features, but especially encourage designing the components to foster interaction and socialization among all children. For example, having ramps and other accessible components grouped separately or set apart from the other play features are not considered as meeting accessibility criteria.

The annex also spells out the minimum percentage of each accessible feature that must be implemented to be considered accessible.

"You can't just put in a few items and say it's accessible," says Sanderson. "You need to meet certain requirements. That is the power in the document." Smooth ground surfaces such as rubber are also important for impact absorption and easing mobility. An accessible ground surface also means considering slope heights, making sure that there are accessible entrance and exit points in the park and ensuring ample maneuvering space for wheelchair users.

Another important guideline is the minimization of the height of transfer systems within the play equipment. Transfer systems usually consist of a platform and a series of steps and are a means of accessing other areas of the equipment. Children in wheelchairs would have to lift (Safety and accessibility article continued on page 26)

## Standard tied to decline in playground injuries



A 2005 study by the Canadian Medical Association Journal (CMAJ) directly links a decrease in the number of injuries to the installation of playground equipment that adheres to the national standard for children's playspaces and equipment (CAN/CSA-Z614).

Researchers examined 136 elementary schools in the Toronto area, where equipment was assessed as hazardous by an independent consultant. Of these schools, 86 schools either fully replaced or upgraded their unsafe play equipment in compliance with the standard. When the injury rates of schools now adhering to the playground safety standard were compared to the rates of those schools that did not replace the hazardous equipment, the results were revealing.

At schools that followed the standard, injuries decreased to 1.68 injuries per thousand students per month, from 2.61 injuries. This meant 550 injuries were prevented during the study's timeframe.

Photo credit: Kim Sanderson

At the schools that did not replace their equipment, the results indicated an increase in the number of injuries – 1.81 per thousand students per month from 1.44.

According to another report released by the Canadian Institute on Health Information (CIHI), among all age groups, children aged five to nine have the highest percentage of playground injuries, representing 54 per cent of children who sustained playground injuries.

The CIHI report indicates that Ontario hospital emergency departments received more visits due to playground injuries in 2004-2005, with 8,734 visits from 8,698 visits in 2002-2003. Although the overall number has risen slightly, severe head injuries have been significantly reduced. Head injuries that required admission to a hospital decreased to 37 in 2004-2005, from 131 in 2002-2003.

"We recognize that there are going to be injuries," says Health Canada's Christine Simpson. "But we've been doing a good job of reducing their severity and in some cases, frequency." ■