

## **Preventing Childhood Burn Injuries**

A boiling pot left momentarily unattended, a hot cup of coffee placed too close to the edge of a table or a curious toddler turning on the hot water tap — these everyday moments can turn into life-altering emergencies in the blink of an eye. Young children, especially toddlers, are naturally curious and drawn to explore. But their delicate skin, far thinner than an adult's, makes them much more vulnerable to severe burns.

Scald burns are the most common type of burn injury in young children and they happen fast. They occur in places meant to be safe like our kitchens, bathrooms and living rooms. Scald injuries caused by hot liquids or steam are among the most common and preventable childhood burns. Simple actions like turning pot handles inward to prevent them from being pulled, always testing bathwater before placing a child in the tub or setting the water heater to a safe 120°F (49°C) can significantly reduce the risk of scald burns. These aren't just precautions; they're life-saving habits that protect children from devastating injuries.

Another possible danger includes household cleaning products, especially those containing alkalis or acids, which can cause deep, painful burns if they come into contact with a child's skin or eyes. These hazardous items are often stored under sinks or in low cabinets, making them easily accessible to curious children. A moment of curiosity can lead to a serious chemical burn, resulting in long-term pain and damage.

To prevent chemical burns, it's essential to store all cleaning products, including bleach, drain cleaners and oven cleaners, in high, locked cabinets, far out of a child's reach. Labels should always be carefully read and any item that poses a burn risk should be securely stored. Never leave chemicals unattended and be sure to keep them in their original containers with proper safety seals.

Electrical burns, though often overlooked, can be just as dangerous. Children may chew on cords, poke objects into outlets or tug on exposed wires. These actions can result in serious internal injuries, not just surface burns. To reduce these risks, all outlets should be covered with safety plugs, cords kept out of sight and reach and electrical devices checked regularly for damage. Simple precautions like these can make a world of difference in keeping children safe from hidden household dangers.

As we enter summer, outdoor burn risks become more prevalent, with metal playground equipment, car seats and sidewalks heating to dangerous temperatures. Caregivers should always test surfaces before allowing children to climb or sit. To prevent sunburns, applying SPF 30 or higher, dressing children in light protective clothing and using wide-brimmed hats are especially important, particularly for fair-skinned children more vulnerable to UV damage.

Seeking prompt medical attention for burns is crucial because of children's delicate skin. Even if the injury seems minor, burns can worsen over time or lead to serious complications like infections, scarring or functional impairments. Signs of infection include pus-like discharge, unusual color changes, a yellowish sheen or increasing redness and swelling. If left untreated, this can result in hypertrophic scars or contractures that affect a child's growth and mobility.

These complications can have lasting effects, impacting not just physical movement, but a child's confidence, comfort and quality of life.

The best defense against childhood burns is prevention through childproofing the home, recognizing potential hazards and maintaining vigilant supervision. These small acts, turning a knob, testing water, locking a cabinet, may seem minor but carry the weight of protecting your child's future. When accidents do happen, quick and professional medical care gives children the best chance at a full recovery and healthy future. Every second of prevention, every act of awareness, can be the difference between a scare and a tragedy.

*Alan Pang, M.D., is Texas Tech Physicians surgeon who specializes in burn, wound, trauma and critical care, and an assistant professor at the Texas Tech University Health Sciences Center School of Medicine. He also is the Associate Program Director of the Burn Fellowship of the UMC Timothy J. Harnar Regional Burn Center.*