# BURNS

## SYMPTOMS OR BEHAVIORS

Infection:

- Increasing pain
- Swelling
- Pus
- Red streaks
- Fever
- Trouble breathing

Physical:

- Change in muscle control
- Pain
- Change in skin sensitivity
- Slow motor control
- Twitching and phantom pains in muscles and skin

Trauma:

- Impaired ability to concentrate or learn
- Low self-esteem
- Change in behavior
- Distorted body image
- Withdrawal
- Social isolation
- Concern for others safety
- Feeling overwhelmed

#### •••• Minnesota

Low Incidence

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# **ABOUT THE CONDITION**

Thousands of children suffer burn-related injuries each year. Children ages 4 and under are at the greatest risk, with an injury rate more than four times that of children ages 5 to 14. Burns have long been recognized as among the most painful and devastating injuries a person can sustain and survive. Burns often require long periods of rehabilitation, multiple skin grafts, and painful physical therapy, and they can leave victims with lifelong physical and psychological trauma.

Scald burn injury (caused by hot liquids or steam) is the most common type of burn related injury among young children. While flame burns (caused by direct contact with fire) are more prevalent among older children. All children are also at risk for contact, electrical and chemical burns. Because young children have thinner skin than older children and adults, their skin burns at lower temperature and more deeply. A child exposed to hot tap water at 140 degrees Fahrenheit for three seconds will sustain a third degree burn, an injury requiring hospitalization and skin grafts.

Burns are divided into 3 different degrees depending on how severe the damage is to the skin and the underlying tissue. First degree burns only damage the outer layer of skin called the epidermis. Second degree burns damage the epidermis and the dermis, the layer underneath the skin. Third degree burns involve damage or complete destruction to the fullest depth of the skin and underlying tissues. Children who suffer third degree burns often require multiple skin grafts.

Burns often lead to infection due to the damage of the skin's protective barrier (see symptoms). In many case creams and ointments with antibiotics in them are applied to the skin to treat and prevent infection. First and second degree burns can heal over time without skin grafts since there is enough underlying tissue to rebuild skin. Third degree burns need skin grafts or application of artificial materials to cover and protect the exposed areas, as well as trigger new skin growth. Bandages must be changed frequently for all degree burns. Infections caused by burns also occur elsewhere in the body. A blood infection called septicemia and a lung infection called pneumonia can complicate severe burns.

Burns and the painful intrusive procedures required to heal them are traumatic for children. Traumatic experiences such as severe burns have a profound effect on the developing child and can overwhelm their coping ability. Burn trauma overwhelms the body and its defenses and it also overwhelms the mind and its defenses.

## **EDUCATIONAL IMPLICATIONS**

Students who have suffered from severe, disfiguring burns often encounter difficulties when they leave the hospital and return to their homes and schools. Burn care experts believe that the psychological, social, educational and vocational needs of these children are as important as their medical needs. The return home and resumption of a "normal" life is a frightening experience for children who have survived large or disfiguring burn injuries. Students may be afraid of being rejected and ridiculed by their friends, and the family can be equally fearful. In addition, other professionals in the home community who will be involved in the child's continuing recovery, such as teachers and pediatricians, may be unfamiliar with, and thus frightened by, the child with obvious burn wounds and disfiguring scars.

# INSTRUCTIONAL STRATEGIES AND CLASSROOM ACCOMMODATIONS

Seek guidance and input from physicians, school nurse, teachers, school counselors or social workers to assist child with smooth reentry into school.

- Educate and discuss the student's injuries with classmates (may include a parent and child in discussion).
- Try to establish a feeling of safety and acceptance within the classroom. Greet the student each day, make eye contact, and let the child know the he or she is valued, and that you care.
- Do not tell a student "to forget" about the incident.
- Keep informed of treatments and the probable affects on attendance.
- Help the student regain a sense of control over their life by providing choices.
- Encourage the student to set goals and to be active in their life.
- Encourage the student to participate in social activities.
- If activities and conversations are upsetting or trigger trauma feelings stop the activity and redirect attention to a calming activity.
- Create a medication and bandage plan. School nurse may need to develop a health care plan.
- Extra snack, fluids and rest may be needed to help stamina.
- Modification of activities as recommended by parents, physicians, occupational therapist and physical therapist may be required.
- Make arrangements for assignments to be sent home when student misses school because of his or her condition.

## RESOURCES

#### American Burn Association

ABA-Central Office-Chicago 625 Michigan Ave., Ste. 1530 Chicago, IL 60611 800-548-2876 (toll free) www.ameriburn.org

#### The Burn Center

640 Jackson Street St. Paul, MN 55101 800-221-4387 (toll free) www.coolburn.com

### The Phoenix Society, Inc.

2153 Wealthy Street SE #215 East Grand Rapids, MI 49506 800-888-2876 (toll free) www.phoenix.society.org

#### Publications:

Munster, A. M. & Hale, G., Severe Burns: A Family Guide to Medical and Emotional Recovery. A John Hopkins Health Books, 1993.

## Videos:

List of videos available to rent, buy and checkout from American Burn Association www.ameriburn.org/pub

## Books:

The Educator's Guide to Medical Issues in the Classroom

The School Nurse's Source Book of Individualized Healthcare Plans Volume II Sunrise River Press