

## Playground Equipment

Playgrounds and playground equipment provide educational and pleasurable experiences to millions of children every day. Unfortunately, these same playgrounds can also present significant injury hazards. Each year, too many children are injured while using playground equipment.

Analysis of playground-related injuries reveal that falls, hangings, entrapments, struck by moving parts, and sharp points are the most frequent injuries. Accident/injury efforts should be directed to the identification and elimination of these hazards.

Suggested playground safety guidelines include:

### Fall Protection

Shock absorbent surfacing material should be used under and in fall zone areas around playground equipment. The following materials are recommended:

- Organic Loose-fill Materials—pine bark nuggets, pine bark mulch, shredded hardwood bark.
- Inorganic Loose-fill Materials—pea gravel, crushed stone.
- Unitary Materials—uniform rubber mats, interlocking rubber mats.
- Loose-fill Manufactured Materials—chipped rubber.
- Non-recommended Materials—angular gravels, grass, soil, fine sand, all paved surfaces.

### General Safety Guidelines

- Equipment should not be installed on paved surfaces, grass, or dirt surfaces. If existing equipment is on a paved surface and cannot be moved, shock-absorbing mats/surfacing should be provided under and around the equipment.
- Equipment location and spacing should allow for even distribution of children throughout the playground area.
- Equipment associated with frequent injuries should be repaired to correct deficiencies and prevent recurrence of injuries. If corrective measures are not feasible, or cannot be taken, the equipment should be removed.
- Equipment should be firmly anchored. All concrete footings should be at least 4 inches below grade.
- Equipment should be separated from streets, parking lots, and other areas by fencing.
- Swing sets – For multiple swing units, 30 inches should separate the swing chain from the nearest support. 24 inches should separate swing units.

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Swing seats should be rubber or canvas. Steel, wood, and hard plastic should be avoided.

- Cable ropes, wires and other obstructions between pieces of equipment should be removed.
- Slip resistant surfaces should be applied/ installed on all climbing equipment, gripping, and step components.maintenance, renovations, or erosion from air streams.
- Wooden equipment should receive special attention to control loose/ protruding nuts and bolts, rough edges, sharp corners, and splinters. Nailed equipment is not recommended.
- Good housekeeping should be maintained; glass, metal, and trash should be cleaned up and removed prior to the beginning of school day.
- Playground equipment should be used by children under adult supervision (i.e. in the presence of a trained playground aid or supervisor).
- Emergency numbers should be posted in a central location.

### **Inspection and Maintenance**

Playground equipment and area should be inspected daily and all deficiencies repaired promptly. Specific conditions which should be eliminate/repared include:

- Tripping hazards–rocks, tree roots, depressions or low containment structures, which must be at least 6 inches above the surface so as to be visible.
- Equipment components that are bent, cracked, rusted, or warped.
- Open or deformed “S” hooks, links, rungs, shackles.
- Worn swing seats and chains.
- Damaged, loose, or missing swing seats. Metal swing seats should be replaced with plastic compound material.
- Broken or damaged anchors and supports.
- Damaged-exposed concrete anchors, which must be at least four inches below grade.
- Accessible sharp edges, bolts, fasteners, and protrusions.
- Uncapped, exposed tube endings.
- Cracked or splintered wood.
- Worn bearings.
- Broken or missing rails, rungs, seats, steps.
- Loose nuts and bolts.
- Areas of poor drainage

**Playground Leader Responsibilities**

- Prepare written guidelines for playground operation.
- Learn to identify dangerous behavior.
- Prohibit use of dangerous equipment.
- Prohibit overloading of equipment by children.
- Continually roam and observe all playground areas to ensure the safety of all playground areas.
- Investigate all serious accidents and injuries. Identify root causes of accidents-injuries, develop corrective actions to prevent recurrence, and follow up to ensure that corrective actions are taken.

**Reference Material**

Consumer Products Safety Commission, 1991

Public Playground Handbook For Safety

Contact your local Great American Loss Prevention Specialist for additional information.

The loss prevention information and advice presented in this brochure are intended only to advise our insureds and their managers of a variety of methods and strategies based on generally accepted safe practices, for controlling potentially loss producing situations commonly occurring in business premises and/or operations. They are not intended to warrant that all potential hazards or conditions have been evaluated or can be controlled. They are not intended as an offer to write insurance coverage for such conditions or exposures, or to simply that Great American Insurance Company will write such coverage. The liability of Great American Insurance Company is limited to the specific terms, limits and conditions of the insurance policies issued.  
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