

# Electrical Safety

## around swimming pools, hot tubs, and spas

**For many of us, water activities equal fun. But it's important to be aware of electrical hazards while enjoying the water. Know how to be safe around swimming pools, hot tubs, and spas.**

- If you are putting in a new pool, hot tub, or spa be sure the wiring is performed by an electrician experienced in the special safety requirements for these types of installations.
- Outdoor receptacles must have covers that keep them dry even when appliances are plugged into them.
- Ground-fault circuit interrupters (GFCIs) are special devices designed to protect against electric shock and electrocution. They are required for most pool, spa or hot tub equipment. They may be in the form of an outlet or a circuit breaker. Test the GFCIs monthly according to the manufacturer's instructions.
- Electrical appliances, equipment, and cords should be kept at least 6 feet away from the water. When possible, use battery operated appliances and equipment, such as televisions, radios, and stereos.
- Avoid handling electrical devices when you are wet.
- Make sure that any overhead lines maintain the proper distance over a pool and other structures, such as a diving board. If unsure, contact a qualified electrician or your local utility company to make sure power lines are a safe distance away.
- Do not swim during a thunderstorm.
- Have a qualified electrician periodically inspect and—where necessary—replace or upgrade the electrical devices or equipment that keep your pool, spa, or hot tub electrically safe.
- Have a qualified electrician show you how to turn off all power in case of an emergency.

## KNOW THE RISKS!

Electrocution is death by an electrical shock. Be aware when skin is wet or when surrounding surfaces, such as the grass or pool deck, are wet. Wet skin or wet surfaces can greatly increase the chance of electrocution when electricity is present.

There are several signs of electrical shock. Swimmers may feel a tingling sensation. They may experience muscle cramps. They may not be able to move. They may feel as if something is holding them in place.

If you think someone in the water is being shocked, turn off all power, but do not attempt to go in the water. Use a fiberglass or other kind of rescue hook that doesn't conduct electricity to help the swimmer. Have someone call **9-1-1**.

If you think you are being shocked while in the water move away from the source of the shock. Get out of the water.

## FACT

The U.S. Consumer Product Safety Commission has reports of 14 deaths related to electrocutions in swimming pools from 2003 to 2014. Hot tubs and spas may present the same hazard as swimming pools.



**NATIONAL FIRE  
PROTECTION ASSOCIATION**  
The leading information and knowledge resource  
on fire, electrical and related hazards