## QUEENSLAND INJURY SURVEILLANCE UNIT



c/o Mater Hospitals, South Brisbane 4101 Ph 61 7 38408569 Fax 61 7 38401684 E-Mail Mail@qisu.qld.gov.au Website: http://www.qisu.qld.gov.au

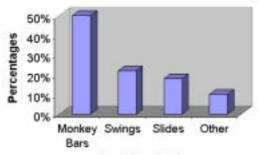
## PLAYGROUND INJURIES

**Some facts:** \* One in twenty childhood injuries occurs as a result of playing on or around playground equipment.

- \* One in every four cases of playground injury results in hospital admission.
- \* Three out of four playground injuries involve a fall.
- \* Almost one in two playground injuries involve a fall from a height over 1 metre.

The highest percentage of playground injuries occur in the school playground (30%). The second most common location of playground injury is a child's own home yard (22%) with a further 15% of the injuries occurring at public playgrounds.

## Playground Equipment Injuries



(Continued on page 2)

Item Description

\* QISU data is based on emergency department presentations to the following hospitals: Mater Children's Hospital, Mater Adult Hospital, Mater Private Emergency Care Centre, Queen Elizabeth II Jubilee Hospital, Redland Hospital, Logan Hospital, Royal Children's Hospital, Mt Isa Hospital and Mackay and district hospitals.



## **Equipment:**

The three pieces of playground equipment most commonly associated with playground injuries are monkey bars (or other climbing apparatus), swings and slides. The percentage of injuries associated with each of these pieces of equipment can be seen in the graph on the first page of this Bulletin.

**Monkey bar injuries** – In most cases, monkey bar injuries involve a fall from over 1 meter and falls from heights ranging from 1.5 to 2.5 metres are not uncommon!

One in three cases is precipitated by a child slipping or losing their grip, Such instances are commonly due to the equipment being wet.

Another feature of monkey bar injuries is that they frequently involve more than one child. It is common for one child to fall from the equipment onto another child at a lower level. A proportion of these injuries are caused by falls onto the climbing apparatus itself.

**Swing injuries** - These can occur when one child is pushing another on a swing or as a result of walking too close to a swing in use. This type of injury usually involves the face: and/or head. Injuries also occur when children voluntarily jump from a moving swing. Broken and poorly maintained equipment is another factor in these injuries.

**Slide injuries** - The most common cause of injury is a fall from the top platform of the slide. A number of injuries are also caused by the slide having sharp edges or having too steep a grade (which causes the child to lose control and land awkwardly).

**Solutions:** Three out of four playground injuries were caused by the ground surface.

Clearly, to reduce this type of injury, appropriate undersurfacing is necessary although factors such as supervision, design and maintenance of the playground equipment and its surrounds are also important.

Finely mulched bark chip, pine peelings, and mesh rubber crumbs are recommended. A combination of shredded rubber and fine pine bark is an ideal mix as it incorporates the impact absorbing properties of the rubber with the fire retarding properties of the pine bark. Sand is not considered a suitable undersurface. Although it is better than hard packed soil it compacts readily into a hard forgiving surface.

