

Power for your life

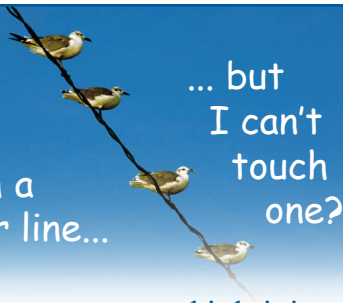
Electrical safety for energy-smart kids

The power of electricity

You use electricity everyday to run the lights, television, computer, video games and more. It is easy to take for granted, but electricity can also be dangerous if not respected. Wherever there is electricity, there is power. And wherever there is power, there's danger. Each year in the United States, hundreds of lives are lost and thousands are injured in needless electrical-related accidents.¹ That is why it is important to know what to do to stay safe around the power of electricity.



Why can a bird touch a power line...



... but I can't touch one?

Have you ever seen a bird sitting on a power line, and wondered how it can sit there without getting a shock? No, birds aren't magic! They stay safe because electricity is always looking for a path to the ground, and as long as they are not touching anything to ground the electricity, they will stay safe. But if you touched an electric line while standing on the ground, on a ladder or in a tree, you would complete the electric circuit. The electricity would flow through your body on its way to ground, seriously injuring or killing you.

Learn how electricity can hurt you

Electricity is always trying to get to the ground, and it takes shortcuts whenever it can. That includes moving through any object that conducts electricity. Some of the best conductors for electricity are water and metal. Since the human body is mostly water, you are unfortunately a great conductor! If you touch an electric circuit and the ground at the same time, or even if you are touching something that connects an electric circuit to the ground, such as a ladder or a tree, you will become electricity's best path. Electricity will flow through you and you could be seriously hurt or killed.



Other ways electricity can hurt you is through water. You can become the path to ground if you are touching water that touches electricity. This is why you should never be in water when a lightning storm is nearby. Never touch any electrical device when you have wet hands or any part of you is wet.

Electricity and water do not mix!

Consider this: a single bolt of lightning is hotter than the surface of the sun, and has enough power to light an entire home for a month! Outside, power lines and substations are the main sources of electricity for homes and communities. So if an outlet can give you a shock, think how powerful a shock from a power line or substation would be!





Ways to protect yourself

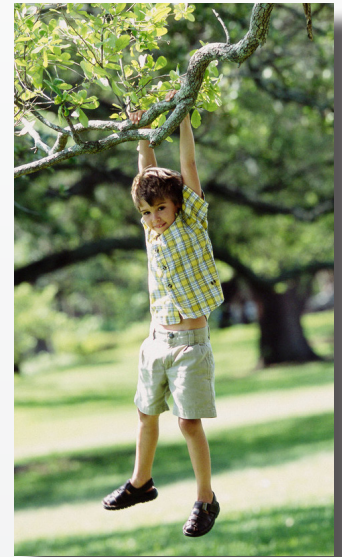
Now that you know how electricity travels through conductors looking for the quickest path to ground, here are some tips to keep you safe from electric shock.

Electrical safety and water

- 💧 Water and electricity never mix! Keep all electronics at least ten feet away from pools, hot tubs and bathtubs.
- 💧 Never plug in or unplug anything with wet hands, or if any part of you is wet.
- 💧 Tell your parents to be sure all outlets outside, and any indoor that are near water are GFCI (ground fault circuit interrupter) outlets.

Outdoor electrical safety

- ⚡ Never climb trees that have grown into or near electrical wires. Even if the tree is not touching the line, your weight or the wind could cause the tree to touch the line.
- ⚡ Don't fly kites or model airplanes around electrical wires, or on a cloudy day when a thunderstorm is brewing.
- ⚡ Storms can move rapidly, and lightning is a potential danger even many miles in advance of a storm. Learn the saying, "If thunder roars, go indoors," and do not seek shelter under a tree or open picnic shelter.
- ⚡ If you are ever involved in a vehicle accident and your vehicle is touching power lines, stay in the car until an electric utility worker tells you it is safe. You are safe while in the car, protected by the rubber tires. But if you step onto the ground, your foot becomes the path to ground and the electricity will flow through your body.



Safety around electrical equipment

- † If you see fallen wires, keep other kids away from them and tell an adult and call your local electric cooperative.
- † Stay away from places that have Danger: High Voltage signs and keep your friends away too.
- † Don't play on or around pad-mounted electrical equipment.
- † Never climb a utility pole or tower. The electricity carried through this equipment is extremely high voltage and could kill you.
- † Never go into an electric substation for any reason. Electric substations contain high-voltage equipment, which can kill you. Never rescue a pet or retrieve a ball or toy that goes inside. Call your electric utility instead.



Indoor electrical safety

- 🔌 Don't overload electrical outlets with too many appliances.
- 🔌 Never stick a utensil into a toaster or other electrical appliance.
- 🔌 Never use an appliance with a frayed or damaged cord.

