

SAFETY BULLETIN

PLAYGROUND ATTRACTION SAFETY



PLAYGROUND ATTRACTION SAFETY

Playgrounds and playground equipment are common attractions at sports and entertainment venues. However, they can pose significant liability exposures for venue operators who choose to install them at their facilities. According to the U.S. Consumer Product Safety Commission (CPSC), each year, more than 200,000 children in the U.S. visit emergency rooms with injuries and approximately 15 children die from playground related incidents. Proper risk management controls should be in place for playground equipment to avoid litigation, meet legal requirements, and most importantly, to protect children.

PLAYGROUND ATTRACTION SAFETY

PURCHASING AND INSTALLING PLAYGROUND EQUIPMENT

Venues that are looking to purchase playground equipment should first make sure that they are purchasing commercial playground equipment and not residential or “backyard” playground equipment. Commercial playground equipment is designed to handle large volumes of traffic and is governed by industry organizations and associations. With commercial playground equipment, purchasers in the United States can verify that any equipment they are considering purchasing has been checked for compliance with industry standards. The International Play Equipment Manufacturers Association (IPEMA), is a non-profit, membership, trade association that provides third-party product certification services for U.S. and Canadian public play equipment and public play surfacing materials. IPEMA’s equipment certification program is designed to make sure that playground manufacturers follow ASTM F1487-11, *Standard Consumer Safety Performance Specification of Playground Equipment for Public Use*, as well as ASTM F1292 – 13, *Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment*.

After the playground has been constructed, a post-installation safety inspection should be performed by a Certified Playground Safety Inspector (CPSI) prior to first use. The inspection should include all the equipment as well as the surfacing. Conditions found that are not compliant to the standards should be corrected prior to opening to the public.

SAFETY INSPECTIONS

According to the (NRPA), one out of every three playground injuries is due to poor maintenance. In light of this, venues should conduct safety inspections on a regular basis. Venue operators

COMMON HAZARDS

According to the National Recreation and Park Association (NRPA), the following are the common safety hazards on playgrounds that can cause injuries to children:

1. **Improper protective surfacing** – Falling to the ground (or surface) is the contributing factor in 79% of playground injuries. Falls from playground equipment are not only the most frequent cause of injuries, but also account for the most severe injuries. It is critical that the surfacing material or product used has sufficient depth and thickness to ensure adequate impact attenuation.
2. **Inadequate use zone** – A use zone is the area under the playground equipment where a child might fall. There are specific fall zone dimensions for certain playground equipment that must be followed. Refer to the manufacturer’s specifications for placing equipment and designating proper fall zones.
3. **Protrusions and entanglement hazards** – A protrusion is a component or piece of hardware that could impale or cut a child. Some protrusions may also be entanglement hazards that are especially dangerous because they may result in strangulation. Inspections should include looking for protrusions and entanglement hazards. Examples of protrusions and entanglement hazards include the following:
 - Bolt ends that extend more than two threads beyond the face of the nut;
 - Hardware configurations that form a hook or leave a gap or space between components;
 - Open “S” type hooks;
 - Rungs or handholds that protrude outward from a support structure can penetrate the eye socket.

Note: Special attention should be paid to the area at the top of the slides. Protruding hardware and gaps could act as a hook and catch clothing resulting in a strangulation injury.

should insist that the manufacturer provide specific instructions regarding the inspection program of the playground equipment that was purchased. It is very important that the manufacturer's recommendations be strictly followed relative to the maintenance inspection program of the playground equipment. Issues found during the inspection process should be noted and fixed as soon as possible. Repairs and replacement of equipment parts should also be completed per the manufacturer's specifications.

PLAYGROUND SUPERVISION

Proper supervision has a direct influence on the overall safety of the playground environment. It is estimated that over 40% of all playground injuries are directly related to the lack of supervision. Horseplay, older children playing too rough with younger, smaller children, and children challenging their abilities without being able to recognize potential hazards are some of the behaviors that should be monitored. The playground should be constructed in such a manner that parents and attendants responsible for monitoring the area can easily observe the children at play. While venue operators should encourage parents to watch after their own children (generally via signage), there should be someone close by or a system in place that allows emergency assistance to be quickly summoned should a child become injured at the playground.

SAFETY SIGNAGE

The playground manufacturer should supply signage or recommendations for signage for each specific playground attraction. In general, signage should be high-profile and easily recognizable. The signage should be prominently displayed and clearly list the rules as well as information that is beneficial and applicable to the attraction and the individuals using it. Disclaimer wording on the signage is also recommended.

COMMON HAZARDS CONTINUED

4. **Entrapment in openings** – Enclosed openings on playground equipment must be checked for head entrapment hazards. In general, there should be no openings on the playground equipment that measure between 3½ inches and 9 inches.
5. **Insufficient equipment spacing** – Improper spacing between pieces of play equipment can create overcrowding of the play area, which may produce several hazards. A minimum of 12 feet should be present between two play structures to provide room for children to circulate and to prevent the possibility of a child falling off one structure and striking another structure.
6. **Trip hazards** – Exposed concrete footings, changes in surface elevations, and rocks are common trip hazards that are often found in the play environment. In general, trip hazards that cannot be removed or repaired should at a minimum be highlighted.
7. **Pinch, crush, and sharp edge hazards** – Components in and around the play structure should be inspected to ensure that there are no sharp edges or points. Crush or pinch points are mainly located where equipment is movable, and a space exists for fingers or other body parts can be pinched or crushed.
8. **Hot surfaces** – Hot surfaces such as decks, slides, and steps located in direct sunlight can reach temperatures high enough to cause serious contact burn injuries in a matter of seconds. Playground equipment should be checked before allowing children to access.
9. **Platforms with no guardrails** – Elevated platforms, ramps, and bridge ways should have the appropriate guardrails or protective barriers to prevent falls. Both guardrails and barriers should be inspected to ensure that they are the appropriate height, properly secure, loose and free of laceration exposures.

CONCLUSION

Ensuring that your venue has a comprehensive playground safety program in place that encompasses the above components is an effective way to avoid litigation, meet legal requirements, and most importantly, protect children.

If you or your staff have any questions concerning this important Safety Bulletin, please contact us today.



RICH POWERS

Senior Vice President
American Specialty Insurance & Risk Services, Inc.
rpowers@americanspecialty.com
260.755.7261 Direct