

Safety Leader's Discussion Guide



Dear Safety Leader:

Safety Works for You and your employees. You can reduce your workers' compensation costs by improving safety and preventing accidents. And the Ohio Bureau of Workers' Compensation's (BWC's) Division of Safety & Hygiene is here to help.

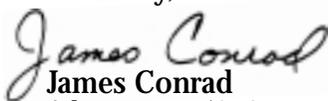
This discussion guide supplies you with the tools you need to improve safety awareness and performance. Designed to assist safety discussion leaders, this guide provides your employees with how-to information to help them perform their jobs safely. It offers **14 safety-meeting topics** you can tailor to address your company's safety issues. It also supplies you with a **handout for your employees** to reinforce the safety topic for that specific meeting.

Regular safety meetings will involve your employees and familiarize them with occupational injury and illness prevention techniques. Employee involvement will stimulate ideas, awareness and energies that will **improve your company's safety record.**

Back in the workplace, involve employees in the company's efforts to maintain a safe and healthful work environment. Reinforce the benefits of safety policies, ask employees to share motivational ideas and encourage employees to **report unsafe conditions.**

Safety does work, and it can work for you and your employees. Use this discussion guide to prevent workplace accidents and lower your workers' compensation costs.

Sincerely,



James Conrad
Administrator/CEO
Ohio Bureau of Workers' Compensation



Dave Spencer
Superintendent
BWC Division of Safety & Hygiene

p.s. Don't forget about the Ohio Safety Congress and Expo held in Columbus, April 3-6, 2000!

Using this discussion guide is easy.

- 1 Review the discussion leader notes prior to the meeting so that you are familiar with the topic.
- 2 Supplement your meeting with examples of safety issues specific to your workplace.
- 3 Photocopy the handout located to the right of each month's safety topic. The handout contains safety tips to make safety work for your company.

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Safety Works for January

Safe Behavior and Responsibility

You may be puzzled. You've invested time, energy and money to make sure your work area is safe. Machines are well guarded, material-handling devices are used to reduce ergonomic hazards, controls are provided for workplace chemical exposures and work areas are generally clean and orderly. Tools and equipment are in good shape and your team is well trained. However, incidents and injuries still occur.

No matter how much focus is on the workplace, the deciding factor in most incidents and injuries is the behavior of people.

This discussion will be on at-risk behaviors, how they cause incidents and injuries and how you and your co-workers can help prevent them. The discussion is interactive. Use the questions to get everyone involved and, by all means, use real experiences to reinforce the concepts.

On a white marker board or easel, write the following questions one at a time. Have your employees answer them, writing the answers after the question.

What is risk?

Answers include taking chances, gambling, short cuts, etc. By definition, risk is "hazard; peril; exposure to loss or injury."

What are examples of risks or hazards in our work areas?

Answers include machine hazards (such as guards missing), chemical hazards, traffic hazards, material-handling hazards (lifting, pulling and pushing), etc.

How have we safeguarded or minimized these hazards?

Answers may be guarding of machines, ventilation for contaminants, labeling of chemical containers, lift tables and other material-handling equipment, etc. Use your own real examples.

What are examples of at-risk behaviors?

Participants may struggle with this. However, this refers to the very first question, such as taking chances, short cuts. Try to develop specific examples of this risky business. (Nobody has to admit to having done it.) Obvious examples include use of a wrong tool, reaching around machine guard, overexerting to move a heavy object, not using required personal protective equipment and climbing on equipment vs. using a ladder or stool.

Challenge the group to identify the not-so-obvious or subtle at-risk behaviors, i.e. overreaching to place parts on a skid, stepping backward without first looking, handling a wooden skid without gloves, not stopping for a moment when frustrated, skipping a step in a procedure, etc.

How do these behaviors result in injuries? In most cases, these risks are learned through experience. We learn that taking a particular risk saves time or increases production. We've done it many times without injury, so we continue to repeat it, again and again, and it becomes a habit. Eventually, something happens to make the behavior more dangerous than usual. Because we're on automatic pilot, an incident or injury occurs.

Example: You load parts onto wooden skids. After each load is complete, a material handler removes it with a forklift, and you obtain a new skid. You're supposed to wear gloves when handling the skids, but it only takes a few seconds to lift the skid and put it into place. You've never been hurt handling skids so you're in the habit of not using gloves. Today, however, you don't notice a small spot of oil on the floor (a forklift has developed a leak), and you slip as you're placing the skid and lose control of it. A piece of wood is jammed into the palm of your hand. *Try to identify an example that relates to your company.*

What can we do to change these behaviors? Develop your own list from the group's input. Key points include always thinking about our own safety before each task and correcting ourselves when we start to take a shortcut.

We need to work at doing everything the safe way, so that it is the habit, not the at-risk behavior. *Example:* Similar tasks at home are performed with the same level of safety as at work, i.e. protective equipment, shutting off circuit breaker before working on a fixture, etc.

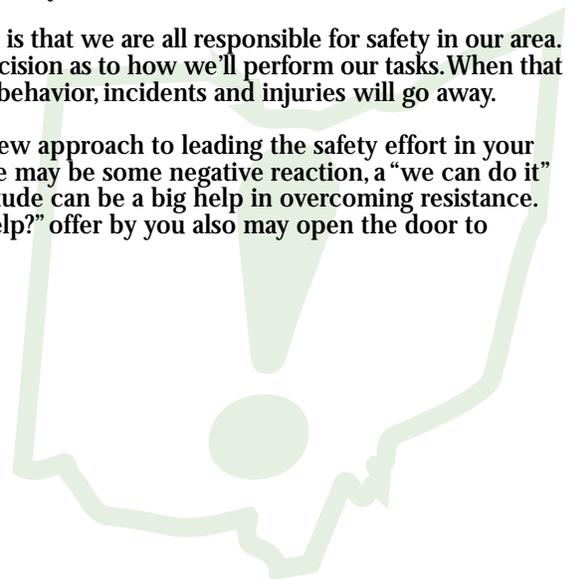
We need to look out for each other. If we notice an at-risk behavior, it's our responsibility to say something to our co-worker. Done with real concern for that person's safety, this need not be a conflict situation. Consider an example or two here and possibly role-play with volunteers. Focus on, "I'm concerned that you may hurt yourself. What if something happens unexpectedly?"

We need to discuss safety and safe work behaviors on the job floor, not just in safety meetings. This is particularly critical when there's something different in our area. Perhaps there are new parts or materials to deal with. Are there safety issues? There's been a change in a procedure. Does it affect our safety? Maintenance performed major work on our equipment over the weekend. Have we checked everything out? Have we discussed it among ourselves?

Finally, we need to recognize each other for our safe practices and behaviors. This is how safe behavior becomes a habit — not the risky business.

The bottom line is that we are all responsible for safety in our area. We make the decision as to how we'll perform our tasks. When that decision is safe behavior, incidents and injuries will go away.

This may be a new approach to leading the safety effort in your area. While there may be some negative reaction, a "we can do it" or "let's try" attitude can be a big help in overcoming resistance. A "How can I help?" offer by you also may open the door to improvement.



Safe Behavior and Responsibility

What is risk?

Risks include taking chances, gambling, short cuts, etc. By definition, it is “hazard; peril; exposure to loss or injury.”

Work area risks or hazards

Risks or hazards in work areas include machine hazards (i.e. guards missing), chemical hazards, traffic hazards, material-handling hazards (lifting, pulling and pushing), etc.

We safeguard or minimize these hazards by guarding machines, ventilation for contaminants, labeling of chemical containers, lift tables and other material-handling equipment, etc.

At-risk behaviors

At-risk behaviors are taking chances and short cuts. Examples include use of a wrong tool, reaching around machine guard, overexerting to move a heavy object, not using required personal protective equipment and climbing on equipment vs. using a ladder or stool.

Other at-risk behaviors are overreaching to place parts on a skid, stepping backward without first looking, handling a wooden skid without gloves, not stopping for a moment when frustrated, skipping a step in a procedure, etc.

How do at-risk behaviors result in injuries?

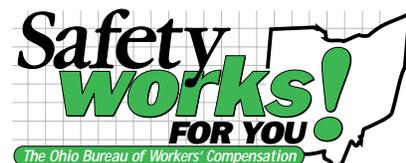
In most cases, these risks are learned through experience. We learn that taking a particular risk saves time or increases production. We’ve done it many times without injury, so we continue to repeat it, again and again, and it becomes a habit. Eventually, something happens to make the behavior more dangerous than usual. Because we’re on automatic pilot, an incident or injury occurs.

What can we do to change these behaviors?

Always thinking about our own safety before each task and correcting ourselves when we start to take a shortcut can change these behaviors. Work at doing everything the safe way, so that it is the habit, not the at-risk behavior.

Also, look out for each other. If you notice an at-risk behavior, it’s your responsibility to say something to your co-worker. Done with real concern for that person’s safety, this need not be a conflict situation.

Safety Works for January



Safety Works for February

Handling Chemicals Safely

Prior to the meeting, obtain the following:

- A material safety data sheet (MSDS) for a common chemical handled in your facility;
- Your emergency evacuation plan;
- A drawing of the location of your safety shower/eyewash locations;
- Your written hazard-communication program;
- Any incident reports that occurred as a result of mishandling chemicals;
- A selection of personal protective equipment (gloves, faceshield, respirator, etc.).

Be prepared to use a question-and-answer format requesting the participants to drive the discussion and suggest improvements to your system.

Chemicals are a major part of our everyday life at home, work and play. They include toxics, corrosives, solvents and numerous other substances. As long as we take proper precautions, these substances can be handled safely.

Name some chemicals that you use at home. Some possible answers include gasoline, paints, fertilizers, lawn chemicals, bug spray, paint strippers, kerosene, bleach and other household cleaners.

Name some of the chemicals used at work. These are facility-specific solvents, laboratory chemicals, fuels, paint, office copier chemicals, correction fluid, lubricants and corrosives.

For discussion purposes, ask the employees what personal protective equipment they use when handling chemicals at work vs. handling chemicals at home.

Ask your employees the following questions.

How are we exposed to chemicals?

Inhalation — breathing in dusts, mists and vapors.

Example: working with bags of concrete at home without a respirator.

Ingestion — eating something that's been contaminated.

Example: having lunch in the work area where there are airborne contaminants.

Absorption — skin contact with a chemical.

Example: contact dermatitis or eye irritation.

Injection — an agent is forced into the body through a needle or high-pressure device.

Example: needlestick or misuse of a high-pressure washer.

After each of the following answers, review the information you prepared before the meeting.

How can you protect yourself against chemical hazards?

- Read container labels, MSDS and safe-work instructions before handling a chemical. (*Review the sections of an MSDS of a chemical handled in your facility.*)
- Use specified personal protective equipment (PPE), which may include chemical splash goggles, respirator, safety gloves, apron, steel-toed shoes, safety glasses with sideshields, etc. Make sure the PPE fits properly, and you have been trained in its use. (*Review the various pieces of PPE and when each may be required.*)
- Inspect all PPE before use, looking for defects such as cracks, missing parts, rips, etc. Ensure your respirator has the proper chemical cartridge for the particular chemical hazard. Change cartridges when necessary. (*Review how to inspect, what to look for and how to make sure the PPE fits properly.*)
- Know the location of safety showers and eyewash stations and how to use them. (*Have the employees identify from memory the locations of the safety shower/eyewash stations in their areas. Review the drawing of the locations after discussion.*)
- Always wash your hands before eating, especially after handling chemicals.
- Leave your contaminated clothing at work. You can expose your family to the hazards if you wear the clothes home.

Remind your employees that the company's written hazard communication program and emergency evacuation plan are available. Explain where they are located and how to access the information. Have the employees suggest ways to improve these programs.

Pick a specific chemical handled at work that is familiar to most employees. Make sure you have a copy of the MSDS for that chemical to review. Start a discussion on handling procedures. Ask the employees to identify the PPE they would be required to use when handling the chemical. Compare their answers to what is required on the MSDS or other safe work instructions.

Also review any past incidents involving mishandling of a chemical. Have the employees discuss how the incident may have been prevented. Some possible answers could be:

- Using specified PPE;
- Avoiding shortcuts;
- Reviewing MSDS instructions before handling.

Quiz:

1. Before handling a chemical, you should read the label, MSDS and any other safe-work instructions. T or F
2. Required PPE is identified on the label and MSDS. T or F
3. Three ways in which a person can be exposed to a chemical are:
 - a) Indigestion, inhalation, absorption
 - b) Inhalation, absorption, ingestion
 - c) Digestion, absorption, infestation
 - d) Desorption, inhalation, ingestion
4. PPE should be inspected weekly. T or F
5. Contaminated clothing, including shoes, should not be worn home. T or F

Answers: 1 - T; 2 - T; 3 - b; 4 - F; 5 - T

Handling Chemicals Safely

Chemicals are a major part of our everyday life at home, work and play. They include toxics, corrosives, solvents and numerous other substances. As long as we take proper precautions, these substances can be handled safely.

Chemicals that you use at home include gasoline, paints, fertilizers, lawn chemicals, bug spray, paint strippers, kerosene, bleach and other household cleaners.

Chemicals you may use at work are facility-specific solvents, laboratory chemicals, fuels, paint, office copier chemicals, correction fluid, lubricants and corrosives.

We are exposed to chemicals through:

Inhalation — breathing in dusts, mists and vapors.

Example: working with bags of concrete at home without a respirator.

Ingestion — eating something that's been contaminated.

Example: having lunch in the work area where there are airborne contaminants.

Absorption — skin contact with a chemical.

Example: contact dermatitis or eye irritation.

Injection — an agent is forced into the body through a needle or high-pressure device.

Example: needlestick or misuse of a high-pressure washer.

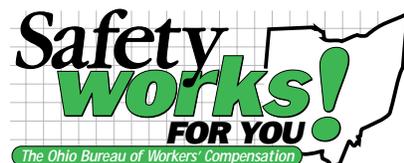
You can protect yourself against chemical hazards by:

- Reading container labels, material safety data sheets (MSDSs) and safe-work instructions before handling a chemical;
- Using specified personal protective equipment (PPE), which may include chemical splash goggles, respirator, safety gloves, apron, steel-toed shoes, safety glasses with sideshields, etc. Make sure the PPE fits properly, and you have been trained in its use;
- Inspecting all PPE before use, looking for defects such as cracks, missing parts, rips, etc. Ensure your respirator has the proper chemical cartridge for the particular chemical hazard. Change cartridges when necessary;
- Knowing the location of safety showers and eyewash stations and how to use them;
- Always washing your hands before eating, especially after handling chemicals;
- Leaving your contaminated clothing at work. You can expose your family to the hazards if you wear the clothes home.

Quiz:

1. Before handling a chemical, you should read the label, MSDS and any other safe-work instructions. T or F
2. Required PPE is identified on the label and MSDS. T or F
3. Three ways in which a person can be exposed to a chemical are:
 - a) Indigestion, inhalation, absorption
 - b) Inhalation, absorption, ingestion
 - c) Digestion, absorption, infestation
 - d) Desorption, inhalation, ingestion
4. PPE should be inspected weekly. T or F
5. Contaminated clothing, including shoes, should not be worn home. T or F

Safety Works for February



Answers: 1 - T; 2 - T; 3 - b; 4 - F; 5 - T

Safety Works for March

Material Handling (Push/Pull)

Although many of us do not handle cargo regularly, sometimes we use our bodies for leverage to maneuver objects. We would like to think that this would not produce an injury. Today's session will prepare your employees so they may be less likely to suffer sprains or strains from overexertion when pushing or pulling.

Moving wheelchairs, pushing carts, and opening and closing overhead doors are all contributors to sprains or strains. Through job safety analysis (JSA), determine the leading causes that may be reduced or eliminated through proper training and awareness.

Ask your employees the following questions:

- How many of you have pulled a muscle at work or at home from overexertion?
- What were the contributing factors to that injury?
- What types of exposure do we have in this workplace, today?
- Identify potential problems with lifting or closing overhead doors, pushing or pulling hand carts or wheelchairs, or working with drawers or doors that are difficult to move.
- What are your responsibilities as an employee to prevent various types of strains or sprains that were mentioned?

We can approach this together by looking at the task as a step-by-step process, listing the hazards of each step, discussing how to prevent injuries by eliminating the hazard or barrier, learning use of leverage and receiving proper training.

The first step to any task would include mindset. Looking at the JSA worksheet, which of the 11 numbered items would occur if we were not in command of a safe performance? Discuss one through 11. What can we do to prevent injury from occurring? Answers include rest, nutrition, focus, procedure, PPE, attitude, etc.

Brainstorm with your employees what things can cause injury for a push/pull task in three areas: equipment, environment and human error. Divide into three groups. The first group identifies risks associated with equipment; the second group for environmental risks; and the third group the human factors. Report back to the large group in five minutes. Answers may include, but are not limited to:

1. The right equipment for the job (size, weight, capacity and design); well-maintained equipment; removing hazards from equipment; and deciding whether or not additional equipment is needed for the job. Safe footwear like closed toes, anti-slip soles and ankle supports also may be considered.
2. The environment contributes to hazardous situations due to surface conditions: wet, dirty, dusty, uneven, unsupported, poorly illuminated, badly designed storage, temperature extremes, chemical or biological exposure.
3. The human factor is most volatile, and what we have the ability to control: human error, miscalculation of load assessment, etc.; attitude: "I can handle this without help;" ignorance, imprudence, fatigue, physical or mental distractions.

A successful group will brainstorm many more hazards and occasionally go off on a tangent. Remind them to focus on the task at hand, and be sure to address and follow up the other issues that may surface through discussion at a future time.

To summarize the group discussions, walk through the steps by completing the JSA worksheet. Identify a task that causes strains and sprains in your workplace through the push/pull motion. List each step in the first column and work across the row, listing hazards in the middle column. Complete the row by listing recommended safe job procedures in the third column. A blank JSA worksheet is provided, as well as a sample completed one. The final evaluation is to choose a person out of the group to walk through the task, following the steps you listed on the JSA.



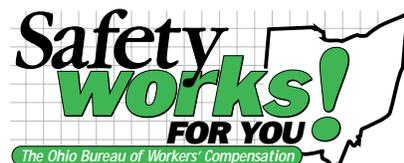
Material Handling (Push/Pull)

Moving wheelchairs, pushing carts, and opening and closing overhead doors are all contributors to sprains or strains. Although many of us do not handle cargo regularly, sometimes we use our bodies for leverage to maneuver objects. We would like to think that this would not produce an injury. However, you can suffer sprains or strains from overexertion when pushing or pulling.

There are three areas that things can cause injury for a push/pull task: equipment, environment and human error. Risks associated with these three areas include, but are not limited to:

- 1. Equipment**
The right equipment for the job (size, weight, capacity and design); well-maintained equipment; removing hazards from equipment; and deciding whether or not additional equipment is needed for the job. Safe footwear like closed toes, anti-slip soles and ankle supports also may be considered.
- 2. Environment**
The environment contributes to hazardous situations due to surface conditions: wet, dirty, dusty, uneven, unsupported, poorly illuminated, badly designed storage, temperature extremes, chemical or biological exposure.
- 3. Human error**
The human factor is most volatile, and what we have the ability to control: human error, miscalculation of load assessment, etc.; attitude: "I can handle this without help;" ignorance, imprudence, fatigue, physical or mental distractions.

Safety Works for March



Job Safety Analysis Worksheet

Title of Job/Operation Material Handling - Push/Pull Overhead Door Date 9/24/1998 No. 1

Position/Title(s) of Person Who Does Task Technician Name of Person Observed Joe

Analysis By Amy Stewart, CSP Location Cincinnati

Steps	Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedures
1	Mindset	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	awake, trained, professional focus, avoid rushing
2	Assess load location to push/pull	1, 2, 3, 4, 5, 6, 7, 10, 11	tool selection, placement, body position surface, exposure, environment load location, weight, leverage illumination, clearance
3	Attire	trip, strain, sprain, 5, 8, 10	slip-resistant footwear, proper attire
4	Prepare for push/pull	8, 9, 10	Three-point system, bend knees get help if needed inspect/maintain equipment
5	Push/pull	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	stand clear
6	Put tool(s) away, cleanup	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	good housekeeping

1. Struck By (SB)

2. Struck Against (SA)

3. Contacted By (CB)

4. Contact With (CW)

5. Caught On (CO)

6. Caught In (CI)

7. Caught Between (CB)

8. Fall-Same Level (FS)

9. Fall to Below (FB)

10. Overexertion (OE)

11. Exposure (E)

Job Safety Analysis Worksheet

Title of Job/Operation _____

Date _____

No. _____

Position/Title(s) of Person Who Does Task _____

Name of Person Observed _____

Analysis By _____

Location _____

Steps **Sequence of Basic Job Steps**

Potential Hazards

Recommended Safe Job Procedures

1. Struck By (SB)
2. Struck Against (SA)
3. Contacted By (CB)
4. Contact With (CW)

5. Caught On (CO)
6. Caught In (CI)
7. Caught Between (CB)
8. Fall-Same Level (FS)

9. Fall to Below (FB)
10. Overexertion (OE)
11. Exposure (E)

Safety Works for April

Off-the-Job Hearing Conservation

Although you may be exposed to noise in the workplace, noise is present throughout the day — at work, at home and during recreational activities. Your exposure to noise in the workplace is regulated to certain exposure levels. It may be necessary for you to wear hearing protection to protect your ears from excessive noise. But what happens once you leave the workplace for the day? Noise also is present and can affect your hearing.

Ask your employees the following questions.

What causes hearing loss?

Hearing loss can be caused by:

- A medical condition, which affects the inner ear;
- A congenital (from birth) condition, which may prevent hearing;
- Noise exposure at work, at home and during recreation.

How does your hearing work?

As sound waves are projected, your ear receives those sound waves and changes them into impulses, which are then interpreted by the brain as sounds.

What happens when you lose hearing through noise exposure? Your inner ear loses the ability to change sound waves into the nerve impulses.

How is hearing measured?

A hearing test determines your ability to hear tones at various frequencies. The test measures how loud each tone needs to be for you to hear it. The level at which you hear a tone is called your threshold. Your hearing is best at young ages. As you age, your sensitivity to hear may decrease.

Can your hearing be damaged at work or at home?

Yes. At work, specific standards have been established for levels of noise exposure, but a lot of hearing damage may occur away from work. Examples include:

- Driving with windows down experiencing road noise or noise from construction/road grading or paving equipment;
- Using audio equipment, such as head phones and boom boxes;
- Mowing the lawn;
- Operating tools in a home workshop;
- Attending concerts or sports events.

Is hearing loss permanent?

There are two types of hearing loss — short-term or temporary (temporary threshold loss) and long-term or permanent (standard threshold shift). Short-term hearing loss occurs when you're exposed to a loud level of noise for a period of time. An example of this would be attendance at a loud rock concert. Once the exposure is stopped, there can be a temporary loss in your ability to hear. After a period of time, normal hearing returns.

Permanent hearing loss can occur when nerves in the inner ear are damaged. This can occur from long-time exposure to noise, or by repeated instances of short-term hearing loss. Once the inner ear decreases or loses its ability to hear a certain frequency, that loss is permanent. Often, you do not realize small incremental hearing losses.

As you age, the short-term hearing losses build until you realize your hearing has been diminished. You compensate for this by turning the volume up on televisions and radios. You begin to ask others to repeat their statements or questions. You may start to speak louder yourself to sound normal.

If you suffer from long-term hearing loss can hearing be restored?

Permanent hearing loss cannot be recovered, but devices are available to assist a person to hear certain tones.

How can you help prevent hearing loss?

Be alert for noise sources such as:

- Lawn mowers;
- Power tools.

Turn down audio equipment – if it can be heard a short distance away, it is too loud. Anticipate instances where you may expect loud noise levels and protect yourself from those.

How can you protect yourself from noise?

You can protect yourself from noise by:

- Wearing appropriate hearing protection, such as ear plugs or earmuffs, and make sure it fits correctly;
- Ensuring equipment is properly exhausted;
- Lowering volume levels on audio equipment.

Ensure that all members of your family are aware of noise sources and protect themselves properly. Hearing loss does not discriminate between the work, home or recreational environment. Any hearing loss will be compounded with previous and future hearing loss and reduce your ability to hear.



Off-the-Job Hearing Conservation

Although you may be exposed to noise in the workplace, noise is present throughout the day — at work, at home and during recreational activities. Your exposure to noise in the workplace is regulated to certain exposure levels. It may be necessary for you to wear hearing protection to protect your ears from excessive noise. But what happens once you leave the workplace for the day? Noise also is present and can affect your hearing.

As sound waves are projected, your ear receives those sound waves and changes them into impulses, which are then interpreted by the brain as sounds. When you lose hearing through noise exposure, your inner ear loses the ability to change sound waves into the nerve impulses.

Hearing is measured with a hearing test, which determines your ability to hear tones at various frequencies. The test measures how loud each tone needs to be for you to hear it. The level at which you hear a tone is called your threshold. Your hearing is best at young ages. As you age, your sensitivity to hear may decrease.

There are two types of hearing loss – short-term or temporary (temporary threshold loss) and long-term or permanent (standard threshold shift). Short-term hearing loss occurs when you're exposed to a loud level of noise for a period of time. An example of this would be attendance at a loud rock concert. Once the exposure is stopped, there can be a temporary loss in your ability to hear. After a period of time, normal hearing returns.

As you age, the short-term hearing losses build until you realize your hearing has been diminished. You compensate for this by turning the volume up on televisions and radios. You begin to ask others to repeat their statements or questions. You may start to speak louder yourself to sound normal.

Permanent hearing loss can occur when nerves in the inner ear are damaged. This can occur from long-time exposure to noise, or by repeated instances of short-term hearing loss. Once the inner ear decreases or loses its ability to hear a certain frequency, that loss is permanent. Often, you do not realize small incremental hearing losses. Permanent hearing loss cannot be recovered, but devices are available to assist a person to hear certain tones.

Hearing loss can be caused by:

- A medical condition, which affects the inner ear;
- A congenital (from birth) condition, which may prevent hearing;
- Noise exposure at work, at home and during recreation.

Hearing can be damaged at work or at home. At work, specific standards have been established for levels of noise exposure, but a lot of hearing damage may occur away from work. Examples include:

- Driving with windows down experiencing road noise or noise from construction/road grading or paving equipment;
- Using audio equipment such as head phones and boom boxes;
- Mowing the lawn;
- Operating tools in a home workshop;
- Attending concerts or sports events.

You can help prevent hearing loss. Be alert for noise sources such as:

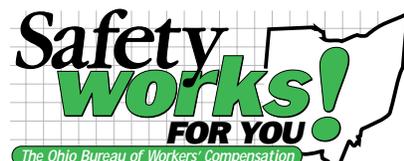
- Lawn mowers;
- Power tools.

Turn down audio equipment – if it can be heard a short distance away, it is too loud. Anticipate instances where you may expect loud noise levels and protect yourself from those.

You can protect yourself from noise by:

- Wearing appropriate hearing protection, such as ear plugs or earmuffs, and make sure it fits correctly;
- Ensuring equipment is properly exhausted;
- Lowering volume levels on audio equipment.

Safety Works for April



Safety Works for May

Near-Miss Incident Reporting

This session is designed for you to discuss the importance of reporting near-miss incidents with your employees. Prior to beginning the safety meeting, review your company's near-miss incident reporting policy for specific requirements. In addition, research whether there have been any significant near-miss incidents reported in the past year for use as examples during the discussion.

Common near-miss incidents include near traffic collisions, whether on company property or offsite; near slips, trips, and/or falls; possibly a dropped load of materials from a crane or forklift; etc.

Ask your employees the following questions.

Who can tell me what a near-miss incident is?

A near-miss incident is any event or action which under slightly different circumstances could have resulted in an injury or illness to people, damage to equipment or property, or harm to the environment.

Now that you have defined what a near miss-incident is, who can give me some examples they have experienced either here at work or off the job?

Encourage discussion of near-miss incidents to ensure that employees understand the various types and how frequently they occur. If you have good examples of recent near misses that have occurred at your facility, discuss them — what happened, why it happened, and corrective action taken to prevent them.

How do we know when a near-miss incident has occurred?

Near misses actually occur quite frequently and are evidenced by phrases like: "That was a close one," "We were sure lucky" or "Someone could've been hurt." The challenge is to recognize when a near-miss incident has occurred.

Company Near-Miss Policy

At this point, review your company's near-miss reporting policy, stressing key points such as when to report, whom to report to, etc. If you don't have a company policy, use the following questions to establish basic near-miss reporting guidelines for your discussion.

Why is it important to report near-miss incidents?

If you recall from our definition, a near miss is only slightly different from an incident that causes an injury or damage, and the next time, you may not be so fortunate. If you don't report the incident, then we have no way of knowing about it, and we can't fix what caused the incident.

What steps should you take once a near-miss incident has occurred?

Recognize that a near-miss incident has occurred, and report it to your immediate supervisor and the safety department.

Next, you should complete a near-miss report. If your company doesn't have one, then write down all of the events that led up to the near-miss incident. Any witnesses to the incident also should write down what they observed. The description of the incident can be brief since its primary purpose is to record the basic facts of the incident. Also record any actions that were taken at the time of the near-miss incident that prevented it from being more serious.

Forward the near-miss report to the safety coordinator or committee for review and follow up (if your facility has one; otherwise, according to your company policy). Once the report has been reviewed and corrective actions are selected, act upon them as quickly as possible.

Feedback. A very important step is to provide feedback to the employees who were involved with the near-miss incident and any other employees who could be exposed to a similar series of events in their work environment. A basic description of what occurred, why it occurred and what has been done to prevent it from happening again should be sufficient feedback.

Near-miss incidents are often the first sign or indicator that a more serious incident is about to happen. Every incident, whether it causes personal injury, property or equipment damage, or harm to the environment should be investigated to determine what happened, why it happened, and what can we do to prevent it in the future. Otherwise, the next time we may not be as fortunate and the events that caused the near-miss incident may cause a very serious incident. Remember to report immediately all near-miss incidents to your supervisor.

Quiz

True or False

1. A near-miss incident has occurred when no injury has taken place, but a piece of equipment was damaged. T or F
2. Phrases such as "that was close" or "someone could have been injured" are good indicators that a near miss occurred. T or F
3. After a near-miss incident has occurred, you should report it immediately to your supervisor. T or F
4. It is not important to fill out a near-miss report since no one was hurt and no equipment was damaged. T or F
5. Take corrective action as soon as possible to ensure that the near-miss incident doesn't happen again, possibly more serious the next time. T or F
6. Always review the outcome of the near-miss review and corrective actions with the employees. T or F
7. A near-miss incident is any event or action which under slightly different circumstances could have resulted in an injury or illness to people, damage to equipment or property, or harm to the environment. T or F

Answer Key: 1 - F; 2 - T; 3 - T; 4 - F; 5 - T; 6 - T; 7 - T



Near-Miss Incident Reporting

A near-miss incident is any event or action which under slightly different circumstances could have resulted in an injury or illness to people, damage to equipment or property, or harm to the environment. Near-miss incidents are often the first sign or indicator that a more serious incident is about to happen.

Near misses actually occur quite frequently and are evidenced by phrases like: "That was a close one," "We were sure lucky" or "Someone could've been hurt." The challenge is to recognize when a near-miss incident has occurred.

Common near-miss incidents will include near traffic collisions, whether on company property or offsite; near slips, trips, and/or falls; possibly a dropped load of materials from a crane or forktruck; etc.

It is important to report near-miss incidents because a near miss is only slightly different from an incident that actually causes an injury or damage. The next time, you may not be so fortunate. If you don't report the incident, then the company has no way of knowing about it, and therefore, can't fix what caused the incident.

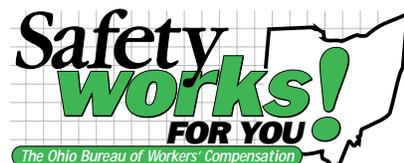
Try to recognize that a near-miss incident has occurred, and report it to your immediate supervisor and the safety department. Next, you should complete a near-miss report. If your company doesn't have one, then write down all of the events that led up to the near-miss incident. Any witnesses to the incident also should write down what they observed. The description of the incident can be brief since its primary purpose is to record the basic facts of the incident. Also, record any actions that were taken at the time of the near-miss incident that prevented it from being more serious.

Quiz

True or False

1. A near-miss incident has occurred when no injury has taken place, but a piece of equipment was damaged. T or F
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Safety Works for May



Answer Key: 1 - F; 2 - F; 3 - T; 4 - F; 5 - F; 6 - T; 7 - T

Safety Works for June

Heat Stress

Heat stress is a topic that many times is misunderstood. Prepare a list of jobs that might be associated with heat stress, such as work in foundries, heat treating, laundries, construction projects, bakeries or other hot-job assignments. You may want to organize your discussion using questions and answers as a guide. You also may want to have a white board or flip chart to write the questions and answers.

Ask your employees the following questions.

What are the four environmental factors that affect the amount of stress a worker faces in a hot work area?

They are:

- Temperature of the air;
- Humidity (moisture) in the air;
- Amount of radiant heat (such as from the sun or a furnace);
- Air movement or velocity.

What are other factors that affect workers in a hot work area?

Other factors include type of clothing, metabolic rate and general health.

What are the types of heat disorders?

Encourage worker participation. Have the class give you examples of heat stress. Write the class' answers down on the flip chart and then give information about their answers. Discuss the treatment for each heat disorder.

Heat stress is classified as five different heat disorders with heat stroke being the most serious and heat rash the least serious. The five disorders are:

- Heat stroke;
- Heat exhaustion;
- Heat cramps;
- Fainting;
- Heat rash.

It is important that the employees recognize the symptoms of heat stress. It also is important for them to be able to get immediate emergency assistance when someone is affected by heat stress.

What are the two most serious forms of heat stress, the way to tell if a person is having a problem and what first aid should be given while waiting for emergency medical assistance?

The first form of heat stress is heat stroke. The symptoms are flushed hot skin, fever, rapid pulse, disorientation and unconsciousness. First-aid treatment includes moving the person to a cool place; loosening his or her clothing; keeping the person lying down; applying cold applications to the person's head; sponging his or her body with cool water; and letting the paramedics take over when they arrive.

The second form of heat stress is heat exhaustion. The symptoms are pale, clammy skin; rapid, weak pulse; weakness (trouble standing or sitting); headache; nausea; and dizziness. First-aid treatment includes moving the person to a cool place and keeping them from getting chilled; loosening his or her clothing; keeping him or her lying down; giving them fluid if the person is conscious; and letting the paramedics take over when they arrive.

You may want to discuss ways to prevent heat stress. There are several methods, including engineering controls, such as spot and general ventilation; work practices, such as having plenty of drinking water; alternating work and rest periods; acclimatization to heat through short exposures followed by longer periods of work; and worker education.

The last three items are not as serious but should not be left untreated. These conditions are heat cramps, fainting and heat rash. If you observe any of these conditions, review the work situation and make corrections to eliminate or reduce the person's exposures before the condition worsens. The person's work habit also may need to be changed.

A 15-page booklet, *Working in Hot Environments*, is available free from the National Institute for Occupational Safety and Health Publications, 4676 Columbia Parkway, Cincinnati, Ohio 45226; phone 513-533-8287.

Quiz

True or False

1. Heat exhaustion is the most serious form of heat stress. T or F
2. When sweating stops and the worker seems confused, he or she may be suffering from heat stroke. T or F
3. When a worker is believed to be suffering from heat stroke, immediate medical attention should be obtained. T or F
4. Heat rash also is known as prickly heat. T or F
5. The sun is not a consideration in heat stress situations. T or F

Answers: 1 - F; 2 - T; 3 - T; 4 - T; 5 - F

Heat Stress

The four environmental factors that affect the amount of stress a worker faces in a hot work area are:

- Temperature of the air;
- Humidity (moisture) in the air;
- Amount of radiant heat (such as from the sun or a furnace);
- Air movement or velocity.

Other factors that affect workers in a hot work area include type of clothing, metabolic rate and general health.

Heat stress is classified as five different heat disorders with heat stroke being the most serious and heat rash the least serious. The five disorders are:

- Heat stroke;
- Heat exhaustion;
- Heat cramps;
- Fainting;
- Heat rash.

The first two heat disorders, heat stroke and heat exhaustion, are the most serious.

Heat stroke

The symptoms are flushed hot skin, fever, rapid pulse, disorientation and unconsciousness. First-aid treatment includes moving the person to a cool place; loosening his or her clothing; keeping the person lying down; applying cold applications to the person's head; sponging his or her body with cool water; and letting the paramedics take over when they arrive.

Heat exhaustion

The symptoms are pale, clammy skin; rapid, weak pulse; weakness (trouble standing or sitting); headache; nausea; and dizziness. First-aid treatment includes moving the person to a cool place and keeping them from getting chilled; loosening his or her clothing; keeping him or her lying down; giving them fluid if the person is conscious; and letting the paramedics take over when they arrive.

There are several methods to prevent heat stress. They include engineering controls, such as spot and general ventilation; work practices, such as having plenty of drinking water; alternating work and rest periods; acclimatization to heat through short exposures followed by longer periods of work; and worker education.

The last three items are not as serious, but should not be left untreated. These conditions are heat cramps, fainting and heat rash. If you observe any of these conditions, review the work situation and make corrections to eliminate or reduce the person's exposures before the condition worsens. The person's work habits also may need to be changed.

Quiz

True or False

1. Heat exhaustion is the most serious form of heat stress. T or F
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5. The sun is not a consideration in heat stress situations. T or F

Safety Works for June



Answers: 1 - F; 2 - T; 3 - T; 4 - T; 5 - F

Safety Works for July

Auditing Ourselves and Our Areas

Have an interactive discussion with your group using a question-and-answer format. You also will need a flip chart or white board to write down discussion points.

Ask your employees the following questions.

What do you think of when the word audit is mentioned?

Answers may include:

- Negative experience;
- An Internal Revenue Service (IRS) tax audit;
- Confrontation.

Is it possible for audits to be positive?

Of course. First, let's consider the definition of audit. *Audit*: A systematic or methodical review; to examine with intent to verify. *(Write this down on the flip chart or white board.)*

Given these definitions, who can give an example of a positive audit that could impact you personally?

Answers include:

- Shopping for a new home. (You look at the potential property and review/evaluate the condition, appliances, carpeting, cleanliness, locale, schools, churches, etc.)
- Selecting a babysitter. (You verify reliability, honesty, maturity, etc.)

How can this concept of audit be applied to our work?

Ask for opinions and thoughts, keeping in mind the following information. From a safety standpoint there is only one way to do a job — the safe way. Safety needs to be the first consideration in everything we do. It is possible that we may not always be doing this, so our continuing efforts to review or think about our jobs are auditing. Contrary to an IRS audit which evaluates what we did not record, our job audit should evaluate what we did record. If we take the time to write down or at least mentally think out the steps that we go through to perform our jobs, then we can audit them to see if there is a safer way of doing that job.

So, how do we audit ourselves?

Before starting our work, we can evaluate our clothing and protective equipment. Do we have:

- The correct eye protection?
- The correct gloves?
- Protective footwear?
- Special protective equipment, i.e. hearing protection, chemical apron, aluminized jacket, hard hat, etc.? Is this protective equipment in good condition? Do we know how to use it properly?

Upon arriving at our work area, we can ask:

- Is it clean and orderly?
- Has anything changed since the last time you were there that could affect your safety or the safety of others?
- Are all tools and equipment safe, correct for the job and in good working condition?
- Do you know how to use them?
- Do you know the procedures necessary for doing the job safely?
- Are the procedures adequate to assure your safe job performance?
- Do you understand them?
- Will you follow them without deviation?
- If you think a deviation is necessary, will you clear it with your supervisor or work leader?
- Do you anticipate how something could occur unexpectedly?
- Do you consider how you might respond?
- Do you know what to do in an emergency?
- Are you regularly thinking about how the job can be done more safely?

This ongoing review need not be formal. It doesn't have to be a written report or checklist. What's important is thinking about how you're going to do your job and, once you begin it, the ongoing process of reviewing all safety factors.

If your company uses employees as part of formal audit or inspection teams, you may want to review roles and responsibilities. If you have special employee audits, i.e. housekeeping inspections, fire protection inspections, etc., you also may consider a review of these.



Auditing Ourselves and Our Areas

When the word audit is mentioned, people generally think of a negative experience, an Internal Revenue Service (IRS) tax audit or of a confrontation. However, it is possible for audits to be positive.

First, let's consider the definition of audit. *Audit*: A systematic or methodical review; to examine with intent to verify.

Positive audits may include:

- Shopping for a new home. (You look at the potential property and review/evaluate the condition, appliances, carpeting, cleanliness, locale, schools, churches, etc.)
- Selecting a babysitter. (You verify reliability, honesty, maturity, etc.)

Audits can apply to your job. From a safety standpoint there is only one way to do a job — the safe way. Safety needs to be the first consideration in everything we do. It is possible that we may not always be doing this, so our continuing efforts to review or think about our jobs are auditing. Contrary to an IRS audit which evaluates what we did not record, our job audit should evaluate what we did record. If we take the time to write down or at least mentally think out the steps that we go through to perform our jobs, then we can audit them to see if there is a safer way of doing that job.

Auditing ourselves

Before starting our work, evaluate our clothing and protective equipment. Do we have:

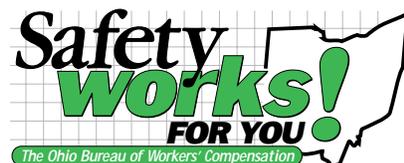
- The correct eye protection?
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Safety Works for July



Safety Works for August

Hand and Finger Safety

The hand is one of the most complex parts of the human body. An intricate network of muscles, tendons, nerves, bones and tissues provides us with an incredible range of dexterity and feel unmatched by any machine. Whether buttoning our shirt or tying our shoes, we take for granted the tremendous utility of hands and fingers. Try eating breakfast tomorrow without using your thumbs and then think how tough it would be without hands!

Start the meeting by following up on the importance of hands and fingers in everyday life. Discuss daily activities that would be made more difficult due to a hand injury or loss of fingers. After the meeting, review the answers to the quiz and reinforce learning with a final summary of the presentation.

Ask your employees the following questions regarding hand and finger safety and record employee responses on a flipchart.

What are reasons hand injuries occur?

Answers include:

- Improper use of tools/wrong tool used;
- Lack of training to operate equipment properly;
- Inadequate hand protection — no gloves/wrong gloves;
- Pinch points not recognized or guarded;
- Distractions/inattention to work being done;
- Guards disabled/removed;
- Lockout procedure not followed correctly;
- Hands placed where they could be cut or crushed.

After reviewing possible causes of hand injuries, pick a few cases from your own workplace. Have the group analyze the incidents and talk about the possible causes. Discuss what corrective actions you can take to prevent recurrence of the injuries.

What are specific things you can do to prevent hand and finger injuries in your facility?

Answers include:

- Don't wear rings, jewelry or loose clothing when working around moving/rotating machinery;
- Wear leather or cut-resistant gloves when handling sharp objects like sheet metal;
- Make sure screwdrivers and chisels are properly ground;
- Use push-sticks, clamps or guards to keep hands away from table saw blades;
- Choose the correct type of rubber gloves for chemical protection — check the MSDS;
- Keep knives sharp to reduce force needed to cut, and store them in the closed position or in knife sheath;
- Unplug or lock out powered equipment before starting to work on it;
- Use barrier creams to help protect skin from chemical contamination or natural hazards like poison ivy.

Review the following information concerning first-aid treatment of hand and finger injuries. Talk about the emergency response procedures and available medical services at your facility. Be sure to include transmission of bloodborne diseases in your emergency procedures discussion.

- Avoid contact with any other person's blood or body fluids when offering first aid.
- Get first aid/medical attention for all injuries.
- Apply direct pressure to cuts and lacerations with a bandage or clean cloth.
- For thermal burns, immediately flush the affected area under cold running water for five minutes.
- For chemical contamination, immediately wash the affected area with soap and water. Consult the MSDS.
- In the event of an amputation, apply pressure to stop bleeding. Place severed part in a clean bag and submerge bag in ice.

Quiz

True or False

1. It is okay to use a mushroom-headed chisel if you are in a hurry. T or F
2. Pinch point injuries don't need first aid. T or F
3. There are many different kinds of chemical-resistant gloves. T or F
4. Leather gloves are okay for handling sheet metal. T or F
5. Powered equipment should always be locked out before starting to work on it. T or F
6. You don't need to worry about getting any diseases from co-workers' blood because they are your friends. T or F
7. Rings and watches can be caught on machinery and cause serious injury. T or F
8. It is okay to remove safety guards from machinery if it helps you work faster. T or F
9. It is better to use a dull knife because there is less chance of cutting yourself with it. T or F
10. Cold running water is the best first aid treatment for a thermal burn. T or F

Answers: 1 – F; 2 – F; 3 – T; 4 – T; 5 – T; 6 – F; 7 – T; 8 – F; 9 – F; 10 – T



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Reasons hand injuries occur:

- Improper use of tools/wrong tool used;
- Lack of training to operate equipment properly;
- Inadequate hand protection — no gloves/wrong gloves;
- Pinch points not recognized or guarded;
- Distractions/inattention to work being done;
- Guards disabled/removed;
- Lockout procedure not followed correctly;
- Hands placed where they could be cut or crushed.

You can prevent hand and finger injuries in your facility. Some specific things to do to prevent injuries include:

- Don't wear rings, jewelry or loose clothing when working around moving/rotating machinery;
- Wear leather or cut-resistant gloves when handling sharp objects like sheet metal;
- Make sure screwdrivers and chisels are properly ground;
- Use push-sticks, clamps or guards to keep hands away from table saw blades;
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First-aid treatment for hand and finger injuries:

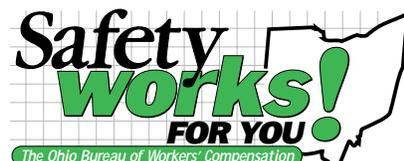
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Safety Works for August



Answers: 1 - F; 2 - F; 3 - F; 4 - T; 5 - T; 6 - F; 7 - F; 8 - F; 9 - F; 10 - T

Safety Works for September

Electrical Safety

Electricity is a very important part of our everyday lives at home, work and play. When everything is working properly we enjoy the effects of electricity to make our lives pleasant. When conditions go wrong, people can be exposed to the hazards associated with electricity, such as shocks. Therefore, it is important that everyone have some minimal knowledge of electrical safety. One of the most important rules is to prevent exposure to live electrical circuits.

Review the following questions with your discussion group, asking for input and writing the answers on a chart or overhead to aid understanding of the concepts.

What dangers are associated with electricity?

Dangers include the potential for:

- Electrical shock;
- An electrical fire;
- An electrical explosion;
- Electrically induced, unintended body motion.

What are common electrical hazards?

Answers include:

- Not using ground fault circuit interrupters when required;
- Overloading circuits;
- Damaged flexible cords;
- Removing grounding pins from flexible cord plugs.

How does human behavior increase the risk when working with electricity?

Answers include:

- Instructions may not be followed for proper use of equipment;
- People may become careless around electricity;
- People may use equipment with shorted and/or ungrounded conductors;
- Lockout procedures may not be used when working on equipment.

What are some physical effects of contact with electrical hazards by people?

Answers include:

- The person may suffer electrical shock;
- The person may suffer a thermal burn from sudden heating or flash;
- The person may fall from the sudden reaction to shock or explosion;
- The person may get caught in machinery due to unexpected operation.

What actions can you take to reduce your potential for contact with electricity?

Answers include:

- Ask if appropriate codes and standards were followed when equipment was installed;
- Do not operate equipment that you suspect has an electrical hazard;
- Exercise good housekeeping habits;
- Report any electrical hazards;
- Use appropriate personal protective equipment;
- Follow the lockout program;
- Are properly trained to make repairs to equipment;
- Don't remove or disable grounding measures from equipment;
- Operate equipment only when you are properly trained;
- Inspect the workplace on a regular basis looking for electrical hazards;
- Have electrical hazards fixed in a timely manner;
- Have high maintenance electrical devices on a predictive maintenance program;
- Have electricians test repairs before operations resume.

In summary, following job instructions, maintaining good grounds and reporting and fixing electrical hazards are good rules to follow to avoid electrically initiated hazardous working conditions. Remember, only qualified and trained employees are to make electrical diagnoses and repairs.

Quiz:

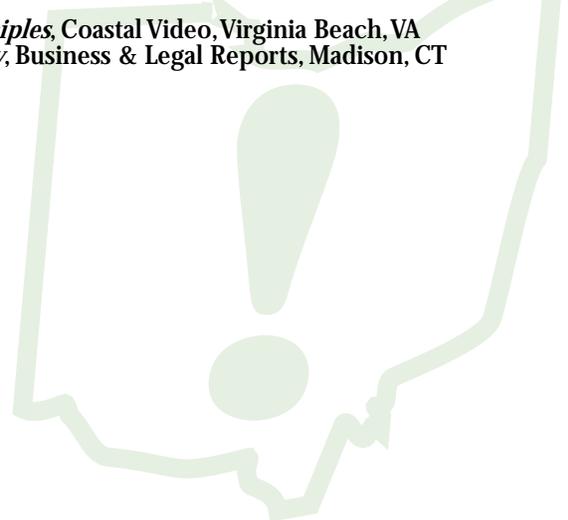
True or False

1. Electricity provides energy to make our lives better. T or F
2. A fire could result from an electrical hazard. T or F
3. You could become an electrical casualty because of carelessness. T or F
4. You may fall because of an electrical shock or explosion. T or F
5. Anyone may make an electrical repair when no help is available. T or F
6. An inspection program can help find electrical hazards. T or F

Answers: 1 - T; 2 - T; 3 - T; 4 - T; 5 - F; 6 - T

Sources:

Accident Prevention Manual, National Safety Council, Itasca, IL
Electrical Safety at Work, National Safety Council, Itasca, IL.
About On-The-Job Electric Safety, Channing L. Bete, S. Deerfield, MA
Electrical Principles, Coastal Video, Virginia Beach, VA
Electrical Safety, Business & Legal Reports, Madison, CT



Electrical Safety

Electricity is a very important part of our everyday lives at home, work and play. When everything is working properly we enjoy the effects of electricity to make our lives pleasant. When conditions go wrong, people can be exposed to the hazards associated with electricity, such as shocks. Therefore, it is important that everyone have some minimal knowledge of electrical safety. One of the most important rules is to prevent exposure to live electrical circuits.

Dangers associated with electricity include the potential for electrical shock, an electrical fire, an electrical explosion and electrically induced, unintended body motion.

Common electrical hazards include:

- Not using ground fault circuit interrupters when required;
- Overloading circuits;
- Damaged flexible cords;
- Removing grounding pins from flexible cord plugs.

Human behavior increases the risk when working with electricity.

Examples include:

- Instructions may not be followed for proper use of equipment;
- People may become careless around electricity;
- People may use equipment with shorted and/or ungrounded conductors;
- Lockout procedures may not be used when working on equipment.

Physical effects of contact with electrical hazards are:

- The person may suffer electrical shock;
- The person may suffer a thermal burn from sudden heating or flash;
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You can reduce your potential for contact with electricity if you:

- Ask if appropriate codes and standards were followed when equipment was installed;
- Do not operate equipment that you suspect has an electrical hazard;
- Exercise good housekeeping habits;
- Report any electrical hazards;
- Use appropriate personal protective equipment;
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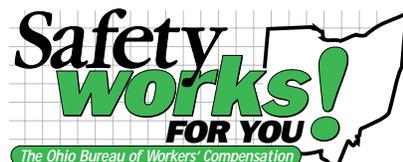
In summary, following job instructions, maintaining good grounds and reporting and fixing electrical hazards are good rules to follow to avoid electrically initiated hazardous working conditions. Remember, only qualified and trained employees are to make electrical diagnoses and repairs.

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True or False

1. Electricity provides energy to make our lives better. T or F
2. A fire could result from an electrical hazard. T or F
3. You could become an electrical casualty because of carelessness. T or F
4. You may fall because of an electrical shock or explosion. T or F
5. Anyone may make an electrical repair when no help is available. T or F
6. An inspection program can help find electrical hazards. T or F

Safety Works for September



Answers: 1 - T; 2 - T; 3 - T; 4 - T; 5 - F; 6 - T

The Ohio Bureau of Workers' Compensation

Safety Works for October

Fire Emergency Procedures

The goal of this meeting is to measure the reactions of the employees involved in this exercise and then train them in the proper procedures.

Review a copy of your company's operations procedure for a fire before the meeting. What is provided to you here is just a suggested format. You are limited only by your inventiveness. We suggest you stage a make-believe fire in your section with your group. You might start with — "We have a simulated fire at machine X and it is hydraulic in nature. Two fire extinguishers could put it out." Have everyone react to this information. Then gather everyone together and review reactions.

Below is a list of questions for the group.

Did we get the where, when, why, who and how answers in place?

Did your employees react, as you would have expected?

Was there confusion and/or lack of knowledge and training?

Was there a proper accounting for all employees involved?

Was this fire in an area with a sprinkler system?

Would this have made a difference?

Do we have a fire brigade or a first responder group? Are any of you on it?

Do we have a fire pre-plan? Have you heard of it?

In the event the fire is uncontrolled, how is the fire department notified (phone, alarm, etc.)? Who notifies the fire department?

Is there an in-house incident commander? Who is it?

Who directs the fire service to the fire if it's in your area?

If the fire is extinguished, but sprinkler heads were set off, who shuts off the area post indicator valve, changes heads and recharges the system?

The previous questions are just a few that could be answered by your group as you review what happened and why. Review possible answers, asking for everyone's input.

Now review how the event should have proceeded with the entire group. Remember to include answers to previous questions for positive enforcement of entire group.

CAUTION — If you have an unknown or a hyper-reactive person in your group, assign another person (in confidence) to be with your unknown.

This exercise will indicate the level of training/experience that your group has and what you need to do (if you do) to qualify to properly respond to this emergency. It will probably also indicate the total level of training within your group and whether you have spot problems or total training problems.



Fire Emergency Procedures

Your company has an operations procedure for a fire. Familiarize yourself with the procedure so you can react properly to a fire in your area.

There are several questions you can ask yourself when a fire occurs to see how you and your fellow co-workers handled the situation.

Did we get the where, when, why, who and how answers in place?

Was there confusion and/or lack of knowledge and training?

Was there a proper accounting for all employees involved?

Was this fire in an area with a sprinkler system?

Would this have made a difference?

In the event the fire is uncontrolled, how is the fire department notified (phone, alarm, etc.)? Who notifies the fire department?

Is there an in-house incident commander? Who is it?

Who directs the fire service to the fire if it's in your area?

If the fire is extinguished, but sprinkler heads were set off, who shuts off the area post indicator valve, changes heads and recharges the system?

Was the proper operations procedure for a fire followed?

Answering these questions will indicate the level of training/experience that employees have and what you need to do (if you do) to qualify to properly respond to a fire emergency.

Safety Works for October



Safety Works for November

Housekeeping and Orderliness

Good housekeeping and orderliness is a fundamental factor in achieving safe performance. In addition to removing hazards that pose threats to safety and health, a clean and orderly work area indicates a high level of pride in the work and a concern and commitment for effective, safe performance.

Safe performance is everyone's responsibility, supervisors and hourly workers alike. So, like the players on a winning sports team, we must execute our responsibilities for maintaining clean and orderly work areas at all times. Otherwise, the team will not be successful and injuries will result.

During the meeting you will be using a question-and-answer format to test for knowledge and to identify opportunities for improvement. Your goals are

1. To help everyone understand the importance of a clean and orderly work area;
2. To involve the group members in identifying problems: at-risk behavior, process defects or support needs;
3. To identify solutions and develop action plans that will improve performance.

Prior to the meeting, collect the following information. You will rely on the information during the safety discussion.

- Make a list of the areas where poor housekeeping could be a factor in causing a safety problem, such as causing injury or impeding emergency egress.
- Identify all past instances where housekeeping might have been a contributing factor to an injury or near injury.
- Identify all safe work practices and job procedures that involve housekeeping and orderliness.
- Make a list of instances where housekeeping and orderliness problems could affect productivity and safety.
- If there is a housekeeping/orderliness checklist, make copies for everyone.
- Videotape various areas where housekeeping either is or could be a problem (optional). This is not to find fault, but to be used as a teaching aid during the meeting.

At the meeting, introduce the subject — identify the subject and briefly indicate your support for maintaining a clean and orderly work area. Seek participation by asking several questions and if possible, writing the answers on a white board or flip chart. Questions may include:

Has anyone noticed housekeeping/orderliness problems in the work areas?

Discuss the reasons that these problems exist (at-risk behavior, process defects, support needs, etc.). Ask for proposed solutions. If possible, develop a list of actions to be taken with completion dates. This is the first opportunity to develop an action plan.

Has the organization experienced injury or near-injury due to problems associated with housekeeping/orderliness? (Remember, this is not fault finding.)

If so, ask the group to identify why the problems existed. Attempt to identify the causes by asking why several times. Then, ask the group to brainstorm ideas that will improve and eliminate the real causes. This is the second opportunity to develop an action plan.

If there are safe work practices that deal with housekeeping/orderliness in the work areas, ask the group to identify all the safe work practices. The idea is to test for knowledge and to teach those who need more information.

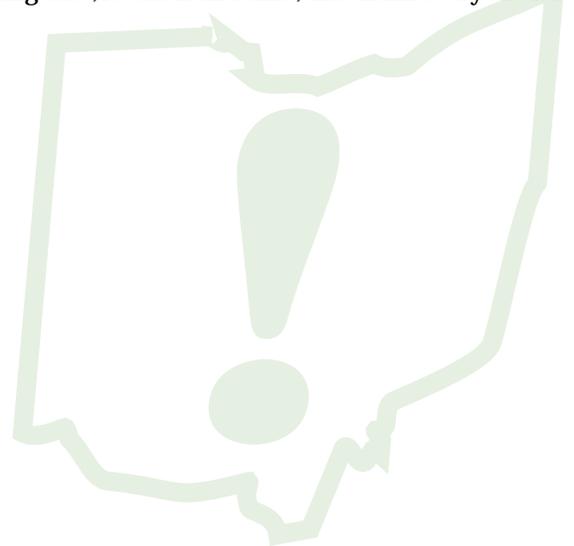
If there is a housekeeping checklist, ask if everyone is familiar with it and how it is used. Hand out the checklist and review it in detail so everyone understands the expectations for housekeeping/orderliness. If no housekeeping/orderliness checklist exists, suggest using the checklist at the end of this section, or modify it to fit organizational needs.

Last, note the fact that housekeeping/orderliness problems also adversely impact productivity. Ask the group how this could occur. Examples:

- Time is wasted when it takes longer to find the necessary tools/equipment;
- People get frustrated;
- The wrong tool is used for the task;
- Working around unnecessary objects slows the process;
- Problems in this area could indicate a lack of pride in workmanship and low morale.

Optional – show videotape of the areas to refresh everyone on where the housekeeping issues exist. Use the videotape to stimulate additional conversation on where potential problems exist and to identify possible solutions. These issues and solutions should be added to the previous action plans already developed.

When concluding the meeting, review the importance of individuals acting as team players and doing their share to keep the areas clean and orderly. Also, review all action plans that were developed, including individual responsibilities and time frames; remind everyone of the next meeting date, location and time; and thank everyone for participating.



Housekeeping and Orderliness

Good housekeeping and orderliness is a fundamental factor in achieving safe performance. In addition to removing hazards that pose threats to safety and health, a clean and orderly work area indicates a high level of pride in the work, and a concern and commitment for effective, safe performance.

Housekeeping/orderliness problems may exist as a result of at-risk behavior, process defects, support needs, etc.

Housekeeping/orderliness problems also adversely impact productivity.

Examples:

- Time is wasted when it takes longer to find the necessary tools/equipment;
- People get frustrated;
- The wrong tool is used for the task;
- Working around unnecessary objects slows the process;
- Problems in this area could indicate a lack of pride in workmanship and low morale.

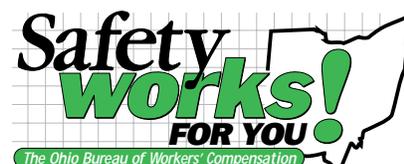
Safe performance is everyone's responsibility, supervisors and hourly workers alike. So, like the players on a winning sports team, we must execute our responsibilities for maintaining clean and orderly work areas at all times. Otherwise, the team will not be successful and injuries will result.

Housekeeping/orderliness checklist

Instructions: Use the checklist to look at specific areas that may have housekeeping and orderliness issues that could affect safety and health. Check only those areas that need attention. Identify the specific problem and suggest actions to take that may solve the problem.

Housekeeping/orderliness checklist	Issues for review	OK	Needs action	Problem	Suggested action
	Tools and equipment Tools do not pose tripping hazards				
	Tools with sharp edges or points are stored, covered or otherwise protected				
	Cords, hoses and lines do not pose tripping or falling hazards				
	Tools and equipment are stored in designated locations, cabinets, etc.				
	Equipment is not left or stored near sources of heat that could damage or ignite combustible materials				
	Walkways and floors Aisles are clearly marked				
	Equipment is not left in aisles				
	Cords, hoses or lines are not tripping hazards				
	File cabinets and desk drawers do not protrude into walkways				
	Storage, loose material and spills Floors are free from debris				
	Loose materials, trash and scrap are placed in containers				
	Disposal containers are not full or overflowing				
Spills are promptly cleaned up					
Flammable liquids are stored in safe containers and in safety cabinets					
Oily rags are stored in metal containers and disposed of promptly					
Other issues					
Name:	Date:	Location:			

Safety Works for November



Safety Works for December

Hoisting/Lifting Devices

At the beginning of the safety meeting, ask the group to identify various types of lifting devices used to hoist material and/or employees at the site. Common examples include cab, floor, gantry, track and locomotive cranes; powered platforms; manlifts; hand trucks; tuggers; come-alongs; and other types of powered industrial equipment.

Although we could discuss any one of these lifting devices as a separate topic, today we will focus on the general safety requirements related to crane hoisting and lifting.

Work-related incidents involving hoisting and crane movement continue to be a real concern for manufacturing, construction and shipping industries. Workers continue to be injured in crane-related incidents involving rigging, falling material, pinch points, sling failure and being struck by or caught between moving material.

Overhead-travel cranes transport materials and product over working areas where employees could be injured if the crane is not operated safely. Every operator must be properly trained and exercise extreme care and good judgment while operating equipment.

Outline the basic requirements of your operator training program, which should include practical and classroom training and specific physical qualifications.

Seek participation by asking questions.

Must all employees operating cranes and lifting equipment be trained?

Permit only designated and trained employees to operate a crane or lifting device. Employees operating a crane from a cab or the floor also may be required to meet specific physical qualifications. Inadequate training programs can result in possible Occupational Safety and Health Administration violations. Facilities with trained employees have fewer crane-related incidents, both personal injury and property damage.

Who has the right-of-way when it comes to crane movement?

Perform no hoisting, lowering, swinging or travel while any employee is near the load or hook. Operators should never move a lift of material over the heads of employees. Employees have the right-of-way. Crane operators must sound the warning horn when raising, lowering or carrying loads wherever employees are working. Do not move loads unless a standard crane signal is clearly given, seen and understood.

Is the operator held responsible for safety issues related to crane operation?

Each operator is held directly responsible for the safe operation of the lifting and hoisting equipment. Whenever there is any doubt as to the safety requirements, the operator has the authority to stop the operation until he or she is assured the safety concern is resolved.

Ask the group members to identify points they believe are important for safe operation of hoisting and lifting equipment. Discuss all responses, including those listed here:

- Always inspect equipment at the beginning of a shift;
- Never exceed the rated load capacity of the equipment;
- Insist on safe rigging practices, and use only approved slings and cables;
- Follow recognized preventive maintenance inspection programs;
- Make sure employees and equipment are clear before lifting;
- Lift slowly to avoid shock loading;
- Minimize load swinging and jerking;
- Don't pass loads over workers;
- Don't leave unattended loads suspended;
- Keep hands and fingers in the clear during hook-ups and lifts.

Be prepared to discuss any recent incidents involving hoisting and/or lifting devices where an injury, property damage or near miss may have occurred. After explaining the details of the incident, explain what corrective measures were taken to prevent recurrence.

Quiz

True or False

1. A crane is a piece of equipment for lifting and lowering a load and moving it horizontally. T or F
2. Crane operators should be familiar with the principal parts of a crane and have a thorough knowledge of crane control functions and movements. T or F
3. Although crane hoist cables should be kept vertical, it is acceptable to make side pulls with the crane. T or F
4. As long as the operator can see his or her co-workers in front of him or her, it is not necessary to sound the warning horn when approaching with a lift of material. T or F
5. If an employee fails to move out of the way after the crane warning system is sounded, the crane operator can proceed. T or F
6. Each crane operator is held responsible for the safe operation of his or her equipment. T or F

Answers: 1 - T; 2 - T; 3 - F; 4 - F; 5 - F; 6 - T



Hoisting/Lifting Devices

Types of lifting devices used to hoist material and/or employees at the site include cab, floor, gantry, track and locomotive cranes; powered platforms; manlifts; hand trucks; tuggers; come-alongs; and other types of powered industrial equipment. The focus of this meeting is on the general safety requirements related to crane hoisting and lifting.

Work-related incidents involving hoisting and crane movement continue to be a concern for manufacturing, construction and shipping industries. Workers continue to be injured in crane-related incidents involving rigging, falling material, pinch points, sling failure and being struck by or caught between moving material.

Overhead-travel cranes transport materials and product over working areas where you could be injured if the crane is not operated safely. Every operator must be properly trained and exercise extreme care and good judgment while operating equipment at this location.

Only designated and trained employees should be permitted to operate a crane or lifting device. Employees operating a crane from a cab or the floor also may be required to meet specific physical qualifications. Inadequate training programs can result in possible Occupational Safety and Health Administration violations. Facilities with trained employees have fewer crane-related incidents, both personal injury and property damage.

Perform no hoisting, lowering, swinging or travel while any employee is near the load or hook. Operators should never move a lift of material over the heads of employees. Employees have the right-of-way. Crane operators must sound the warning horn when raising, lowering or carrying loads wherever employees are working. Never move loads unless a standard crane signal is clearly given, seen and understood.

Each operator is held directly responsible for the safe operation of the lifting and hoisting equipment. Whenever there is any doubt as to the safety requirements, the operator has the authority to stop the operation until he or she is assured the safety concern is resolved.

Tips for safe operation of hoisting and lifting equipment:

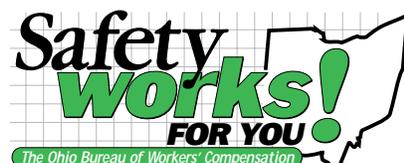
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6. Each crane operator is responsible for the safe operation of his or her equipment. T or F

Safety Works for December



Answers: 1 - T; 2 - T; 3 - F; 4 - F; 5 - F; 6 - T

The Ohio Bureau of Workers' Compensation

Safety Works for You

Office Safety

Most of us think that offices are safe places to work. According to the 1996 edition of *Accident Facts*, published by the National Safety Council, office environments were more hazardous, regarding days away from work and deaths, than either the mining industry, chemical industry or research and development labs.

Review your company's incident reports for office-related accidents. Share any findings in the relevant section below, i.e., if your company experienced any office trips and falls, discuss it in the slips and fall section.

Ask your employees the following questions.

What hazards in offices could cause work-related injuries and deaths?

Hazards in the office can involve electricity, manual material handling, ladders, walkways and housekeeping, and office equipment.

What electrical hazards are in the office environment, and how can we correct them?

Hazards and their remedies include:

1. *Using octopus outlets.* Provide additional receptacles or multi-outlet strips with circuit breakers;
2. *Using damaged electrical cords.* Replace cords; relocate cords if traffic is causing damage; and unplug cords by pulling on the plug, not the cord;
3. *Handling electrical supplies.* Maintain grounding pins on three-prong plugs (if pins are missing, replace the cord); use only grounded (three-prong plug) equipment; turn the power off to photocopier machines before removing paper jams; and turn off computer equipment before changing circuit boards or memory chips;
4. *Preventing electrical fires.* Keep cords and plugs away from heat and water, and do not block ventilation slots on computers or other electronic equipment.

List some hazards and possible remedies associated with material handling in the office environment.

Hazards and their remedies include:

1. *Lifting materials such as reams of paper and computer equipment.* Get help for lifting heavy objects, and use mechanical aids such as carts and dollies; avoid obstructing your vision when carrying materials; and make sure the path you will follow with the load is clear from obstructions or tripping hazards;
2. *Moving furniture.* Obtain basic training in lifting heavy objects.

What are hazards associated with use of ladders by office personnel?

Hazards and their remedies include:

1. *Use of chairs to reach heights.* Use ladders or step stools when needed;
2. *Placing ladders in the vicinity of doors where opening the door can knock over the ladder.* Place a sign or guard the blind side of the door when a ladder is in use on the opposite side;
3. *Use of ladders in disrepair.* Use ladders that are in sound condition;
4. *Using a ladder too short for the task.* Use ladders that are tall enough that your highest footstep is at least three rungs from the top of the ladder.

Identify hazards associated with walkways, office organization and housekeeping.

Hazards and their remedies include:

1. *Ignoring or creating tripping hazards found in walkways.* Maintain clear walkways; keep boxes, files, electrical cords, etc. out of these areas; pick up or remove tripping hazards;
2. *Ignoring or creating spills on smooth floors.* Clean up spills of water, tea, coffee immediately; if spills are large or result from leaking plumbing, direct pedestrians around the area until they can be mopped up and repairs made;
3. *Leaving file drawers open.* Close file drawers when not in use.

What types of hazards can you find with miscellaneous office equipment?

Hazards and their remedies include:

1. *Using paper cutters.* Avoid blade and pinch points;
2. *Using poorly loaded file cabinets.* In older file cabinets, if the upper drawer is loaded heavily compared to the lower drawers, they may tip over when the heavy drawer is opened; load file cabinets bottom up; replace file cabinets with single open drawer safeguards;
3. *Using sharps as letter openers.* Only blunt openers or guarded blades should be used; use of letter openers is to be encouraged to avoid paper cuts, which can become infected;
4. *Using utility knives.* Only utility knives with guarded blades should be used.

Quiz

True or False

1. Serious injuries and deaths do not occur in office environments. T or F
2. Slips and falls are a major concern of office environments. T or F
3. Minor spills of beverages do not need to be cleaned immediately because they will evaporate quickly. T or F
4. Maintaining clear office walkways will minimize slips and falls. T or F
5. Lifting heavy office equipment once in a while poses little risk to those untrained in proper lifting. T or F

Answers: 1 - F; 2 - T; 3 - F; 4 - T; 5 - F

Office Safety

Most of us think that offices are safe places to work. According to the 1996 edition of *Accident Facts*, published by the National Safety Council, office environments were more hazardous, regarding days away from work and deaths, than either the mining industry, chemical industry or research and development labs. Hazards in the office can involve electricity, manual material handling, ladders, walkways and housekeeping, and office equipment.

Electrical hazards in the office environment and their remedies include:

1. *Using octopus outlets.* Provide additional receptacles or multi-outlet strips with circuit breakers;
2. *Using damaged electrical cords.* Replace cords; relocate cords if traffic is causing damage; and unplug cords by pulling on the plug, not the cord;
3. *Handling electrical supplies.* Maintain grounding pins on three-prong plugs (if pins are missing, replace the cord); use only grounded (three-prong plug) equipment; turn the power off to photocopier machines before removing paper jams; and turn off computer equipment before changing circuit boards or memory chips;
4. *Preventing electrical fires.* Keep cords and plugs away from heat and water and do not block ventilation slots on computers or other electronic equipment.

Hazards associated with material handling in the office environment and their remedies include:

1. *Lifting materials such as reams of paper and computer equipment.* Get help for lifting heavy objects, and use mechanical aids such as carts and dollies; avoid obstructing your vision when carrying materials; and make sure the path you will follow with the load is clear from obstructions or tripping hazards;
2. *Moving furniture.* Obtain basic training in lifting heavy objects.

Hazards associated with the use of ladders in the office environment and their remedies include:

1. *Use of chairs to reach heights.* Use ladders or step stools when needed;
2. *Placing ladders in the vicinity of doors where opening the door can knock over the ladder.* Place a sign or guard the blind side of the door when a ladder is in use on the opposite side;
3. *Use of ladders in disrepair.* Use ladders that are in sound condition;
4. *Using a ladder too short for the task.* Use ladders that are tall enough that your highest footstep is at least three rungs from the top of the ladder.

Hazards associated with walkways, office organization and housekeeping and their remedies include:

1. *Ignoring or creating tripping hazards found in walkways.* Maintain clear walkways; keep boxes, files, electrical cords, etc. out of these areas; pick up or remove tripping hazards;
2. *Ignoring or creating spills on smooth floors.* Clean up spills of water, tea, coffee immediately; if spills are large or result from leaking plumbing, direct pedestrians around the area until they can be mopped up and repairs made;
3. *Leaving file drawers open.* Close file drawers when not in use.

Hazards found with miscellaneous office equipment and their remedies include:

1. *Using paper cutters.* Avoid blade and pinch points;
2. *Using poorly loaded file cabinets.* In older file cabinets, if the upper drawer is loaded heavily compared to the lower drawers, they may tip over when the heavy drawer is opened; load file cabinets bottom up; replace file cabinets with single open drawer safeguards;
3. *Using sharps as letter openers.* Only blunt openers or guarded blades should be used; use of letter openers is to be encouraged to avoid paper cuts, which can become infected;
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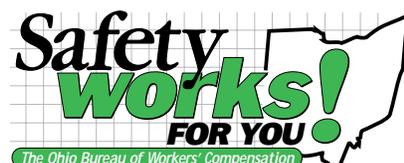
Quiz

True or False

1. Serious injuries and deaths do not occur in office environments. T or F
2. Slips and falls are a major concern of office environments. T or F
3. Minor spills of beverages do not need to be cleaned immediately because they will evaporate quickly. T or F
4. Maintaining clear office walkways will minimize slips and falls. T or F
5. Lifting heavy office equipment once in a while poses little risk to those untrained in proper lifting. T or F

Answers: 1 - F; 2 - T; 3 - F; 4 - T; 5 - F

Safety Works for You



The Ohio Bureau of Workers' Compensation

Safety Works for You

Utility Knife Safety

Utility knives are one of the most often used hand tools in industry today. If used improperly, they can cause lacerations and/or puncture injuries.

Before the meeting, obtain examples of utility knives used at your facility; a copy of safety procedures you may have regarding utility knives; any accident reports that occurred involving utility knives; and personal protective equipment available/required when using utility knives. Be prepared to use a question-and-answer format requesting the participants to drive the discussion and suggest improvements to your system.

Review the various types of utility knives available at your facility. Use a show-and-tell format when explaining each type. If the type you use is not listed, use the manufacturer's information sheet to review with the participants.

There are many types of utility knives available for specific uses including fixed-blade, retractable-blade, single-edge-razor and snap-blade knives.

Review past incidents/injuries involving the use of a utility knife. Have the participants discuss why the injury occurred and how it could have been prevented. Review the items below to determine if any of the injuries were the result of not following one or more of the items.

Following these simple rules can prevent most utility knife injuries:

- Wear proper protective equipment. There are specially designed, reinforced safety gloves and sleeves available from most safety supply houses that protect your hands and arms from lacerations;
- Inspect the knife thoroughly before using it. On fixed-blade and/or retractable knives, make sure the blades are properly and securely seated, and free from nicks or chips. When you're finished, close the knife tightly and fasten it;
- Clear all obstructions from your work area before using the knife. Remove all clutter to give you a clear path to cut;
- Always keep your knife under control. Many accidents occur when the knife slips or the blade breaks. Make sure your work is adequately secure.

A sharp blade is safer than a dull blade. Have the participants discuss why this is true.

A dull blade requires greater force to do the work. The more force applied to the knife, the less control you have. This makes it a greater likelihood the blade will slip or break. A sharp blade also will reduce the number of strokes it will take to cut through the work piece, increasing efficiency and making the work easier.

Ask the participants to suggest ways to properly and safely use a knife. Write the information on a flipchart or chalkboard. Discuss each item thoroughly, and ask the participants why each of the items is important. Possible answers:

- Use the knife while standing in a well-balanced position. Anytime you have to bend, twist or reach while using the knife, your control of that knife is reduced;
- Always pull the knife toward you when making a cut on a flat surface. The knife is less likely to slip because a pulling motion is stronger and easier to control. Make sure the path of the cut is clear and your other hand is well out of the way. If at all possible, secure your work with a clamp when using a straightedge to guide your cut. This will keep your free hand out of the way;
- When cutting thick material, make several passes with the knife, applying more downward pressure with each pass. This method allows more control over the knife.
- When cutting around electrical wires, outlets, etc., make sure to disconnect the power before making the cut. Most utility knives will conduct electricity;
- Never use a utility knife as a screwdriver, pry bar or chisel. The blade could break off and become a projectile. Always use the tool as intended.

Select the type of utility knife used in your facility and review the proper method of changing the blade from the manufacturer's recommendations. Have the participants demonstrate changing blades. Review the procedure for obtaining a new knife or additional blades. Use the following method when changing fixed-blade knives or retractable-blade knives:

1. If the knife requires a screwdriver to open, lay the knife on a flat surface and remove the screw. Never hold the knife in one hand when removing the screw;
2. Spare blades may be stored in the handle. Use extreme caution when opening the knife;
3. Carefully remove the used blade and dispose of it properly. If possible, wrap the used blade in heavy tape, folding the tape over the sharp edge and sealing it;
4. Insert new blade, ensuring it is seated properly and securely;
5. Replace the screw;
6. Inspect the knife to make sure it is assembled properly and that the blade is secure.

Quiz

True or False

1. A dull blade is actually safer than a sharp one. T or F
2. Always pull the knife toward you when cutting on a flat surface. T or F
3. Clamp down a straight edge before cutting. T or F
4. Place the knife securely in your hand to replace the blade. T or F
5. It is okay to place the fixed-blade knife in your pocket when traveling from job to job. T or F

Answers: 1 - F; 2 - T; 3 - T; 4 - F; 5 - F

Utility Knife Safety

Utility knives are one of the most often used hand tools in industry today. If used improperly, they can cause lacerations and/or puncture injuries.

There are many types of utility knives available for specific uses, including fixed-blade, retractable-blade, single-edge-razor and snap-blade knives.

Following these simple rules can prevent most utility knife injuries:

- Wear proper protective equipment. There are specially designed, reinforced safety gloves and sleeves available from most safety supply houses that protect your hands and arms from lacerations;
- Inspect the knife thoroughly before using it. On fixed-blade and/or retractable knives, make sure the blades are properly and securely seated and free from nicks or chips. When you're finished, close the knife tightly and fasten it;
- Clear all obstructions from your work area before using the knife. Remove all clutter to give you a clear path to cut;
- Always keep your knife under control. Many accidents occur when the knife slips or the blade breaks. Make sure your work is adequately secure.

A sharp blade is safer than a dull blade. A dull blade requires greater force to do the work. The more force applied to the knife, the less control you have. This makes it a greater likelihood the blade will slip or break. A sharp blade also will reduce the number of strokes it will take to cut through the work piece, increasing efficiency and making the work easier.

Ways to properly and safely use a knife include:

- Use the knife while standing in a well-balanced position. Anytime you have to bend, twist or reach while using the knife, your control of that knife is reduced;
- Always pull the knife toward you when making a cut on a flat surface. The knife is less likely to slip because a pulling motion is stronger and easier to control. Make sure the path of the cut is clear and your other hand is well out of the way. If at all possible, secure your work with a clamp when using a straightedge to guide your cut. This will keep your free hand out of the way;
- When cutting thick material, make several passes with the knife, applying more downward pressure with each pass. This method allows more control over the knife;
- When cutting around electrical wires, outlets, etc., make sure to disconnect the power before making the cut. Most utility knives will conduct electricity;
- Never use a utility knife as a screwdriver, pry bar or chisel. The blade could break off and become a projectile. Always use the tool as intended.

Use the following method when changing fixed-blade knives or retractable-blade knives:

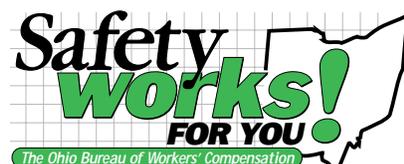
1. If the knife requires a screwdriver to open, lay the knife on a flat surface and remove the screw. Never hold the knife in one hand when removing the screw;
2. Spare blades may be stored in the handle. Use extreme caution when opening the knife;
3. Carefully remove the used blade and dispose of it properly. If possible, wrap the used blade in heavy tape, folding the tape over the sharp edge and sealing it;
4. Insert new blade, ensuring it is seated properly and securely;
5. Replace the screw;
6. Inspect the knife to make sure it is assembled properly and the blade is secure.

Quiz

True or False

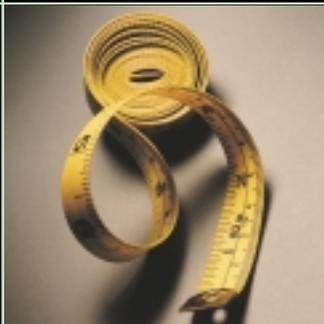
1. A dull blade is actually safer than a sharp one. T or F
2. Always pull the knife toward you when cutting on a flat surface. T or F
3. Clamp down a straight edge before cutting. T or F
4. Place the knife securely in your hand to replace the blade. T or F
5. It is okay to place the fixed-blade knife in your pocket when traveling from job to job. T or F

Safety Works for YOU



Answers: 1 - F; 2 - T; 3 - T; 4 - F; 5 - F

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