



Education

First Aid for Second-Degree Burns

What is a second-degree burn?

Second-degree burns are more serious than first-degree burns because a deeper layer of skin is burned. They can become infected more easily. Also, if the burn affects more than 10% of your body, you may go into shock because large quantities of fluid are lost from the burned area.

All second-degree burns greater than 2 to 3 inches in diameter should be treated by a medical professional. Smaller burns can usually be treated at home.

What causes a second-degree burn?

Second-degree burns are usually caused by:

- deep sunburn
- contact with hot items such as skillets or irons
- exposure to flames
- contact with hot liquids
- burning gasoline or kerosene
- contact with chemicals.

What are the symptoms?

The skin is bright red and has 1 or more blisters. Second-degree burns are often very painful.

How is it treated?

After the cause of the burn has been removed or controlled, the goals of treatment for second-degree burns are easing the pain and preventing infection.

For **chemical burns**, follow these steps (avoiding contact with the chemical):

- Remove any clothing and jewelry on which the chemical has spilled.
- Flush **liquid chemicals** from your skin thoroughly with running water for 20 minutes. Be sure to avoid splashing the chemical in your eyes. After flushing, call the Poison Control Center for further advice. It helps to have the chemical container with you when you make the call.
- Brush **dry chemicals** off the skin if large amounts of water are not available. Small amounts of water will activate some chemicals, such as lime, and cause more damage. Be careful not to get any of the chemicals in your eyes.
- Once all chemical has been removed, cover the burn with a sterile or clean, loose bandage and seek medical care.

For burns with **closed blisters**:

- Try not to break the blisters. If the blisters break, the exposed skin can become infected.
-

- Flush the burn with cool running water or apply cold moist cloths until the pain lessens. Do not use ice or ice water, which can cause more damage to the skin.
- Remove jewelry or tight clothing from the burned area before the skin begins to swell.

For burns with **open blisters**:

- Do not remove clothing if it is stuck to the burn.
- Run cool water over the burn unless the burn is several inches in size. Running water over a large burn might increase the risk of shock.

For **all second-degree burns**:

- Cover the burn with a clean (sterile, if possible), dry, nonfluffy bandage such as a gauze pad. Do not put tape on the burn.
- Do not put ointments, grease, petroleum jelly, butter, or home remedies on the burn. These substances can hold the heat in, making the burn worse.
- Take aspirin or ibuprofen to relieve pain and inflammation, or take acetaminophen to relieve pain.
- Keep burned arms or legs raised to reduce swelling.

Get medical care right away for second-degree burns bigger than 2 to 3 inches in diameter or for burns on the hands, face, penis, buttocks, or vaginal area.

- You will need extra fluids to replace the large quantities of fluids your body loses through the burned area. Your health care provider may give you fluids intravenously (through a tube into your vein).
- Your provider may prescribe antibiotics because the burned skin can no longer protect your body from infection by airborne bacteria.
- Your provider will either lightly bandage the burned area with an antibacterial dressing or leave it unbandaged, depending on the size and location of the burn.
- Your provider will prescribe medicine to kill the pain.
- Your provider may recommend a skin graft to lessen scarring.
- Your provider may give you a tetanus booster.

How do I take care of a burn?

For a small burn, after you have cleaned and bandaged the burn, leave it alone for at least 24 hours to allow the healing process to begin.

If your health care provider had told you to change your bandages, follow these procedures to help prevent infection:

- Wash your hands carefully with soap and water.
- Open the clean bandage, but leave it in its package until you are ready to put it on the burn.
- Take off the old bandage gently. Soak it off if it sticks to the burn.
- Wash the burned area gently as you are instructed by your health care provider.
- Check for any changes or worsening of the burned area, such as pus, swelling, or increased redness.
- Put a thin layer of the antibiotic cream provided to you by your provider on the burn.
- Cover with the clean bandage.
- Keep your follow-up appointments with your provider.

Call your health care provider right away if you have any of the following:

- fever over 100°F (37.8°C)
 - puslike drainage from the burned area
 - excessive swelling of the burned area
-

- increased redness of the skin
- a blister filled with greenish or brownish fluid or one that becomes hot again or turns red
- a burn that doesn't heal in 10 days to 2 weeks.

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

Usually, second-degree burns heal in 10 days to 2 weeks. There may be little or no scarring if the burn was not too extensive and if infection is prevented.

How can I help prevent burns?

Some examples of things you can do to help prevent burns are:

- Turn your water heater setting down to 120°F (48.8°C).
- Keep pot handles turned away from the stove front.
- Always wear sunscreen when outdoors.

Adult Health Advisor 2006.4; Copyright © 2006 McKesson Corporation and/or one of its subsidiaries. All Rights Reserved. Developed by McKesson Provider Technologies. 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.

