

Monterey Educational Risk Management Authority

Loss Control Services – 5 Minute Safety Topic – Electrical Safety

Electrical safety is important, but by no means the end of the road when it comes to adequate protection against electrical hazards. This brief topic on electrical safety will by no means make you sufficiently prepared for tasks involving work with or around electricity. Rather, this electrical safety discussion will give you a foundation on which to build your knowledge to best protect against the typical dangers of electrical hazards.

Why is Electrical Safety Important? Simply put, electricity is dangerous. As such, anyone working with or near electricity should be educated on how to properly prevent basic electrical safety hazards. Unfortunately, this wonderful thing we call electricity can be conducted by human bodies. With greater misfortune still is that when electricity runs through a human body, it can cause severe damage. When a human body conducts electricity, the experience can range from painful shock to fatality. Surprisingly, relatively small currents can have dramatic effects. It is important to understand the difference between voltage and current. A basic analogy for voltage is that it is the electricial equivalent of water pressure. Amperage is like flow of water. A relatively small flow of electricity (amps) at a standard voltage can cause a painful shock. For example, the small amount of power that flows into a laptop can be enough to cause a severe shock hazard.

Electrical Safety Tips

- Never use electrical tools on damp ground or around water.
- Never insert anything (especially metal) into an electrical appliance (such as a toaster).
- Do not overload electrical outlets with too many electrical plugs.
- Wear rubber gloves and rubber boots when working near electrical components.
- Inspect tools and appliances for wear and damage prior to use. Do not use a damaged or malfunctioning item.
- Use electrical tape or non-conductive cable ties for power cord management, do not use staples.
- Always use the correct size fuse; never use a fuse with a larger amperage rating than the original.
- When working near electrical equipment, use ladders made of wood or fiberglass instead of metal.
- If you lack knowledge about some work involving electricity, stay away!
- Know where breakers and electrical boxes are in case of an emergency and what they control.
- Label circuit breakers clearly remember, a tripped circuit breaker may mean there is an electrical problem.
- Do not use electrical outlets or cords with exposed wiring.
- Do not touch a person or electrical apparatus in the event of an electrical accident. Always disconnect the power first!

Electrical safety awareness may mitigate the risk of electrical danger. In the workplace, there should be policies and safety guidelines on electrical safety practices. If you spend a good portion of the day working directly with electricity (plugging things into electrical sockets, dealing with power cords, many electrical appliances, etc), you should definitely make sure you are sufficiently educated to prevent harm to yourself and others. Always use caution with electricity and let experts take care of diagnosing and correcting problems. Think about safety!

