## **Laboratory Safety: Electrical Safety in the Laboratory Training**

Electricity powers modern laboratories, and special precautions must be used when working with electrical equipment. Electrical equipment in labs must safely coexist with people as well as flammable or explosive fluids and vapors. Ensuring lab workers understand the properties of electricity and how to work with it safely is the goal of this Video On Demand.

An initial discussion of how electricity works, explains volts, current and amperage, control devices such as on/off switches, fuses and circuit breakers, the principles of grounding and the usefulness of ground fault circuit interrupters. Subsequently, safe work practices to prevent fires, shocks and burns are emphasized. Tips on checking wiring insulation, equipment inspection, and prohibiting the use of extension cords helps prevent accidents. A discussion about the proper selection of lab equipment when working with flammable materials stresses excluding home appliances. Finally, dealing with electrical emergencies is detailed, and the advisability of obtaining cardio pulmonary resuscitation is stressed. A brief discussion of fighting electrical fires is also included.

It is easy to take electricity for granted, and to fail to recognize its life-giving and life-taking powers. This video training program equips lab workers with fundamental knowledge about how electricity works, how to protect themselves and the lab from wayward current, sparks and fire, and how to respond if someone receives a shock or electrical burn. Since only six-one hundredths of an amp can be fatal if it strikes a person's heart, there is little margin for error when dealing with this ever-present power source. The time lab workers spend viewing this video could prevent a fatal accident, or a serious injury or property damage incident.

- Full-screen video presentation
- Print certificate of completion
- You have 60 days to complete the course

## **Audience**

All laboratory workers

## **Topics**

The course presents the following topical areas:

- Introduction How Electricity Works
- Grounding
- Safe Work Practices
  Equipment & Flammables
  Electrical Emergencies
- Review

