

# **Personal Protective Equipment**

# Safety Guidance Document

Lead Directorate and Service:	Corporate Resources - Human Resources, Safety Services.
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Contact Officer/Number	Garry Smith / 01482 391110
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Issued	<b>Review Date</b>	Approval CMT	Comments	
Sept 2010	Sept 2012	CMT 12 April 2010 Minute 12396	New Guidance	
Feb 2013	Feb 2015		Reviewed with minor	
			amendments and reference	
			to procurement policy.	
December	Feb 2015		Removed reference to	
2013			Arvato government services	
July 2018			Minor amendment to	
			including acceptability trials	
			of all PPE.	
			To record training and	
			instruction given.	
			Reference to Occupational	
			Health removed as it is not	
			relevant to this guidance	
			document.	

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#### 1. Background

This safety guidance document on personal protective equipment (PPE) provides information on the need for and safe use of personal protective equipment.

#### 2. Foreword

In accordance with the Council's Corporate Safety Policy, the council is committed to pursuing continual improvements in health and safety. This safety guidance document supports this commitment and forms part of the council's health and safety management system.

#### 3. Implementation

Directorates are responsible for the implementation of this safety guidance document, and communication of its content as appropriate.

This safety guidance document is available on the safety services intranet page and, where employees do not have access to the council's intranet, via their line manager/headteacher.

The council relies on the co-operation of all employees, and trade unions for the successful implementation of this safety guidance document.

A review of this safety guidance document will be undertaken 3 years after its implementation, and where significant changes in legislation or working practices deem this appropriate.

#### 4. Roles and Responsibilities

#### 4.1 Directors and Heads of Service

Directors and heads of services are ultimately responsible and accountable to the Chief Executive for ensuring this safety guidance document is issued to their management team.

#### 4.2. Managers and Headteachers

Managers and headteachers are responsible for achieving the objectives of this safety guidance document where relevant to their area of service delivery and are responsible for ensuring that:

- The information contained within this safety guidance document is implemented and complied with;
- PPE is provided for the use of employees who may be exposed to risks to their health and safety except where those risks have been controlled by other means;
- The PPE is appropriate to protect the worker from the risk(s) involved and for the duration of the exposure, and, that the minimum standard required is recorded on the appropriate risk assessment;
- A range of suitable PPE is available for individuals to select in accordance with their physical characteristics and individual choice;

- PPE takes account of ergonomic requirements and the state of health of those who may wear it and the characteristics of their workstation;
- PPE is capable of fitting each wearer correctly;
- In respect of respiratory protective equipment (including disposable items), each wearer passes a 'face fit' test to ensure that the model of equipment selected will fit the wearer correctly and thereby function effectively;
- PPE meets appropriate standards and is CE marked;
- PPE wearers are (as necessary) trained and instructed on the use and wearing of PPE;
- They regularly check that PPE is being used and investigate whenever it is not being worn or used correctly;
- Safety signs are displayed in the workplace to remind workers that it must be worn;
- Suitable replacement PPE is always readily available;
- Suitable facilities are available to maintain, clean and store PPE;
- Consideration is given to whether different PPE may be required in the event of an emergency.

#### 4.3 Employees

Employees must ensure they carry out assigned tasks and duties in accordance with information, instruction, training and agreed safe systems of work. Specifically they must:

- Comply with this safety document;
- Participate in the completion and review of risk assessments;
- Co-operate to enable their manager/headteacher to formulate and implement effective management systems including method statements and safe systems of work;
- Undertake training and follow any instructions that enable them to wear or use PPE;
- Notify their supervisor of any loss or obvious defect with the PPE and if that defect creates an immediate risk to health or safety not use the PPE nor enter any related hazard area.
- Keep any health surveillance appointments they are required to attend;
- Use any PPE that they have been provided with in accordance with their training and instruction;
- Ensure that their own health and safety and that of others are not put at risk by their actions;
- Not intentionally interfere with PPE or misuse it in such a way as to create additional hazards or render it ineffective.

#### 4.4 Safety Services

The primary function of safety services is to support the council and its employees by providing professional, authoritative, impartial advice on all aspects of health, safety and wellbeing. Where managers/headteachers require further assistance, safety services will advise on achieving compliance with this safety guidance document.

#### 5. Arrangements

#### 5.1 Introduction

Personal protective equipment (PPE) is any equipment or clothing that is intended to be worn or held by anyone at work which protects against one or more risks to their health and safety.

This includes items such as respiratory protection equipment, eye protection, safety helmets, gloves, high-visibility clothing, safety footwear and safety harnesses.

Cycle helmets and crash helmets worn for use on the highway are not subject to health and safety regulations but, nevertheless, are also deemed to be PPE for the purposes of this guide when ever they are used whilst at work.

#### 5.2 Procurement of PPE

All PPE should be procured through supplies in accordance with the council's contract procedure rules. As part of the procurement process it is recommended that a trial of the PPE is undertaken with a selection of the end users to ensure its suitability.

- Identify The PPE Specification by referring to Appendix 1
- Identify different options that meet the defined specific criteria
- Select employees as a representative example from the workforce
- Trial selected sample models, issue and commence time limited trial
- Seek appropriate feedback from selected users and report any issues or concerns to the safety services team.

#### 5.3 Selecting PPE

PPE must be supplied and used at work whenever there are risks to health and safety that cannot be adequately controlled in other ways.

The risk assessment of work activities will determine whether there is a need for PPE. Under the law, PPE should be the last control measure used to protect workers from risks to their health and safety, engineering controls and safe systems of work must be considered first.

Ask yourself;

- Can I remove the hazard altogether?
- If not, how can I control the risks so that harm is unlikely?

When establishing risk controls, the following principles must be followed in order of preference;

- Prevent access to the hazard, eg. by guarding;
- Organise work to reduce exposure to the hazard, eg. restrict/prevent entry if there is a risk of falling objects;
- Use a low risk option, eg. lower voltage tools, a less hazardous substance;
- If after all the above there is still a residual risk, you will need to provide PPE.

There are a number of reasons why the use of PPE is the last resort. Firstly PPE only protects the person wearing it, whereas measures that control the risk at source protect everyone in the workplace. Secondly, in practice, maximum levels of protection are seldom achieved and the actual level of protection is difficult to assess. Effective protection is only achieved by suitable PPE, correctly fitted, maintained, and properly used. Finally, PPE may restrict the wearer to some extent, limiting movement or visibility.

Before it is used PPE must be assessed to ensure it is suitable for use and will provide the worker with sufficient protection.

It must be maintained and stored properly and provided with instructions on how to use it safely and the risks that it will and will not protect the employee from. It must be used correctly by employees.

Where available, alternative models should be made available from which an employee can choose one that suits their physical characteristics and personal preference.

Consideration should also be given to potential emergency situations during which additional or superior levels of protection are necessary for the situation to be managed. For example it may be necessary for employees to deal with spillages or leaks where the risks to health and safety are greater than usual and the issued PPE may not offer the wearer sufficient protection in these circumstances.

#### 5.4 Suitability of PPE

The type and grade of PPE selected must be related to the nature of the hazard(s) and how those hazards will affect the worker. As an example, safety goggles that protect an employee's eyes from chemical fumes may not also protect them from the impact of hot particles when cutting metals with an angle grinder. Further information about the variety of standards available in respect of the sorts of PPE are contained in <u>Appendix 1</u>.

Where more than one item of PPE is used simultaneously to protect the wearer from different hazards, the PPE must be compatible. Each item must continue to provide effective protection when worn in combination.

The people who will have to use the PPE should be consulted and involved in the selection and specification of the PPE - there is a better chance of it being used effectively if it is accepted by each worker.

Any risk assessment that requires PPE to be used as part of a safe system of work must detail the standard(s) that the PPE must meet, eg. safety footwear incorporating protective toe caps and midsole protection (to protect the wearer from both falling objects and penetration injuries through the sole).

Respiratory protective equipment (RPE) (including wearers of disposable RPE) wearers must undergo initial 'face fit' testing to ensure that the equipment selected fits them properly and will be effective in use. The 'face fit' test must be repeated whenever there is a change in the RPE provided or if the individual's facial characteristics change significantly such as with weight gain or loss.

### 5.5 Typical Hazard and Potential PPE Solutions

The following table provides an indication of the various hazards that may affect the worker and some of the types of PPE that are available. The list is not exhaustive.

Part of body	Hazard	Type of PPE
Eyes	Chemical/metal splash Dusts Gases/vapours Projectiles Radiation	Safety spectacles Goggles Face shields Visors
Head	Falling objects Bumping into things Hair entanglement Falls from transport	Safety helmets Bump caps Hair net Cycle helmets
Lungs	Dusts/particles Vapours/gases Oxygen deficient atmospheres	Disposable filtering face piece/respirator Half/full face respirators Air fed helmets Breathing apparatus
Whole Body	Temperature extremes Adverse weather Chemical/metal splash Contaminants Impact/penetration Collision etc	Thermal wear Wet weather gear Conventional/disposable overalls Boiler suits Special clothing eg chain mail Hi-vis clothing
Hands and arms	Abrasion Temperature extremes Cuts and punctures Chemicals Electric shock Infection/disease/contamination	Gloves Gauntlets Mitts Wrist cuffs Armlets Non-latex gloves
Ears	Excessive noise	Disposable/re-usable ear plugs Ear muffs/defenders
Feet and legs	Electrostatic build up Cuts and punctures Falling objects Abrasion Wet conditions Slips Metal/chemical splash	Safety boots/shoes (protective toe caps or penetration resistant midsoles) Gaiters, wellington boots Snow grips Spats
Whole Body	Working at height	Body harnesses Restraint lanyards Fall arrest lanyards
Whole Body	Drowning Hypothermia	Buoyancy aids/lifejackets Immersion and dry suits

#### 5.6 Maintenance of PPE

In order to ensure that PPE continues to remain effective it must be appropriately maintained. This may be limited to periodic inspection and cleaning by the user, however, other more safety critical items may need regular planned preventative maintenance and recorded inspections and tests.

An effective maintenance system includes the following:

- Examination checking for faults, damage, wear and tear, dirt, etc.;
- Testing to ensure it continues to operate as intended;
- Cleaning including disinfection if appropriate;
- Repair;
- Replacement.

The responsibility for carrying out maintenance together with details of the procedures to be followed and the frequency should be recorded in writing. Where appropriate, records of tests and examinations should be kept.

It is usual for PPE to be issued to individuals; however, some items may be used by a number of people. In such instances there must be arrangements to clean and disinfect it after use so there are no health risks to the next person to use it.

Repairs to PPE must be carried out by trained people. Simple repairs may be possible by trained users; more intricate repairs must be carried out by someone with the required skills and technical knowledge.

Some PPE will have a useable 'shelf life', when this 'shelf life 'is exceeded it needs to be replaced.

#### 5.7 Storage of PPE

When PPE is not being used it must be stored correctly to prevent damage from:

- Sunlight, chemicals, humidity, heat and accidental knocks;
- Contamination from dirt and harmful substances;
- The possibility of losing it.

Storage may be simple hooks and pegs for clothing, carrying cases for spectacles and goggles, containers on vehicles for mobile workers. Checks should be made to ensure PPE is being stored correctly.

#### 5.8 Instruction and Training

Anyone using PPE must be aware of why it is needed, when it must be used, repaired or replaced and any limitations that it may have.

They must be trained and instructed on:

- When to use it;
- How to test it before and/or after use if necessary;
- How to put it on and use it properly;

- How to remove it if it is contaminated e.g. gloves;
- How to look after it;
- How to store it.
- This training should be recorded.

#### 5.9 Management and Supervision of Work Activities

Managers and supervisors must set a good example by wearing their own PPE when entering hazardous areas of the workplace. They must regularly check that PPE is being used, both at static and mobile sites, and investigate whenever they find it is not being used. Safety signs and marked safety zones can be useful reminders that PPE must be worn and used in hazard areas.

Suitable stocks of replacement PPE must always be readily available in the workplace to ensure that no one can be exposed to a hazard unnecessarily.

#### 5.10 Accidents and Dangerous Occurrences'

In accordance with the Council's Corporate Health and Safety policy and the Council's Accident and Incident Safety Guidance Document, every manager/headteacher is responsible for, and will, ensure all accidents, incidents and dangerous occurrences' are investigated and reported.

#### 5.11 References and Links

- L25 Personal Protective Equipment at Work (Third Edition)
- INDG174 A Brief Guide to the Personal Protective Equipment at Work Regulations
- HSG53 Respiratory Protective Equipment at Work
- The Noise at Work Regulations
- Control of Substances Hazardous to Health Regulations
- Control of Lead at Work Regulations
- The Ionising Radiation Regulations
- Control of Asbestos at Work Regulations

### Personal Protective Equipment Variable Equipment Standards

BS EN 166 Markings for Safety Eyewear		
	Frame	Lens
Optical Class		
Refractive Tolerance +0.06 dioptre		1
Refractive Tolerance +0.12 dioptre		2
Refractive Tolerance +0.12/-0.25 dioptre		3
Mechanical Strength		
Low energy impact (45m/second) - spectacles	F(T)	F(T)
Medium energy impact (120m/second) - Goggles and	B(T)	B(T)
Faceshields		
Field of Use or Hazard		
Liquid droplets and splashes	3	
Large dust particles	4	
Gas and fine dust particles	5	
Short circuit electric arc	8	
Molten metal and hot solids	9	
Optional/Desirable Requirements		
Resistance to misting		Ν
Anti-scratch		К
<b>Note:</b> Consideration may also be given to the needs of wearers of prescription lenses and for UV eye protection by means of coloured or tinted lenses		

Hearing Protection

Hearing protection equipment is assigned a 'Single Number Rating or SNR' to indicate the dB reduction that each model will achieve provided that it is fitted and worn correctly.

The selection of hearing protection must be based on competent noise measurements/surveys so that wearers do not become overprotected and thereby exposed to greater and more immediate danger or under protected and exposed to excessive noise. Such surveys and measurements can be arranged by contacting the Safety Unit.

Respiratory Protective Equipment			
All RPE must be CE marked and comply with The Appropriate European Standard.			
Selecting RPE is dependant upon identifying the following:			
What Hazard?	Dust, Mist, metal fume, gas or vapour.		
What concentration of contaminant?	Either measure accurately or assume worst case.		
What is the likely exposure level and does it exceed the 'Workplace Exposure Limit'?	Select RPE that has an appropriate 'Assigned Protection Factor (APF) to reduce the exposure as low as is reasonably practicable.		
What is the 'APF'?	The 'APF' is a single number and is often 4, 10, 20 or 40. This means that when used correctly by a wearer who has passed a face fit test, RPE with an APF of; 4 should reduce exposure to a quarter, 10 to a tenth and so on.		
Anyone who is expected to use any form of RPE, even disposable items, must pass a Face Fit			

Anyone who is expected to use any form of RPE, even disposable items, must pass a Face Fit Test wearing the RPE s/he will be expected to use.

Head Protection		
EN 397	Safety Helmets for use in construction and Industry	
EN 812	Bump Caps to protect the head from striking against hard or sharp stationary objects	
Optional Standards	Other hazard or working condition that the PPE can be designed to protect the wearer from or environment it can be used in.	
ММ	Protection from molten metal, unvented shells only	
-20°C/-30°C	Low temperature performance	
-40°C	Ultra low temperature performance	
LD	Lateral distortion	
F	Flame resistant	
440va.c/1000va.c	Electrical insulation - unvented shells only	
150°c	Tested at High Temperature	
7 or 14	Resistant to Radiant Heat (KW)	

Buoyancy Aids			
Buoyancy Option	150 Newtons	275 Newtons	
Enclosed/sheltered waters	$\checkmark$		
Flowing or tidal waters	$\checkmark$	✓	
Wearing heavy clothing or tool belts		✓	
Working next to water (low risk)	$\checkmark$		
Working alone or in small groups		✓	
Working at Height of 2 Metres		✓	
Inflation Option	Automatic	Manual	
<i>No</i> risk of injury		$\checkmark$	
Working at height	$\checkmark$		
Entering the water unconscious	$\checkmark$		
Possibility of shock, panic or injury	$\checkmark$		

Further guidance on the appropriate specification of personal protective equipment (including electrical PPE) can be obtained from safety services on telephone 01482 391117 or email safety.services@eastriding.gov.uk