



Building Safe Playgrounds

How Can We Provide Safe Playgrounds?

Outdoor playgrounds can be exciting places where children explore their environment while developing motor and social skills; however, they also can pose serious safety hazards.

The American Society for Testing and Materials (ASTM) has established a voluntary industry standard for public playground safety (F1487-93), and the U.S. Consumer Product Safety Commission (CPSC) has established voluntary guidelines. This tip sheet discusses common playground hazards and recommends actions that parents and others can take to increase playground safety.

What Makes a Playground Unsafe?

Each year hospital emergency rooms treat an estimated 200,000 children who have been



injured in playground accidents. About 60 percent of these injuries are caused by children falling from playground equipment onto a hard and unyielding surface such as asphalt, concrete, or even the ground. Most playground injuries are caused by preventable hazards. These hazards include:



Inadequate fall zones under and spaces between playground equipment.

The area under and around equipment should be covered with a minimum of 12 inches of protective, resilient surfacing material (such as wood chips, mulch, or rubber), extending a minimum of 6 feet in all directions.

Fall zones around swings should extend twice the height of the swing hanger in front of and behind the swings. Swings should not be attached to play systems. There should be a minimum of 12 feet between play structures.



Absence of guard rails.

Elevated surfaces such as platforms, ramps, and bridgeways should have guard rails to prevent accidental falls.



Dangerous protrusions and entanglements.

Objects such as nails, screws, bolts, pipe ends, and sharp or pointed hardware can impale or cut children.



Hooks or parts that catch strings and clothing can cause strangulation.

Open S hooks allow swing seats to slip off their chains and can cause children to fall.



Hazardous entrapment areas.

Openings between posts, ladder rungs, deck levels, or entryways are fine for foot-first entry, but they can also entrap children's heads. Ideally, openings on playground equipment should measure less than 3 inches or more than 9 inches.



Dangerous swing seats.

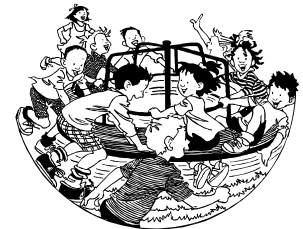
Hard wood or metal swing seats can hit children passing too closely to or jumping off a swing. Heavy animal-type swings are particularly dangerous because they act as battering rams; bumpers attached to these swings do not reduce the risk of injury.



Other dangerous playground equipment.

Equipment such as suspension bridges, merry-go-rounds, swinging gates, and seesaws

(teeter-totters) may have moving parts that can pinch or crush children's fingers or other body parts.



Age-inappropriate equipment.

It is important to ensure that playground equipment is appropriate to the age group using it. For example, equipment for children in preschool should have guard rails on elevated surfaces higher than 20 inches, and it should be separated from equipment for school-age children. Small children may not have the coordination and balance to climb on equipment designed for older children.



Inadequate supervision or lack of supervision.

It is estimated that more than 40 percent of playground injuries are directly related to lack of proper supervision. Most children are unable to foresee danger. Parents and school staff need to be alert to potential hazards.



How Can You Help Children Play Safely?

Proper supervision is essential to safe play. Parents and teachers should ensure that children observe the following rules:

- ☉ Wear shoes, such as sneakers, that do not slide on wet surfaces. However, check for footwear rules at indoor play areas.
- ☉ Do not play on slippery or wet equipment or force body parts through small spaces.
- ☉ Do not play on hot metal surfaces, such as slides, that may cause third-degree burns.

☉ Do not cross in front or behind moving swings. Get off a seesaw only when your partner's feet are on the ground.

☉ Do not push or pull others while playing on climbing equipment.

How Can an Unsafe Playground Be Made Safe?

If a playground is unsafe, it can be renovated by making these improvements:

- ☞ Install a fall zone of appropriate materials that extends the correct distance in all directions under all equipment.
- ☞ Modify unsafe equipment if it is economical; otherwise, unsafe equipment should be replaced.
- ☞ Replace hard swing seats with softer ones and remove animal-type swings and multiple-occupancy glider swings.
- ☞ Install guard or barrier walls on all elevated surfaces, close S hooks, and modify protrusions.

- ☞ Space equipment appropriately and remove equipment with openings that can trap children's heads.
- ☞ Remove hazards that children may trip over, such as exposed concrete footings, tree roots, stumps, or rocks; modify containment borders and abrupt changes in surface elevations.
- ☞ Talk with contractors and equipment manufacturers to ensure that equipment complies with safety standards.

Where Can You Get More Information?

American Society for Testing Materials
 100 Bar Harbor Drive
 Conshohocken, PA 19428
 610-832-9500

ERIC Clearinghouse on Teaching and
 Teacher Education
 One Dupont Circle NW, Suite 610
 Washington, DC 20036-1186
 800-822-9229
<http://www.ericsp.org>

National Recreation and Park Association

National Playground Safety Institute
 2775 South Quincy Street, Suite 300
 Arlington, VA 22206
 703-820-4940

Consumer Product Safety Commission
 Washington, DC 20207
 800-638-2772

Consumer Product Safety Commission.
 Handbook for Public Playground Safety.
 Washington, DC. (1991)

Jambor, T., and S.D. Palmer. 1991.
 Playground Safety Manual.
 Birmingham, AL: Injury Control
 Research Center, University of Alabama at
 Birmingham.

Wallach, Frances. April 1995. "Playground
 Safety: The Long Trail." Parks &
 Recreation. Arlington, VA: National
 Recreation and Park Association.

This brochure is based on the ERIC Digest Safer
 Playgrounds for Young Children by Charlotte M. Hendricks
 (ED 355 206) and the Dirty Dozen: Are They Hiding in Your
 Child's Playground? (available from the National Recreation

and
 Park
 Association).
 For more information contact:
 Park
 Association

ciation). Spring 1996.



The Center for Parent Involvement (FCPI) was funded by the U.S. Department of Education; Goals 2000, Educate America Act from 1994-1999. Guided by an advisory board of parents and professionals, the FCPI's goal was to tap the power of parents.

The FCPI gathered information on parent needs, coordinated the information, and created a series of resources organized by theme, including fact sheets for parents and professionals, "Beyond the Basics" resources, and resource identification lists. Many of the resources have been translated into Spanish language versions, and every effort has been made to preserve the meaning and flavor of the original English documents. This series of materials provides a wealth of current information for both parents and providers; the complete set of resources can be obtained in PDF format on the Department of Child and Family Studies Website at www.fmhi.usf.edu/cfs/dares/fcpi. The staff of the FCPI are hopeful that their work will continue to help children get ready to learn for many years to come.

The series' themes include:

- Family Empowerment
- Parent Involvement
- Parenting Support
- School Readiness
- Violence in the Lives of Children
- Transition to Kindergarten

The Center was one component of a project led by Hillsborough County Center of Excellence in collaboration with the Department of Child & Family Studies at USF's de la Parte Institute and the Florida Children's Forum. Other project partners include HIPPI (Home Instruction Program for Preschool Youngsters), Hillsborough County Head Start and Hillsborough County Even Start. For more information about these projects, call 813.974.4612.

Violence & Young Children, Beyond The Basics: Building Safe Playgrounds

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