
Discussion Leaders Guide Session Electrical Hazards

1. Preparation

- You will need a DVD player and a television.
- Review the **Tell**, **Ask** and **Review** portions of the Discussion Leaders Guide. You will be presenting the material in *italic* to the group during these sections.
- Preview the video before you show it.
- Ensure that everyone attending the training can easily see and hear the video.
- Print the handouts prior to the training.

Training Day

2. Introduce the Topic

Tell: *Today we are going to review the workplace hazards that come from working around electricity. The training will include both a DVD presentation and discussion time. You may be asked questions during the discussion time.*

*Look at your handout titled **Hazards Identification**.*

Remember that hazards are conditions or actions that can cause injuries, illness or even death.

We use electricity every day at work and at home. It is easy to forget that electricity is dangerous. Electrical shock happens when electrical current flows through the human body. The result of electrical current flowing through the body can cause serious injury or death.

Some common hazards related to working around moving equipment, specifically forklifts or order pickers are:

- *Forgetting that water and electricity are a deadly combination. Water conducts electricity.*

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- *Using electrical equipment in wet areas without using a ground fault circuit interrupter (GFCI). A GFCI is a safety device used in wet areas that can cut off the flow of electricity if a short occurs.*
 - *Sparking, smoking or overheating equipment or power tools.*
 - *Corroded, outlets, switches or circuit boxes.*
 - *Missing outlet covers or missing circuit faceplates that expose bare wiring.*
 - *Overhead power lines.*
 - *Using frayed or damaged electrical cords.*
 - *Ground plugs missing or removed from electrical cords.*

Note: Use examples from your own workplace if available.

Let's start the DVD now.

3. Start the DVD

- Select your language choice
- Select scenario

4. The DVD has paused

5. Encourage discussion

ASK: *Why is this situation hazardous?
Could this situation happen here?
What should the worker do to prevent an accident from happening?
What can we do to reduce equipment hazards here?*

6. Restart the DVD

7. Review

Tell: *Eliminating potentially serious accidents requires everyone to be knowledgeable of the hazards and avoiding them.*

*Look at your handout titled **Preventing**.*

Let's review a few of the prevention steps:

- *NEVER throw water on an electrical fire. Water conducts electricity and will make the fire spread. A chemical fire extinguisher should be used in the case of an electrical fire. Only use a fire extinguisher if you have been properly trained on how to use one.*
- *Never use an extension cord that has been damaged. If you find a damaged cord report it to your supervisor.*
- *Always disconnect the power source before repairing or servicing electrical equipment.*
- *Look up when working outside to make sure you will not encounter power lines.*
- *Do not overload circuits, outlets, power strips or extension cords. Never plug an extension cord or power strip into another extension cord or power strip.*
- *Inspect the insulation on the power cord of the equipment you will be using. Never tape or splice a cord.*
- *Keep walkways and areas around the electrical panels clear so the electricity can be shut off quickly in an emergency.*

Keep your eyes on safety at all times when working with electricity. Immediately inform your supervisor of any faulty tools or equipment so it can be repaired or replaced. Electricity. Unless you have been trained, never work on or near exposed electrical parts without the parts being de-energized and locked out.

Note: Review the company's Lockout/Tagout program.

Are there any questions?

ADDITIONAL RESOURCES

Lockout/ Tagout Programs: Anytime that powered equipment is being repaired or serviced there is potential for injury. The purpose of a Lockout/Tagout program is to isolate the energy sources or dissipate stored energy. Sources of energy associated with a Lockout/Tagout program include; electricity, hydraulic and pneumatic pressure, spring tension and gravity. If you suspect you need a Lockout/Tagout program more information can be obtained from Oregon OSHA or your workers' compensation insurance carrier.

Hazards Identification Electrical Hazards

To prevent accidents you must know how to identify hazards and what to do to correct or eliminate them.

Hazards = Conditions or actions that can cause injury or illness

Exposure = How close you are to the hazard

Common Hazards

- Forgetting that water and electricity are a deadly combination. Water conducts electricity.
- Using electrical equipment in wet areas without using a ground fault circuit interrupter (GFCI). A GFCI is a safety device used in wet areas that can cut off the flow of electricity if a short occurs.
- Sparking, smoking, or overheating equipment or power tools.
- Corroded outlets, switches or circuit boxes.
- Missing outlet covers or missing circuit faceplates that expose bare wiring.
- Overhead power lines.
- Using frayed or damaged electrical cords.
- Ground plugs missing or removed from electrical cords.

Preventing Electrical Hazards

We use electricity everyday to power machinery, lights, heaters and equipment. However, electricity can be very dangerous.

THINK....Ahead

- Water and electricity don't mix. Never use electrical equipment in or around water. Use a waterproof cord when working outside
- Never use an extension cord that has been damaged. Never tape or splice electrical cords.
- Inspect your electrical tools regularly. Don't use any tool that smokes, sparks or gives a slight shock.
- Look up, when working outside to make sure you will not encounter power lines.

ACT....Now

- Immediately inform you supervisor of any faulty tools or equipment so it can be repaired or replaced.
- Inspect the insulation on the power cord of the equipment you will be using.
- Use grounded or double insulated tools.
- Always disconnect the power source before repairing electrical equipment.

WATCH.....Your Step

- Keep walkways and areas around the electrical panels clear so the electricity can be shut off quickly in the event an emergency
- NEVER throw water on an electrical fire. Water conducts electricity and will make the fire spread. Use a chemical fire extinguisher for an electrical fire.
- Do not overload circuits, outlets, power strips or extension cords. Never plug an extension cord or power strips into another extension cord or power strip.
- Unless you have been trained, never work on or near exposed electrical parts without the parts being de-energized and locked out.