

What protective devices and procedures can you use to prevent electrocution?

[Ask the following questions and give time for answers.]

What are the hazards? Bodily contact with electricity due to faulty equipment, ungrounded or damaged equipment, wet conditions, etc.

What are the results? Shock, fire, burns, falls or death

What should we look for? Proper training in using engineering controls (e.g. GFCIs, proper cords), assured equipment grounding conductor written program, electrical testing meters

American Wire Gauge (AWG)	
Cord Size	Handles Up To
#10 AWG	30 amps
#12 AWG	25 amps
#14 AWG	18 amps
#16 AWG	13 amps

[Relate this incident or, better, one you know.]

Actual Incident: A 29-year-old male welder was electrocuted and died when he contacted an energized receptacle end of an extension cord. It was found that the welding unit and cord were incompatible, however, both the welding cord and extension cord were damaged allowing them to be used together. The result was an ungrounded system that killed a worker.

[Ask the following question and ensure every item is covered.]

How do we prevent these results?

- Inspect all electrical equipment before use.
- Use GFCI with all power tools.
- Use intact and properly-rated cords (i.e. correct AWG).
- Do not use damaged equipment - take it out of service.
- Institute an assured equipment grounding conductor program.
- Use testing meters, where appropriate, if you are trained to do so.



[Ask the following questions about this site and ensure every item is covered. Show site's grounding conductor program and engineering controls. Consider cutting the head off of a damaged cord to make a point.]

Let's talk about this site now.

- Can someone explain how a GFCI works? (Hand them a GFCI to use).
- Who has read this site's assured equipment grounding conductor program? What are some of the requirements?
- Who here needs new extension cords, GFCIs or other equipment replaced due to electrical safety issues?

Record questions below that you want to ask about this site.]