

## **HSWG29: Managing Electrical Safety – Principles of Electricity and Its Effects**

Electricity is such a ubiquitous source of energy - and is so familiar - that it is frequently used in unsafe ways. As a result, the Health and Safety Executive receives, on average, reports of between 25-30 fatalities, and about 1000 major injuries per year as a result of accidental contact with electricity at work.

Many of those killed or injured by contact with electricity are not doing electrical work when they receive an electric shock. Instead they are engaged in other tasks such as carpentry, labouring, machinery maintenance or building work.

This course does not provide any detailed technical knowledge of electricity or how to carry out electrical work. Instead it seeks to ensure that the learner has a general appreciation of what electricity is, and the ways in which it can cause harm to humans. This will enable the learner to identify and manage the precautions necessary to avoid electric shocks.

### **Course Content**

- Understanding the terms 'voltage', 'current' and 'resistance'
- An overview of Ohm's Law
- The effects of electricity on the human body
- The factors affecting electric shock
- How electricity causes:
  - Burns
  - Shock
  - Arcing
  - Fires
  - Explosions

### **Course Duration**

- 40 minutes

### **Available in:**

- Audio

### **Delivered via:**


- Internet

**If you require any further information please contact NYES:**

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