Keeping Children Safe From Injuries in Early Care and Education Settings

Burn Prevention
Welcome

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Learning Objectives

• Explain why children are at risk for burns
• List the most common causes of burns in children younger than age 5
• List potential burn dangers in your environment
• List at least 3 key strategies to prevent burns
• List resources for preparing fire and burn prevention lessons
“If a disease were killing our children in the proportions that injuries are, people would be outraged and demand that this killer be stopped.”

C. Everett Koop, MD
Former US Surgeon General
The #1 Killer of Children in the United States

For every 1 child who dies from injury there are...

- 25 hospitalizations
- 925 treated in ERs
- Many more treated in doctors’ offices

SOURCE: CDC Vital Signs, 2012
Injuries Among Children

• Leading cause of death and disability
  – 10% of injuries in preschoolers happen in early care and education settings

• Not accidents
  – Preventable and predictable
Caring for Our Children Standards

- Caring for Our Children: National Health and Safety Performance Standards—Guidelines for Early Care and Education Programs (CFOC)
- 3rd edition
- Available at [http://cfoc.nrckids.org](http://cfoc.nrckids.org) (free download and purchase options)
Injuries

- Pediatric first aid kit
- Pediatric CPR and first aid training
- Communication device for emergencies (911)
- Document and notify parents and state licensing agency
- Report serious injuries to appropriate authorities
The Early Care and Education Provider

- Relationship with family and child
- Model safety for children and families
THE PROBLEM
Fire and Burn Injuries

- Every hour 16 children are injured
- Every day:
  - 300 children are treated in emergency rooms
  - 2 children die
Burden of Burn Injuries

• Younger children
  – Scalds
    • Liquid or steam

• Older children
  – Contact burns
    • Fire or hot objects
Burden of Burn Injuries

• Lifelong care
  – Multiple surgeries
• Scars
  – Physical and emotional
• Limited movements
• Costly
• Good news
  – Preventable
Children and Burn Risk

• Developmental
  – Test their limits
  – May not recognize hazards

• Physical
  – Children’s skin is thinner than adults’ skin
    • Burns quicker and at lower temperatures
    • Larger and deeper burns
Types of Burn Injuries

- Scald burns
- Electrical burn
- Sunburn
- Burn: Flame or hot object
Scald Burns

• Most common in young children
• 3\textsuperscript{rd} degree burn (severe)
  – 149°: 2 seconds
  – 120°: 2 minutes
• Prevention
  – Anti-scald devices
  – Temperature setting of hot water heater
To reduce risk of scalding, set your hot water heater no higher than:

A. 100°F
B. 110°F
C. 120°F
D. 150°F
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A. 100°F
B. 110°F
C. 120°F
D. 150°F
Hot Beverages

• NO hot beverages
  – Holding, caring for, or working with children
• Children = no access
• Spill-proof containers: False sense of security
Warming Devices

• Microwaves
  – Children = no access
  – Stir and test before serving
  – NO bottles

• Slow-cooking devices
  – Out of reach, including cords
  – Wipe dry

• Caution
  – Electrical cords
Kitchen

- Never hold child when preparing hot food or liquids
- Kid-free zone
- Restrict access
  - Safety gates
  - Visual markings
What’s WRONG in this picture?
Kitchen

- Toddlers’ reach: 8–10 inches
- Keep handles turned to back
- Use back burners
Hot Liquids and Food

• Out of reach
  – Against wall
  – As far back as possible
• Avoid
  – Edge of surface
  – Tablecloth
  – Child’s level
Types of Burn Injuries

- Scald burn
- **Electrical burn**
- Sunburn
- Burn: Flame or hot object
Electrical Outlets

- 2,400 children injured each year
  - Most are under age 6
- At child’s eye level
- Insert objects into outlet
Outlet Safety Options

- Tamper-Resistant Electrical Outlet
- Safety Cover
- Safety Plugs
Extension Cords

- Should not be used, if possible
- Children = no access
- Avoid
  - Across hallways
  - Under rugs and carpet
  - Near water source
  - Behind wall hangings
  - Frayed or overloaded
Types of Burn Injuries

- Scald burn
- Electrical burn
- Sunburn
- Burn: flame or hot object
Sun Exposure

- Childhood sunburn = skin cancer risk
- Limit sun exposure between 10am and 2pm
- Play in the shade!
Sunscreen

- Infants under 6 months
  - NO direct sunlight
  - Protective clothing and wide brimmed hat
- Over 6 months
  - All exposed areas
  - 15 to 30 minutes before exposure
  - Reapply every 2 hours
Types of Burn Injuries

- Scald burn
- Electrical burn
- Sunburn

- Burn: Flame or hot object
On the Playground

- Check temperature of equipment surfaces
- Keep metal equipment in shade
Fire Escape

How much time do you have to safely get out of a building once the smoke or fire alarm sounds?

A. 30 seconds
B. 2 minutes
C. 5 minutes
D. 10 minutes
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Fires

- 85% of fire-related deaths are from home fires
- Fire spreads rapidly
  - ~ 2 minutes to escape
- Death: Smoke inhalation
Fire Drills

- Fire drills
  - Practice monthly
  - Record them
  - Follow approved routes

- Attendance sheet
- Children with special needs
- Evacuation cribs
What is the leading cause of home fires and home fire injuries?

A. Space heaters  
B. Fireplaces and wood burners  
C. Extension cords and other types of electrical cords  
D. Cooking
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A. Space heaters
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Cooking Fires

- Pot or pan overheats
- Grease splatters
- Distractions
- Flammable
Heating Equipment

- Fireplace and wood stove
- Children = no access
  - Barriers and screen
- Doors
  - Can reach 1300°F
  - Stay hot for 1 hour +
  - Serious burn: Less than 1 second
Fire and Burn Risk

• Matches and lighters
  – Children = no access
  – Not childproof

• Candles and space heaters
  – Children = no access
  – Consider policy
Smoke Alarms

- Cut risk of dying in half
- Install smoke alarms
  - Every level
  - Inside and outside bedrooms
- Make and practice fire escape plan
- Test monthly
WHEN INJURIES OCCUR
First Aid: Burn Injuries

• As quickly as possible
  – Cool burn with cool water
  – Cover with dry cloth or gauze
  – Call parents
• No butter, grease, or powder
• No ice
Document and Report

• Document all injuries and “near misses”
  – Identify patterns
  – Determine causes
  – Prevent future injuries

• Report abuse and neglect
  – Burns may be sign of abuse or neglect
  – Always report through proper channels
SUPERVISION
As the number of adults in an area increases, so does the number of injuries.

Why do you think that happens?
Supervision

- No substitute for supervision
- Keep counting routine and ratios
- Remove distractions
- Let others know if leaving the area
Teaching Kids

• Firefighters are our friends
• Crawl low under smoke
• Stop, drop, and roll
• Tools not toys
• What’s hot and what’s not
• Smoke alarm
  – Recognize sound and respond
Reinforce Lessons

- Fire drills
- Sunscreen
- Children: Spot dangers
- Visit fire station
- Books
- Involve parents
  - In-person meeting
  - Homework
  - Handouts
Develop Policies

• Use best practices to develop policies
• Work with local expert
  – Pediatrician
  – Child Care Health Consultant
  – Fire/EMS/Police
Local Resources

- Hospital
- American Red Cross
- Fire and police
- Physicians
Summary

• Deaths and injuries from fires and burns are absolutely preventable
• Children are more likely than adults to get injured
• Childproofing is only a layer of protection
• Teach children and families and model safe behaviors
• Use community resources
Online Resources

• Safe Kids Worldwide (http://www.safekids.org/)
• American Burn Association (http://ameriburn.org/)
• National Fire Protection Association (http://www.nfpa.org/)
• US Fire Administration (http://www.usfa.fema.gov/)
OPTIONAL SLIDES
Discussion

• Do you practice fire drills with the children you care for and talk with them about what to do in case of a fire?
• What strategies do you use or could you use to help children understand what a smoke or fire alarm is and what to do when they hear one?
Teachable Moments

• How can we prevent this from happening again?
Discussion

• Do you have a policy about sunburn and sunscreen use?
• You need parent’s written permission to use sunscreen!
• What do you include in the policy?
• What common items in homes or centers should be kept out of children’s reach because they could be hot and cause serious burn injuries?
Discussion

Think of a time when a child suffered a fire or burn injury

• Did more than 1 child have the same injury at different times?
• What was the situation and what did you do?
• What might you do to prevent it from happening again?
Discussion

• Do you have policies on preventing fires and treating burn injuries?
• Do you have sources of information to share that would be useful to others for creating and updating policies?
Injury reports show

- 3 children in the 3-year-old classroom have received sunburns this week while playing outside.
- Several times, children got burned on hot outdoor play equipment.
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- The recommendations in this curriculum do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.
- Listing of resources does not imply an endorsement by the AAP. The AAP is not responsible for the content of resources mentioned in this curriculum.
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