

LEARNING LESSONS

PLAYGROUND INJURIES ARE AN UNPLEASANT AND PAINFUL DIGRESSION FROM THE PURPOSE OF THESE AREAS. IIRSM LOOKS AT THE CAUSES AND SOLUTIONS.

Play for children has never been more important, particularly with the Government's drive to promote health and prevent obesity. Playgrounds form a significant part of play opportunities for children, but it is not surprising that those involved in children's play are anxious that playgrounds are as safe as possible.

In the 1970s, there were concerns regarding playground injuries and deaths, leading to the introduction of safety features, such as impact absorbing surfaces (IAS), changes in equipment entrapment avoidance, height restrictions and guardrails, and changes in materials used in the construction of equipment and design. These changes led to the introduction of standards in Britain to reduce injury episodes to children. But what evidence is there to suggest that playground safety features work, and are they worthwhile in preventing serious injuries?

Every year there are a significant number of accidents to children in playgrounds due to fixed play equipment, believed to be as many as 40,000 annually. On average, there is one fatal injury every three to four years. The risk of injury in UK playgrounds is found to be modest compared with the risks of many other activities, but one fatality is one too many.

When a children's play environment or facility is created, evidence proves that they should be appropriate in terms of age, ability range, social factors, and play value.

There is always a possibility of accidents in the rough and tumble of playground cultures, and the Royal Society for the Prevention of Accidents (RoSPA) has a clear message: play areas should be as safe as necessary, not as safe as possible.

ADVENTURE V SAFETY

Playgrounds can provide children with fun, fresh air and exercise, but they can pose safety hazards. Faulty equipment, improper surfaces and careless behaviour are just a few of the dangers that can cause children in playgrounds to hurt themselves. In addition, teaching children how to play safely is important: if they know the rules of the playground, it's less likely they will get hurt.

It is important to remember that children need challenge and adventure in their playgrounds, but is also essential to distinguish between risk and hazard. The main locations where equipment-related playground accidents occur are public playgrounds, parks, schools and public houses or restaurants.

SAFE SURFACES

A proper playground surface is one of the most important factors in reducing injuries – and the severity of injuries – that occur when children fall from equipment. The surface under the play area equipment should be soft and thick enough to cushion the impact of a child's fall. Concrete, asphalt and blacktop are unacceptable. Grass, soil and packed-earth surfaces are also unsafe because weather and wear can reduce their capacities to cushion a child's fall. The playground surface should be free of debris that could cause a child to trip and fall, and may be loosely filled with materials like wood chips, mulch, sand, pea gravel, or shredded rubber. Surfacing mats made of safety-tested rubber or rubber-like materials are also safe. Rubber mats and wood chips allow the best access for people in wheelchairs. However, even proper surfacing can't prevent all injuries. Also, the greater the height of equipment, the more likely the child is to get injured if he or she falls from it.

Until recently it was commonly held that the most serious playground injuries

are caused when the head impacts with the ground after a fall from equipment. This remains true, but it is a very rare occurrence, as after four years, a child is no longer top-heavy and has sufficient co-ordination to put their hands down to break the fall.

However, it is generally agreed that there are too many preventable or avoidable accidents in playgrounds and that there are a range of measures that can deter or prevent them. These accidents include falls from items which are too high and/or lack any/adequate safety surfaces, cuts and other injuries caused by poorly maintained items, and poorly-sited equipment. The many potential hazards mean playground owners/managers must be aware at all times of the need for playground safety consciousness – this encompasses every stage from selecting and buying through installation to use, inspection, maintenance and repair.

OUTSIDE FACTORS

Sometimes children overestimate their abilities and accidents happen, but not all are related to the equipment – perhaps as few as 40 per cent. Of these, 80 per cent result in a fall to the surface. Of the remaining accidents, at least four per cent involve children being struck by a swing seat (although the resultant injury is usually not serious), a similar number being bitten by dogs and being cut by glass. Owners or managers of premises that include children's play areas have the responsibility to ensure the play area provided is safe.

GOOD MANAGEMENT

Management failures (ie incorrect design and layout) and user problems (lack of supervision, etc) are the two main factors which can lead to injuries. All providers of play equipment should carry out a suitable and sufficient risk assessment to ensure its ongoing safety. Maintenance is an important factor to consider. Routine visual inspections should be carried out to spot damage and other unreported problems. In addition, an independent specialist should carry out an annual inspection for long-term safety of the equipment.

PLAYGROUND RULES

Playground managers may be sued for negligence if they fail to take reasonable care to ensure their playgrounds are safe, and don't avoid accidents they could reasonably have foreseen would happen, such as an accident which occurred from failing to maintain the protective surface which has been provided under equipment.

Acts of Parliament covering children's playgrounds include the Occupier's Liability Act 1957, the Health and Safety at Work Act 1974 and the Management of Health and Safety at Work Regulations 1999. The regulations apply to all features, from access to equipment, surfaces, furniture and the surrounding environment. The laws cover playgrounds in England and Wales. (There are slight differences in Scotland and Northern Ireland.) All play areas should comply with the European Regulations. The main standards are BS EN 1176 covering equipment, and BS EN 1177 covering surfacing. The Health and Safety Executive strongly recommends that all play areas have at least one inspection every year from an independent suitably qualified body.

If new equipment is being installed, an independent "health check" is advised, in order to ensure the equipment has been fitted correctly and is considered appropriate. A written report has great evidential benefits. "Organisations would also be well advised to have professional comments on the design before installation to ensure that any potential problems are ironed out before work commences", says the Royal Society for the Prevention of Accidents.

Injuries to children in playgrounds is still a complex subject and this article is intended to give an overview of some factors that influence them. Although there are still challenges, modern playgrounds are safer now than they were 35 years ago. They do not need fall heights of over four metres or concrete surfaces to be exciting for children.

For further information on playground safety, RoSPA is holding its annual International Play Safety Congress on 14 June 2007 in Leicestershire. The event aims to help play providers towards the provision of fun but safe play areas for children. More information is available at: www.rospa.com.