Burn and Scalds Safety

Key Facts

• Since 1999, an average of 496 children ages 14 and under have died each year due to unintentional fire- or burn-related injury.

• In 2008, 366 children ages 14 and under died due to fire or burn-related injuries.

• Since 2001, an average of 107,170 children have sustained nonfatal fire or burn injuries each year.

• In 2009, almost 90,000 children ages 14 and under sustained nonfatal fire or burn-related injuries.

• Scald burns, caused by hot liquids or steam, are more common types of burn-related injuries among young children, compared to contact burns, caused by direct contact with fire, which are more prevalent among older children.

• Since 2001, an average of 1,293 children ages 4 and under were hospitalized for fire/burn-related injuries each year. The leading cause of burn-related hospitalizations and emergency room visits among young children is scalds.

• In 2010, there were approximately 2,500 fireworks-related injuries among children ages 14 and under.

• In 2010, children ages 14 and under accounted for 40 percent of fireworks-related injuries. Children under age 5 accounted for approximately 700 injuries while children age 5 to 14 accounted for approximately 1,800.

• Among different types of fireworks in 2010, sparklers were associated with the greatest number of estimated injuries at 1,200. There were 900 injuries associated with firecrackers and 400 associated with bottle rockets. Sparklers accounted for nearly half of the injuries to children ages 14 and under.

• Burns account for more than half of all fireworks-related injuries. The parts of the body most commonly injured include the hands and fingers, legs, eyes, head, face and ears.

Where, When and How

• The majority of scald burns children experience are from hot foods and liquids spilled in the kitchen or wherever food is prepared and served.
• Of non-tap water scalds, it has been found that 90 percent are related to hot cooking or drinking liquids.
• Among children under 5 years of age, hot water accounts for nearly 50 percent of all scald burns associated with nonelectric cookware.
• Hot tap water accounts for nearly one in four of all scald burns among children and is associated with more deaths and hospitalizations than any other hot liquid burns.
• Tap water burns most often occur in the bathroom and tend to be more severe and cover a larger portion of the body than other scald burns. A recent survey found that only 8 percent of adults felt that the bathroom was a high risk area for burn and scald incidents.
• Fireworks-related injuries peak during the four weeks surrounding July 4, when almost 75 percent of them occur.
• Burns and death rates from burn injuries are higher in rural areas, particularly among black and Native Americans

Who
• Male children are at higher risk of burn-related death and injury than female children.
• Children under 4 years of age and people with disabilities are at high risk of burn-related death and injury, especially scald and contact burns.
• Children under 5 years of age account for almost 20 percent of all burn cases in the U.S.
• Among children under 5 years of age, scalds or contact burns are responsible for 90 percent of burn injuries.
• Young children, even toddlers, are at risk of scald injuries from opening the microwave and spilling the hot food or drink.
• Children 1 year of age have the highest risk of scald injury.
• Per capita, children ages 5 to 9 had the highest risk of fireworks-related injuries in 2010, followed by children ages 10 to 14.
• The death rates from burn injury for Native Americans and blacks are two to three times higher than the death rates from burns for whites.

Costs
• Each year, the total cost of scald burn-related deaths and injuries among children ages 14 and under is approximately $44 million.
• Total charges for pediatric admissions to burn centers average $22,700 per case.

Proven Interventions
• Hot tap water scalds can be prevented by lowering the setting on water heater thermostats to 120 degrees Fahrenheit or below and by installing anti-scald devices in water faucets and shower heads.

Laws and Regulations
• All code-making bodies on the national and regional level have established plumbing standards for newly constructed homes and residential units requiring anti-scald technology and a maximum water heater temperature of 120 degrees Fahrenheit.