

HIGH-IMPACT HAND SAFETY

Leader's Guide, Fact Sheet & Quiz

Item Number: 2407 © AP Safety Training

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.

2407 HIGH-IMPACT HAND SAFETY FACT SHEET

LENGTH: 19 MINUTES

PROGRAM SYNOPSIS:

Hands help us provide for our basic necessities as well as help us enjoy the fruits of our labors. Despite numerous training programs on the subject of hand and finger safety, the National Safety Council reports that one out of every four on-the-job accidents involve hands, fingers, wrists and arms. Although the majority of the injuries occur among people who work with equipment and machinery, hand and finger accidents can and do occur anywhere that hands are involved with work.

This program dramatically re-creates 15 work-related accidents involving hands and fingers. Not only will viewers be able to recall the accident, but they will also be able to recall the causes and the applicable prevention methods mentioned in the video. The accident re-creations will motivate employees to understand hazards, wear appropriate hand protection and follow safe work practices.

PROGRAM OBJECTIVES:

After watching the video, the viewer will be able to identify the following:

- Hazards that cause the majority of hand and finger injuries;
- Safe procedures and attitudes for preventing hand and finger injuries:
- Different types of hand protection and the situations in which they should be used.

INSTRUCTIONAL CONTENT:

BACKGROUND

- Hand injuries result from smashing steel, grinding wheels, saw blades, extreme temperatures, molten metal, sharp knives, pinch points, chemicals and repetitive motion stress.
- Classes of hazards:

Physical (heat, cold, mechanical, ergonomic); Biological (bacteria, viruses, molds); Chemical (irritants, sensitizers, corrosives, etc.)

• Protect hands from hazards by understanding and practicing safe work procedures and knowing when to wear and how to select appropriate hand protection.

ACCIDENTS AND THEIR SAFETY LESSONS

Accident 1: Metal Worker Injures Hand

• While assisting in bending metal plates into an arc, John Growler ignored instructions to keep the floor clear around the metal bending machine before operating it. Attempting to clear the area after the machine was running, he tripped over his own tools and fell into the machine rollers.

LESSON: Follow good housekeeping practices by removing tripping hazards that can result in injury.

Accident 2: Hand Wound Becomes Infected

• While changing the coolant in a drill press, Earl Osterman scratched the back of his hand. Not only did he delay getting medical attention, he allowed bacteria-contaminated coolant to flow over the wound, resulting in a serious infection.

LESSON: Learn the potential hazards of materials you work with such as coolant and select the appropriate gloves for protection. Also learn the limitations of the gloves you select so that they don't deteriorate during the work you perform. Always seek medical attention immediately after an accident.

Accident 3: Meat Cutter Loses Control Of Hand Muscles.

• Monique Salvarz failed to select a glove with adequate insulation to prevent cold exposure to her hands. After several hours of cutting on the line, she lost control of her hand muscles and injured her hand.

LESSON: Select gloves to prevent exposures to hazards. Insulating layers can be used under an outer glove to protect from the cold. Also, keep your hand in-line with the wrist to relieve discomfort associated with repetitive motion stress.

Accident 4: Power Cord Shorts Out On Watch Band

• Robert Ferris, maintenance repairman, received an electrical burn when the frayed electrical cord on his drill shorted out on his metal watch band. Ferris sustained minor burns to his wrist and hand.

LESSON: Don't wear jewelry when working with power tools or equipment. Don't use power tools with a frayed electrical cord or other defects.

Accident 5: Glove Caught In Conveyor Belt

• While clearing out an overfilled catch bin on a piston ring cleaning machine, Frank Batavius's gloved hand got caught in the conveyor after he quit using the prescribed tool to clear the bin. His finger was severely injured.

LESSON: Follow safe work practices all of the time. Use prescribed tools not hands; don't work too closely to moving machinery.

Accident 6: Machine Operator Pulled Into Rotating Equipment

• Clarence Hall attempted to clean the working surfaces below his drill press with his gloved hand. While working his loose-fitting, long-sleeved shirt caught in the drill and pulled his arm and face into the equipment. He suffered severe lacerations to his face and his arm was pulled out of socket.

LESSON: Do not wear loose-fitting clothing around machine actions.

Accident 7: Machine Operator's Arm Severed

• Jose Montoya removed the guard on a continuously running steel rolling press. When he reached into the machine to check the rollers, his gloved hand was pulled into the pinch point between the steel feed stock and the rollers. His entire arm was severed by the action.

LESSON: Don't attempt to reach into rotating machinery with your hands. Don't defeat machine guards; machines must be locked out before servicing.

Accident 8: Clearing Paper Trim With Hand Results In Injury

- Christina Wando, a slitter operator, cleared trim from the paper roll ends with her hands rather than using the approved wooden wedge. She received a severe hand injury when she ignored the safe work practice.
- LESSON: Understand and remember why assist devices, guards, interlocks and electric eyes are necessary on the equipment you use.

Accident 9: Blender Amputates Operator's Arm

• To complete his routine cleaning task faster, Charles Badesden defeated the safety interlocks on the sausage blender door so he could reach into the running machine. The blender amputated Badesden's right arm.

LESSON: Defying company safety rules has far-reaching consequences. Such defiance not only results in a safety violation but often in tragic personal loss.

Accident 10: Welder Loses Fingers

• Roy Anderson, a welder, lost his concentration while helping to position a tank top in preparation for welding. He didn't remove his hand from the tank edge where it was crushed by the tank top.

LESSON: Stay alert and focused on the job task to prevent carelessness and tragedy.

Accident 11: Saw Blade Severs Finger

• After changing the blade on his band saw, Phagen Beadenbaugh unconsciously place his hand into the rotating blade while reaching with his other hand for a piece of lumber. He severed his fingers above the second joint.

LESSON: Stay alert and focused on the job task to prevent carelessness. Do not work when fatigued or under the influence of drugs and alcohol.

Accident 12: Employee's Hand Is Crushed

• Reporting for work while still under the effects of alcohol, Jan Nolten violated company policy on the use of pallets as manlifts. He placed his hand on the forklift mast to steady himself as it was lowered. He had just finished servicing a vent while standing on the pallet inserted on the forks. Nolten didn't realize where his hand was until it was crushed by the moving parts on the forklift mast.

LESSON: Working under the influence of alcohol decreases our awareness of safe work rules. Reporting to work impaired is always a violation of company rules.

Accident 13: Materials Handler Loses Finger

• Materials handler Rick Fairmore climbed a storage shelf to retrieve a roll of material. After throwing the material to the floor, he held onto the edge of the shelf and jumped to the floor. His wedding ring got caught on a shelf fastener. While he landed on the floor, his finger and ring were still on the shelf.

LESSON: Always obey company safety practices. Use a ladder for climbing and don't wear jewelry in work areas where it is prohibited.

Accident 14: Wrong Tool Punctures Hand

• Wally Burlson, a maintenance worker, attempted to pry a ring from a universal joint with an awl. When the awl slipped, Burlson realized quickly that he had selected the wrong tool as the awl punctured his hand.

LESSON: Thousands of injuries occur because the wrong tool is selected. Match the tool with the job.

Accident 15: Paper Mill Worker Slices Hand

• Using improper cutting procedures to obtain paper samples from a paper roll, Charlene Thompson sliced her hand and chest.

LESSON: Always direct the cutting action of knives and other cutting tools away from your body.

SUMMARY

- Select the right glove for the job when gloves are required.
- Keep hands and gloves clean; maintain and store gloves properly.
- Ensure all machine guards are in place and don't defeat any safety devices.
- Follow your company's lockout/tagout procedures before repairing or maintaining equipment.
- Use assist devices for clearing scraps or jams from running equipment.
- Never wear rings, jewelry or loose clothing when working with or around moving machinery.
- Always follow company job procedures and safety rules.
- Stay alert and concentrate on your work task.
- Match hand tools to the job and use them properly.

HIGH-IMPACT HAND SAFETY

ANSWERS TO THE REVIEW QUIZ

- 1. a
- 2. a
- 3. b
- 4. a
- 5. a
- 6. b
- 7. a
- 8. a
- 9. b

HIGH-IMPACT HAND SAFETY REVIEW QUIZ

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

NameDate	
1.	Power tools with frayed cords or defects should not be used.
	True False
2.	You should not substitute your hands for prescribed tools used around machinery.
	True False
3.	You can only defeat safety devices on machinery if you are trained and authorized to do so.
	True False
4.	When using a cutting tool, always cut from your body.
	Towards Away
5.	Safe housekeeping practices and removing all hazards should be employed when working around machinery.
-	True False
6.	Wearing loose clothing is acceptable around equipment and machinery.
-	True False
7.	Machinery must be locked out before repairing.
	True
b.	False
8.	You should never wear jewelry while working around equipment that is running.
	True False
9.	All work gloves are designed to protect against any type of hazard you may encounter.
_	True False