

## **Safety Share: Burns**

Burns can result from everyday things and activities in your home. The most common causes of burns are from [scalds](#) (steam, hot bath water, hot drinks and foods), [fire](#), [chemicals](#), [electricity](#) and overexposure to the [sun](#). Some burns may be more serious than others.

The [severity](#) of the burn is based on the depth of the burn. First degree burns are the least severe, and third degree burns are the most severe. Call 911 or seek medical attention if you are unsure of how severe your burn is.

All burns are susceptible to [tetanus](#) (lockjaw). Get a tetanus shot every 10 years. If your last shot was 5 years ago, talk to your doctor - you may need a booster shot.

### **Causes of Burns:**

#### **Scalds**

Scalding injuries and burns are caused by hot tap water, hot beverages and food, and steam. Although scalding injuries can happen to anyone at any age, children, older adults and persons with disabilities are the most vulnerable. Sixty percent of all scald injuries are suffered by children between the ages of 0-4 years.

The most common areas where scalding injuries occur are in the kitchen or dining area from spills with hot liquids or foods and in the bathing area from hot water.

#### **Fires**

Prevent burns from fires by preventing fires in your home. Learn more about preventing fires under the [fire safety section](#).

If your clothes catch on fire **STOP, DROP and ROLL**.

**STOP** immediately.

**DROP** to the ground and cover your face with your hands.

**ROLL** over and over or back and forth to put out the fire.

Immediately cool the burn with cold running tap water until the area is free from pain even after removal from the water. Then seek emergency medical care, especially for burns on the face, hands, genitals or feet.

## **Electrical burns**

You may not recognize an electrical burn at first, but they can cause serious injury. Very often, the entry and exit points for the electrical current are not easily found so it's important to be extremely careful around a person with an electrical burn.

An electrical current, including lightning, can easily pass through our bodies. This can cause severe internal injury including disturbance in heart rhythm, cardiac arrest or respiratory difficulty or respiratory arrest. Seek medical attention if you think an electrical burn may have occurred.

## **Chemical burns**

Chemicals that are strong acids or bases can cause chemical burns. Household items that may cause burns include bleach, concrete mix, drain or toilet bowl cleaner, metal cleaners, or pool chlorinators.

All chemical burns are medical emergencies. Most will need outpatient care. Some may develop into or cause deep tissue damage. Signs and symptoms include:

- Redness or irritation at the site of contact
- Pain or burning sensation at site of contact
- Formation of blisters or discolored skin at contact site
- Vision changes if the chemical gets into your eye
- Cough or shortness of breath

And in severe cases, some may develop:

- Low blood pressure
- Faintness, weakness, dizziness
- Shortness of breath or severe cough
- Headache
- Muscle twitches or seizures
- Cardiac arrest or irregular heartbeat

## **Sunburn**

Sunburns are caused when a person's skin is exposed too much sun. Symptoms of sunburn include:

- Red, tender skin that feels warm to the touch
- Blisters which can develop anywhere from a few hours to a few days later
- Severe reactions including fever, chills, nausea or rash (sun poisoning)
- Peeling of the skin which will occur several days after a sun burn

Although these symptoms are temporary, the damage to your skin can be permanent. Too much exposure to the sun increases your risk of premature aging and skin cancer. Infants and children are more sensitive to sun and people with fair skin are more likely to get sunburn. But, everyone, no matter your age or skin tone, or whether it's sunny or overcast, should protect themselves from the sun's rays.

### **Treating Burns:**

*Treatment for burns depends on the type, severity and size.*

### **Treatment for minor burns – first and second degree burns no larger than 3 inches in diameter**

1. Cool the burn. Hold under cold running tap water until the area is free from pain even after removal from the water. If this is not possible cool with a cold compress.
2. Cover the burn with a sterile nonstick dressing and bandage. Don't use fluffy cotton or other material that may stick to or get lint in the wound. Wrap the bandage loosely to avoid putting pressure on burned skin. Bandaging reduces pain, protects blistered skin, and helps prevent infection.
3. Take an over-the-counter pain reliever. Aspirin, Ibuprofen (Advil, Motrin, etc.), naproxen (Aleve) or acetaminophen (Tylenol, etc). Use caution when giving pain relievers to children or teenagers. Although aspirin is approved for use in children older than 2 years, children and teens recovering from chickenpox or flu-like symptoms should never take aspirin.

### **Treatment for major/severe burns – call 911 or your local emergency number immediately**

1. Do not remove clothing that is stuck to the skin. However, do make sure the victim is no longer in contact with smoldering materials or exposed smoke or heat.
2. Do not immerse large severe burns in cold water. This could cause a drop in body temperature (hypothermia) and deteriorate blood pressure and circulation causing shock.
3. Check for responsiveness and signs of normal breathing. If there is no normal breathing begin [CPR](#).
4. Treat for shock: have the person lie on back, elevate legs if no trauma and maintain normal body temperature (cover with a sheet or blanket).

If you are unsure about the depth of the burn, treat it as a severe burn.  
DON'T use ice – can cause further damage to wound.  
DON'T apply butter or ointments – can increase severity of burn.  
DON'T break blisters – broken blisters are more vulnerable to infection.

### Treatment for electrical burns

Victims of electrical burns should always seek medical care. While waiting for medical care:

1. **Look first. Don't touch.** A person may still be in contact with an electrical source. If you touch them, the current can pass through you, causing you shock.
2. **Unplug or turn off the source of electricity, if possible.** If this is not possible, not touch the victim. Call 911.
3. **Check for responsiveness and normal breathing.** If there is no normal breathing, being CPR (cardiopulmonary resuscitation) immediately.
4. **If responsive and breathing, treat for shock.** Lay the person down and elevate the legs, if there is no trauma. Maintain normal body temperature.
5. **Cover the affected areas.** If the person is breathing, cover any burned areas with a sterile cause (nonstick preferred) or a clean cloth. Don't use a blanket or towel. The loose fibers can stick to the burns.

### Treatment for chemical burns

1. Identify the chemical that was involved. As work, have someone check the material safety data sheet (MSDS) for this information.
2. Move the victim away from fumes or ventilate the area.
3. With a gloved hand or piece of cloth, brush off any dry chemical.
4. Remove clothing and jewelry from the burn area.
5. Flush the entire area as quickly as possible with large amounts of running water. Flush until EMS personnel arrive to give definitive care or until a topic specific solution is available.
6. Contact the [Poison Control Center](#) in your area or 911. Many chemical burns may be treated with local wound care. Some chemicals can cause life- and limb-threatening injuries and need emergency care.
7. Victims with chemical burns to their eyes should always seek emergency care. Flush the victim's eye with large amount of running water until EMS arrives. Have a victim wearing contact lenses remove them.

### Treatment for sunburns

1. Take a cold shower or bath, or place cool cloths on your burn
  2. Avoid using creams that contain benzocaine, lidocaine and petroleum (Vaseline)
  3. If you have blisters, dry bandages can help prevent infection
  4. If you do not have blisters, use aloe vera to relieve some of the discomfort.
  5. Adults can use medications like ibuprofen to relive some of the pain from the burn.
- DO NOT** give children aspirin.

**The United States National Poison Hotline is  
1-800-222-1222.**

You will be automatically linked to your closest poison control center.