

Playground Safety

PRIMEX³ RISK MANAGEMENT BULLETIN

Playgrounds are magnets for children. It gives them a chance to run around out-of-doors, interact with others their age, and to explore and expand the abilities of their developing bodies while having fun. Each year, more than 200,000 children go to hospital emergency rooms with injuries associated with playground equipment.

Unfortunately, many playgrounds are not as safe as they should be. From 2009 to 2014, there was a total estimated 1,458,201 emergency department treated injuries associated with playground equipment, bringing the annual average to over 243,000.

Over 60% of the emergency room treated injuries occurred on park or school playgrounds and 51% percent of the treated children were between the ages of 5 and 9. Monkey bars and playground gyms, swing sets and slides accounted for the majority (80 percent) of the total injuries.

Four major factors contribute to playground problems: the surfaces under the equipment; the design and arrangement of the equipment; how well the equipment is installed and maintained; and how children use the equipment. While children playing should never be left unsupervised, if playgrounds are well designed and maintained they can make the job of the supervising adult much easier.

Preschool (2-5) and school-age children (5-12) differ dramatically in physical size and ability and also in their cognitive and social skills. Therefore, age appropriate playground designs should accommodate these differences and play areas should be separated.

In order to prevent injuries on playgrounds someone should be designated to inspect the playgrounds periodically. While a thorough inspection should be performed periodically, a quick checkup (i.e. re-raking of surfacing material) should be done daily. If any hazardous conditions are noted, they should be removed, corrected or repaired immediately to prevent injuries. Included in this bulletin is a sample general maintenance checklist for your reference.

Supervision is an integral part of playground safety. Supervisors of children during playtime should:



- Arrive at the playground before the children
- Be alert and attentive
- Have knowledge of age appropriateness
- Have hazard recognition skills (see checklist)
- Know procedure for reporting hazards and injuries
- Be positioned throughout the play area and close to the more hazardous equipment (i.e. large slides and tall climbers)
- Intervene when inappropriate behavior occurs.
- Ensure safe children's clothing (i.e. do not permit clothing to have attached strings known to have been caught in equipment, causing strangulation)
- Be prepared

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Sample General Maintenance Checklist

Surfacing Material: The surface under and around the playground equipment should be soft enough to cushion a fall. Hard surfaces such as concrete, asphalt, packed earth or grass are not acceptable under play equipment. A fall onto these hard surfaces could be life-threatening. Acceptable surfaces are: wood chips, bark mulch, engineered wood fiber, sand, gravel, shredded rubber, rubber mats or tiles, or poured in place rubber compositions.

Surfacing materials should be free of foreign objects and debris and should not be allowed to become compacted.

General Hazards - Make sure that there are no:

- Sharp points, corners or edges on the equipment
- Missing or damaged protective caps
- Hazardous protrusions and projections
- Clothing entanglement hazards (i.e. open S hooks)
- Trip hazards such as exposed footings on anchoring devices,
- Rocks, roots, or other obstacles in the play areas.



Deterioration of the equipment:

- The equipment has no rust, rot, cracks or splinters, especially where it comes in contact with the ground.
- There are no broken or missing components on the equipment (e.g., handrails, guardrails, protective barriers, steps or rungs on ladders) and there are no damaged fences, benches, or signs on the playground.
- All equipment is securely anchored.

Security of Hardware:

- There are no loose fastening devices or worn connections, such as S-hooks.
- Moving components, such as swing hangers or merry-go-round bearings, are not worn.

Drainage:

- The entire play area has satisfactory drainage, especially in heavy use areas such as under swings and at slide exits.

General Upkeep of Playgrounds:

- The entire playground is free from miscellaneous debris or litter such as tree branches, soda cans, bottles, glass, etc.
- There are no missing trash receptacles.
- Trash receptacles are not full.

Playground Safety (continued)

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Not recommended for public playgrounds:

- Animal Swings: their rigid metal framework is very heavy, presenting a risk of impact injury.
- Multiple Occupancy Swings: their greater mass, as compared to single occupancy swings, presents a risk of impact injury
- Rope Swings: strangulation hazard
- Swinging Dual Exercise Rings and Trapeze Bars
- Trampolines

Not recommended for preschool age children:

- Chain or Cable Walks
- Free Standing Arch Climbers
- Free Standing Climbing Events with Flexible Components
- Fulcrum Seesaws
- Log Rolls
- Long Spiral Slides (more than one turn)
- Overhead Rings
- Parallel Bars
- Track Rides
- Vertical Sliding Poles



Any time your playground equipment is in need of repairs, please perform those repairs in accordance with the equipment manufacturer's recommendations.

Online Resources:

Handbook for Public Playground Safety, <https://www.cpsc.gov/s3fs-public/325.pdf>

National Program for Playground Safety, <http://www.uni.edu/playground>

For more information, please contact your Primex³ Risk Management Consultant at 800-698-2364 or email RiskManagement@nhprimex.org.