

Keep Your Playgrounds Safe

Standards, Industry Guidelines, and Protective Surfacing

CSDSIP InSight Newsletter | April 2020



As educators, student safety remains a top concern, however, the focus is often on learning environments. It is just as important to consider safety where your students play, and proper playground inspection and maintenance is the best way to achieve this goal. Proper inspection and maintenance is sometimes easier suggested than done, so CSDSIP has compiled some key points for you to consider.

It is important that owners, operators and those who perform maintenance and inspections on these facilities have a good understanding of the following:

- Applicable playground guidelines and standards.
- Playground protective surfacing guidelines.
- Identification of common hazards on playgrounds, including entrapment and impalement hazards.
- Playground equipment “Fall Height and Use Zones.”
- How to maintain and inspect playgrounds.
- The importance of adequate signage and supervision.

Court Case

In 2014, a student was playing on a playground apparatus (track ride) during recess when she fell and fractured her wrist. The equipment was part of her school’s playground which contained other types of playground equipment. As a result of her injury, the student sued the school district in a tort action, asserting, among other things, that the school district did not have immunity from her injuries.

Case law arising from this litigation has defined playgrounds to be a public facility located in a park or recreational area maintained by a public entity. As such, if a dangerous condition of the playground is present, this could be considered a waiver of immunity under the Colorado Governmental Immunity Act (CGIA).

Playground Claim

A student was swinging on a swing when the swing hanger broke, causing the student to fall to the ground and break their wrist. After reviewing the inspection report of the swings that was completed 6 weeks prior, the school was aware of a defect but didn’t take action to repair the swing. In light of these facts, there was a waiver of the Colorado Governmental Immunity and the Member was held responsible for the injury.

What Insurances Coverage Does the Member Have?

Under the CSDSIP School Entity Liability (SEL) Coverage, the Pool would defend a claim or suit brought against the Member for an occurrence directly resulting from the playground, subject to the policy terms, conditions and deductible, as well as the CGIA.

CGIA currently provides limited immunity from liability for these types of tort actions and claims. Any claim would be investigated and considered on a case by case basis to assure there is not a waiver of CGIA.

Any damages to the playground equipment would be covered under the Member’s Property Coverage subject to the policy terms, conditions and deductible.

Applicable Playground Guidelines and Standards

The Consumer Product Safety Commission’s (CPSC) Public Playground Safety Handbook Publication is a nationally recognized and commonly cited reference for voluntary playground safety guideline and is a free download from the [CPSC website](https://www.cpsc.gov/00CPSC/Pages/Public-Playground-Safety-Handbook-Publication.aspx).

The American Society for Testing and Material International (ASTM) offers

another resource, F1487 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use, which is recognized as the national voluntary standard. This document is available for purchase from ASTM.

Local Jurisdictions Information

It is important to be aware of local jurisdictional requirements. The Colorado Department of Public Safety Division of Fire Prevention and Control requests [a small project submittal requirements checklist](#) be completed for installation of new playgrounds.

Who should conduct a safety audit?

Ideally, a playground safety audit should be conducted by a Certified Playground Safety Inspector (CPSI) —someone who has passed the National Playground Safety Institute's (NPSI) written examination. The Certified Playground Safety Inspector (CPSI) Program is offered by the National Certification Board in coordination with the National Park and Recreation Association. Courses are offered to individuals who are required to inspect playgrounds for safety hazards and to ensure compliance with national standards set by the ASTM and CPSC. An individual must successfully pass the CPSI examination to receive a 3-year certification. An inspector with a current CPSI certification can identify hazards on public playground equipment and rank those hazards according to injury potential. A certified inspector can advise how to remove the hazards and establish a system of inspection and maintenance.

For additional information on this program visit the [NRPA website for Certified Playground Safety Inspector Certification](#)

Perform Inspections and Audits

Remember, a good preventive maintenance program can dramatically lower the risk of accidents and injuries.

Conduct maintenance inspections: This is maintaining a standard of care recommended by the manufacturer. There should be a low and high frequency inspection. Low frequency inspections (monthly or seasonally) are in-depth evaluations of the playground, while high frequency inspections (daily or weekly) are used to correct surfacing problems, remove trash and address vandalism.

Please contact the CSDSIP Risk Control Department for low and high frequency inspection forms.

Perform an audit: This is a comprehensive evaluation of equipment and environment. An audit is conducted at the start of a playground program, after the installation of new equipment, after repairs following a catastrophic event, or when standards/guidelines change. The purpose of an audit is to record and evaluate current conditions, such as; age appropriateness, accessibility, surfacing material, site design and layout, and to determine to what degree each element conforms or deviates from current safety criteria. Non-compliant areas should be prioritized and corrected based on hazard. Modification and repair to equipment should be based upon documented recommendations and approval of a manufacturer's representative. Please contact the CSDSIP Risk Control Department if you have question about playground audits.

Playground Protective Surfacing Guidelines

A playground should never be installed without protective surfacing of some type. Concrete, asphalt, or other hard surfaces should never be directly under playground equipment. Grass and dirt are not considered protective surfacing because wear and environmental factors can reduce their shock absorbing effectiveness.

Pea gravel, sand, shredded/recycled rubber mulch, wood mulch and wood chips along with material (including unitary surfaces) tested to ASTM F1292-17 standards are appropriate playground surfaces.

Loose-fill materials will compress at least 25% over time due to use and weathering. This must be considered when planning the playground. For example, if the playground will require 9 inches of wood chips, then the initial fill level should be 12 inches.

Loose-fill surfacing requires frequent maintenance to ensure surfacing levels never drop below the minimum depth. Areas under swings and at slide exits are more susceptible to displacement and special attention must be paid to maintenance in these areas. Additionally, wear mats can be installed in these areas to reduce displacement.

Consider marking equipment supports with a minimum fill level to aid in maintaining the original depth of material.

Adequate surfacing is one of the most important factors in reducing the likelihood of life-threatening injuries. However, some injuries from falls, including broken limbs, may occur no matter what playground material is used.

Please contact our Risk Control Department at 303-722-2600 with any questions.