



Washington State Department of
Labor & Industries

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



blood & bodily fluids



excessive vibration



Hot objects



electricity



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

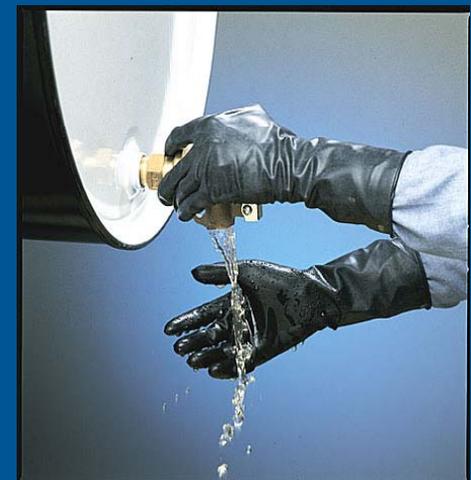
Anti-vibration gloves reduce the effects of excessive vibration from hand-tools and machinery.



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.



(Optional Slide)

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

Glove Use & Care

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.



Glove Use & Care

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.



Glove Use and Care

Use the right glove for the job

Don't use fabric or leather gloves to handle liquid chemicals.



No!



Yes!

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

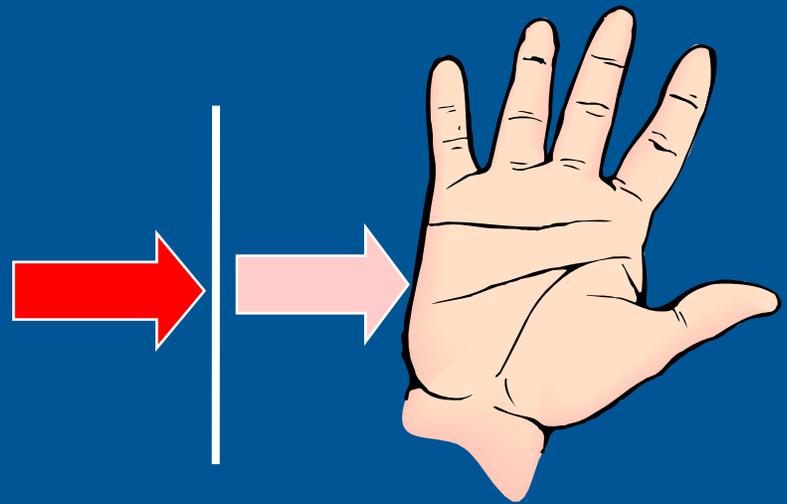
Facts

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.



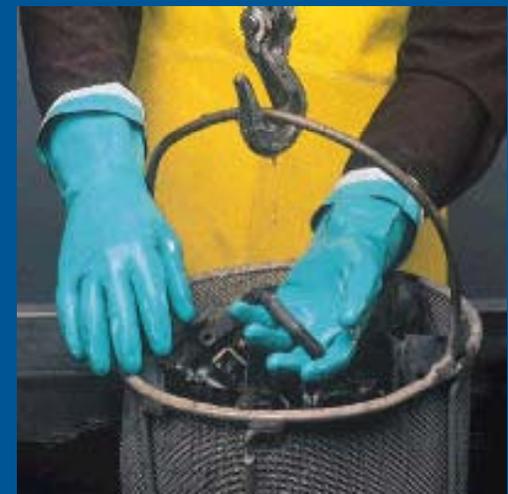
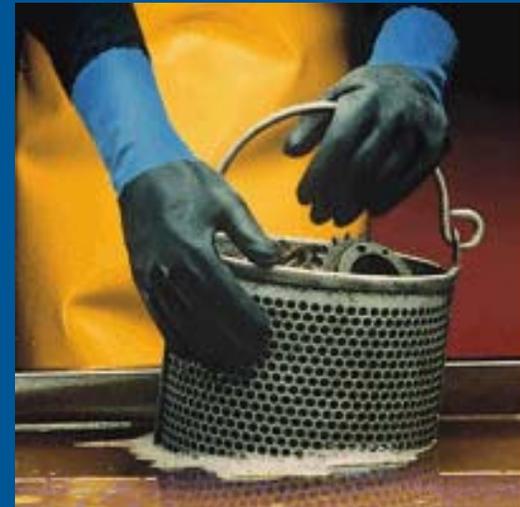
Chemical-Resistant Gloves

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.

1 Hr? 8 hrs?

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

Quiz

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