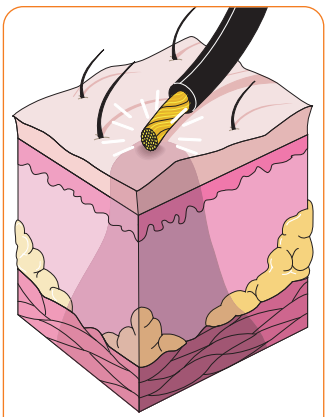
Electric Shock

Electric shock occurs when an electric current flows through the body. The human body is made up of 60% to 70% water. This makes it a good conductor of electricity. Burns, damage to internal organs, heart rhythm problems, and death, can result from electric shock.

Signs & Symptoms

- Shocking sensations. Numbness or tingling. A change in vision, speech, or in any sensation.
- Burns or open wounds. These occur where the electricity enters and exits the body.
- Muscle spasms or contractions.



Electric Shock can cause tissue damage under the skin's surface.

- Sudden immobility or fractures. A body part may look deformed.
- Interrupted breathing. Irregular heartbeats or chest pain.
- Seizures.
- Unconsciousness.

A small child who bites or sucks on an electric cord can have a facial injury or distinct burn around the rim of the mouth.

Causes

- Touching a high-voltage (more than 1,000 volts) source, such as high-tension wires that fall during a storm. Touching someone who is still touching a live current. Touching a low-voltage (less than 1,000 volts) current source, such as an electric socket or worn cord.
- Mixing water and electricity.
- Being struck by lightning. A bolt of lightning carries as many as 30 million volts.

Questions to Ask

Do any of these problems occur?
- The person is still in contact with the electric source or was in contact with a high-voltage wire.
- The person was struck by lightning.
- The person is not breathing.

YES → Get Medical Care Fast

{*Note:* Give first aid for the problem as needed. See next page.}

NO ↓

Has an electric shock gone through the body in such a way that it might have passed through the center of the chest? Or, are any **signs and symptoms of electric shock** listed in the left column present?

YES → Get Medical Care Fast

NO ↓

After having an electric shock, are any of these problems present?
- Cough with phlegm. Fever. Headache.
- Wounds are not healing.
- Tetanus shots are not up-to-date.

YES → See Doctor

NO → Use Self-Care

See Self-Care / First Aid on next page

Electric Shock, Continued

Treatment

Contact with electricity from a high-voltage wire or being struck by lightning needs emergency medical care. Contact with electricity from a low-voltage current needs emergency medical care if any signs or symptoms listed on previous page are present. A person who does not have any symptoms should still see a doctor to check for possible internal injuries.

To Avoid Being Harmed by Lightning

- Heed weather warnings.
- Take shelter in a building, if you can.
- Stay in your car (if it is not a convertible) rather than out in the open.
- If you are caught outside, avoid tall trees, open water, metal objects, and high ground. Crawl into a low-lying place or curl up on the ground, head to knees with your head touching the ground.

Self-Care / First Aid

Beware! Do not put yourself in danger to give first aid. Do not touch the person until power is shut off.

- If the source is a high-voltage wire or lightning, **call 9-1-1!**
- It is safe to touch a person struck by lightning.
- If the source is a low-voltage current, remove the fuse or switch off the circuit breaker to the electrical outlet.
- If you can't shut off the source, with dry feet and hands, use a board, wooden stick, rope, etc. to get the person away from the source.
- If it is safe for you to touch the person, check for a response. (See Step 2 at www.HealthyLearn.com.) Give **CPR**, as needed. (See at www.HealthyLearn.com).
  - Unless it is absolutely necessary, don't move the person. He or she could have a traumatic injury, especially to the head or neck.
  - Check for burns. Cover burned areas with dry, sterile dressings.
  - Give first aid for **Shock** (see at www.HealthyLearn.com), if needed.

Prevention

- Stay clear of fallen wires. Inform the police, electric company, etc.
- Install ground-fault circuit-interrupters (GFCIs) in wall outlets of bathrooms, kitchens, etc. With GFCIs, when an electrical appliance falls into water, the current is instantly cut off.
- Don't turn electrical switches on or off or touch an electric appliance while your hands are wet, while standing in water, or when sitting in a bathtub.
- Replace worn cords and wiring.
- Cover all electric sockets with plastic safety caps.

Heed warnings to avoid electrical hazards.

- Before you do electrical repairs, remove the fuse from the fuse box or switch off the circuit breaker. Don't just turn off the appliance or light switch.