



Personal Protective Equipment (PPE)

INTRODUCTION

- Nearly two million people are expected to receive disabling work-related injuries this year.



- More than one-fourth of these injuries will involve the **head, eyes, hands, or feet**





PERSONAL PROTECTIVE EQUIPMENT DESIGN:

- PPE is designed to protect the worker from health and safety hazards that cannot be removed or engineered out of the work environment



VARIOUS TYPES

- Types of PPE:
 - hearing and sight
 - foot
 - respiratory
 - head
 - hand





POLICY SHOULD INCLUDE:

**PPE to be provided, used and
maintained in a sanitary condition**

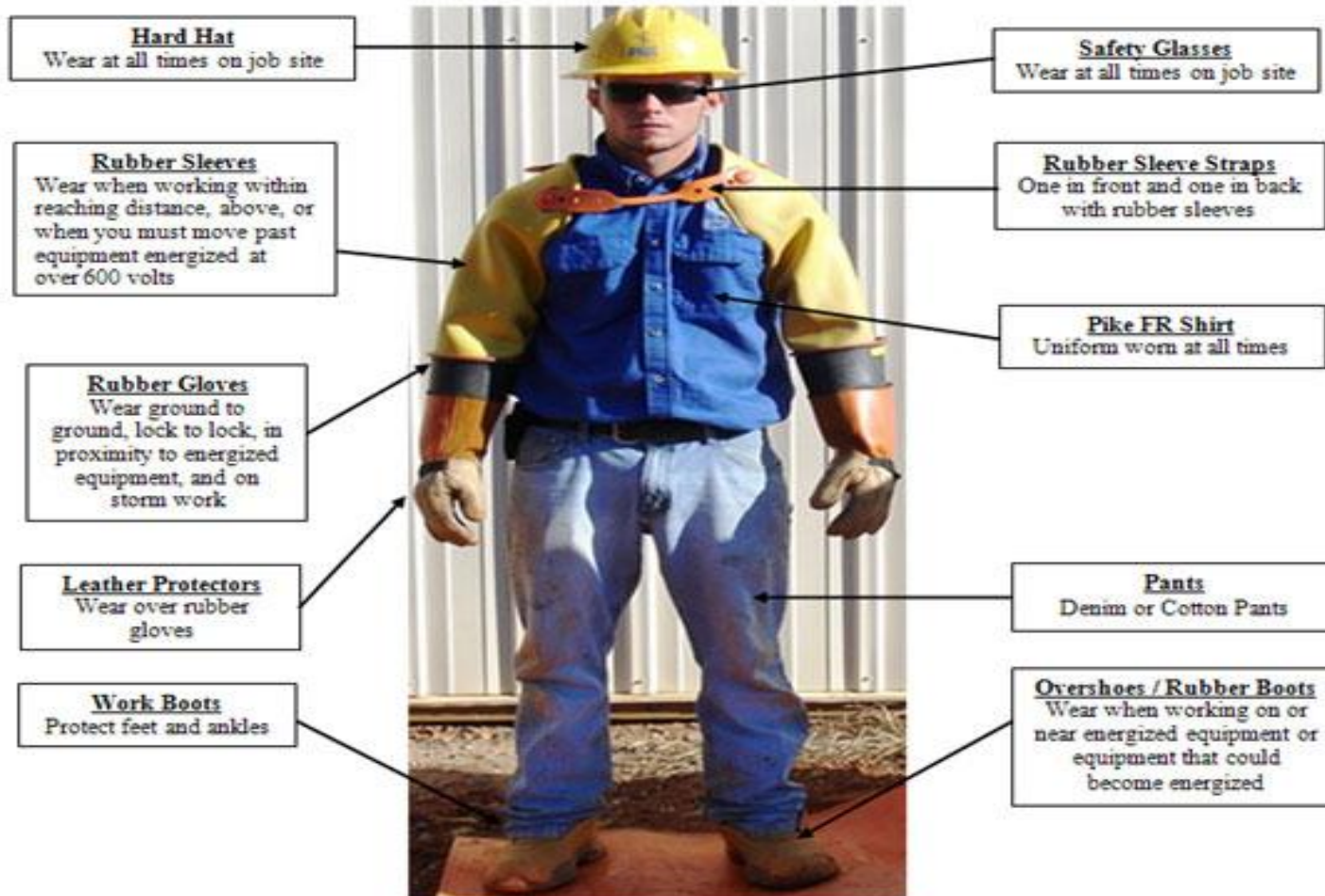


BASIC REQUIREMENTS:

- Activities will complete a job hazard analysis of work areas to determine hazards which necessitate the use of PPE
- Select, and have each affected employee use the types required

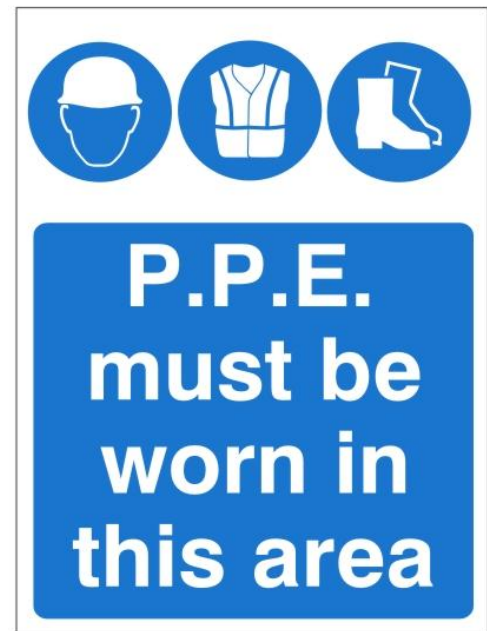


EXAMPLE OF PPE:



HAZARD ASSESSMENT

- Once job hazard analysis has been conducted, employees will be trained in:
 - when to wear PPE
 - what PPE to wear
 - how to wear PPE
 - limitations of PPE
 - proper care, maintenance,
 - useful life and disposal of PPE



EYE AND FACE PROTECTION

- Approved eye and face protection will be worn when there is reasonable probability that an injury can be prevented or reduced by wearing such equipment



SAFETY EYEWEAR

Types of eye and face protection include:

- safety glasses
- goggles
- face shields
- welding helmets
- full hoods



SAFETY EYEWEAR CONT.

- Tinted or shaded lenses may be needed for protection against glare
- Tinted or shaded lenses may limit your vision when moving from bright to dim areas
- Specially numbered lens are provided for protection of radiant energy(welding etc.)



RESPIRATORY PROTECTION:

- *hazards include:*

- dusts
- fogs
- fumes
- mists
- gases
- smoke
- sprays
- and vapours



HEAD PROTECTION

- Helmets and hats for the protection of impact of falling and flying objects



HEAD PROTECTION

- Hard hats are tested to withstand impact of 8 lb weight dropped from 5 ft
- Hard hats must also meet weight, flammability and electrical insulation standards





CLASSES OF HARD HATS

- Class A:
protects from falling objects and electrical shocks up to 2,200 volts
- Class B:
protects from falling objects and electrical shocks up to 20,000 volts
- Class C:
protects from falling objects, but not designed for use around live electrical wire or corrosives

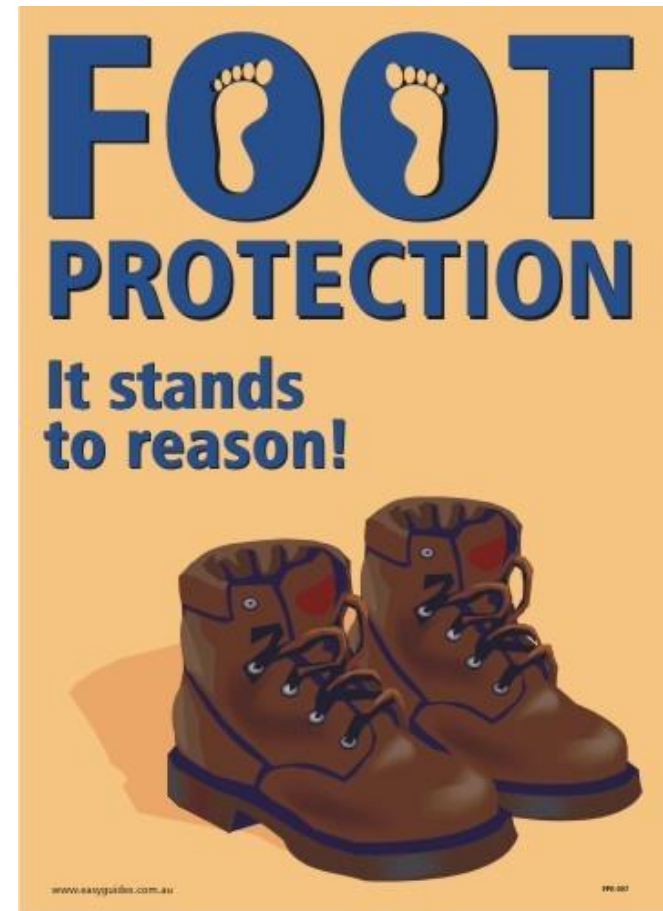
FOOT PROTECTION

- Foot injuries are most likely to occur with:
 - heavy objects falling on your feet
 - rolling of heavy objects
 - piercing of objects through soles of your shoe



FOOT PROTECTION CONT.

- If working around electrical wires, boots/shoes must be metal free and non-conductive
- Static free environments require conductive shoes
- Rubber or synthetic footwear may be required around chemicals
- Avoid leather shoes/boots around corrosives
- Foot guards and heel and ankle shields may be required for particular work



FOOT PROTECTION REQUIREMENTS

- Activity and safety will determine foot hazardous areas and type of foot/toe protection
- Foot and toe protection shall be worn at all times in a designated foot hazard area
- Foot/toe hazard areas shall be provided with approved warning signs



HAND PROTECTION

- Fingers, hands and arms are injured more than other parts of the body
- Gloves are the most common protectors for the hands
- Barrier creams may be used as hand protection or, in conjunction with other hand protection



TYPES OF HAND PROTECTION

- Vinyl or neoprene gloves are sufficient when working with most chemicals
- Leather or cotton knitted gloves are for handling abrasives, metal or sharp objects
- It is dangerous to wear gloves around machinery with rotating parts



TYPES OF HAND PROTECTION

Welding Gloves



SafeTech[®]
Yellow - Leather
Working Gloves



SafeTech[®]
Semi - Leather Jean
Cuff Working Gloves



SafeTech[®]
Argon Gloves



SafeTech[®]
Leather Gloves



SafeTech[®]
Green Welding
Leather Gloves

Chemical - Resistant Gloves



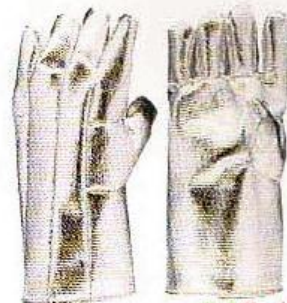
SafeTech[®]
Shock Electrical
Resistant



SafeTech[®]
Nitrile



SafeTech[®]
PVC



SafeTech[®]
Zetex Aluminized



SafeTech[®]
Flextra Kevlar Palm



SafeTech[®]
Cryo Gloves

HAND PROTECTION

- Hand protection will be provided when hands are exposed to such hazards as:
 - skin absorption
 - severe cuts or lacerations
 - abrasions and punctures
 - chemical burns
 - thermal burns
 - temperature extremes



HEARING PROTECTION

- Hearing loss is a common workplace injury, all too often ignored because it usually happens gradually over a period of time



HEARING PROTECTION

- Workers may suffer permanent hearing loss due to:
 - exposure to loud noise
 - hearing protection worn incorrectly





EARPLUGS

- Earplugs offer the most protection to insert disposable type properly:
 - roll plug into a small diameter
 - place it well into the ear canal
 - pull the ear up and back as you insert the plug
 - hold the plug in the ear for a few seconds to allow



EARMUFFS

- Earmuffs are only as effective as their seal:

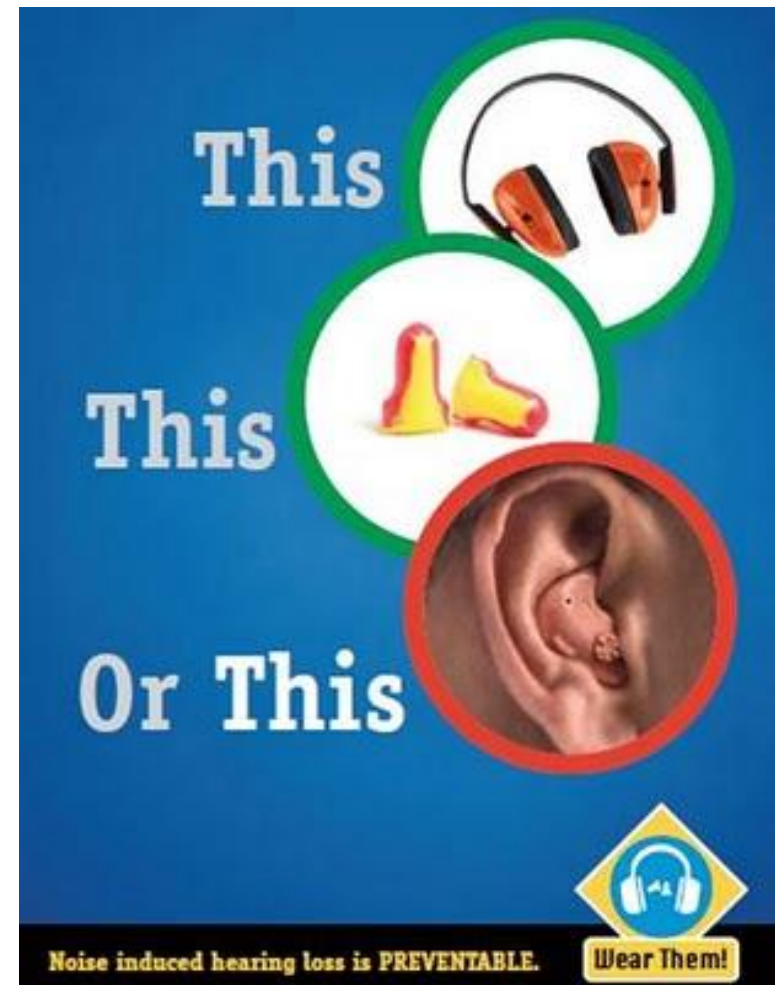
Limitations include:

- facial hair can decrease protection by breaking the seal
- wearing eyeglasses and earrings can pose a similar problem



PROPER PROTECTION

- To ensure proper protection, earplugs and earmuffs may be worn together (double hearing protection)
- Keep in mind that hearing protection may block out sounds you may need to hear-- such as voices and alarms



LIMITATIONS OF PPE

- Ear muffs with cracked, cut or missing gaskets reduce your protection
- Dirty or scratched eyewear could limit your vision
- Suspension on hard hats may have loose or torn cradles
- PPE must fit properly to protect you



CAUTION
IT'S NOT
PPE IF IT
DOESN'T
FIT

MAINTENANCE

- Learn how to clean and sanitise your equipment
- Be familiar with storage and proper handling of all PPE
- If equipment is damaged, know how to repair it or when to replace it



MISCELLANEOUS PPE

- Life preservers (pfd)
- Wrist guards
- Sun, wind, and dust flight goggles
- Ergonomic devices
- Foul weather gear



SUMMARY

- PPE must be used correctly to protect you.
- PPE is designed for your benefit.
- For your sake learn how to use PPE



PROTECTIVE EQUIPMENT

THE FOLLOWING MUST BE WORN IN THIS AREA

(PLEASE CHECK OR FILL IN APPROPRIATE BOXES)

<input type="checkbox"/>	 SAFETY GLASSES
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<input type="checkbox"/>	 EAR PROTECTION
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<input type="checkbox"/>	 FACE SHIELD
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<input type="checkbox"/>	 HARD HAT
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<input type="checkbox"/>	 SPLASH GOGGLES
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<input type="checkbox"/>	 RESPIRATOR
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<input type="checkbox"/>	 GLOVES
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<input type="checkbox"/>	 APRON
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<input type="checkbox"/>	 SAFETY SHOES
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<input type="checkbox"/>	 HAIR & BEARD COVERS
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<input type="checkbox"/>	
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<input type="checkbox"/>	
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**A FIDDLER CRAB
CAN RE-GROW
A LOST CLAW...**



...YOU'RE ONLY HUMAN so an accident could
leave you with a permanent disability. Box clever...

ALWAYS wear your PPE!