



Training Solutions, Delivered!

ELECROCUTION HAZARDS IN CONSTRUCTION

**Leader's Guide, Fact Sheet
& Quiz**

Item Number: 5249
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This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes before the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

5249 ELECTROCUTION HAZARDS IN CONSTRUCTION FACT SHEET

LENGTH: 2:58 MINUTES

PROGRAM SYNOPSIS:

There are three major types of electrocution hazards in the construction industry: contact with power lines, contact with energized sources, and the improper use of extension and flexible power cords. Before conducting any construction work, survey the site for overhead powerlines. If you plan on digging, have all underground utilities located and marked before getting started. The best way to protect yourself from the danger of overhead power lines is to always maintain the required safe distance between you and any energized power line. Don't use metal ladders or conductive tools and materials when working near any energized electrical parts.

PROGRAM OBJECTIVES:

After watching the program, the participant should be able to explain the following:

- What electrocution injuries are;
- The hazards involved with working with electricity;
- Why being aware of surroundings is important;
- The importance of using proper PPE and housekeeping.

INSTRUCTIONAL CONTENT:

ELECTROCUTION HAZARDS IN CONSTRUCTION

- Electrocution Hazards are one of the leading causes of injuries and fatalities in construction and are one of OSHA's "Fatal Four" construction hazards.
- There are three major types of electrocution hazards in the construction industry: contact with power lines, contact with energized sources, and the improper use of extension and flexible power cords.
- Before conducting any construction work, survey the site for overhead powerlines. If you plan on digging, have all underground utilities located and marked before getting started.
- The best way to protect yourself from the danger of overhead power lines is to always maintain the required safe distance between you and any energized power line. Typically, this distance is 10-feet for up to 50,000 Volts.
- Also, don't use metal ladders or conductive tools and materials when working near any energized electrical parts.
- Making contact with energized sources can result in electrical shocks and burns. To avoid such injuries, stay out of electrical rooms and avoid any electrical equipment.
- Don't touch any open or uncovered electrical boxes, breakers or panels. Also, never perform electrical work if you are not a qualified electrical worker.
- Another way to protect yourself from electrical shocks and burns is to make sure the equipment you are using has a ground fault circuit interrupter, or GFCI. In addition to using GFCI's, you should follow these precautions, avoid working on electrical equipment in damp or wet conditions.
- Never allow metallic items or tools to make contact with energized electrical parts. Follow appropriate lockout/tagout procedures to de-energize electrical equipment and wear the appropriate PPE, or personal protective equipment.
- Electrocution hazards are also created when extension and flexible power cords, plugs and grounding prongs become damaged. To avoid the risk of electrocution, always inspect tools and power cords before use. If a plug is designed to have a ground pin, make sure it is fully intact and in good condition.

- Also, never carry a tool by the cord. Never pull on a cord to disconnect it from the outlet. Keep cords away from heat, oil and sharp edges.
- Properly store and maintain your cords and don't use extension and flexible cords in wet or damp conditions.
- Construction workers must be able to recognize and avoid these electrocution hazards and follow the safe work practices and procedures required to prevent injuries and fatalities.

ELETROCUTION HAZARDS IN CONSTRUCTION

ANSWERS TO THE REVIEW QUIZ

1. b

2. c

3. d

ELECTROCUSSION HAZARDS IN CONSTRUCTION
REVIEW QUIZ

Name _____ Date _____

The following questions are provided to determine how well you understand the information presented in this program.

1. Which of the following is not one of the three major types of electrocution hazards in the construction industry?
 - a. Contact with power lines
 - b. Static discharge
 - c. Contact with energized sources
 - d. Improper use of extension and flexible power cords

2. For power lines up to 50,000 volts, always maintain a distance of at least _____.
 - a. 5 feet
 - b. 25 feet
 - c. 10 feet
 - d. 100 feet

3. Which of the following will help prevent being shocked while using an extension cord or flexible power cord?
 - a. Using a GFCI
 - b. Avoiding wet conditions
 - c. Inspecting the cord and tool before use
 - d. All of the above