



6-minute safety talk for plumbing

Instructor Guide

Electrical Safety

Topic overview (why the topic is important to the students)

Plumbers are not qualified to undertake electrical work, but their work involves powered tools and can bring them into contact with 240 volt wiring. Electric shock and electrocution happen when a person becomes part of an electrical circuit and the current flows through their body. Unsafe work practices, electrical faults, lack of maintenance, or short circuits can cause serious injuries and even death.

Demonstration and Discussion Topics

- **Discuss** electrical hazards in the shop, including power tools and cords. Topics to cover include:
 - Drilling into walls when connecting water services - the location of electrical wiring must be established first.
 - Using powered tools in proximity to water supply, and out of doors in all weather conditions. Contact between water and electricity can cause shock or electrocution. Keep electric leads away from water.
- **Tour the shop** with the students, pointing out electrical hazards.
- **Show** the students where the main breaker is located and how to turn it off.
- **Distribute** the student handout.
- **Review** the safety tips. Discuss the safety alert on page 2.
- **Remind** students that they are required to wear appropriate rubber-soled footwear.
- **Make it real.** Tell two stories of electrical injuries from your experience, or use the following example:
 - A young worker contacted electrical energy when he kneeled to plug a power screwdriver into a 100-120 V/20 amp floor outlet. The victim was found convulsing on the damp floor, with one hand on the plug and the other on the receptacle box. The supervisor went to the electrical panel, but was unable to locate the appropriate circuit breaker for approximately 5 minutes. A coworker attempting to take the victim's pulse received an electrical shock, but was not injured. Paramedics attempted resuscitation but the worker was declared dead at the scene.
- **Discuss** the attitude that "it won't happen to me". Remind them that an injury can and will happen if they take shortcuts or are careless.

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- Instruct** the students to identify and report any safety concerns about electrical hazards.
- Answer** any questions or concerns they might have.
- Set a good example** by working safely at all times.

Resources

- Working Safely Around Electricity
http://www.worksafebc.com/publications/health_and_safety/by_topic/assets/pdf/electricity.pdf