

Topic 1.1

Identification of a range of Personal Protective Equipment

- Eye protection
- Ear protection
- Head protection
- Body/Skin protection
- Foot protection
- Inhalation protection (where required)

Personal protective equipment (PPE) refers to all equipment that is worn by an individual, in order to provide protection against health or safety risks, whilst at work.

Eye Protection

There are three main types of eye protection, these are:

- Safety glasses – These are effective for flying objects heading straight towards the face, but they are not effective for vapours and dust that can enter the eyes.
- Goggles – They are effective at protecting the eyes from all angles, as the rim is in contact with the face
- Face shields and visors – These can be worn with prescription glasses underneath, and they help to protect the whole face.

**Ear Protection**

There are three main types of ear protection, these include:

- Ear defenders (ear muffs) – The cups are lined with a sound absorbing material, this helps to reduce the level of noise to the ears
- Ear plugs – These fit into the ear canal and form a seal, they also can have a cord on them, that you can put behind the back of the neck, to help prevent them from becoming lost.
- Canal caps – These are similar to ear plugs, however they offer less protection they are suitable for operations where earplugs would be frequently taken out and put back in.

Head Protection

There are two main types of head protection that are used in the workplace, these are:

- Industrial safety helmets – These protect the head from falling objects such as – tree-felling, building and construction and blasting at a quarry.
- Bump caps – These protect the head from being bumped, they are useful for maintenance personnel working under machinery and plumbers working under pipework. However, they do not offer adequate protection from the risk of a falling object.

**Body/Skin Protection**

There are three main types of whole-body/skin protection:

- Separates – these only cover part of the body (e.g. jackets or trousers).
- Aprons – these only cover part of the body.
- Overalls, coveralls, body suits, boiler suits and chemical suits – these cover the whole body, and may be reusable or disposable.

- Knee pads.
- Gaiters – these cover the shins.
- Hard fibre or metal guards, which help to protect against some impact hazards.



High visibility clothing - This is required to protect the body against certain hazards such as moving vehicles, the main types are:

- Jackets
- Tops
- Trousers
- Vests



Foot Protection

There are two common types of foot protection, they both offer a variety of protection, these are:

- Safety boots and shoes – They come with slip-resistant soles, penetration-resistant midsoles, protective toe caps.
- Wellington boots – These are suitable for people who work in wet conditions, they are normally made from rubber, they also come with slip-resistant soles, penetration-resistant midsoles, protective toe caps.

Inhalation Protection

There are two main types of inhalation protection these include:

- Breathing apparatus – These are used for high-risk work activities where breathing in the contaminated air could be fatal, as well as when there is a chance that the air could become deficient of oxygen
- Respirators – These filter out contaminants from workplace air and there are three types of respirators these include – Simple filtering face piece respirator (disposable mask) Respirator (full face or half face reusable mask) Power-assisted respirators.



These help protect the mucus membranes of the eyes, as well as help to reduce the risk of foreign objects entering the eyes and damaging them.

Hand and arm protection

There are four main types of hand and arm protection, these include:



- Gloves – These protect the hands, they can prevent blisters from occurring, people from burning themselves or getting splinters in their hands.
- Gloves with cuffs – These protect both the hand and the wrists
- Gauntlets, sleeves and long gloves – These provide protection for the hands, wrists and parts of the forearms.
- Sleeves and arm protection – These can provide protection for the whole forearms and upper arms.

<https://cpdonline.co.uk/knowledge-base/health-and-safety/what-are-the-types-of-ppe/>