This document sets out in more detail the arrangements for compliance with University Health and Safety Policy at Budget Centre level and it gives guidance on how these requirements may be met. This document forms a part of the University Health and Safety Policy.

Personal protective equipment may be needed in addition to all other control measures if the combination of all control measures fails to achieve adequate control of risks to health and safety. Personal protective equipment includes gloves, respirators, eye protectors, helmets, harnesses and other items of personal clothing. In addition to the work being done, materials used and also fit requirements for the individual user, the selection of personal protective equipment also must take into account the variation of performance according to type and individual specification. In specific cases there are statutory requirements for personal fit testing and regular maintenance and performance testing.

This document sets out Policy and requirements for the selection, use and maintenance and further supportive information and guidance for items of personal protective equipment in common use. Further information and advice is available from the Health and Safety Unit.

November 2003
UHSP/19/PPE/03

Updated October 2014
Hygiene requirements added –see pages 2 and 3.
Standards consolidated and updated throughout document
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INTRODUCTION

There is a general statutory requirement¹ that personal protective equipment (PPE) is to be supplied and used at work wherever there are risks to health and safety that cannot be adequately controlled in other ways. Usually, PPE is required to be considered in addition to all other control measures if the combination of all control measures fails to achieve adequate control of risks to health and safety. However, in certain cases² there are specific statutory requirements, such as that for the provision and wearing of head protection during construction work. There are also some other specific requirements about PPE contained in Regulations covering hazardous substances, noise and ionising radiation.

Personal protective equipment includes:
- gloves;
- respiratory protection - respirators/face masks;
- eye protectors;
- safety harnesses;
- personal ear protection - ear defenders;
- helmets;
- footware;
- certain items of clothing.

Personal protective equipment must be suitable. In addition to the work circumstances and also fit requirements for the individual worker, the selection of personal protective equipment also must take into account the variation of performance according to type and individual specification. For example, a glove material must be impermeable, a filter respirator must not only be able to filter out the particular substance but also have sufficient capacity for the level and duration of exposure.

In specific cases there are statutory requirements for personal fit testing and regular maintenance and performance testing.

This document sets out Policy and requirements for the selection, use and maintenance and further supportive information and guidance for items of personal protective equipment in common use.

POLICY

Heads of Budget Centres must make arrangements to ensure that, in accordance with the requirements of this Policy:

Provision of PPE
- the requirement for PPE is assessed and suitable PPE provided;

Information, Instruction and Training
- users of PPE are aware of the requirements of this Policy and are given adequate information, instruction and training;
- where there is a mandatory requirement to wear PPE, the appropriate Safety Signs are displayed;

Maintenance, Inspection, Testing and Record Keeping
- all PPE is kept clean and in good repair;

¹ The Personal Protective Equipment at Work Regulations 1992
² The Construction (Head Protection) Regulations 1989
• respirators in regular use (other than one-shift disposable) are thoroughly examined and, where appropriate, tested at least once a month or more frequently according to circumstances;

• respirators used only occasionally are examined and tested prior to next use and maintenance carried out as appropriate;

• a record is kept of the detailed outcome of each thorough examination and test of a respirator;

• PPE contaminated with substances hazardous to health is effectively decontaminated before normal cleaning;

Hygiene

• all PPE should be hygienic and otherwise free of risk to health;

Suitability

• all PPE conforms to an approved type standard, as appropriate, and is suitable for the purpose;

• in addition to the above, items of PPE are ‘CE’ marked;

• the selection of a tight fit respirator for an individual wearer includes an appropriate fit test;

Storage

• suitable storage is provided for clean PPE not in use;

• additional suitable receptacles are provided for keeping contaminated PPE prior to cleaning/disposal.

Individuals must:

• use only the PPE specified in the hazard and risk assessment or in budget centre Policy;

• wear laboratory coats/gowns, kept fastened at all times, in areas where chemical and microbiological hazards are handled;

• remove laboratory coats/gowns, etc. before entering rest rooms, canteens, libraries, lavatories, hospital wards and offices and, as far as is practicable, corridors and areas to which there is general access;

• carry out the pre-use checks required by this Policy;

• ensure PPE is kept clean and replaced if contaminated or damaged;

• use the storage provided in accordance with the requirements of this Policy.

REQUIREMENTS FOR PERSONAL PROTECTIVE EQUIPMENT

Provision of PPE

1. Where PPE is the only effective means of controlling the risks of injury or ill health, then it must be available for use at work and free of charge to the employee (or within limits agreed).

Maintenance, Inspection, Testing and Record Keeping

2. Before each period of work, users must carry out an external visual inspection of the PPE to confirm suitability for the work activity and that it is not damaged or degraded so as to impair fit or performance.

3. PPE should be kept clean and in good repair - the manufacturer’s maintenance schedule (including recommended replacement periods and shelf lives) should normally be followed.
4. Coats/gowns must be changed regularly (e.g. daily at microbiological Containment Level 3 and weekly at Level 2) and must be autoclaved before laundering.

5. Protective clothing that has been contaminated by hazardous substances must be decontaminated/cleaned before next use (gloves will need to be washed both inside and outside).

6. Respirators in regular use (other than one-shift disposable) must be thoroughly examined and, where appropriate, tested at least once a month or more frequently according to circumstances.

7. Respirators used only occasionally should be examined and tested prior to next use and maintenance carried out as appropriate.

8. A record must be kept of the detailed outcome of each thorough examination and test of a respirator.

9. No one should re-use PPE previously used by another person unless it has been thoroughly washed and cleaned in accordance with the manufacturer's instructions.

**Suitability**

10. PPE must conform to an approved type standard.

11. In addition to the above, PPE must be 'CE' marked.

12. An item of PPE must be compatible with:
   - the wearer;
   - the work to be done;
   - any other item of PPE worn at the same time.

13. PPE must be of the correct size to ensure the wearer achieves an adequate fit and protection.

14. Fabric, filters, etc. must be able to resist penetration and permeation by the substance concerned indefinitely or for a specified or recommended period.

15. Selection of a suitable respirator should use as a guide the equipment's assigned protection factor.

16. The selection of a tight fit respirator for an individual wearer must include an appropriate fit test and this must be repeated if there is any change in the respirator or facial characteristics of the wearer.

**Hygiene**

17. Where it is necessary to ensure that personal protective equipment is hygienic and otherwise free of risk to health, the equipment provided must be for individual use only (e.g. goggles, gloves, face masks etc. as appropriate).

**Storage**

18. Suitable storage must be provided for clean PPE not in use, adequate to protect it from contamination, loss or damage, out of direct sunlight and not in excessively hot or humid conditions.

19. Additional suitable receptacles must be provided for keeping contaminated PPE prior to cleaning/disposal.

**FURTHER INFORMATION AND GUIDANCE**

It should be remembered that PPE should be used as a control measure only as a last resort and where other methods of control are not reasonably practicable. This is because:

- PPE only protects the wearer – it does not remove the contaminant or hazard from the workplace environment;
- some types of PPE are inconvenient and interfere with the way people work, e.g., wearing gloves interferes with the wearer’s sense of touch;
- the extent of protection depends upon good fit and attention to detail;
- if PPE is used incorrectly, or badly maintained, the wearer may receive no protection.
PROTECTIVE CLOTHING

Types of Protective Clothing
Protective clothing may be needed to protect the body and limbs against certain hazards:
- coats, coveralls, overalls and aprons to protect against hazardous substances;
- outfits to protect against cold, heat and bad weather;
- clothing to protect against knives and machinery, such as chain saws.

Protective clothing may also be needed for personal safety:
- high visibility clothing;
- life jackets and buoyancy aids.

The appropriate level of protection will depend on the work being undertaken and the environment it is being under taken in.

Protective clothing should only be used for the purpose intended. It should be maintained in good condition and checked regularly. It should be repaired in accordance with the manufacturer’s instructions or discarded.

Laboratory Coats for Microbiological Containment Laboratories
Ordinary laboratory coats are adequate for biological containment level 1 laboratories, but “Howie coats”, high necked, side or back fastening gowns with elastic cuffs (or equivalent), give better protection and must be worn in containment Level 2 and 3 areas. Coats/gowns must be changed regularly (e.g. daily at Level 3 and weekly at Level 2) and must be autoclaved before laundering. For this reason it is often easier to use disposable gowns in Containment level 3 facilities. Containment level 3 gowns must not be worn in any other laboratory and should not be removed from the facility unless they have been autoclaved or are being taken to a nearby facility for autoclaving.

Relevant Standards:
All protective clothing must be manufactured to the correct British Standard. The appropriate standards for protective clothing can be found on the HSE’s website: http://www.hse.gov.uk/foi/internalops/oms/2009/03/

PROTECTIVE GLOVES
Protective gloves are available in a wide range of natural and synthetic materials; however, there is no single glove material (or combination of glove materials) able to provide unlimited resistance to any individual substance, combination of hazardous substances or physical activity. There are four ways in which any protective glove will, at some stage, fail to protect the wearer from exposure to any hazardous substance:
- **permeation** – the process by which a substance migrates through the protective glove at a molecular level;
- **penetration** – the bulk flow of a substance through closures, porous materials, seams and pinholes or other imperfections in the protective glove;
- **degradation** – a damaging change in one or more physical properties of the protective glove as a result of exposure to a substance or physical damage;
- **physical damage** – caused by mechanical or other hazards including cuts, punctures, heat and flame.

In some activities gloves may be worn to protect the work. However, extended periods of glove use can produce adverse reactions in users. (See below)
Selection

The manufacturer/distributor of the glove is best placed to provide glove performance test data which can be used to assist in predicting the permeation, penetration and degradation of specific glove materials by specific substances.

The links below provide information on the suitability of different gloves types for a variety of chemicals:
http://www.showa-europe.com/

Relevant Standards:

All hand protection must be manufactured to the correct British Standard. The appropriate standards for hand protection can be found on the HSE’s website:
http://www.hse.gov.uk/foi/internalops/oms/2009/03/

There are four requirements which must be met for any protective glove selected to be suitable. The glove must:

- be appropriate for the risk(s) (is the glove really necessary for the task?) and the conditions where it is used;
- take into account the ergonomic requirements and state of health of the person wearing it;
- fit the wearer correctly, if necessary, after adjustments;
- either prevent or control the risk involved without increasing the overall risk.

Proper selection should therefore take into consideration the wearer, the workplace conditions and the protective glove. Wearers need to be trained in the correct way to put on, wear and then take off protective gloves to ensure maximum protection.

If protective gloves are selected or worn incorrectly there is every possibility that this may increase the wearer’s overall risk to health because:

- contaminant may get inside the glove to reside permanently against the skin which could cause greater exposure than if a glove had not been worn at all; or,
- wearing a glove for extended periods can lead to the development of excessive moisture (sweat) on the skin which in itself will act as a skin irritant; or,
- wearing gloves manufactured in natural rubber (latex) can cause an allergenic reaction in susceptible individuals, causing the skin disease contact urticaria to occur.

In addition to the above, overall risk to health may be increased because indiscriminate use of gloves may engender a less careful attitude in the wearer.

EYE AND FACE PROTECTORS

Eye and face protectors provide protection against impacts, optical radiations (0.1 to 1000 µm), hazardous substances, short circuit electric arc or any combination of these risks. In certain cases eye protectors are also required to provide protection to the face, e.g. UV radiation, foundry work, welding.

Types of eye protector

- spectacles with or without side-shields;
- goggles;
- face-shields, including welding hand-held shield and welding helmet.
Marking of Eye and face protectors

The standard specifies how eye protectors are to be marked to indicate intended performance.

Both the oculars (lenses) and frames are marked.

The ocular marking relates to its filter performance for optical radiation and its durability e.g. protection from welding, ultra violet, infra red, sunglare etc.

The frame is marked to indicate the field of use. Where the frame and ocular form a single unit, the code for field of use follows the standard number. Eye protectors can be marked to indicate more than one field of use.

Application of Eye Protector Types for Fields of Use

<table>
<thead>
<tr>
<th>Field of use</th>
<th>Symbol</th>
<th>Type of Eye protector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic use - unspecified mechanical hazards</td>
<td>No symbol</td>
<td>✓</td>
</tr>
<tr>
<td>Optical radiation - hazards arising from ultraviolet, visible, infra red and solar radiation</td>
<td>Scale number*</td>
<td>✓</td>
</tr>
<tr>
<td>High Speed particle impact</td>
<td>Low energy</td>
<td>-F</td>
</tr>
<tr>
<td></td>
<td>Medium energy</td>
<td>-B</td>
</tr>
<tr>
<td></td>
<td>High energy</td>
<td>-A</td>
</tr>
<tr>
<td>Liquid droplets</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Liquid splashes</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Large dust particles - &gt;5µm</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Gases, vapours, sprays, smoke and dust with a particle size &lt;5µm</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Short circuit electric arc</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Molten metals and hot solids splashes</td>
<td>9</td>
<td>7</td>
</tr>
</tbody>
</table>

* Scale number (transmittance characteristics) - combination of code number and shade.
  (Welding filters have only a shade number)
  Code number:
  2 or 3 ultra violet, affected or good colour recognition
  4 infra red
  5 or 6 sunglare without or with infra red

There are specific requirements for work with lasers including laser eye-protectors and laser adjustment eye-protectors.

Relevant Standards:

All eye and face protection must be manufactured to the correct British Standard.
The appropriate standards for eye and face protection can be found on the HSE’s website:
http://www.hse.gov.uk/foi/internalops/oms/2009/03/
RESPIRATORY PROTECTIVE EQUIPMENT

RPE is a particular type of personal protective equipment (PPE) designed to protect the wearer from breathing in harmful substances or from oxygen-deficient atmospheres when other controls are either not possible or insufficient on their own.

Classification and Selection For Use

RPE can be divided into two main classes according to whether its use is dependent or independent of the ambient (contaminated) atmosphere:

**Respirators** - Respirators (filtering devices) use filters to remove contaminants from the air being breathed in. They can be either:

- non-powered respirators – relying on the wearer’s breathing to draw air through the filter; or
- powered respirators – using a motor to pass air through the filter to give a supply of clean air.

**This type is not suitable for use in environments which are immediately dangerous to life or health (IDLH), including oxygen deficient atmospheres.**

**Breathing apparatus (BA)** - needs a supply of breathing-quality air from an independent source (eg air cylinder or air compressor. BA must not be used without consulting the University’s Health and Safety Unit. BA may be suitable for IDLH environments including oxygen deficient atmospheres.

Respirators and BA are available in a range of styles, dividing into two main groups:

- Tight-fitting facepieces (often referred to as masks) rely on having a good seal with the wearer’s face. These are available as both non-powered and powered respirators and BA. A face fit test should be carried out to ensure the RPE can protect the wearer.
- Loose-fitting facepieces rely on enough clean air being provided to the wearer to prevent contaminant leaking in (only available as powered respirators or BA). Examples are hoods, helmets, visors, blouses and suits.

Performance

All RPE has some potential for inward leakage of contaminated air. An assigned protection factor (APF) indicates the maximum level of protection for a particular form of RPE. The APF is dependent on the degree of enclosure of the mouth/nose/face/head, the form of respirator, and the filter specification or, in the case of BA, the source of air. The range of APF’s is 4 to 2000.

Selection for Use

RPE must be both adequate and suitable:

- Adequate – It is right for the hazard and reduces exposure to the level required to protect the wearer’s health.
- Suitable – It is right for the wearer, task and environment, such that the wearer can work freely and without additional risks due to the RPE.

Relevant Standards:

All RPE must be manufactured to the correct British Standard and CE marked. The appropriate standards for RPE and filter types can be found on the HSE’s website: http://www.hse.gov.uk/foi/internalops/oms/2009/03/
Respirators

In this class of RPE air passes first through a filter, which traps out contaminants, before the air is inhaled.

Filters

All respirators rely on the filter material to remove the hazard, it is therefore critical that the correct filter is selected.

The classification of a respirator filter begins with the class of material the filter is designed to remove from contaminated air.

- Particulates, solid and liquid (including (dusts, mists, fume, etc.) or
- Gases and vapours.

These categories are further subdivided by performance in relation to particle size, capacity or chemical nature of substance.

<table>
<thead>
<tr>
<th>Type</th>
<th>Application</th>
<th>(NB Confirm manufacturer's recommendations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Particulate (solid or liquid). These are classified according to their filtering efficiency and their maximum total inward leakage. There are three classes in increasing order of performance FFP1, FFP2, FFP3</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Certain organic gases and vapours with a boiling point above 65°C, as specified by the manufacturer</td>
<td></td>
</tr>
<tr>
<td>AX</td>
<td>Low boiling point (below 65°C) organic vapours</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Certain inorganic gases and vapours, as specified by the manufacturer (excluding carbon monoxide)</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Sulphur dioxide and other acidic gases and vapours, as specified by the manufacturer</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>Ammonia and organic ammonia derivatives, as specified by the manufacturer</td>
<td></td>
</tr>
<tr>
<td>Special Hg</td>
<td>Mercury vapour</td>
<td></td>
</tr>
<tr>
<td>Special NO</td>
<td>Nitric oxide and nitrogen dioxide</td>
<td></td>
</tr>
</tbody>
</table>

There are also combination filters in which two or more filter types may be incorporated into a single housing. A “Special” filter must always incorporate a P3 particle filter.

Fit Testing of Facepieces

Non-powered filter respirators based on a tight fitting facepiece, including disposable filtering facepieces, rely on a good seal between the mask and face to provide protection. Face fit testing is a method of ensuring that a tight fitting facepiece is suitable for the wearer's facial features and seals adequately to their face.

All users of respirators must be fit tested using either a qualitative or quantitative method by a competent person and record of the fit test kept. Tight-fitting RPE will only provide effective protection if the wearer is clean shaven, so they should also be clean shaven when fit tested.

For further information on fit testing please contact the University’s Health and Safety Unit.

A fit test should be carried out:
- as part of the initial selection of the RPE;
- where an untested facepiece is already in use.

A repeat fit test should be conducted if the wearer:
- loses or gains weight;
- undergoes any substantial dental work;
- develops any facial changes (scars, moles etc) around the face seal area.
Further Information
Further information on the different types of RPE and the correct selection and use can be found in the HSE document HSG53 Respiratory Protective Equipment at Work. 

HEAD PROTECTION

Types of Head Protection
Industrial safety helmets which are intended to protect against falling objects or impact with fixed objects.

Crash helmets, cycling helmets, riding helmets and climbing helmets which are intended to protect the user in the event of a fall.

Hairnets which are intended to prevent hair being entangled in moving machinery.

Selection
To fit correctly head protection should:
- be of an appropriate shell size for the wearer;
- have an easily adjustable headband and, if necessary, nape and chin strap;
- be comfortable;
- be able to accommodate a thermal liner when used in cold weather.

Head protection should be compatible with the work being done. For example:
- a helmet with little or no peak is useful for a surveyor taking measurements or to allow upward vision to a scaffolding erector;
- if working in windy conditions or where repeated bending or looking up is required a chinstrap or other secure retention system will be required;
- if used where food is prepared it will need to be easily cleaned and be compatible with other hygiene requirements;
- if other ppe such as ear defenders, eye protectors or rpe are required then the design should allow them to be worn safely and in comfort.

Factors that affect helmet performance
Deterioration in shock absorption or penetration resistance of helmets can occur from:
- exposure to certain substances;
- exposure to heat and sunlight;
- ageing due to heat, humidity, sunlight and rain.

Contact with certain chemical agents should be avoided, including paint, adhesives, and cleaning agents. Where names or other markings need to be applied using adhesives, advice should be sought from the helmet manufacturer.

Exposure to heat or sunlight can cause the shell to become brittle. Head protection should never be stored therefore near a window, for example the rear window of a motor vehicle.
Criteria for Replacement

Head protection should normally be replaced at intervals recommended by the manufacturer. It will also need replacing when the shell is damaged or when it is suspected that the shock absorption or penetration resistance has deteriorated. For example when:

- the shell has received a severe impact;
- deep scratches occur;
- the shell has any visible cracks.

Relevant Standards:

All head protection must be manufactured to the correct British Standard. The appropriate standards for head protection can be found on the HSE’s website:

http://www.hse.gov.uk/foi/internalops/oms/2009/03/

SAFETY FOOTWARE

Types of Safety Footware

**Safety boots or shoes** These normally have steel toe-caps and may also have other safety features including slip resistant soles, steel midsoles and insulation against extremes of heat and cold.

**Wellington boots** These protect against water and wet conditions and can be useful in jobs where the footwear needs to be disinfected for hygienic reasons. They are usually made from rubber but, especially where chemical resistance is needed, are also available in synthetic rubbers, polyurethane and PVC. Wellington boots can be obtained with corrosion resistant steel toe-caps, rot-proof insoles, steel midsoles ankle bone padding and cotton linings. They range from ankle boots to chest-high waders.

**Foundry boots** These have steel toe-caps, are heat resistant and designed to keep out molten metal. They are without external features such as laces to avoid trapping molten metal blobs and should have velcro fasteners or elasticated sides for quick release.

**Chainsaw boots** These offer protection against chain saw contact.

**Construction boots** These offer protection against a variety of hazards, particularly objects falling on them and sharp objects (e.g. nails) on the ground.

**Anti-static footwear** prevents the build up of static electricity on the wearer. It reduces the danger of igniting a flammable atmosphere and gives some protection against electric shock.

**Conductive footwear** also prevents the build up of static electricity. It is particularly suitable for handling sensitive components or substances (e.g. explosive detonators). It gives no protection against electric shock.

Selection

The selection of foot protection depends primarily on the hazard. However comfort, style and durability should also be considered. The choice should be made on the basis of suitability for protection, compatibility with the work and the requirements of the user.

Generally, safety footwear should be flexible, wet resistant, non-slip and absorb perspiration. Inflexible or unnecessarily bulky footwear will result in tired feet and legs. Boots not shoes are required when ankles need protection. Consideration should be given to the ability of the footwear to resist corrosion, abrasion and wear and tear.

Always follow the manufacturer’s instructions and markings for appropriate use and level of protection.
Relevant Standards:
All safety footwear must be manufactured to the correct British Standard. The appropriate standards for safety footwear can be found on the HSE’s website: http://www.hse.gov.uk/foi/internalops/oms/2009/03/

HEARING PROTECTION

Types of Hearing Protection

Earmuffs which completely cover the ears.

Earplugs which are inserted into the ear canal.

Semi-inserts (also called ‘canal caps’), which cover the entrance to the ear canal.

Selection
The choice of personal ear protection will need to take into account the results of a noise risk assessment.

Hearing protection should:
- reduce personal noise exposure to below 90db(A);
- be suitable for the working environment whilst taking into account both comfort and hygiene;
- be compatible with other protective equipment used.

Relevant Standards:
All hearing protection must be manufactured to the correct British Standard. The appropriate standards for hearing protection can be found on the HSE’s website: http://www.hse.gov.uk/foi/internalops/oms/2009/03/

SAFETY HARNESS

Types of Safety Harness

Protection in the working position i.e. the harness in conjunction with a line is used to prevent a person approaching a hazard, usually a drop. This type of harness is not suitable to arrest a fall.

Protection in the event of a fall This harness is used in connection with a fall arrest system.

For rescue e.g. when working in a combined space. Rescue equipment can be attached to the harness.

Harnesses that combine all three roles are available.

Selection
It is essential that the correct harness is selected, according to the work being carried out and it fits correctly and is correctly adjusted.

Ideally, each user of a safety harness should have a personal harness for which they are responsible.
**Maintenance and inspection**

Attached to a harness will normally be a lanyard made of rope or webbing. It is essential that both harnesses and lanyards are maintained in good condition.

- Each harness and lanyard should be uniquely identified.
- A record of the use of each harness and lanyard should be kept.
- Harnesses and lanyards should be cleaned and the fittings serviced in accordance with the manufacturers instructions.
- Harnesses and lanyards should never be load or shock tested.
- Harnesses and lanyards should be stored hanging up in a cool dry environment away from direct sunlight;
- Before use the condition of the webbing, stitching and fittings should be inspected. The harness and lanyard should not be used if:
  - there are any signs of abrasion, cuts, holes, burns or chemical contamination;
  - there are any signs of corrosion, cracks, distortion or burrs;
  - there are any signs of broken, pulled, worn or unravelled stitching;
- Detailed inspections of harnesses and lanyards should be made at least every six months. This should be reduced to every three months for frequent use or in adverse conditions. These inspections should be recorded.

**NB** No attempt should be made to repair damaged harnesses and lanyards - they should either be returned to the manufacturer or be destroyed.

**Criteria for Replacement**

Manufactures may give guidance on when harnesses should be replaced. As a general rule they should be replaced not more than ten years after manufacture or five years after first use, whichever is the sooner. This time period may be reduced depending on the use they are put to and the environment in which they are used.

**Further information**

*Inspecting fall arrest equipment made from webbing or rope* [http://www.hse.gov.uk/pubns/indg367.htm](http://www.hse.gov.uk/pubns/indg367.htm)

**Relevant Standards:**

All fall protection must be manufactured to the correct British Standard. The appropriate standards for fall protection can be found on the HSE’s website: [http://www.hse.gov.uk/foi/internalops/oms/2009/03/](http://www.hse.gov.uk/foi/internalops/oms/2009/03/)

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**FURTHER REFERENCES**

The following Health and Safety Executive website gives more information [http://www.hse.gov.uk/toolbox/ppe.htm](http://www.hse.gov.uk/toolbox/ppe.htm) includes:

- Why is PPE important
- What do I have to do
- Selection and use
- Maintenance
- Types of PPE you can use (for different protection requirements)
- Emergency equipment
- The Law
- More information
Standards and Markings for Personal Protective Equipment

http://www.hse.gov.uk/foi/internalops/oms/2009/03/ includes:

- Head protection
- Hearing protection
- Eye and face protection
- Respiratory protective equipment (RPE)
- Hand and arm protection
- Foot and leg protection
- Protective clothing
- Buoyancy, immersion and diving suites
- Fall arrest equipment

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