
Care of Burns

Burns are classified according to how deeply they penetrate the skin's layers, not by the amount of pain they cause or the extent of the body that is burned. A *first-degree* burn affects only the outer layer of the skin, such as a sunburn. With a first-degree burn, the skin may be dry and painful but it doesn't blister. A *second-degree* burn involves several layers of skin, which become swollen, bubbly, or blistered. Spilling hot or boiling water on yourself, for example, usually results in a second-degree burn.

The most serious type of burn is a *third-degree* burn, which goes down through all layers of the skin and can even reach underlying tissues or organs. For example, this can happen if someone's clothes catch on fire. The burned skin is often pale white or charred black and sometimes breaks open. In this case, nerves are destroyed or damaged, so that sensation in the outer layer of skin is usually lost.

Prevention

1. Do not smoke in bed.
2. Install a smoke detector on every floor of your home, and replace the batteries at regular intervals. A good way to remember to do this is to check it twice a year when daylight savings and standard time change.
3. Keep a fire extinguisher near the kitchen, and inspect it every year.
4. Set your water heater at 120 degrees or lower. This is especially important if you have young children.
5. If your clothing catches on fire, remember to: **STOP, DROP** down and **ROLL** on the ground to smother the flames; don't run unless you have to escape other flames.
6. When cooking, turn pot handles toward the back of the stove. Serious burns have resulted when children have spilled something that is cooking onto themselves by hitting or pulling on pot handles.
7. If food catches on fire, smother it with a lid or pot.
8. Make sure young children are closely supervised.
9. Store cleaning solutions and chemicals out of the reach of children and in well-ventilated areas.
10. Use proper fuses in electrical boxes, do not overload outlets, and use insulated and grounded electrical cords.

Home treatment

For a minor burn, the most important thing to do is to run cold tap water over it for 10 or 15 minutes. If you think the burn is serious or extensive, however, do not spend time doing this—get medical help immediately. Do not use ice, because ice can further harm damaged skin. You should also immediately take off any rings, bracelets, watches, or shoes from a burned limb, as they may be difficult to remove once swelling sets in.

For first or second degree burns, you probably don't need to see a health care professional. Here are three home treatment tips:

1. Don't cover the burn or put anything on it for 24 hours. If you're burned on a part of your body that is usually covered by clothing, place a gauze pad over the burn and make sure it is large enough so that the taped edges don't touch the burned area of skin. Change the bandage after 24 hours, and every two days after that.
2. If you have blisters, don't break them. If they do break, run tap water over the area and apply an antibiotic ointment, such as Polysporin or Bacitracin. Then cover the burn with a sterile dressing and take care not to touch it with your hands or anything else. Change the dressing and clean the wound every day.
3. For pain from burns, you might try taking ibuprofen, such as Motrin, acetaminophen, such as Tylenol, or regular aspirin. However, don't give aspirin to children and teens under the age of 20. Also, do not use these together with prescription pain medication unless you have checked with the pharmacist or doctor.

When to seek help

If you think you might have a third- or second-degree burn on the face, hands, feet, genitals, or a joint, seek immediate medical treatment by going to the Emergency Department. If you are burned on a fairly large part of your body, it can be a life-threatening situation and may require hospitalization and long-term care and treatment.

You should call your health care professional if you've had an electrical burn; if your pain lasts longer than 48 hours; if you develop signs of infection; or if an infant, older adult, or person with diabetes is burned.

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For more health information ...

- Connect to our Web site at members.kp.org. Here you'll find the Health Encyclopedia, which offers more in-depth information on this and many other topics, including "Burns to the Eye," "Sunburn," "Shock," and "Dealing with Emergencies."
- Check your *Kaiser Permanente Healthwise Handbook*.
- Listen to the Kaiser Permanente Healthphone at 1-800-332-7563. For TTY, call 1-800-777-9059.
- Visit your facility's Health Education Department for books, videos, classes, and additional resources.

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other medical professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor.