

**KNOWLEDGE**

An electrical shock from an outlet at home (120V) may be enough to kill a person.

- True
- False

Electrical Safety, slide # 5

The most important electrical current characteristic that determines the health effects in case of electrocution is:

- Voltage
- Resistance
- Complexity
- Amperage

Electrical Safety, slide # 6

A ground fault circuit interrupter (GFCI) is required when using an electric tool in a wet area because it will:

- Protect the equipment
- Prevent electrocution
- Prevent fires
- Prevent circuit overheating

Electrical Safety, slide # 7

A circuit breaker is designed to:

- Protect people from random electric shocks
- Protect the equipment when a circuit is overloaded
- Reduce the risk of fire by preventing wire overheating
- Repel water when tools are used in a wet location

Electrical Safety, slide # 7

In case of an emergency involving electrical shock, you should do which of the following?

- Turn off the source of electrical current
- Touch the victim if still in contact with the "live" circuit
- Pry the victim from the energized circuit using plastic or wood objects
- Move the victim to fresh air as soon as possible
- Use a defibrillator (AED) if the victim is breathing but has rapid irregular heart rhythm
- Perform CPR if the victim is not breathing and you've been trained

Electrical Safety, slide # 17

OSHA requires that in a shop, electrical panels:

- Have unprotected circuit breaker openings, with wires visible
- Have a label that identifies the equipment serviced by each breaker
- Have at least 36 inches of clear space in front of the panel door
- Are permanently locked
- Are unobstructed at all times

Electrical Safety, slide # 15



**Testing a GFCI with a running tool plugged in:**

- ✓ The best way to ensure the outlet is wired correctly
- ~~○ The worst way to test that the circuit is wired correctly~~
- ~~○ Not needed if the “test” and “retest” buttons work~~
- ~~○ Not permitted and not recommended~~

Electrical Safety, slide # 16

**Which of the following health effects can occur when a person comes in contact with a “live” electrical wire?**

- ✓ Rapid heart beat
- ✓ Brain death – from lack of oxygen to the brain
- ✓ Muscle contractions
- ✓ Blood clots
- ✓ Broken bones or torn ligaments
- ✓ Burns

Electrical Safety, slide # 7

