the Dirty Dozen

Are they hiding in your child's playground?

National Playground Safety Institute™

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In the time it will take you to read this pamphlet a child will be severely injured and admitted to an emergency room as a result of a playground-related accident. It is estimated that each year over 205,850 such injuries occur. Approximately fifteen children will die from playground related injuries.

The National Playground Safety Institute (NSPI) has identified twelve of the leading causes of injury on playgrounds. By familiarizing yourself with the "Dirty Dozen Checklist" you can inspect your local playground to see how safe it is. As parents and caregivers, we are responsible for providing safe play opportunities for our children. Should you identify any of the following hazards on your child's playground, notify the owner/operator of the play area of the condition so that they may take steps to eliminate the hazard.

The Dirty Dozen Checklist

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improper protective surfacing

The surface or ground under and around the playground equipment should be soft enough to cushion a fall. Improper surfacing material under playground equipment is the leading cause of playground related injuries. Over seventy nine percent of all accidents on playgrounds are from children falling. Hard surfaces such as concrete, blacktop, packed earth or grass are not acceptable under play equipment. A fall onto one of these hard surfaces could be life threatening.

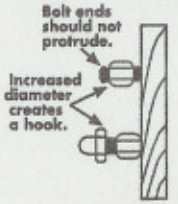
There are many surfaces that offer protection from falls. Acceptable surfaces are hardwood fiber/mulch, sand, and pea gravel. These surfaces must be maintained at a depth of twelve inches, be free of standing water and debris, and not be allowed to become compacted. There are also synthetic or rubber tiles, shredded rubber and mats that are appropriate for use under play equipment.

inadequate use zone

A use zone is the area under and around the playground equipment where a child might fall. A use zone should be covered with protective surfacing material and extend a minimum of six feet in all directions from the edge of stationary play equipment such as climbers and chin-up bars. The use zone at the bottom or exit area of a slide should extend a minimum of six feet from the end of the slide for slides six feet or less in height. For slides between six feet and eight feet high the use zone at the exit of the slide is equal to the height of the platform or entrance to the slide. The maximum use zone regardless of height is eight feet. Swings require a much greater area for the use zone. The use zone should extend, two times the height of the pivot or swing hanger above the surfacing material in front of and behind the swings seats. The use zone should also extend six feet to the side of the support structure. A fully enclosed tot swing requires less of a use zone. Measure the vertical distance from the bottom of the seat to the pivot point or swing hanger and multiply by two for the use zone in front and back of the swings.

protrusion & entanglement hazards

A protrusion hazard is a component or piece of hardware that might be c ble of impaling or cutting a child if a child should fall against the projection. Some protrusions are also capable of catching strings or items of clothing wc around a child's neck. This type of entanglement is especially haz-



ardous because it might result in strangulation. The Consumer Product Safety Commission does not recommend the use of d strings on children's outerwear because of the potential strai lation hazard. Examples of protrusion and entanglement haz includes bolt ends that extend more than two thread beyond face of the nut, hardware configurations that form a hook or l a gap or space between components and open "S" type hooks.

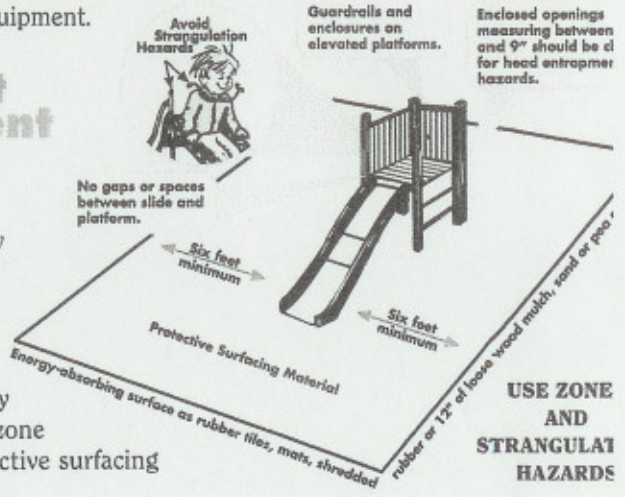
Rungs or handholds that protrude outward from a support structure be capable of penetrating the eye socket. Special attention should be paid to area at the top of slides and sliding devices. Gaps and spaces at the top of sli may catch clothing. Ropes should be anchored securely at both ends and not capable of forming a loop or a noose.

entrapment in openings

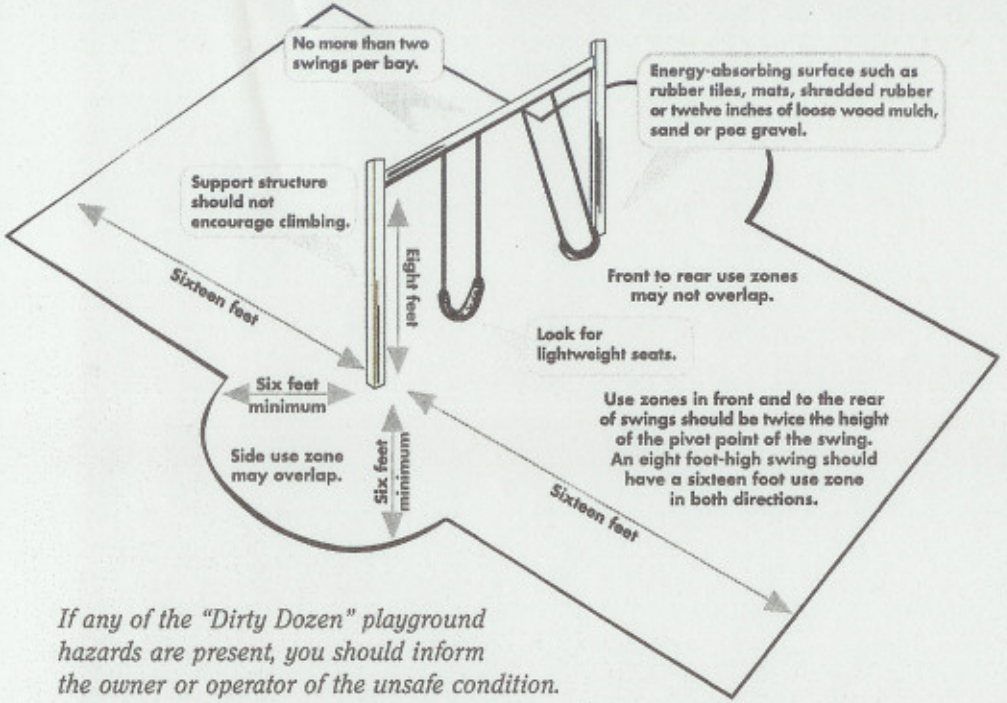
Enclosed openings on playground equipment must be checked for head entrapment hazards. Children often enter openings feet first and attempt to s through the opening. If the opening is not large enough it may allow the bod pass through the opening and entrap the head. Generally, there should be no openings on playground equipment that measures between three and one hal inches and nine inches. Where the lower boundary of the opening is formed l the protective surfacing the opening is not considered to be hazardous. Pay s cial attention to openings at the top of a slide, openings between platforms a openings on climbers where the distance between rungs might be less than n inches. Partially bounded openings such as seen on the top of a picket fence entrap a child's neck and should be avoided on play equipment.

insufficient equipment spacing

Improper spacing between pieces of play equipment can cause overcrowding of a play area resulting in unsafe play conditions. Each item of play equipment has a use zone around it where protective surfacing



USE ZONE AND STRANGULAT HAZARDS



If any of the "Dirty Dozen" playground hazards are present, you should inform the owner or operator of the unsafe condition.

material is applied. These use zones may overlap for certain items of equipment. Equipment that is less than 30 inches in height may overlap use zones with six feet in between. Equipment higher than 30 inches must have nine feet in between each structure. The to-fro area of swings, the exit area of slides, standing rocking equipment and merry-go-rounds may not overlap use zones. This provides room for children to circulate and prevents the possibility of a child falling off one structure and striking another structure. Swings and other pieces of moving equipment should be located in an area away from other structures.

trip hazards

Trip hazards are created by play structure components or items on the playground. Exposed concrete footings, abrupt changes in surface elevations, containment borders, tree roots, tree stumps and rocks are all common trip hazards that are often found in play environments.

lack of supervision

The supervision of a playground environment directly relates to the overall safety of the environment. A play area should be designed so that it is easy for a parent or caregiver to observe the children at play. Young children are constantly challenging their own abilities, very often not being able to recognize potential hazards. It is estimated that over forty percent of all playground injuries are directly related to lack of supervision. Parents must supervise their children on the playground!

age-inappropriate activities

Children's developmental needs vary greatly from age two to age twelve. In an effort to provide a challenging and safe play environment for all ages it is important to make sure that the equipment in the playground setting is appropriate for the age of the intended user. Areas for preschool age children (2-5) should be separate from areas intended for school age children (5-12).

lack of maintenance

In order for playgrounds to remain in "safe" condition a program of systematic, preventive maintenance must be present. There should be no missing, broken or worn-out components. All hardware should be secure. The wood, metal or plastic should not show signs of fatigue or deterioration. All parts should be stable with no apparent signs of loosening. The surfacing material must also be maintained. Check for signs of vandalism.

pinch, crush, shearing, and sharp edge hazards

Components in the play environment should be inspected to make sure that there are no sharp edges or points that could cut skin. Moving components such as suspension bridges, track rides, merry-go-rounds, seesaws and some swings should be checked to make sure that there are no moving parts or mechanisms that might crush a child's finger.

platforms with no guardrails

Elevated surfaces such as platforms, ramps, and bridegeways should have guardrails or barriers that would prevent accidental falls. Preschool age children are more at risk from falls; therefore equipment intended for this age group should have guardrails on elevated surfaces higher than twenty inches and protective barriers on platforms higher than 30 inches. Equipment intended for school-age children should have guardrails on elevated surfaces higher than thirty inches with barriers on platforms above 48 inches.

equipment not recommended for public playgrounds

Accidents associated with the following types of equipment have resulted in the Consumer Product Safety Commission recommending that they not be used on public playgrounds:

- Heavy swings such as animal figure swings & multiple occupancy/glider type swings,
- Free swinging ropes that may fray or form a loop,
- Swinging exercise rings and trapeze bars are considered athletic equipment and not recommended for public playgrounds. Overhead hanging rings that have a short amount of chain (12") are allowed on public playground equipment.