

Playground Safety: A Community Effort

Safe Kids Pennsylvania and NPPS

April 2011

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Today's Key Points

- This Webinar will help youth serving organizations identify local partners & resources within your community to improve playground safety.
- Understand NPPS's S.A.F.E. model.
- Implementation of NPPS's S.A.F.E. model.

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National Program for Playground Safety



NPPPS is the Leader in Training, Development,
Advocacy, & Information of Safe Play Areas.

NPPPS mission is to help the public create safe
and developmentally appropriate play
environments for children.

www.playgroundsafety.org

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Play Is A Universal Need And Right



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Little Attention Has Been Paid To Children's Outdoor Play Environments



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Safe Kids Pennsylvania



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Playground Injury Statistics

Every year over 200,000 children are treated in emergency departments after being injured on the playground. That is about one injury every 2 ½ minutes.

On the average 17 children a year die just because they wanted to play on the playground.

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How does Pennsylvania compare with U.S.?

	U.S.	PA
Overall	C+	B-
School	C+	B
Child Care	C+	C+
Park	C+	C+

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Pennsylvania's Playgrounds

NPPS' Research Findings	PA	National
Equipment installed prior to 1998	35%	63%
Slides present	92%	94%
Swings present	66%	61%
Horizontal ladders present	40%	66%
Sliding poles present	38%	34%

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Safety Concerns

NPPS' Research Findings	PA	National
POOR SIGHT LINES	8%	21%
SEPARATE PLAY AREAS	56%	29%
APPROPRIATE DEPTH OF LOOSE FILL SURFACING	40%	19%
Rust	38	21%

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Bucks County Safe Kids Playground Safety Program

- Each committee member was asked to use the NPPS report card and check one community/school playground.
- Results found that many of our playgrounds did not meet current CPSC guidelines and were not well maintained.

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Bucks County Safe Kids Playground Safety Program

- National Safe Kids Assessment Tool required to review data
- Reviewed local ED data, and Injury Deaths and Hospitalizations in PA Report; CDC Childhood injury reports
- Falls as leading cause of unintentional injury mostly occurring at home and at play

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Polling Question

What age group is being injured on playground equipment the most?

- A. 15 and older
- B. 10 -14 years of age
- C. 5-9 years of age
- D. 0-4 years of age

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WHO ARE INJURED?

Age Group	Total %
0 -4	54%
5 -9	35%
10 -14	6%
15 and over	5%

Source: CPSC Reported Incidences 2001-2008



54% of Injuries are Male

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Injuries to young children

Injuries to the head and face accounted for **49%** of injuries to children 0-4.

For children ages 0-4, climbers (**40%**) had the highest incidence rates, followed by slides (**33%**).

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Injuries to school-age children

Broken arms or legs from falling off equipment.



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What are the injuries?

Injury Types	Percentage
Fractures	36%
Contusions/ Abrasions	20%
Lacerations	17%
Strains/Sprains	12%
Internal Organs	5%
Dislocations	2%
Dental	1%
Hematomas	1%
Foreign Body	1%

There were 40 deaths reported for the years 2001-2008. 27 of these were the result of hanging.

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Why are they being injured?

Injury Location	Percentage
Falls	44%
Equipment-Related	23%
Other	11%
Incidental	8%
Collision	7%
Entrapment	7%

There were 29 reported injuries involving thermal burns; almost half (**48%**) involved playground surfacing materials

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What type of equipment?

58% of the incidents reported to CPSC involve:

1. Swings
2. Slides
3. Climbers (or Monkey Bars*)

***Words matter. If we call everything on the playground a monkey bar, how can we tell what equipment is part of the problem?**



*This is a monkey bar! There are less than 3% of these left in the U.S.

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Injury Prevention at the Local Level

Polling Question

- Has your Safe Kids Coalition provided playground safety programs for your community?
- A. Yes
- B. NO

Polling Question

- If you have provided training, who was the target audience?
 - A. Parents
 - B. Teachers
 - C. Early Childcare Professionals
 - D. Maintenance Staff
 - E. Open to all community members

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Bucks County Playground Maintenance and Design Workshop

- Invite school district, county, municipality, parks and recreation facility staff and supervisors, child care owners and directors.
- Identified local Certified Playground Safety Inspectors to present
- Playground equipment and surfacing manufactures invited as vendors
- Move location each year to various parts of the county

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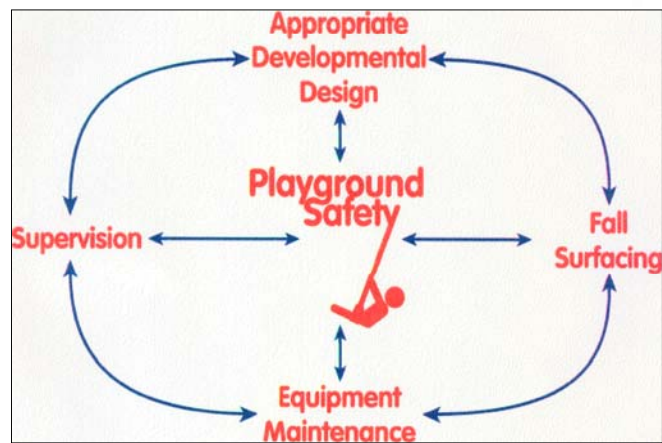
Polling Question

As a playground safety trainer, do you feel confident on the direction you should take for the playground safety curriculum?

- A. Yes
- B. No

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SAFE Model



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Equipment & Surface Maintenance

Equipment Maintenance

- Ensures the equipment is as safe as possible
- Extends the life span of the equipment
- Regular inspection and documentation helps the organization defend itself against litigation



Maintenance

Be aware of these 6 dangers

1. Pinch-Crush Parts
2. "S" Hooks
3. Hard, Heavy Swings
4. Gaps
5. Spacing /Head Entrapments
6. Exposed Screws and Bolts

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1. Pinch, Crush, And Shearing Points

There should be no accessible pinch, crush, or shearing points on playground equipment that could injure children or catch their clothing.



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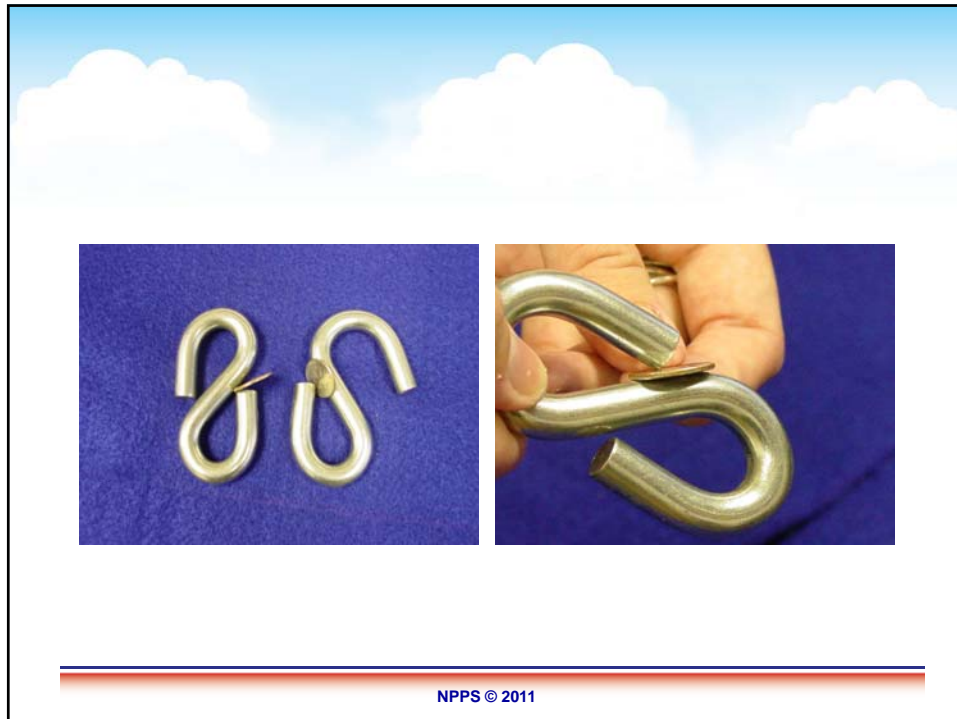


2. “S”-Hooks

S-hooks are commonly found on swings, suspension bridges, and cable walks.



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3. Hard, Heavy Swings

All swing seats should be of rubber, not metal, or wood.

Animal, multiple occupancy, and rope swings should not be present.



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4. Gaps

Gaps on playground equipment should not be capable of entangling children's clothing because such entanglement can cause death by strangulation (9.2).



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5. Spacing Head Entrapment

A head entrapment potential exists when an opening between any interior opposing surfaces is greater than 3 ½ inches and less than 9 inches (9.6).



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6. Exposed Nuts and Bolts

All nuts and bolts should be recessed.

Two and a half threads - Protrusion



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INSERT NPPS REPORT CARD

America's Playgrounds Safety Report Card



DOES YOUR PLAYGROUND MAKE THE GRADE?
Evaluate your playground using the following criteria.
A full explanation of the criteria is on the back of this sheet.

	Yes	No	SCORING SYSTEM
SUPERVISION			
Adults present when children are on equipment			24 - 20 = A Completions on having a staff present. Please document to maintain this score.
Children can be easily viewed on equipment			
Rules posted regarding expected behavior			
AGE-APPROPRIATE DESIGN			
Playgrounds have separate areas for ages 2-5 and 6-12			19 - 17 = B Your playground is on its way to providing a safe environment for children. Work on the areas checked "No".
Platforms have appropriate guardrails			16 - 13 = C Your playground is potentially hazardous for children. Take corrective measures.
Platforms allow change of direction to get out of structure			12 - 8 = D Children are at risk on this playground. Start to make improvements.
Storage indicating use group for equipment provided			7 & less = F Do not allow children on this playground. Make changes immediately.
Equipment design prevents climbing outside the structure			
Supporting structure prevents climbing on it			
FALL SURFACING			
Suitable surfacing materials provided			**If any of the gray boxes are marked "No," the potential of a life-threatening injury is significantly increased. Contact the owner of the playground.
Height of all equipment is 8 feet or lower			
Appropriate depth of loose fill provided			
Slit sand and loose base appropriate surfacing			
Concrete footings are covered			
Surface free of foreign objects			
EQUIPMENT MAINTENANCE			
Equipment is free of noticeable gaps			
Equipment is free of loose attachments			
Equipment is free of broken parts			
Equipment is free of missing parts			
Equipment is free of protruding bolts			
Equipment is free of rust			
Equipment is free of splinters			
Equipment is free of cracks/holes			
TOTAL POINTS			

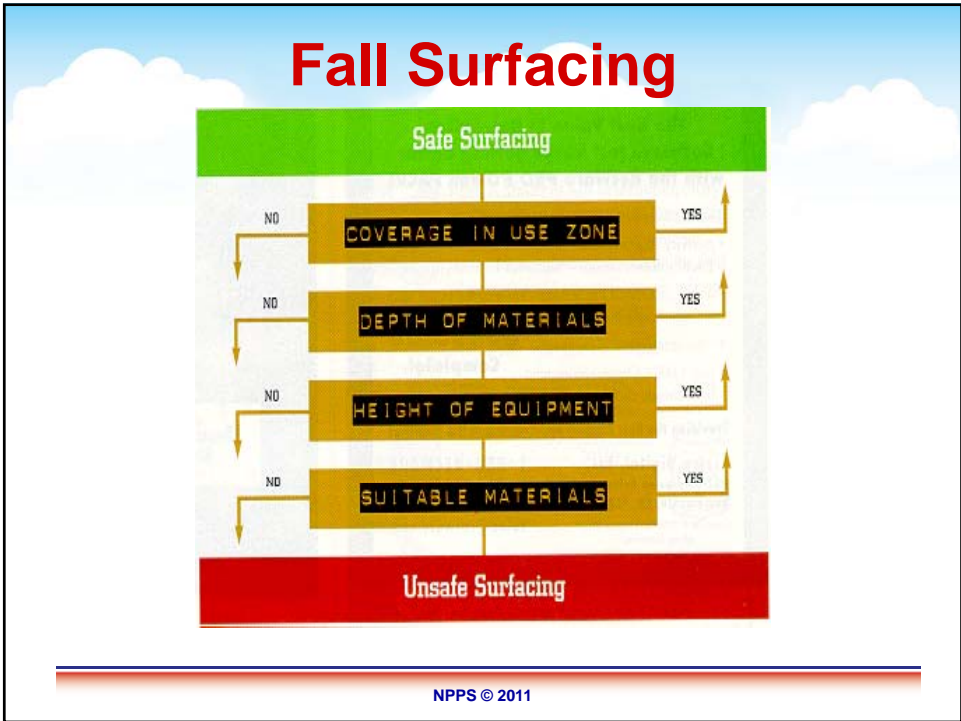
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Fall Surfacing

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Suitable Surfacing Materials

Although suitable materials, loose-fill surfacing such as pea gravel and chopped rubber may not be appropriate for young children who have a tendency to put things in their mouths.



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ASTM F 1292



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ASTM Surfacing Standards

- ASTM stands for
American Society for Testing Material
- ASTM F 1292 – Impact Attenuation of surfacing material
- ASTM F 1951 – Testing for ADA compliance for surfacing & equipment
- ASTM F 2075 – Testing for wood fiber



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Depth of Materials

Materials must be maintained at an appropriate depth.

Only **40%** of surfacing in PA is at the proper depth.



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Use Zones

Use Zone is an area under and around the equipment where protective surfacing is required.



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Use Zones

Stationary Equipment

Should extend 6 feet
in all directions.

75% have correct 6
foot use zone



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NPPS Resource



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ADA

- Americans with Disabilities Act
- www.access-board.gov/play/guide/guide.pdf

On October 18, 2000, the Architectural and Transportation Barriers Compliance Board issued a final rule in the form of accessibility guidelines to serve as the basis for standards to be adopted by the Departments of Justice for new construction and alterations of play areas covered by the ADA.

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HOW DOES ADA FACILITATE INCLUSIVE PLAY?

- Enables children to get to and from playgrounds,
- Provides opportunities for them to play, and
- Enhances opportunities to interact with other children.



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Supervision

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Designing for Supervision

Supervisors should have the ability to respond to emergencies.



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Designing for Supervision

Site lines for a play structure should allow visual access to all points of the structure from at least two directions in any direction.



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Designing for Supervision

Play areas should be separated for children:
Ages 6 months – 23 months,
Ages 2-5,
Ages 5-12.



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Bucks County Safe Kids

- 2005 - Playground Safety Committee kicked off the ABC's of Playground Supervision training
- Learned most had very little or no training requirements

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- Utilized NPPS curriculum to implement 2 hour program for our public school districts.
- 8 of 11 districts participated.



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Bucks County

ABC's of Playground Supervision

- 2006 expanded program to reach child care providers
- Registered all programs with PA Key for professional development credit for child care providers
- Provide evening 2 hour program utilizing NPPS materials
- Average program annually
- Present at local child care conferences

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Lessons Learned

- No real measurable outcomes to determine success of program only anecdotal reporting from participants
- Recommend recording initial playground assessments and then reviewing again 1 – 2 years after program implementation to compare results

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Playground Maintenance and Design Workshop

- Invite school district, county, municipality, parks and recreation facility staff and supervisors, child care owners and directors.
- Identified local Certified Playground Safety Inspectors to present
- Playground equipment and surfacing manufactures invited as vendors
- Move location each year to various parts of the county

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Appropriate Developmental Design

Appropriate Developmental Design

If children came in one size and had the same developmental needs, then it would be appropriate to have a one-sized piece of playground equipment for their use.



The first consideration should be the developmental needs of children

Physical

Emotional

Social

Intellectual



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Meaningful Play Experiences



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Pre -K



Grades K-1





Implications for transforming community playgrounds to meaningful play experiences

User	Physical	Emotional	Social	Intellectual
Age: 6-23mo				
Years 2-3				
Years 3-5				
Grades K-1				
Grades 2-3				
Grades 4-6				

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Children Need Outdoor Play Areas

Children of the 21st century deserve play environments that are appropriate to their needs.



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Polling Question

When advocating for playground safety, it is important to remember the SAFE model. What does SAFE stand for?

- A. Site Lines, Age Development, Fall Surfacing, & Equipment Maintenance
- B. Supervision, Appropriate Development Design, Fall Surfacing, & Equipment and Surface Maintenance
- C. Safety, Appropriate Age, Fall Surfacing, , & Equipment and Surface Maintenance
- D. Supervision, Age Appropriate, Fall Surfacing, & Equipment Safety

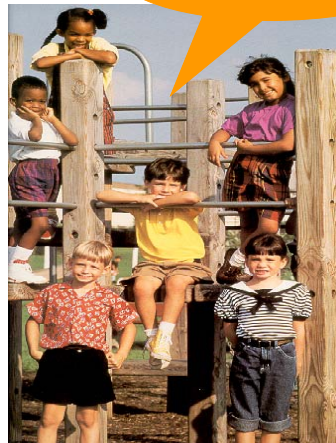


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It's everybody's responsibility!

One way to make outdoor play environments **SAFE** for children is to place resources in the play areas that meets the needs and developmental abilities of all children!

We are the Future!



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Contact
NPPS at



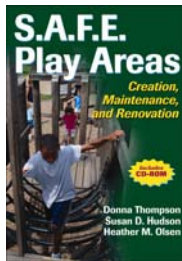
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