Playground Safety

According to a study conducted by the U.S. Consumer Product Safety Commission (CPSC), 79% of injuries on public playgrounds occurred due to falls from equipment. These were primarily falls to the ground surface below the equipment. To assist entities in providing safe playgrounds, the CPSC has published guidelines in the *"Public Playground Safety Handbook"*. If you do not have a copy, you can contact me and I can email one to you. The following are some reminders for your entity to consider when trying to protect children from being injured while using the equipment in your parks.

Use Zones

A "use zone" is defined as "the surface under and around a piece of equipment onto which a child falling from or exiting from the equipment would be expected to land". These areas are also designated for unrestricted circulation around the equipment meaning they should be clear of obstructions such as trees and other pieces of equipment. The dimensions for use zones can vary by the type of equipment and each of these are described in the *"Public Playground Safety Handbook"*.

Surfacing

The surfacing under and around playground equipment is one of the most important factors in reducing the likelihood of life-threatening head injuries. A fall onto a shock absorbing surface is less likely to cause a serious head injury than a fall onto a hard surface. There are 2 options available for surfacing public playgrounds: unitary and loose-filled materials. Grass and dirt are not considered a protective surface because wear and environmental factors can reduce their shock absorbing effectiveness.

Unitary materials are generally rubber mats and tiles or a combination of energy-absorbing materials held in place by a binder that may be poured in place at the playground site and then cured to form a unitary shock absorbing surface. Unitary materials provide an excellent surface but they are more expensive than loose-fill materials.

Loose-fill materials can consist of engineered wood fiber, sand, pea gravel, wood chips or wood mulch. Each of these materials provides a certain amount of protection if maintained at a specific depth. Loose-fill materials will compress over time due to use and weathering. Frequent maintenance is required to ensure the surfacing levels do not drop below the minimum depths to ensure proper protection. Good drainage is also essential to maintaining this type of surfacing.

For your playground equipment to be considered ADA accessible, unitary materials or engineered wood fiber must be installed as the shock absorbing material.

Inspection and Maintenance

During peak use, we recommend at least daily visual inspections of playground equipment. Seasonal or full-time employees can conduct these daily visual inspections to make sure there are no obvious signs of damage or vandalism to the various pieces of equipment. Any piece of damaged equipment should be taken "out of service" until it can be repaired. Documented inspections should be done at least monthly to make sure the equipment is safe for use and the

shock absorbing surfaces are of sufficient depth and properly maintained. We have sample inspection forms available. So far this season we have been notified of injuries that have occurred due to broken swing seats and swing chains. Fortunately none of these injuries have been life-threatening.

Purchasing New Playground Equipment

If your entity or a group is considering purchasing new playground equipment for your park, here are some recommendations to help limit your potential liability exposure. You want to make sure that any equipment that is going to be installed in your playground is designed for public playground use. There are companies that make excellent playground equipment but it is often advertised for residential or commercial use and is not appropriate for public playgrounds. There are also some companies that advertise playground equipment on the Internet that looks good and is considerably less expensive than other manufacturers but their equipment does not meet the requirements for public playgrounds. **To help ensure that you are getting proper equipment, request that the dealer or manufacturer provide you written documentation that their equipment meets the U.S. Consumer Product Safety Commission's guidelines for public playgrounds and the ASTM's F-1487 standards for playground equipment for public use.** Some manufacturers go a step further and use a third-party service (IPEMA) that certifies that their playground equipment meets these guidelines and standards. While this equipment is more expensive, you can be assured that you are purchasing the safest equipment for the children using your playground facilities.

Finally, make sure that if employees from your entity or a group of volunteers are going to install the new equipment that they follow the installation instructions closely. Too many times we have seen equipment, which meets all of the safety requirements, installed improperly and then it becomes a potential injury threat to the users. Some communities have paid an additional fee to have a trained representative from the company oversee the installation process. While less expensive than having the equipment factory installed, it can be worth the money to make sure the new equipment has been properly installed.

While you cannot prevent all injuries to children playing on your playground equipment, you can help lessen the likelihood of serious injuries from occurring. At the same time you can help reduce your potential liability exposure by following the guidelines published in the CPSC's *"Public Playground Safety Handbook".*

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