SAFETY TRAINING

Training Solutions, Delivered!

WORKING SAFELY WITH HAND TOOLS

Leader's Guide, Fact Sheet & Quiz

Item Number: 1596

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.

1596 WORKING SAFELY WITH HAND TOOLS
FACT SHEET

LENGTH: 9 MINUTES **PRODUCTION YEAR: 2004**

PROGRAM SYNOPSIS:
Because simple hand and power tools are commonly used for many basic job tasks, we often fail to consider the dangers associated with using them improperly or in an unsafe manner. Fortunately, most injuries involving tools can be avoided when we keep them in good working condition and use them properly.

In this program, viewers are shown the basic safety rules that will greatly reduce the risk of injury during hand tool use. Stressed is the importance of having a good safety attitude and exercising proper judgment while using such tools as wrenches, pliers, screwdrivers, and striking tools.

PROGRAM OBJECTIVES:
After watching the program, viewers should be able to explain the following:
- Basic safe work practices for using common hand tools;
- Some of the unsafe acts committed with these tools that should never be practiced;
- The importance of always using the correct tool for the job.

PROGRAM OUTLINE:

INTRODUCTION
- Our tools: indispensable to our ability to do even the simplest tasks. Turn a bolt, drill a hole, drive a nail, cut a board or a pipe. There's as many different tools as there are jobs to be done.
- And while each type of tool is designed for a specific job, they all have one thing in common. They must be kept in good working condition and be used properly to avoid injury.
- Because simple hand and power tools are commonly used for many of our basic job tasks, we often fail to consider their dangers when they are used improperly or in an unsafe manner.
- In this video, we will discuss specific safe work practices and highlight common mistakes made by operators of hand and power tools. Let's take a closer look at some common tools and examine some simple rules you can follow to help you work safely.

WRENCHES
- Wrenches take advantage of grip and leverage to allow us to turn a bolt, nut, pipe or other materials we could not turn by hand. The same features that give a wrench its power can also present hazards.
- Because a wrench can apply significant leverage, a significant amount of force is quickly set into motion when the material breaks free or the wrench slips. This force may smash knuckles or cause a loss of balance.
- When a loss of balance occurs while on a ladder or other elevated working surface, a fall can easily occur.
- When using a wrench, always be prepared for the wrench to slip. If you're expecting the wrench to slip, you're better prepared to prevent an accident or injury.
- To reduce the chance of a wrench slipping, make sure the wrench you choose is the right size for the nut or bolt. Besides leading to a slip, a loose fit can damage the wrench or strip the nut or bolt.
- One common mistake is to use a metric wrench on a standard nut or bolt. Always use the proper tool for the job.

PLIERS
- Just as there are many types of wrenches, pliers also come in a wide variety of types and sizes. Like wrenches, you should always use the right pliers for the job.
- While many pliers are versatile and adaptable for many jobs, none should be used to turn nuts and bolts as the pliers or fasteners can easily be damaged. A wrench is the appropriate tool for that job.
- To prevent damage, never expose pliers to excessive heat. Jobs involving high temperatures require a clamp designed to withstand heat.

- When using cutting pliers, always cut at right angles. Don't rock the pliers from side to side or bend the wire back and forth to finish the cut.
- Never use pliers as a hammer or hammer on the handles; they can easily be damaged.
- If you need greater leverage than cutting pliers provide, get a larger pair or a bolt cutter.
- Pliers should be oiled occasionally at the hinges to make them easier to operate and to make them last longer.
- Just remember when using these types of tools, make sure the grip is secure, use the right tool for the job, and prepare yourself for the tool to slip.

SCREWDRIVERS

- Another common tool that uses grip and leverage to turn an object is a screwdriver.
- When a screwdriver slips, the force generated usually causes a stabbing-type motion that can damage anything in its path. Common screwdriver injuries include stab wounds to the hands, thighs, abdomen, and eyes.
- To reduce the chance of a slip, select the proper sized screwdriver for the screw being turned. Whether you are using a slotted screwdriver or a Phillips head, the blade should fit snugly into the slotted area. Using a blade that is too big or too small can damage the screw and cause the tool to slip.
- Be prepared in advance for the tool to slip. Don't place body parts in the path of a potential slip; take a moment to evaluate your body placement and make any necessary adjustments before applying pressure with the screwdriver.
- Never use a screwdriver as a chisel, punch or pry bar. One slip and a serious injury is likely to occur.
- When driving a screw, make sure to make a pilot hole first. For smaller screws, use an awl; use a drill to make the pilot hole on harder materials or when using larger screws.

STRIKING TOOLS

- Striking tools such as hammers are probably the most used hand tools and unfortunately, the most widely abused tools. They are made in various types, sizes and configurations for a variety of purposes.
- To prevent a hammer or the striking surface from chipping, only select and use hammers for their intended purpose.
- Make sure to use a hammer that is the appropriate size and weight for the job. A sledge hammer should never be used to drive small nails, while a trim hammer should not be used to drive a spike.
- A hammer blow should always be struck squarely with the striking face parallel with the working surface. Avoid glancing blows and over- or under-strikes.
- When striking a chisel, punch or other tool, the striking face of the hammer should have a diameter of at least 3/8 of an inch larger than the face of the tool.
- Never use a hammer to strike another hammer or hatchet.
- Hammers with damaged handles, dents, cracks, chips or mushroomed heads should be discarded. Never attempt repairs, such as grinding, welding or reheating them.
- A common misuse of hammering tools is striking with the side or the cheek of the tool. This should never be done, as it can damage the hammer and chips from its head can cause an eye or other bodily injury.

CONCLUSION

- We have discussed just a few of the hundreds of types of common hand tools. However, the same basic principles can be applied to most tools.
- Use the right tool for the job, ensure the tool is the correct size for the task at hand, inspect the tool for damage and be sure your hands, fingers, eyes and other body parts stay clear of the path of the tool.
- Hand of power tools have become an indispensable part of our ability to do our jobs, but as we've seen, they may also be hazardous.
- We must fight the human tendency to become complacent while using these tools, and always remember that doing a job 1000 times without incident doesn't ensure your safety the next time.
- Even when using the simplest hand or power tools, pay attention to your own safety and take steps necessary to prevent injury.
- Whenever you work with hand or power tools, always put to use the most important tool you have at your disposal, your good safety attitude. Because when you do that, there's no task you can't do safely.

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Concise Version

ANSWERS TO THE REVIEW QUIZ

1. a
2. a
3. d
4. a
5. c
6. b

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REVIEW QUIZ

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

Name_____Date_____

1. Because simple hand and power tools are commonly used for many of our basic job tasks, we often fail to consider their dangers when they are used improperly or in an unsafe manner.

a. True
b. False

2. To reduce the chance of a wrench slipping, make sure the wrench you choose is the right size for the nut or bolt.

a. True
b. False

3. Which of the following statements about pliers is false?

a. They should never be exposed to excessive heat
b. They should never be used to turn nuts and bolts
c. They should never be used as hammers
d. They should never be oiled at the hinges

4. A screwdriver should never be used as a punch or chisel.

a. True
b. False

5. The face of a hammer used to strike a chisel should have a diameter at least _____ the chisel's face.

a. The same size as
b. 3/8 of an inch smaller than
c. 3/8 of an inch larger than

6. Doing a job 1000 times without incident ensures your safety the next time.

a. True
b. False