



MSA Safety Talk for Hand Protection

Toolbox Talks are intended to facilitate health and safety discussions on the job site.

Each year, one out of eight of all work-related injuries are to hands and fingers. Hand and finger injuries are the result of hazards from tools and equipment, being exposed to heat or cold, or after contact with chemicals.

While at work, your hands are exposed to three general kinds of hazards:

- Irritating substances—skin conditions such as dermatitis can be caused by contact with chemicals and biological agents (bacteria, fungi, and viruses). Chemicals and toxic substances can also enter the bloodstream through abrasions or cuts.
- Mechanical hazards—are present wherever tools and machinery are used. Injuries resulting from tool and machinery use might include cuts, punctures, abrasions, or crushing.
- Environmental hazards—factors like extreme heat or cold can cause hand and finger injury.

When handling chemicals, most of the exposure is through your hands and forearms. Container labels and the Safety Data Sheet (SDS) for a particular chemical are the best sources of information for proper personal protective equipment (PPE) for your hands.

Chemical exposure hazards and PPE requirements differ greatly depending upon the form of the material (dry, water based, non-water-based, or gaseous) of chemical being used. In order to protect your hands from injury, you will need to precisely follow the label instructions about the type of gloves or other hand protection for each different chemical you use.

If the chemical being used is a dust, mist, fume, or gas, you will need to protect your lungs, other parts of your respiratory system, your mucous membranes and, for some chemicals, you will need to protect your skin. This document will only be discussing hand protection; the other personal protection equipment will be covered in another Toolbox Talk.

What you should know about protecting your hands:

- When personal protective equipment (PPE) is necessary.
- What PPE is necessary?
- The limitations of the PPE.
- The proper care, maintenance, useful life, and disposal of the PPE.

Types of Gloves:

- Chemical resistant gloves (butyl rubber, natural rubber latex, neoprene, thick plastic) protect against corrosive and irritating chemicals like pesticides, acids, cleansers, or solvents. No one type of chemical resistant glove can protect you from ALL chemicals.

- Leather gloves protect against sparks, moderate heat, blows, chips, and rough objects.
- Fabric gloves can protect against dirt, slivers, chafing, and abrasion. These gloves do not provide sufficient protection to be used with rough, sharp, or heavy materials.
- Coated fabric gloves are useful for general-purpose hand protection and offer slip-resistant qualities.

Considerations when selecting appropriate hand protection:

- Breakthrough – how fast will gloves break down and allow chemicals to seep through?
- Dexterity – how much flexibility does the glove have?
- Length – how exposed are your arms?
- Size – do the gloves provide the right amount of dexterity and comfort?

Hand protection limitations:

All protective equipment has certain limitations. For example, gloves that provide protection from chemical exposure often break down over time and allow the chemical to seep through. Dexterity may be limited with the use of some gloves. Proper fit is an important component in being able to work effectively while wearing gloves.

You know that the Safety Data Sheets (SDS) provide information about the type of hand protection you should use for the chemical. And the manufacturer of the gloves provides information about which gloves are suitable for use with the different groups of chemicals. And, if there are questions, be sure to ask your supervisor.

Toolbox Attendance

Questions? _____

Concerns? _____

Days since Last Incident: _____

Supervisor/Meeting Leader: _____ Date: _____

Signatures of attendees:

Manager review comments:

Manager signature: _____ Date of Review: _____