

Child's play now safer: Study

Injury rate cut in half at revamped school playgrounds
Board feels vindicated for demolishing 'unsafe' equipment

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HEALTH POLICY REPORTER

The number of children's injuries has been cut in half since playground equipment at schools throughout the Toronto District School Board has been replaced with newer, safer equipment, a study has found. The results, published in the *Canadian Medical Association Journal* today, are being hailed as vindication for the Toronto school board, which took a lot of heat from the public when it began removing playground equipment five years ago due to safety fears.

"I am so very happy that the actions of the board are being recognized. They put the kids' safety first," said Sheila Penny, the board's executive superintendent of facility services.

The board started to demolish the equipment on playgrounds at 112 schools five years ago after realizing it failed to meet new standards set by the Canadian Standards Association.

Parents complained bitterly in 2000, saying the board was hastily razing school playgrounds, leaving students with sand or wood shavings instead of actual play equipment. Even the head of the safety council that set the new standards called the move a waste of taxpayers' money.

However, the Hospital for Sick Children-led study found a startling difference in the number of injuries at 86 elementary schools in the 10 months before and the 10 months after the equipment was replaced.

Injuries to children were reduced by 49 per cent, said Dr. Andrew Howard, a staff orthopedic surgeon and co-director of the trauma program at the Hospital for Sick Children, and one of the study's authors.

Many staff at the hospital have school-aged children and they were seeing the effects of poor equipment in the emergency room, he said.

"The (injuries) that come from playground equipment are five times more likely to be severe fractures requiring an operation," he said.

"Kids fall off equipment onto hard sand or concrete, and they get head injuries and that can be really, really serious," said Dr. Alison Macpherson, a co-author of the study and an assistant professor at York University's School of Kinesiology and Health Science.

Hospital data show monkey bars, slides and other climbing frames are usually behind those serious falls, Howard said.

In 2002, the year following the installation of new equipment, the number of injuries tumbled by 550, decreasing from 2.61 injuries per 1,000 students per month before the old equipment was removed, to 1.68 per 1,000 students per month after safer measures were taken.

Conversely, the injury rate at schools where old equipment was maintained went from 1.44 per 1,000 students per month to 1.81 per 1,000.

"We have children out there doing many things with fewer injuries," said Howard, a father of two girls who attend a board school.

Because of its reputation as a leader in children's health, Sick Kids tends to see more severe injuries, such as elbow fractures, displacement of bones and nerve damage, Howard said.

The study suggests up to 40 per cent of hospital visits from playground injuries are for fractures and 17 per cent require hospital admission, the second highest reason for children being admitted next to traffic collisions.

"We want to make sure the equipment that they fall off of and the surface they fall onto will be as safe as possible. That means that surface will absorb the impact, and the fall height will not be above a level that could lead to disastrous consequences," Macpherson said.

The board has fixed up 180 school playgrounds of the nearly 200 it had targeted, Penny said. "We started with the sites that were most dangerous," she said, noting they've spent \$20 million to correct safety issues.

The Canadian Orthopedic Foundation and the Canadian Hospitals Injury Reporting and Prevention Program supported the study.

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