

Playground Safety

MARCH 2011

As the warmer temperatures return, with the bright sunshine and things turning green – Spring is returning! With this nice weather we also see the return of children onto municipal playgrounds. The question is, are your playgrounds ready?

Every year around 200,000 kids suffer playground injuries serious enough to be taken to an emergency room. The National Program for Playground Safety graded each State on their playground and the average grade was a C+. What grade does your playground warrant and how many of those 200,000 kids will be hurt on your playground equipment?

The Consumer Products Safety Commission (CPSC) publishes a checklist of the “Dirty Dozen” or top 12 playground safety hazards:



1) IMPROPER PROTECTIVE SURFACING – This is the surface onto which kids will fall. And since almost 60% of all injuries are caused by falls to the ground, protective surfacing is one of the most important things to install and maintain under and around all playground equipment. Surfacing material is not designed to prevent every injury – it is designed to prevent life threatening injuries. Grass, asphalt and concrete do not have any shock absorbing properties. CPSC guidelines call for a minimum of 9 inches of compressed loose fill with different materials providing protection for different heights. For example, 9 inches of compressed pea gravel will provide protection to a maximum fall height of 5 feet while wood chips and shredded recycled rubber will both provide protection for falls from 10 feet. Also remember that their ability to absorb shock during a fall can be reduced considerably through wear and environmental conditions. Therefore CPSC recommends that you maintain 12 inches of loose fill material.

2) INADEQUATE USE ZONES - A use zone is essentially the area under and around equipment where a child could fall. This area should be free of other equipment and obstacles onto which a child might fall. Stationary climbing equipment and slides should have a use zone extending a minimum of 6 feet in all directions from the perimeter of the equipment. The use zone in front and back of swings should extend out a minimum distance of twice the height of the swing as measured from the ground to the top of the swing support structure.

3) PROTRUSION AND ENTANGLEMENT HAZARDS – A protrusion hazard is capable of cutting or impaling a child while an entanglement hazard has the ability to catch a piece of the child’s clothing, potentially resulting in strangulation. Look for bolt ends with more than 2 threads showing, open “S” hooks, and gaps or spaces between equipment. Ropes should be anchored securely at both ends and not have enough slack to form a loop or noose.

4) ENTRAPMENT IN OPENINGS – Spaces large enough to admit a child’s body but not their head can result in head entrapment and strangulation. Generally there should not be any openings measuring between 3.5 and 9 inches.

5) INSUFFICIENT EQUIPMENT SPACING – Look at your playground. Is there sufficient room for kids to maneuver around the swings? Is your equipment crowded together? This goes hand in hand with the use zones mentioned in #2.

6) TRIP HAZARDS – Look for abrupt changes in elevation, exposed footings, tree roots, rocks and other debris that could cause a child to trip and fall.

7) LACK OF SUPERVISION – Does your playground design allow a parent to see their child at all times? Have you installed benches or seating which allow parents to stay and watch their kids? How about some signs reminding parents that children must be supervised at all times? An estimated 40% of playground injuries are directly related to lack of supervision.

8) AGE APPROPRIATE ACTIVITIES – Two year old children have much different play abilities than twelve year olds so their playground equipment should reflect that. Climbing equipment and giant slides may not be appropriate for the younger kids just as tot swings won’t work for older kids. Make sure your equipment is age appropriate and clearly labeled with signs.

9) LACK OF MAINTENANCE – This is a big problem especially on well used playgrounds. Swinging, running and climbing kids can damage equipment and move loose protective surfacing. Regular, frequent maintenance is the only way to insure that the playground remains safe.

10) CRUSH, SHEARING, AND SHARP EDGE HAZARDS – Suspension bridges, merry-go-rounds, seesaws and swings can have components that may crush a child’s fingers or cause lacerations. Proper maintenance and inspection can eliminate these problems.

11) PLATFORMS WITH NO GUARDRAILS – Preschool children need guardrails on platforms higher than 20 inches and protective barriers on platforms over 30 inches. School age children require guardrails on platforms between 30 and 48 inches and barriers above that height.

12) EQUIPMENT NOT RECOMMENDED FOR PUBLIC PLAYGROUNDS – There are certain pieces of playground equipment which is just inappropriate and which should be removed. Free swinging ropes, heavy animal figure swings, overhead exercise rings with chains longer than 7 inches, and trapeze bars to name a few.

So now that the weather is getting nice, go out and take a close, thorough look at your playground equipment. Find out what’s wrong and fix it now before a child gets injured.

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