives, fuel gases, and typewriter correction fluid), and pesticides (insecticides, herbicides, and rodenticides). The general consensus seems to be that the use of syrup of ipecac is not indicated other than in exceptional circumstances, and then only with professional advice from a poison control centre. The other point to note is that while mortality has decreased, serious morbidity has not.

Tobogganing injuries are infrequent but usually severe. In this Canadian study (Journal of Pediatric Surgery 1995; 30: 1135–7) of 22 children admitted to hospital during a two year period, two died. One of those children was killed while being towed behind a car and propelled into the path of another car. Thirteen children sustained head injuries, frequently while riding in the head first position; nine struck trees, while others fell from their toboggans or hit other toboggans. Safety recommendations include discouraging the head first position for tobogganers and banning towing behind motor vehicles.

Researchers from the School of Human and Health Sciences in Huddersfield, England, interviewed two groups of parents, one group affluent, and another group less affluent, to ascertain parents' perceptions about the safety of their children. Most of the affluent parents believed their children to be relatively safe because they had taken the necessary precautions to ensure this, although they were aware of external hazards such as traffic. They also assumed the primary responsibility for their children's safety. The less affluent parents on the other hand saw the environment as relatively unsafe and believed this to be the council's / housing authority's / responsibility. Injury rates among the two groups were similar; what was different was the higher number of previous injuries among the less affluent. Parents lacking resources find it more difficult to be confident...

French researchers conducted a one year prospective study of 937 childhood burns presenting to 14 burn centres and 18 paediatric surgery units throughout France (Burns 1996; 22: 29–34). Toddlers aged 1 to 3 years were most affected. More than half the burns occurred in the kitchen, often while mothers were present, but the more serious burns happened in the bathroom. While most burns were small and superficial, one third were serious enough to require skin grafting. Older children were commonly burned by the ignition of volatile substances; flame burns caused seven of the 11 deaths. There are no mandatory burn protection regulations in France, and the authors commend a range of environmental approaches (antiscald devices and 'cool' oven doors) as well as tackling burns' prevention at the level of the European Union.

The principal recommendations of a review commissioned by the Australian government into countermeasures to reduce drowning, near-drowning, and spinal injuries from diving into shallow water are the compilation of detailed national information about these events from coroners' files, the requirement for police investigating deaths to record details such as the presence or absence of pool fencing, the need for a study into adolescent drownings, advocacy for pool fencing, and requiring all pool owners to be trained in first aid (Review of countermeasures to reduce drowning, near-drowning and spinal injuries from diving into shallow water. J Nixon, et al. Canberra: Department of Human Services and Health, 1995).

**Child poverty — league tables**
Because of the close relationship between poverty and injuries, readers may be interested in New and Issues, Fall/Winter 1995, from the National Center for Children in Poverty (US). It includes a sobering, but perhaps not surprising graph, depicting the gap between poor and affluent children, by country. The largest gap is found in the United States, Canada, and Switzerland; the smallest, in Ireland and Finland.

**Violence research gets a boost**
The National Science Board has approved a plan to award $12.1 million to Carnegie Mellon University (US) to establish a National Consortium for Research on Violence. The aim is to 'generate fundamental knowledge about the causes and consequences of violence'. The plan is to assemble a team of 39 researchers from 24 institutions in 11 states, Canada, and four European countries.

**Child resistant lighters?**
Despite the fact that as of June 1995 all disposable lighters sold in Canada were required to be child resistant (by requiring two separate actions to make it work), while preparing this section I went to the corner store and inspected the lighters for sale. Although they met this standard it is hard to imagine any child having difficulty using them. To whom do I complain? I know, but does the average citizen?

**Injury to children and teenagers: state-by-state mortality facts**
This 76 page fact book by Susan Baker, Lois Fingerhut and others, has just been released. It is a goldmine of sobering information about injury deaths in the US, but will also be of value to researchers in other countries, both as an example of how such data can be presented, and for purposes of comparison. Three intriguing facts: the total rate for 0–19 year olds is 30 per 100 000 per year; Massachusetts showed the largest per cent decrease between 1980–5 and 1986–92 (–19%); and guess what the category was showing the greatest decrease? Farm machinery and motorcycling, –44% and –43%, respectively. But no surprises in the greatest increase: firearm homicide, 63%.

**Mortality rate for children in farming accidents alarmingly high**
The auditor for Ontario (Canada) suggests that prehospital care in that province is poor. An emergency care physician goes further, describing the service in rural areas as 'obscenely' poor. In support of his allegations, the physician states that 'your chances of dying in a rural road accident are seven times greater than in an urban setting, largely because of distance and time factors to emergency care'. He adds, 'The mortality rate for children in farming accidents is... about 30% of the death total'.

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**Injury to children and teenagers: state-by-state mortality facts**

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<th>State</th>
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