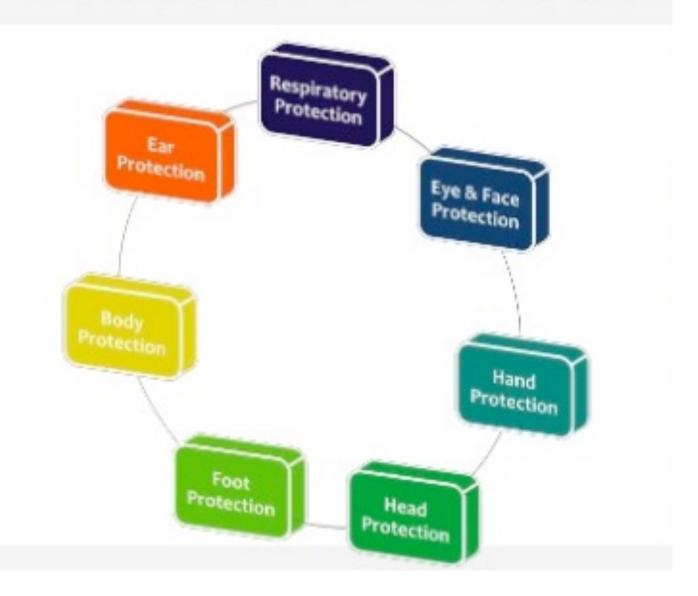
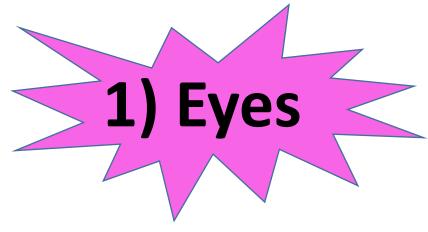
# PERSONAL PROTECTION EQUIPMENTS



### What does PPE include?





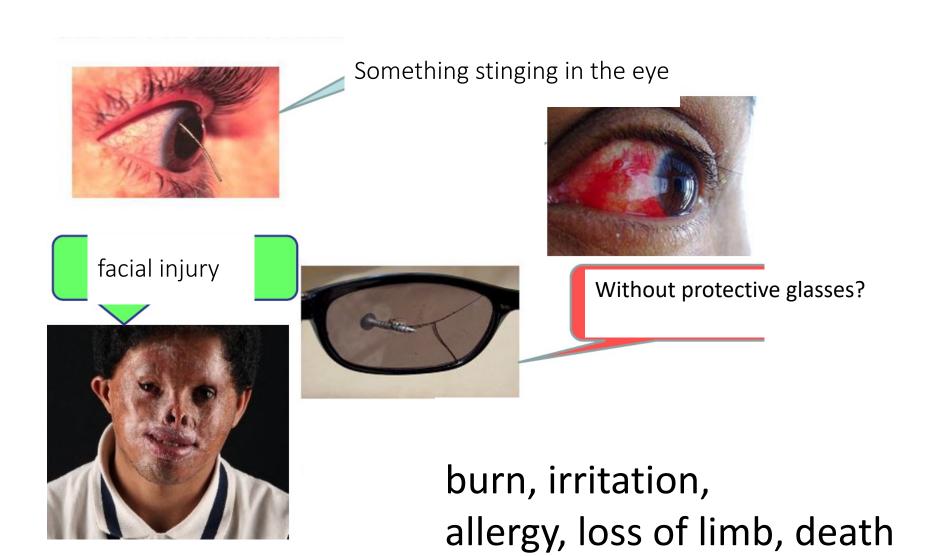


#### **Hazards**

Chemical or metal splash, dust, gas and vapour, radiation



### If eye and face protectors are not used



#### Options

• Safety goggles, face screens, faceshields









#### Note

 Make sure the eye protection chosen has the right combination of impact/dust/splash/molten metal eye protection for the task and fits the user properly



### 2) Head & Neck



 Impact from falling or flying objects, risk of head bumping, hair getting tangled in machinery, chemical splash, climate or temperature





#### Options

• Industrial safety helmets, hairnets









#### Note

- Some safety helmets incorporate or can be fitted with specially-designed eye or hearing protection
- Replace head protection if it is damaged





 Noise – a combination of sound level and duration of exposure, very high-level sounds are a hazard even with short duration









#### Options

• Earplugs, earmuffs, semi-insert/canal caps



#### Note

- Provide the right hearing protectors for the type of work, and make sure workers know how to fit them
- Choose protectors that reduce noise to an acceptable level, while allowing for safety and communication







Sounds above 85 dB: are harmful. So, workers have to use earplugs.

Sounds at 80 dB: employers have to put earplugs in the workplaces.







#### Lets look the other sound intensity (decibel):

10dB: Rustle of leaves

60dB: Normal talking

80 dB: Hair dryer

90 dB: Blender

120 dB: Thunder

150dB: Jet plane







### Ear Protection- earplug- workers' questions:





#### Hazards

• Abrasion, temperature extremes, cuts and punctures, impact, chemicals, electric shock, radiation, vibration, biological agents.







#### Options

Gloves, gloves with a cuff, gauntlets and sleeving that covers part or all of the arm





#### Note

- Avoid gloves when operating machines such as bench drills where the gloves might get caught
- Wearing gloves for long periods can make the skin hot and sweaty, leading to skin problems. Using separate cotton inner gloves can help prevent this

### 5) Feet and Legs

- Hazard
- Wet, hot and cold conditions, electrostatic build-up, slipping, cuts and punctures, falling objects, heavy loads, metal and chemical splash, vehicles.
- Options
- Safety boots and shoes with protective toecaps and penetration-resistant, midsole wellington boots and specific footwear, eg foundry boots and chainsaw boo



- Footwear can help prevent slips in different conditions, including oil or chemical-resistant soles. It can also be anti-static, electrically conductive or thermally insulating
- Appropriate footwear should be selected for the risks identified











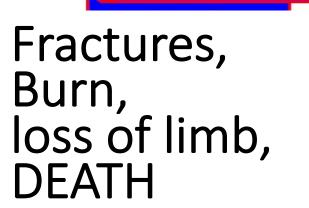




### If foot protectors are not used









### 6) Lungs

- Hazards:
- Oxygen-deficient atmospheres, dusts, gases
- and vapours
- Options :
- respiratory protective equipment (RPE)
- Note
- The right type of respirator filter must be used as each is effective for only a limited range of substances





## 7) Whole body

- Hazards
- Heat, chemical or metal splash, spray from pressure leaks or spray guns, contaminated dust, impact or penetration.



- Options
- Conventional or disposable overalls, aprons, chemical suits



### If whole body protectors are not used



Fractures,
Burn,
loss of limb,
DEATH



warning signs- (have to use)

### white text and icon on blue sheet













while these 3 workers working by wearing all personal protective equipment, this guy is wearing shorts and tshirt. doing it right ???





PPE MUST FIT YOUR BODY IN GOOD CONDITION WITH NO CRACKS, TEARS, OR HOLES



CHECK WITH OSHA REGULATIONS

SAFE AND HEALTHFUL WORKING CONDITIONS ARE YOUR RIGHT!



JOB HAZARDS

CHOOSE PROPER PPE
BE SURE EQUIPMENT WORKS
MAKE SURE EVERYTHING FITS!

### PPE with regard to CORONAVIRUS







Gloves



Goggles



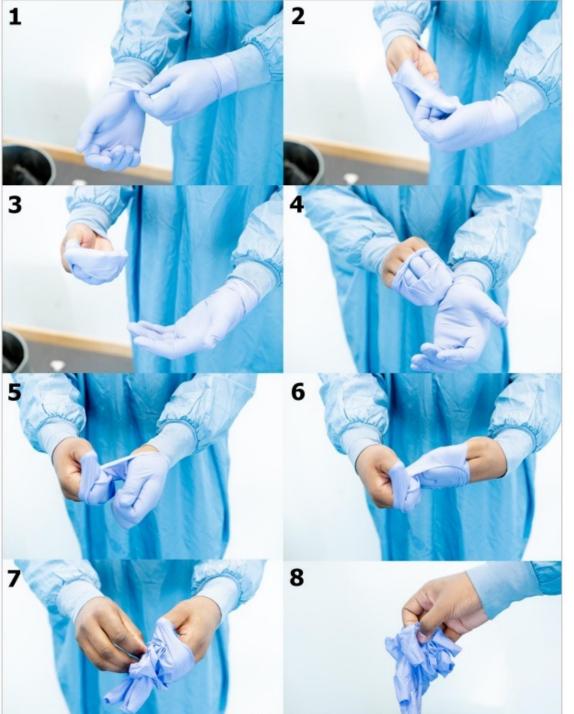
Face shield



Surgical gowns



Plastic apron



#### **Removing the PPE**

Start by (1) pinching and holding the glove (with the other gloved hand) between the palm and wrist area,

- (2) peeling the glove away from the wrist
- (3) until it turns inside out covering the fingers. With the now halfgloved hand,
- (4) pinch and hold the fully gloved hand between the palm and wrist,
- (5) peel the glove away from the wrist
- (6) until it turns inside out and covers the fingers. Now that both hands are half-gloved,
- (7) remove the glove from one hand completely by grabbing the inside part of the glove and peeling it away from the hand, and do the same for the remaining half-gloved hand using the non-gloved hand, while always grabbing the inside part of the glove.

And, Dispose of the gloves (8) in a biohazard bin.

#### Further reading;

- <a href="https://www.hse.gov.uk/pubns/books/hsg53.htm">https://www.hse.gov.uk/pubns/books/hsg53.htm</a>
- Respiratory protective equipment at work: A practical guide
- https://www.hse.gov.uk/pubns/indg174.pdf

A short guide to the Personal Protective Equipment at Work Regulations 1992 Leaflet INDG174 (PDF)

#### Further reading:

Hard hats: What you need to know as a busy builder Construction Information Sheet CIS70 HSE Books 2013 www.hse.gov.uk/pubns/cis70.pdf

Hazardous substances at work: A brief guide to COSHH Leaflet INDG136(rev5) HSE Books 2012 www.hse.gov.uk/pubns/indg136.htm

Lead and you Leaflet INDG305(rev2) HSE Books 2012 www.hse.gov.uk/pubns/indg305.htm

Noise at work: A brief guide to controlling the risks Leaflet INDG362(rev2) HSE Books 2012 <a href="https://www.hse.gov.uk/pubns/indg362.htm">www.hse.gov.uk/pubns/indg362.htm</a>

Personal Protective Equipment at Work (Second edition). Personal Protective Equipment at Work Regulations 1992 (as amended). Guidance on Regulations L25 (Second edition) HSE Books 2005 ISBN 978 0 7176 6139 8 www.hse.gov.uk/pubns/books/I25.htm

Respiratory protective equipment at work: A practical guide HSG53 (Third edition) HSE Books 2005 ISBN 978 0 7176 2904 6 www.hse.gov.uk/pubns/books/hsg53.htm

Selecting protective gloves for work with chemicals: Guidance for employers and health and safety specialists Leaflet INDG330 HSE Books 2000 www.hse.gov.uk/pubns/indg330.htm