Discussion Leaders Guide Session
Machine Hazards

1. Preparation

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

Training Day

2. Introduce the Topic

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

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

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

When you work around moving equipment, you need to be aware of the mechanical hazards of each machine. Machines have unique features but some of the hazards are universal. You need to proceed with caution anytime there are moving parts such as; flywheels, chain drives and rotating shafts. Accidents involving machines can be avoided by understanding the unsafe actions that can lead to injuries.

Some of the common hazards that can cause hazards related to working around machinery are:

- *Removing or tampering with a machine guards.*

- *Placing any part of the body into the area when a machine is performing an operation such as cutting, shaping or forming.*
- *Failing to proper de-energize or disengage machines before servicing.*
- *Bypassing switches that shut off the machine off when it is opened.*
- *Being caught in the machines mechanical systems including; rotating shafts, pulleys, belts and flywheels.*
- *Loose clothing, jewelry or long unsecured hair near moving equipment.*
- *Jumping over or crawling under moving conveyors or other moving parts.*
- *Operating machinery without proper training.*

Note: Use examples from your own workplace if available.

Let's start the DVD now.

3. **Start the DVD**

   - Select your language choice
   - Select scenario

4. **The DVD has paused**

5. **Encourage discussion**

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

6. **Restart the DVD**

7. **Review**

Tell: *Machinery related injuries can be one of the most serious workplace hazards and one of the most preventable accidents. Planning ahead is the best method for preventing accidents.*

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

- *Only operate machines you have been trained to use. If you need training to use a specific machine, talk to your supervisor.*
- *Do not operate a machine if you are sleepy or have taken any medication that may affect your judgment.*
- *Locate the emergency shut off for any machine you operate.*
- *Inspect machine guards before starting the equipment. The guards should be securely in place and in proper working order.*
- *Keep loose clothing, long hair or anything else that may get caught, away from machinery. Tie back hair, tuck in clothing or remove jewelry to prevent being trapped by the machinery.*
- *Keep the work area clear of items that could cause you to trip and fall into moving equipment.*
- *Never bypass interlocking or automatic shut offs. These safety switches are there to keep you from being injured.*
- *Any repair or machine maintenance that involves removal, bypass of a guard, or placing your body into an area of the machine requires the use of a lock out procedure.*

Note: Review of your company's Lockout/Tagout Program.

Machinery related injuries are among some of the worst. Yet, most injuries from machines can be prevented by understanding the hazards of the equipment. Clearing a jam, servicing and maintenance of machinery requires that the energy source be isolated. Isolating the energy source is part of our Lockout/Tagout program. If you have not been trained in Lockout/Tagout, see your supervisor. Never, place any part of your body in a machine that has not been properly turned off.

Are there any questions?

Thank you.

ADDITIONAL RESOURCES

The Oregon Occupational Safety and Health Administration (OR-OSHA) requires that hazardous energy is controlled during service and maintenance activities. Machines and equipment must be isolated from their energy source and made inoperable to prevent the accidental release or restart. A Lockout/Tagout program must be used on machines that can be locked out. A Tagout device can be used on equipment and machines that cannot be locked out. More information about the rules relating to energy isolation or Lockout/Tagout can be found at www.orosha.org.

Hazards Identification
Machine Hazards

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

Hazards = Conditions or actions that can cause injury or illness
Exposure = How close you are to the hazard

Common Hazards

Machines operate by moving back and forth, rotating or some combination of the two. Injuries can result from workers being caught in the moving parts of the machines. Recognizing the hazards and avoiding them prevents injuries. Some of the hazards related to working around machines:

- Removing or tampering with a machine guards.
- Placing any part of the body into the area where a machine is performing an operation such as cutting, shaping or forming.
- Failing to proper de-energize or disengage machines before servicing.
- By passing switches that shut off the machine off when it is opened.
- Being caught in the machines mechanical systems including; rotating shafts, pulleys, belts and flywheels.
- Loose clothing, jewelry or long unsecured hair near moving equipment.
- Jumping over or crawling under moving conveyors or other moving parts.
- Operating machinery without the proper training.

Preventing
Machine Hazards

THINK…Ahead

- Only operate machines you have been trained to use.
- Do not operate a machine if you are sleepy or have taken any medication that may affect your judgment.
- Know what personal protective equipment is required to operate specific machines. For example; some machines produce loud noise or flying particles that would require the operator to wear ear and eye protection.
- Locate the emergency shut off for any machine you operate.

ACT…Now

- Inspect machine guards before starting the equipment. Guards should be securely in place and in proper working order.
- Resist the temptation to take a short cut. Short cuts through equipment invite an accident.
- Take the necessary steps to de-energize and lock out machines before attempting to remove a jam. Know the lock out procedures for the equipment you operate.

WATCH…Your Step

- Keep loose clothing, long hair or anything else that might get caught away from machinery. Tie back hair, tuck in clothing and remove jewelry to prevent being trapped by machinery.
- Keep the work area clear of items that could cause you to trip and fall into moving equipment.
- Never bypass interlocking or automatic shut offs; these safety switches are there to keep you from being injured.
- Any repairs or machine maintenance that involves removal or bypass of a guard or placing your body into an area of the machine requires the use of a lock out procedure.