

## **PlaySafe and Live Well!**

Welcome to PlaySafe, LLC's informational column. Every month we will work hard to provide you with up-to-date information on topics related to parks, recreation, health, wellness, and physical education. Our hope is that by providing you with detailed information, you will go forward and positively change the world. If you have questions or comments, or if you would like to share your thoughts, please contact us through this web site. Thanks. Now PlaySafe and live well!

### **Playground Inspections and Audits**

By Nancy B. White, PhD and Butch DeFillippo

Ideally, playgrounds are carefully designed to provide a safe setting where children can be adventurous, have fun, dream, engage in physical activity and interact with others. The most carefully designed playground can go from safe to suspect in a relatively short period of time due to use, vandalism, and environmental factors. For example, surfacing at the foot of a slide may be displaced through use, wind, or runoff from a rainstorm. If a child falls while exiting the slide, an injury could result if there is not enough surfacing material present to attenuate the impact of the fall. A loose bolt could cause a child climbing a ladder to wobble, fall, or entangle a piece of clothing. A worn down piece of hardware or a loose S-hook could cause a swing to break while in use. The operation of a playground requires a system of regular inspections and detailed audits to keep the facility ready for use and help prevent injuries.

#### **Audits**

A playground audit is an initial comprehensive examination of a playground. An audit is more detailed than a periodic inspection. Audits should be conducted after installation of new equipment, after major repairs or modifications are made and when industry standards change. The purpose of an audit is to check a playground for compliance with standards and identify hazards.

Audits should be conducted by Certified Playground Safety Inspectors (CPSI). Whether an audit is conducted in-house by trained staff members, or the agency contracts with a third-party operator, specialized knowledge and skill are essential. Auditors need to know the standards, be competent using playground test gauges and probes, and have the knowledge to identify hazards and the ability to clearly document their findings.

CPSI certification is provided through the National Recreation and Park Association (<http://www.nrpa.org/CPSI/>). The purpose of the CPSI certification is to educate individuals responsible for public playgrounds about how to identify and rank hazards according to the potential for injury, apply the knowledge to remove the hazards and establish inspection and maintenance systems (National Playground Safety Institute, 2012).

The CPSI should check each component of the playground, including swings, climbers, overhead activities, sliding poles, spring toys, slides, etc. to make sure that parts are secure and free of compliance issues. The possibility of entanglements, protrusions, and head entrapments should be checked on each piece of playground equipment using specially designed gauges and probes. Equipment used for playground audits, and methods for conducting an audit are covered in detail in the CPSI certification course and exam.

Surfacing G-max testing is a vital part of a complete audit and measures the impact attenuation of surfacing materials. Impact attenuation is the ability of the surfacing material to absorb and disperse the kinetic energy of a fall. Field testing of surfacing in fall zones in a playground should be conducted by trained inspectors using specialized equipment that meets industry standards.

## Inspections

An inspection involves a systematic assessment of a playground to look for breakage, wear, litter, exposure, deterioration, vandalism or damage (National Playground Safety Institute, 2012). The primary function of an inspection is to ensure the safety of users. Other functions of an inspection are to maintain usability, sanitation, and aesthetic value of the equipment. Inspections should be performed by trained staff members on a periodic basis.

Playground operators need to develop a schedule of inspections – both High Frequency (often) and Low Frequency (less often) - that is reasonable and realistic given their staff and resources, and regular enough to keep playgrounds safe for use. Frequency of inspections should be based on the level of use on the playground, environmental issues (such as weather and being located next to the ocean – salt damage), type of surfacing, type of equipment and other pertinent factors. Keep in mind that playground components with moving parts require more frequent inspection, maintenance and replacement. Inspections should be based on manufacturer’s recommendations along with industry standards.

A checklist or form that is easy to use helps to keep an inspector on track and serves as a reminder about each item that should be inspected. Playground surfacing is a key item that needs to be inspected on a regular basis. The depth of loose-fill surfacing materials is a critical component in a playground inspection. Loose-fill surfacing materials become displaced and need to be replenished or moved back into place. Unitary surfacing needs to be inspected to determine if repair is needed. Unitary surfacing manufacturers do have some maintenance requirement (such as washing the surfacing) that need to be followed. Inspectors should be thorough in their evaluation of the entire playground area. Moving around, on top, under and through the equipment is the best method for identifying problems on a playground. Touching various components to determine if they are attached securely, along with a visual assessment of the equipment and surfacing are necessary to conduct a thorough inspection.

There are a few publications that would be helpful for playground operators, such as the *Public Playground Safety Handbook* written by the U.S. Consumer Product Safety Commission (2010, November), which is available for download at no cost at <http://www.cpsc.gov/PageFiles/116134/325.pdf>. The ASTM F1487, *Standard Consumer Safety Performance Specification for Playground Equipment for Public Use*, can be purchased at <http://www.astm.org/Standards/F1487.htm>. *An Introduction to Playground Maintenance* (White & DeFillippo, 2011) can be purchased from the Texas Recreation and Parks Society, <http://traps.org/clubportal/ClubStatic.cfm?clubID=2657&pubmenuOptID=30199>.

More information about playground safety is available through the National Program for Playground Safety, <http://playgroundsafety.org/> and the National Playground Safety Institute.

In 1997, a group of Parks and Recreation, Physical Education and private recreation professionals formed PlaySafe, LLC to provide resources that were not readily available to the public and private sectors. Today, PlaySafe, LLC is the largest, most respected and highly skilled playground, surfacing and ball field safety auditing firm in the United States. Our staff members are experts in playground safety, athletic field testing, bleacher inspections, master plans, feasibility studies and program development. Our training and seminars are informative and will make your organization the best it can be. PlaySafe, LLC staff includes Parks and Recreation, Physical Education and Community Health professionals with over 200 years of combined experience.

PlaySafe, LLC is the Premiere Recreational Consulting Company. PlaySafe, LLC assists municipalities, schools, childcare providers, communities and other recreation-providing entities by offering the following services throughout the United States: Playground Equipment and Surfacing Audits, Recreational Topic Seminars and Training, Recreation and Physical Education Plans, GMax Turf Testing, Bleacher Inspections, and Expert Witness Services.

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