

SPLINTERS & FRAGMENTS

Making workplaces safer for adolescents

Early this century it was not uncommon for young people to start permanent, full time employment at 14 years of age. With increasing school retention rates, this age increased steadily. A recent trend towards commencing part time work to supplement incomes while continuing to study has meant that adolescents are in workplaces which may not be completely safe. A North Carolina study of 562 working teenagers found that one third had been employed before the age of 14 and that two thirds had more than one job, commonly lawn mowing, working at cash registers, and dishwashing. Half had been injured at work, usually being cut or burned, but they were also injured by ladders, scaffolding, forklifts, tractors, and ride-on mowers (*Journal of Adolescent Health* 1998;22:19–25). An Australian study of 997 trade apprentices also found that more than half had been injured at work and that the chances of sustaining injury increased with the year level of the apprenticeship. The construction and engineering trades experienced high levels of injury, principally cuts from tools, back and lower limb strains, and foreign bodies in the eye (*Australian & New Zealand Journal of Public Health* 1997;21:767–72). A New Zealand study of 1361 work related injuries to adolescents uncovered significant under-reporting of work injuries when the emergency department database was compared with workers' compensation records, with fewer than 60% being reported (*Annals of Emergency Medicine* 1997;30:266–73).

Can a first aid calendar improve paediatric cardiopulmonary resuscitation skills?

A Norwegian case-control study (Resuscitation 1998;36:59–64) tested the hypothesis by mailing safety and first aid calendars unsolicited to all subscribers of an ambulance service. Insurance company employees also received the calendar as part of a company-wide child safety campaign, and were offered the opportunity to borrow a first aid manikin, but with no instruction provided. Preintervention and postintervention testing indicated that the cardiopulmonary resuscitation skills of the company group not only improved significantly, but that a high level of skill was retained six months later. This was especially true for those who borrowed the manikin. The effect may have been enhanced by the existing culture of safety within the company, and the younger age of the company workers.



Skating on thin ice

In-line skating is a wonderful recreational activity which needs to be practised in controlled circumstances, the main risk factors being speed, obstacles, and hard surfaces. "Skitching" (holding onto a car while skating) and the inability to stop effectively are also risk factors. Twenty seven of the 28 deaths reported in the US were related to collisions with motor vehicles, including one of the cases described in a Miami study of nine cases (*Pediatric Emergency Care* 1997;13:376–9). The mean age for deaths

was 11.8 years and for injuries, 13 years. More than two thirds of both groups were males. Dedicated skating parks and trails may help reduce injuries, along with the wearing of protective gear.

The safety of infant bathtub seats and rings

Twenty eight of the 32 bathtub seats and rings associated with infant drownings investigated by the US Consumer Product Safety Commission had attached warning signs advising against leaving babies unattended in the bath (*Pediatrics* 1997;100:e1). Problems with the seats included infants climbing out or sliding under the rim, seats tipping over, and missing or defective suction cups. Focus group interviews revealed that parents believed the seats to be safety products, presumably giving them a false sense of security about leaving babies in them. Warning labels may have been ignored because most children's products have warning labels, calling into question the effectiveness of warning labels in changing behaviour. The age range of 5–15 months, and the fact that 29 babies were left for periods ranging from one to 35 minutes indicates that bath seats may not be appropriate for babies.

Are randomised controlled trials for behavioural interventions possible?

Behavioural interventions are frequently evaluated by means of uncontrolled, before and after comparisons. Results may be incorrectly attributed to the intervention rather than to the effect of regression to the mean (*BMJ* 1998;316:611–3). Randomisation seeks to diminish external influences between groups so the true effect of an intervention becomes clear, but blinding of participants and researchers to the intervention option in behavioural research is impossible. Bias can be minimised, however, through blinded assessment of the outcome.

Population surveys v accident and emergency department surveillance systems

Collecting data is an expensive exercise and choosing the method which best meets objectives and assists in setting priorities for implementation is critical. What criteria should be used to select the appropriate method? This "consumer's guide" from Amsterdam's Consumer Safety Institute canvasses thoroughly the advantages and disadvantages of each and counsels that since neither has all the desired attributes, they should be considered as complementary methods and used in conjunction with each other (*International Journal for Consumer Safety* 1997;4:165–78).

Teaching injury prevention to medical students

US medical schools responding to a survey of their injury prevention curricula for medical students (87/124, a 70% response rate) indicated that 47% of schools included injury prevention in core curricula and 30% in electives. Where the subject was elective, fewer than 10% of students chose the option. Medical schools affiliated with trauma centres were almost four times more likely to include injury prevention than schools affiliated with children's hospitals, public health schools, or even injury prevention centres. Two thirds of schools devoted less than 10 hours to injury prevention (*Journal of Trauma* 1998;44:161–5).

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