HAND SAFETY

Safety Meeting Contents

- Meeting Notice
- Leaders Guide
- Employee Handout
- Employee Quiz
- Meeting Sign-In Sheet
- Employee Puzzle

PRIOR TO THE WEEKLY MEETING:

- Post the meeting notice by the timeclock
- Read through the Leaders Guide and Employee Handout to familiarize yourself with the topic for the week
- Make copies of the employee handout (one for each employee)
- Make copies of the employee quiz (one for each employee)
- Make copies of the weekly puzzle (one for each employee)

AT THE SAFETY MEETING:

- Pass around the meeting sign-in sheet – ensure all employees present at the meeting print and sign their names
- Pass out the employee hand-out
- Pass out the employee quiz
- Pass out the weekly puzzle
- Keep the meeting simple
- Encourage discussion and questions
WEEKLY SAFETY MEETING NOTICE

THIS WEEK, OUR SAFETY MEETING WILL COVER HAND SAFETY

TIME: ____________________________________________

DATE: ____________________________________________

PLACE: ____________________________________________
EURAMAX PROCEDURE REFERENCE:
B-1.4: Hand Protection

MEETING OBJECTIVE:
Hand injuries on the job are more common than injuries to any other part of the body. It’s no wonder – hands are a worker’s most used tool. But all too often, people are careless about protecting them. You know that hand injuries can be prevented, and you know the danger of these injuries. What seems like a minor cut can lead to infection. A small puncture wound can result in blood poisoning. The purpose of this meeting is to make employees aware of hand hazards, acquaint them with the required hand protection used at your facility, and discuss the circumstances under which different types of hand protection should be used.

MEETING PREPARATION:
Read the Euramax procedure, understand the contents, and ensure compliance.

Consider all the jobs and work areas at your facility, and make a list of related hand hazards. Be prepared to discuss your list at the meeting.

Gather samples of hand protection used at your facility for various tasks. Bring these to the meeting and be prepared to explain under what circumstances they should be used.

Review the employee handout to see if there are any other materials you wish to bring to the meeting.

Use a flip chart during the discussion to write key points and employee responses. This technique visually reinforces your instruction.

MATERIALS CHECKLIST:
• List of hand hazards.
• Samples of gloves and other hand protection.
• Flip chart and marking pens.

MEETING
INTRODUCTION
Our hands take a lot of abuse. We cut them, scrape them, bruise them and still go on doing the job. Our hands are tough – but only up to a point. Today’s finger cut can become tomorrow’s infection. I know most of you don’t think twice about cuts, scrapes, and bruises. But carelessness about hand safety can lead to serious consequences – like losing a finger, or worse.
In today’s meeting, we’re going to discuss the prevention of hand injuries. You’ll learn that it’s really easy to protect your hands, if you take the time to use the right equipment and perform the job in the right way.

OSHA requires workers to wear hand protection to prevent injuries. Most often this protection takes the form of gloves. Gloves can help prevent cuts, abrasions, burns, punctures, and skin contact with chemicals and temperature extremes. But they are only effective if workers choose the right glove for the job and wear gloves every time they are needed. Furthermore, OSHA cautions that no one glove can provide protection against all potential hazards. Even the best gloves can only protect against a limited range of hazards. And they won’t keep hands safe if workers aren’t following safe work practices.

There are about 250,000 serious hand, finger, and wrist injuries in private industry per year, according to Bureau of Labor Statistics data. In a recent year, about 8,000 of these injuries were amputations.

**DISCUSSION GUIDE**

*Question:* What are some common hand hazards that we face on the job?

*Answer:* (Consult the list you prepared before the meeting)
- Cut hazards – edge of steel or aluminum
- Puncture hazards – screwdrivers, knives, awls
- Shearing hazards – cutters, knives, cleavers, axes, any two hard-edged objects that pass close together
- Rotating hazards – rotary saws, fan blades, lathes, power drills.
- Crushing hazards – gears, rollers, wheels, shafts
- Smashing hazards – hammers, presses, pinch points
- Temperature hazards – caused by extremes of heat or cold
- Burn hazards – caused by chemicals or heat
- Chemical hazards – absorption of harmful substances through the skin

*Question:* Gloves can protect us from some of these hazards. What are some of the kinks of gloves we commonly use to protect our hands, and what are the appropriate circumstances for using each kind of glove.
HAND SAFETY

Leaders Guide

Answer: (Show employees the samples of gloves you brought as you discuss them.)

- Cotton, cloth, or canvas helps you grasp slippery objects and protects against slivers, dirt, and moderate heat and cold.
- Leather protects against sparks, chips, rough objects, and moderate heat.
- Natural rubber (and blends) is good for use with caustics, alcohols, and diluted water solutions.
- PVC protects against strong acids, strong caustics, slats, and alcohols.
- Neoprene is good for use with oxidizing acids, aniline, phenol, and glycol ethers.
- Nitrile protects against grease, oils, aliphatic chemicals, xylene, perchlor, and trichloroethane. Nitrile gloves may also serve as an alternative for people who are allergic to latex gloves.
- Butyl can be used with glycol ethers, ketones, and esters.
- Metal mesh/Kevlar® mesh protects against cuts and very rough materials.

Demonstrate proper fitting of gloves.

Teach employees how to safely remove gloves that might have been contaminated by chemicals. Follow this step-by-step procedure:

Safe Glove Removal

- Start with either of the gloves. The first goal is to break the seal (vacuum) that’s formed by your perspiration and the tightness of the glove. Do this by pinching the glove at the heel of the hand with the fingers of your opposite hand. Then pull and stretch the glove away from the heel of your hand, letting air in and breaking the seal. Next, stretch and pull the glove away from your hand, letting the air up past the heel into the palm of your hand. Pull at the glove several times to let as much air as possible get in between the glove and your hand.

- As you break the seal in the glove you’re removing, curl that hand’s fingers, making a loose fit.

- Then slowing and gently begin to pull the cuff of the glove up, peeling it back. It will turn inside out as it comes off. Don’t snap the glove or pull so hard or fast that you tear it. This could defeat the purpose of this safe removal procedure, exposing you to risk.
HAND SAFETY

Leaders Guide

- Once the first glove is removed, don’t drop it or throw it away, hold it scrunched up into a ball, in the palm of your gloved hand.

- Next, slide the index finger of your bare hand (which should have no potentially infectious material on it) up the inside of your gloved hand’s wrist, under the glove, and into the palm of that gloved hand. Then bend that index finger a little so that it forms a hook, hooking onto the glove from the inside. Pull the glove off, turning it inside out as you do so, with the fist glove balled inside the second. Again, it is vital to move slowly and smoothly so as not to rupture the glove.

- Both gloves are now inside out, one inside the other.

- Immediately and thoroughly wash your hands with a disinfectant soap under running water.

Discuss proper care and maintenance of hand protection.

- Inspect gloves for wear, damage, or defects before use.

- Never use worn, damaged or defective gloves. Replace them right away and dispose of them properly so that no one else will use them.

**Question:** Besides gloves, what precautions can you take to protect your hands from injury?

**Answer:** Remove jewelry when working with or near machines. Rings, watches, bracelets, etc., can catch on machinery and cause your hand to get injured.

Keep hands away from moving parts.

Watch out for parallel wheels or roller that turn inward – they can grab your hands and pull them into the machine.

Never operate a machine without its guard.

Never adjust, modify, or remove a machine guard.
Disconnect power to clean, oil, or adjust a machine. Follow required lockout / tagout procedures according to Euramax policy.

Always choose the right tool for the job. Any problem with your tools makes your job more difficult. And it makes it more hazardous for your hands.

Use a brush – not your hands – to clear away filings or shavings from work areas.

Be careful when carrying loads through doorways or in other situations where there are pinch point hazards.

**Question:** What factors should be considered when selecting the right glove for the job?

**Answer:** The following are examples of some factors that may influence the selection of protective gloves for a work place:

- Type of chemicals handled
- Nature of contact (total immersion, splash, etc.)
- Duration of contact
- Area requiring protection (hand only, forearm, arm)
- Grip requirements (dry, wet, oily)
- Thermal protection
- Size and comfort
- Abrasion / resistance requirements

**SUMMARY:**
We can provide you with PPE and safe work procedures to help you protect your hands. And we can warn you about the hazards here on the job. But it’s up to you to be alert to hand safety at all times. Your hands are your most valuable tools. Work with their safety in mind.

**EMPLOYEE HANDOUT:**

A. Employee Handout
B. Hand Safety Quiz
C. Hand Safety Puzzle
HAND SAFETY

Leaders Guide

QUIZ ANSWERS:
1. Leather
2. Heat, Heat, Cold
3. Aramid fiber
4. Acids
5. Dirt, Slivers, Chafing and Abrasions
6. Plastic Coating
7. Cotton Flannel, General-Purpose
8. Rubber
9. Comfortable
10. Allergic Reactions
11. Hypoallergenic Gloves, Glove Liners, and Powderless Gloves
12. Neoprene
13. Nitrile
14. It is essential that you use gloves specifically designed for the hazards and tasks you face because gloves designed for one function may not protect against a different function even though they may appear to be a good choice.
15. Sturdy gloves made from metal mesh, leather or canvas provides protection against cuts and burns.
16. Leather gloves would probably be the best choice.
17. Fabric and coated fabric gloves are made of cotton or other fabric to provide varying degrees or protection. Fabric gloves protect against dirt, slivers, chafing, and abrasions. They do not provide sufficient protection for use with rough, sharp or heavy materials.
18. By adding a plastic coating, fabric gloves are transformed into general–purpose hand protection offering slip resistant qualities.
19. You should always check with the manufacturer or review the manufacturer’s product literature to determine the gloves’ effectiveness against specific workplace chemicals and conditions.
20. Answer may include natural, butyl, neoprene, nitrile and fluorocarbon (viton).
21. As a general rule, the thicker the glove material, the greater the chemical resistance. However, thick gloves may impair grip and dexterity, having a negative impact on safety.
22. Latex gloves have caused allergic reactions in some individuals and may not be appropriate for all employees. Hypoallergenic gloves, glove liners and powderless gloves are possible alternatives for workers who are allergic to latex.
HAND SAFETY

Employee Handout

Gloves Come In Many Forms
Although hands and fingers are difficult to protect because they are needed for practically all types of work, they can be guarded from many common injuries through the use of gloves. Let’s discuss the variety of gloves available to protect us on the job.

Leather, Canvas or Metal Mesh Gloves
Sturdy gloves made from metal mesh, leather or canvas provides protection against cuts and burns. Leather or canvas gloves also protect against sustained heat.

- **Leather gloves** protect against sparks, moderate heat, blows, chips and rough objects.
- **Aluminized gloves** provide reflective and insulating protection against heat and require an insert made of synthetic materials to protect against heat and cold.
- **Aramid fiber gloves** protect against heat and cold, are cut-and abrasive-resistant, and wear well.
- **Synthetic gloves** of various materials offer protection against heat and cold, are cut-and abrasive-resistant, and may withstand some diluted acids. These materials do not stand up against alkalis and solvents.

Fabric And Coated Fabric Gloves

Fabric and coated fabric gloves are made of cotton or other fabric to provide varying degrees of protection.

- **Fabric gloves** protect against dirt, slivers, chafing and abrasions. They do not provide sufficient protection for use with rough, sharp or heavy materials. Adding a plastic coating will strengthen some fabric gloves.
- **Coated fabric gloves** are normally made from cotton flannel with napping on one side. By coating the unnapped side with plastic, fabric gloves are transformed into general-purpose hand protection offering slip-resistant qualities.
Chemical-And Liquid-Resistant Gloves

Chemical-resistant gloves are made with different kinds of rubber. These materials can be blended or laminated for better performance. As a general rule, the thicker the glove material, the greater the chemical resistance, but thick gloves may impair grip and dexterity, having a negative impact on safety.

Some examples of chemical-resistant gloves include:

**Butyl gloves** are made of a synthetic rubber and protect against a wide variety of chemicals. Butyl gloves also resist oxidation, ozone corrosion and abrasion, and remain flexible at low temperatures. Butyl rubber does not perform well with aliphatic and aromatic hydrocarbons and halogenated solvents.

**Natural (latex) rubber gloves** are comfortable to wear, which makes them a popular general-purpose glove. They feature outstanding tensile strength, elasticity and temperature resistance. In addition to resisting abrasions caused by grinding and polishing, these gloves protect workers’ hands from most water solutions of acids, alkalis, salts and ketones. Latex gloves have caused allergic reactions in some individuals and may not be appropriate for all employees. Hypoallergenic gloves, glove liners and powderless gloves are possible alternatives for workers who are allergic to latex gloves.

**Neoprene gloves** are made of synthetic rubber and offer good pliability, finger dexterity, high density and tear resistance. They protect against hydraulic fluids, gasoline, alcohols, organic acids and alkalis. They generally have chemical and wear resistance properties superior to those made of natural rubber.

**Nitrile gloves** are made of a copolymer and provide protection from chlorinated solvents, such as trichloroethylene and perchloroethylene. Although intended for jobs requiring dexterity and sensitivity, nitrile gloves stand up to heavy use even after prolonged exposure to substances that cause other gloves to deteriorate.

Thanks for your attention. Have a safe day.
HAND SAFETY

Employee Quiz

Answer the following questions to see what you know about hand safety.

1. ________________ gloves protect against sparks, moderate heat, blows, chips and rough objects.

2. Aluminized gloves provide reflective and insulating protection against ________ and require an insert made of synthetic materials to protect against ________ and ________.

3. _______ ________ gloves protect against heat and cold, are cut- and abrasive-resistant.

4. Synthetic gloves of various materials offer protection against heat and cold, are cut- and abrasive-resistant, and may withstand some diluted ____________.

5. Fabric gloves protect against __________, __________, __________, and __________. They provide sufficient protection for use with rough, sharp, or heavy materials.

6. Adding a __________ __________ will strengthen some fabric gloves.

7. Coated fabric gloves are normally made from __________ __________ with napping on one side. By coating the unnapped side with plastic, fabric gloves are transformed into __________ - __________ hand protection offering slip-resistant qualities.

8. Butyl gloves are made of a synthetic __________ and protect against a wide variety of chemicals.

9. Natural (latex) rubber gloves are __________ to wear, which makes them a popular general-purpose glove.

10. Latex gloves have caused __________ __________ in some individuals and may not be appropriate for all employees.
HAND SAFETY

Employee Quiz

11. __________ __________, __________ __________ and __________ __________ are possible alternatives for workers who are allergic to latex gloves.

12. __________ gloves are made of synthetic rubber and offer good pliability, finger dexterity, high density and tear resistance.

13. Although intended for jobs requiring dexterity and sensitivity, __________ gloves stand up to heavy use even after prolonged exposure to substances that cause other gloves to deteriorate.

14. Why is it important to make sure you use the right hand protection?
   __________________________________________________________________________
   __________________________________________________________________________

15. What kind of gloves protect against cuts and burns?
   __________________________________________________________________________
   __________________________________________________________________________

16. Suppose your job exposes you to sparks, moderate heat, blows, chips and rough objects. What type of gloves would be a good choice for you?
   __________________________________________________________________________
   __________________________________________________________________________

17. Under what circumstances would you wear fabric or coated fabric gloves?
   __________________________________________________________________________
   __________________________________________________________________________

18. Coated fabric gloves are normally made from cotton flannel with napping on one side. By coating the unnapped side with plastic, what happens to the gloves?
   __________________________________________________________________________
   __________________________________________________________________________
HAND SAFETY

Employee Quiz

19. When selecting gloves to protect against chemical exposure hazards, what should you do?

__________________________________________________________________________

__________________________________________________________________________

20. Chemical-resistant gloves can be made with different kinds of rubber. Name two of these types.

__________________________________________________________________________

__________________________________________________________________________

21. When it comes to chemical-resistant gloves, name one positive and one negative trait of thick gloves.

__________________________________________________________________________

__________________________________________________________________________

22. Natural (latex) rubber gloves are comfortable to wear, which makes them a popular general-purpose glove. What is one of the primary drawbacks of latex gloves?

__________________________________________________________________________

__________________________________________________________________________
# HAND SAFETY
## Meeting Sign In Sheet

**LOCATION**

**MEETING DATE** ____________  **MEETING CONDUCTED BY**  

**CONTENTS OF MEETING** (Attach Handouts, etc.)

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HAND SAFETY
Employee Puzzle

This word search’s theme is hand safety. The words are related to hand hazards and hand protection on the job.

**Word Search Grid**

Abrasions
Bone
Bruise
Burn
Butyl
Canvas
Chain
Chemical
Cots
Cotton
Crush
Cut
Disposable

Elbow
Finger
Flock
Flocked
Forearm
Gauntlet
Glove
Hand
Heat
Jersey
Kevlar
Knit
Laceration

Latex
Leather
Mesh
Mitt
Neoprene
Nitrile
Nylon
Pinked
Polyethylene
Powder
Protection
PVC
Ripped
Rubber
Shoulder
Straight
Tendon
Vinyl
Water
Wear
Wrist