

# **Burns**

Burns are a frightening and painful experience. Even a small deep burn can cause permanent scarring. Your quick and immediate action may save life. **REMEMBER** : The best treatment for a burn is prevention.

## **Severity**

The severity of a burn depends on its size, depth and location. Burns are most severe when located on the face, neck, hands, feet and genitals, and when they are spread over large parts of the body or when combined with other injuries. Burns are especially serious for a child or an elderly person.

## **First degree (Superficial)**

A first degree burn involves only the top layer of skin. The skin is red and dry and usually painful. The burned area may also swell. Most sunburns are superficial burns. This type of burn usually heals in 5-6 days without any permanent scarring.

## **Second degree (Partial thickness)**

A second degree burn involves the top layers of skin. The skin is red or mottled with blisters that may open and weep clear fluid, giving the skin a wet appearance. Second degree burns are usually the most painful. These burns heal in 3-4 weeks, and scarring may occur.

## **Third degree (Full thickness)**

A third degree burn destroys all layers of skin and any or all of the underlying structures (fat, muscles, bones and nerves). The burn appears brown or black (charred) with the tissues underneath sometimes appearing white. This type of burn can be extremely painful or relatively painless if the burn destroys the nerve endings. This burn is critical and requires immediate medical attention.

## **Care and Treatment**

If a person's clothes are on fire:

- Ask or push the victim to the ground and get him or her to roll to douse flames. (Protect yourself from catching alight at the same time).
- Use water or a fire extinguisher to douse flames
- Bundle victim in a blanket or carpet etc to help smother flames

## **Care of Burns**

1. First ensure that you and the victim are out of danger.
2. Start cooling the affected area with running water.
3. Remove tight clothing and objects, e.g. jewellery before swelling occurs. If clothing is stuck to the burn, **DO NOT REMOVE IT**.
4. Treat for shock if the burn is severe.
5. Cover with a clean, non-adherent burn dressing (or plastic wrap etc.)
6. **NEVER** use home remedies like margarine or toothpaste. They lock heat in and cause infection.

## **Thermal Burns**

Thermal burns are caused by contact with open flames, hot liquids, steam, hot surfaces and other sources of high heat.

- Stop the burning. Remove the victim from the heat source.
- Cool the burn with cold water (not ice, except for superficial burns).
- Check breathing. Stop bleeding.
- Cover the burn with a sterile pad or clean sheet.

- Maintain body temperature and take victim to the nearest medical facility.
- Do not apply oils, sprays or ointments to a serious burn, and do not break any blisters.
- For severe burns, lay the victim down unless he or she is having trouble breathing.
- Try to raise the burned areas above the level of the victim's heart if possible, and protect the victim from drafts.
- For minor that are not severe enough to require medical attention, wash the burned area with soap and water, keep it clean and apply an antibiotic ointment.

### ***Chemical Burns***

Chemical burns can be caused by chemicals used in manufacturing or in a lab, or by household items such as bleach, garden sprays or paint removers.

- Flush skin with water for at least 20 minutes.
- Remove contaminated clothing, but avoid spreading the chemical to unaffected areas.
- If the victim's eyes are involved, flush the eyes continuously with water until medical help is obtained. Remove contact lenses.
- Check breathing. Stop bleeding
- Cover burn with a sterile pad or clean sheet.
- Maintain body temperature and take victim to the nearest medical facility.

Note: In cases involving some powdered or dry chemicals, it may not be appropriate to flush with water. If a dry chemical is involved, carefully brush the chemical off the skin and check the package or package insert for emergency information.

### ***Electrical Burns***

Electrical burns can be caused by power lines, lightning, defective electrical equipment, and unprotected electrical outlets.

- Pull the plug at the wall or shut off the current. Do not touch the victim while they are in contact with electricity.
- Check breathing. Stop bleeding.
- Do not move the victim because he or she may have spinal injuries.
- There may be two wounds, one where the current entered the body and one where it left, and they may be deep. The burn itself will not be the major problem.
- Cover burn with a sterile pad or clean sheet.
- Maintain body temperature and take victim to the nearest medical facility.
- All electrical injuries should receive medical attention.

In homes where young children are present, consider using "tamperproof" or child-proof plugs and plug hole covers. Limit your use of extension cords.

### ***Solar Radiation Burn (Sunburn)***

Burns caused by solar radiation may be painful and may also blister.

- Cool the burn.
- Use products designed for relief of sunburn
- Protect the burn by covering it staying out of the sun.
- If the sunburn is severe or is very extensive, seek medical attention.

If you must go in the sun, wear a sunscreen with an SPF of at least 15 and reapply it frequently. Be sure to cover up by wearing a hat and a shirt with long sleeves and collar.

### ***Smoke inhalation and airway burns***

These occur when the victim is trapped in burning enclosed space such as building.

- There may be no visible external burns and the only complaints may be shortness of breath, cough or headache.
- Beware of the danger of delayed complications such as carbon monoxide poisoning.
- Seek urgent medical care.
- Treat for shock if the burn is severe.