Burn: Full Thickness (Third Degree)

What is a third-degree burn?

A third-degree burn is the most serious kind of burn. It involves all layers of skin and may damage muscle and other tissues under the skin. It is so deep that only the edges heal. Scars will eventually cover the burned area if skin grafting is not done.

What causes a third-degree burn?

Third-degree burns are usually caused by:

- · Clothing on fire
- · Immersion in hot water
- · Contact with flames, hot objects, or electricity
- · Corrosive chemicals

What are the symptoms?

The skin may be white, or it may be black and leathery. There may be little pain in the burned area, but the areas surrounding the burn may be quite painful.

How is it treated?

All third-degree burns require medical treatment. **Call 911** for emergency rescue if available, or transport the person to an emergency room if rescue is not available. Assist a burned person as follows:

- If the person's clothes are burning, don't let the person run. Running can fan the flames so that they rise to the person's face. Smother the flames with a blanket, rug, or jacket, rolling the person on the ground if necessary.
- **DON'T** remove clothing that is stuck to the burn.
- Check for a pulse and breathing and begin cardiopulmonary resuscitation (CPR) if needed.
- DON'T put ice water, lotions, ointments, sprays, or home remedies on the burn.
- Remove jewelry and tight clothing from the burned area before swelling begins. If you cannot do this, emergency rooms have special tools for removing jewelry or clothing.
- If the burned area is small (just a few inches), put the burned area in cold water or put cold moist cloths on it **briefly** to bring the temperature of damaged skin and other tissue back to normal. Don't put a large area (for example, all of the lower body) in cold water, and don't leave the burned area in cold water too long. This could cool the body too much.
- If a large area has been burned, check for these signs of shock:
 - Decreased level of consciousness

- Rapid, shallow breathing
- · Faint, rapid pulse
- Nausea, sometimes followed by vomiting

If the person is in shock, be sure you have called for medical help. Don't move the person unless you have to. The person should be lying on their side to prevent choking if they start vomiting. Unless the person has trouble breathing or has pain, raise the feet. Cover the person with a blanket to conserve body heat. Keep him or her as calm as possible.

- Wrap the person loosely in a clean sheet if the burned area is very large. Otherwise, put a dry, loose bandage, such as a pillowcase or clean disposable diaper, on the burned area.
- Raise a burned arm or leg higher than the person's heart. However, keep the head and shoulders raised slightly if the person is burned on the neck or face or is having trouble breathing.
- If the person is conscious and not vomiting and if medical help is more than 2 hours away, give small sips of water or clear juice. If the person is in shock, however, and asks for water, moisten the lips but don't allow drinking. Drinking may cause vomiting and choking.
- · DON'T give the person alcohol.

For **chemical burns** follow these first-aid steps while making sure that you and the person who was burned have no more contact with the chemical:

- · Remove any clothing and jewelry on which the chemical has spilled.
- Flush **liquid chemicals** from the skin thoroughly with running water for at least 15 minutes. Be sure to avoid splashing the chemical in the eyes. After flushing, call the Poison Control Center for advice about the specific chemical that burned you, or have someone else call while you are rinsing the chemical off. It helps to have the chemical container with you when you make the call to make sure you give the correct name for the chemical.
- Brush **dry chemicals** off the skin with a soft, dry cloth if large amounts of water are not available. Small amounts of water will activate some chemicals, such as lime, and cause more damage, so keep dry chemicals dry unless very large amounts of water are available. Be careful not to get any chemicals in the eyes.
- Don't try to neutralize a chemical. For example, putting an alkali chemical onto skin that has been exposed to an acid will often produce a large amount of heat and may increase the burning.
- Once all of the chemical has been removed, cover the burn with a sterile or clean, loose, dry bandage and get medical care.

For **electrical burns**:

• All electrical burns must be examined promptly by a healthcare provider. An electrical burn may seem to have caused just minor damage, but it can go deep into tissues under the skin. The damage may not be obvious for several hours or even until the next day. Delayed treatment can cause more damage.

• Cover the area of the burn with a dry, loose bandage, such as a pillowcase or clean T-shirt. Don't put any ointments or other substances on the burned area.

Burns that cover a lot of the body are usually treated at a burn center.

How long will it take a third-degree burn to heal?

Third-degree burns may require hospitalization for a few days or for many weeks. Scars may require skin grafting and several operations by a plastic surgeon, depending on the severity of the burns. Soon after the injury, the burn may be covered with a temporary skin graft. Often the skin of a cadaver is used for the temporary graft. Later on, a permanent skin graft from a healthy area of your own skin may be done.

Developed by RelayHealth.

This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.

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