Preventing Burn Injuries in Children

The three most common causes of burn injury in children are scalds from hot liquids, contact with hot objects, and fire and flame injuries. Burns caused by chemicals and electricity are less frequent in children (more often occurring in teens and adults in the workplace). The number one location where burns occur is in the home, so this article will focus on identifying risk factors and tips to make your home safer for you and your family.

Scald Burns

Most scald burns in children are associated with cooking (hot food and grease spills) and with hot tap water. These burns frequently involve the face, chest, and arms as children reach for an object and spill the hot liquid onto themselves. Scald burn prevention in the home is focused on the kitchen and bathroom.

Scald Burn Prevention

• Kitchen: Off limits to children for play
  – Zone of safety around stove, sink, microwave
  – Careful placement of pots on stove & hot food & liquids on tables
  – Electrical cords & tablecloths out of reach of children
  – Use of high chairs/pack and plays

• Bathroom: Off limits to children for play
  – Hot water heaters set at 120 degrees F or less
  – Bath water: Start with cold & add hot water
  – Close supervision

Contact Burns

Contact with hot objects in and around the home is also a leading cause of burn injury in children. Contact burns often involve the hands, arms, and face as the child reaches for an object without realizing it is hot. Hazards within the home include clothing and curling irons, oven doors, space heaters, and fireplaces. Outdoors, children can experience contact burns to the feet and hands by walking through or falling into hot embers from a brush or camp fire that is no longer burning.
Contact Burn Prevention

• Inside the Home
  – Clothing & curling irons kept in safe area where children do not have access
  – Safety zone around ovens, space heaters, fireplaces
  – Use of safety gates or screens

• Outside the Home
  – “Circle of Safety” around brush & camp fires
  – Mark burn area off with bricks or rocks to warn of danger
  – Enforce “Circle” at all times as fires can smolder for days

Flame Burns

There are three major causes of flame burn injuries in children: Outdoor fires, house fires, and clothing-related flame injuries. Indoor fires pose the greatest threat, as the victim may also experience smoke inhalation injury. The proper use of smoke detectors has been shown to reduce deaths related to house fires. Many injuries occurring from outdoor fires involve the use of an accelerant such as gasoline or lighter fluid, which contribute to the fire getting out of control. Children playing with matches, lighters, or candles are at risk for catching their clothing on fire.

Flame Burn Prevention

• WORKING smoke alarms on each level of the home and in sleeping areas
• Teach children at a young age that matches & lighters are TOOLS-NOT TOYS
• Fire escape route: Plan and practice
• STOP-DROP-ROLL
• Safety checklists available from local Fire Departments
• NEVER leave an outdoor fire unattended & always have a water supply on hand

Chemical and Electrical Injuries
While these injuries are more common in teens and adults, children remain at risk for injury. Causes of chemical burns in the home include exposure to cleaning products, gasoline, bleach, and other products. Electrical injuries seen in children include contact with electrical outlets or uncovered power sources. There are a few basic rules that can protect your child from chemical or electrical injuries.

### Chemical Injury Prevention

- Keep chemicals in original container & out of the reach of children, preferably locked up!
- Careful with storage of flammable liquids
- Be aware of work hazards and safety procedures

### Electrical Injury Prevention

- Be alert for fraying of electrical cords
- Careful attention during home remodeling
- Discuss consequences of high risk behavior with older children
- Be aware of work related risks

For further information on burn awareness and safety, please visit our websites: www.musckids.com or www.scburnedchildrensfund.org

This handout was developed to help patients understand more about injury prevention measures. It is meant to be used as a guide to supplement your healthcare provider’s instructions. Please consult your physician if you have any questions.