Hand Protection (Gloves)
Training on the use of hand protection in the workplace

Developed by the Division of Occupational Safety & Health (DOSH) for employee training
May, 2009

Hand Protection (Gloves)
The following topics will be covered:
- Hand Hazards
- Types of Gloves
- Limitations
- Use and Care
- Chemical-resistant gloves

Your Hands
Your hands – don’t take them for granted

Human hands are unique and one of our greatest assets.
Can you imagine not being able to work with your hands?

Hand injuries can vary from minor cuts or irritation to amputations.
Hand Injuries
A hand injury can ruin your day or your life

20% of disabling workplace injuries involve the hands.

Hand injuries include cuts, burns, fractures, amputations, nerve damage and dermatitis.

Skin irritation, dermatitis and even poisoning can occur by handling chemicals with bare hands.

Hand Protection
Gloves can protect hands from the following:

- knives, sharp edges, splinters
- chemicals
- excessive vibration
- electricity
- blood & bodily fluids
- hot objects
- extreme cold

Types of Gloves
There are many types of protective gloves

- Leather gloves protect your hands from rough surfaces.
- Special insulated gloves can provide protection from hot objects.
- Cut-resistant gloves prevent or reduce cuts from knives or sharp edges.
Types of Gloves

**Anti-vibration gloves** reduce the effects of excessive vibration from hand-tools and machinery.

**Disposable gloves** protect against blood and germs in healthcare.

Various kinds of **chemical resistant gloves** prevent contact with chemicals.

Electrically Insulated Gloves

Certified Linesman’s Gloves
These specialty gloves are used to handle live wires or energized electrical equipment.

They must be electrically tested every 6 months.

They can’t be used if not tested within past 12 months.

Check for obvious signs of wear or holes before using.

Hazard Assessment
Our company did a hazard assessment and found that gloves are needed in the following areas or job tasks:

List areas or tasks here
Gloves We Use

List, describe or show type of gloves used at worksite here and when and for what tasks they are needed.

Glove Limitations

- Gloves can get caught in rotating machinery.
- Some people are allergic to latex gloves.
- Gloves can actually cause more problems if chemicals get inside glove.
- Gloves can fail in conditions of extreme temperatures, high mechanical force, high vibration or handling extremely harsh chemicals.

Glove Size & Fit

Gloves come in many sizes.

Use properly fitting gloves that give you the needed dexterity.

Too big
A better fit
Your hands should be clean before using gloves.

Fabric and leather gloves should be cleaned regularly or discarded.

Latex gloves should not be used by latex-sensitive people.

Some common-sense rules about gloves

Replace gloves if they have cuts, tears, holes or defects.

Make sure gloves are the right length for the job.

Use the right glove for the job

Don’t use fabric or leather gloves to handle liquid chemicals.
Chemical Resistant Gloves

The following slides cover chemical-resistant gloves for employees who use them.

Chemical Hazards

The kind of chemical determines the hazard

- **Corrosives** – will burn or irritate the skin
- **Solvents** – will dry the skin out, may irritate, burn or blister, some are absorbed into the body
- **Pesticides** – absorbed into the body
- **Other chemicals** – a variety of effects

Chemical-Resistant Gloves

**Facts**

Chemical-resistant gloves are not totally “chemical-proof”

Chemicals will eventually penetrate the gloves over time.

Chemicals will also break down (swell, crack or weaken) the glove material over time.

The thicker the glove, the more resistant it is to chemicals.

Thick is better than Thin.
Chemical-Resistant Gloves
Chemical glove selection

No single glove material will protect against all chemicals.

Gloves are selected according to the type of chemical.

Good chemical gloves are made of Viton®, butyl, nitrile, neoprene, PVC or PVA or combinations of these.

---

Chemical-resistant Gloves
Using chemical-resistant gloves

You should know what chemical you are handling and how long the gloves will keep the chemical out.

Throw away gloves whenever degradation is visible or you know chemicals have leaked inside.

When handling highly toxic chemicals, two layers of chemical-resistant gloves can provide additional protection.

---

Removing Contaminated Gloves
Remove contaminated gloves safely and properly

Badly contaminated gloves are impossible to clean.

Removal should be done in a way so that the bare hands do not touch the outside of the gloves.

[Describe method used at your workplace here, if applicable]
**Workplace specifics**

Describe any additional company glove policies here, such as glove supply and replacement, cleaning policies or rules about use of gloves around machinery with moving parts.

---

**Quiz**

**Question 1**

Leather gloves provide protection for the following:

- a) splinters
- b) sheet metal edges
- c) acid
- d) wire cable

---

**Question 2**

A small pinhole is O.K. in what kind of glove?

- a) leather gloves
- b) rubber gloves
- c) cut-resistant gloves
- d) chemical-resistant gloves

---
Quiz

Question 3

Thin disposable rubber gloves can be used for:

a) handling dry fertilizer
b) handling blood-stained bandages
c) dipping your hands in paint thinner just for a minute
d) Picking up construction debris