

Do you need protection?



What is personal protective equipment?

PPE, as it is often called, is any clothing or equipment used by workers to reduce the chance that they will be harmed by something in their workplace. Depending on the hazards involved, it can include head gear, foot and leg wear, glasses, goggles and face shields, gloves, respiratory protection, hearing protection, overalls, aprons and other garments. Such gear is available in many different varieties, to protect against particular hazards or situations, so it is important to select the right types for each job.

How do I know if I need it?

Because the effectiveness of PPE can be easily compromised – by not wearing it properly, for example – it is not the answer for every hazardous situation. In fact the law *requires* employers to use other ways, taking all practicable steps, to reduce the danger to workers if possible.

Before you can know what is right for you, you will need to do a hazard assessment (see To Begin With, Safeguard 85). You should be looking, first of all, to prevent dangerous situations occurring, or to keep workers away from them, by changing the way work is carried out. If such solutions are not possible, however, PPE may be needed – at least until a more permanent solution can be found.

What sort of protection will PPE give?

Protective clothing and gear can be used to protect against:

- chemicals,
- heat, cold and weather conditions,
- dust, gases or other airborne contamination,
- radiation,
- bacterial or viral infections,
- cuts and puncture wounds,
- injuries caused by collision or being struck by something,

- lasers, welding and other harmful light sources,
- electricity,
- burns.

How do I choose the right gear for the job?

Ask the experts. Different materials and designs can give completely different results for the wearer – and the wrong PPE can be worse than none at all. Reputable suppliers will tell you what you need.

If dealing with chemicals, check recent (less than five years old) material safety data sheets to ensure compatibility.

Don't buy the cheapest brands without reading the fine print first. Unless it carries a Standards mark (preferably the New Zealand/Australian one, but a UK or US one will do), you cannot be certain it will do what it claims.

Be sure to consult those who will wear/use the equipment. If it doesn't fit properly it won't work, and if it isn't comfortable or just doesn't look good, they may "forget" to put it on. One size probably won't fit all, so be prepared to buy different models to suit different employees.

When choosing eye protection, allow for staff who wear prescription spectacles. Some goggles can be worn over glasses, or safety eyewear can be fitted with prescription lenses.

In some situations workers face more than one hazard at a time. A welder, for instance, may

need protection from harmful gases and light rays, molten metal and flying debris. Make sure the necessary equipment can be worn together without becoming uncomfortable or unsafe.

Who provides the PPE?

The Health and Safety in Employment Act says employers have to provide protective clothing and equipment, and make sure that it is easily accessible and worn when required.

A worker who wants to provide his or her own protective clothing (not equipment) may do so, however, provided it is suitable for the task.

Employees must wear PPE as required, but their employer must make sure they are trained in its correct use.

What sort of training is needed?

Make sure the user is aware of why PPE is needed, when it is to be used, repaired or replaced, and its limitations.

All PPE users must be shown how to adjust the fit, not just to ensure comfort, but also to make sure the equipment works properly. A half-face respirator, for instance, will not function unless it fits snugly, and people have been seriously injured because their head or eye protection was not being worn correctly. Again is it a good idea to consult suppliers or manufacturers.

Wearers must also be told not to remove equipment – even for

short periods – in a hazardous environment. Even a few minutes without hearing or respiratory gear can have serious consequences.

Using equipment in the wrong situations can also be dangerous. Gloves, for instance, can be caught in moving machinery, resulting in serious hand injuries.

All users – including those who only use PPE occasionally – should understand how to use the equipment and why it is important to do so correctly.

What about looking after the gear?

Good maintenance and correct storage will increase the equipment's life, so train staff in the right procedures. Encourage them to report damage or wear, but also inspect PPE regularly and immediately repair or replace any that is damaged. This should be carried out to the manufacturer's maintenance schedule, including recommended replacement periods and shelf life. Simple maintenance can be carried out by a trained wearer, however more intricate repairs should only be done by specialist personnel.

Is that all?

No – PPE use should not be seen as an end in itself. You must regularly re-assess the situation to ensure hazards have not changed and equipment is being used effectively, while also looking for more permanent solutions. ■

LINKS

Want to know more?

- Good basic information, plus guidance on how to select the right PPE for various situations, is at www.acc.co.nz/injury-prevention/safe-at-work/worksafe/action/hazard-management/people/ppe/
- For PPE suppliers visit Safeguard's Buyers Guide on Line at www.safeguard.co.nz/searchbuyersguide.asp
- The OSH website – www.osh.dol.govt.nz – has publications about respirator use.
- Good overseas websites include:
www.osha.gov/OshDoc/data_General_Facts/ppe-factsheet.pdf
www.ccohs.ca/oshanswers/prevention/ppe/designin.html?print
www.cdc.gov/od/ohs/manual/pprotect.htm