

Safety Code of Practice 27

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PERSONAL PROTECTIVE EQUIPMENT (PPE)



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worn for protecting the human body against one or more risks to health or safety.								
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	CoP-04 Risk assessment							

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CoP-14 Biological safety all parts
CoP-15 Genetic modified organisms
CoP-16 -20 Radiation
CoP-21 Lasers
CoP-22 Ultra-violet light
CoP-28 COSHH
CoP-42 Noise at work
CoP-48 Hazardous waste
CoP-55 Spillage management
SN-55 Eye protection

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1 INTRODUCTION

This Safety Code of Practice explains what to do when personal protective equipment (PPE) is required for protecting the worker against a hazard to health or safety. This code applies to all staff; however it is of particular importance to those with management responsibilities and those who are responsible for undertaking risk assessments (e.g. research projects, student projects, or high-risk tasks or areas) and who will need to consider PPE as a risk control measure. This Code is intended to help that the proposed work is undertaken safely and in accordance with legislation and good practice.

2 SCOPE

This Code of Practice of practices sets out the University arrangements to meet the Personal Protection Equipment at Work Regulations (1992) and the amendments of (2022), and other H&S legislation that specifies PPE requirements.

This Code of Practice applies to all work activities and all types of workplaces under the direct control of the University of Reading (UoR). This includes routine and non-routine work, or one-off as well as regular activities, teaching and practical classes, student projects, research work, all oncampus activities. It applies to work on the following premises: UoR campuses (Greenlands, London Road, Whiteknights), the Bulmershe Pavilion, the UoR Boat House, Sonning and Hall Farms and non-tenanted areas of TVSP. It also applies to off-premises work that remains directly under the control of UoR. It applies to all staff, workers (i.e. Campus Jobs), students and visitors (including members of the public, volunteers, contractors) undertaking activities under the control of UoR.

This Code of Practice (CoP) should be read in conjunction with other topic-specific CoPs and Safety Notes (SN), which may set out more specialised arrangements for personal protective equipment. For example, CoP-22 ultraviolet radiation, CoP-29 food safety and hygiene, CoP-42 noise at work, SN-55 eye protection. See all CoPs and SNs via the H&S Service policies webpages.

3 DEFINITIONS

Person Protective equipment (PPE) is any wearable equipment that is provided to staff/workers/ students/visitors that protects the individual from hazards (e.g. a lab coat, protection from chemical spills). Issued uniform that does not provide hazard protection is not PPE (i.e. just branded clothing), whereas issued uniform that does provide hazard protection is PPE (i.e. overalls).

Respiration protective equipment (RPE) is a specific group of PPEs (half masks, full masks, powered hoods) that are worn over the nose and mouth (or whole face/head) to protect the worker's breathing zone from inhalable hazards.

Face-Fit-Testing (FFT) is a test to demonstrate the RPE provides adequate breathing zone protection to the wearer.

CE markings are labels that declare the item meets the European Union conformity requirements for design and manufacture, as laid out under the Personal Protective Equipment Enforcement

regulations (2018) (UK implementation of EU 2016/425 directive). Products marked with the CE marking can be sold in the $\frac{UK \text{ until } 31/12/2024}{\text{UK until } 31/12/2024}$.

UKCA markings are labels that declare the item meets with UK conformity requirements for design and manufacture in the post Brexit (EU 2016/425 directive as, incorporated into UK law). The UKCA markings were introduced from 01/01/2021.

EN standards are documents that specify the standard to which the displayed EN numbers and categories must uphold, and the specific test(s) requirements to meet those specified standards. For example, BS EN374:2016 is a standard for gloves that provide protection against chemical penetration and there are three categories (types A-C) for specifying breakthrough time performance.

Workers with protected characteristics are workers that have one or more defined characteristics which protects and prevents discrimination under the Equality Act (2010). Protected characteristics include: disability, pregnancy or maternity, gender, race, religion or belief, and sexual orientation.

An assessment of risk is the mental exercise of identifying hazards and risks that arise from a specific work activity or area, and the selection of precautionary control measures to reduce risk for working as safe as reasonably practical. See safety Code of Practice 04.

A risk assessment document is the recording of the significant findings from the mental exercise.

4 RESPONSIBILITIES

All staff, students and visitors must cooperate by wearing any PPE identified as a control measure in the risk assessment covering the activities or areas of work and must follow the training they have received on correctly applying (donning) and removing (doffing) the PPE. They must report to their manager or supervisor if the issued PPE is not suitable as a control measure for the activity (e.g. no-longer fits them, the activity or substances involved changes), if the PPE is lost, or is defective in anyway, or if the PPE is not CE or UKCA marked. All PPE wearers are responsible for cleaning and storing their personally issued PPE (e.g. RPE, prescription safety glasses) according to the information, instruction and training received. Where RPE is personally issued, individuals are responsible for completing pre-use checks of the RPE each time before wear, for completing regular maintenance examination of their RPE, and for recording the examination on a H&SS template RPE examination form.

Heads of Schools and Functions (HoS/F) are responsible for ensuring that managers, supervisors or researchers understand the requirements on risk assessing, as documented in CoP-04. The HoS/F are responsible for identifying managers or supervisors responsible for managing specialised areas (e.g. areas with restrictions in access, see SN-56 – Access Control), and for completing an area risk assessment and to organise the display of entry door signage to communicate any mandatory PPE requirements identified by the assessment.

Managers, supervisors and researchers are responsible for having suitable and sufficient risk assessment in place for activities under their control, according to the arrangements in CoP-4 Risk Assessment. The managers and supervisors are responsible for ensuring that any PPE (including RPE) is issued to those undertaking the activities prior to the work commencing, either directly as personal issue (e.g. safety shoes) or as shared issue (e.g. disposable gloves). Managers and supervisors are also responsible for ensuring that information, instruction and training is given to wearers (staff, students, visitors) on the correct donning and doffing of the issued PPE, and for the repair or replacement of any defective or lost PPE, and arranging the correct disposal of any contaminated or defective PPE (see CoP-48 on hazardous waste). Where RPE use is identified in the risk assessment, managers and supervisors are responsible for arranging face-fit-testing (FFT) of the RPE before the activity starts.

Where managers, supervisors or researchers have been identified as responsible for managing specialised areas (e.g. labs, workshops, studios, plant rooms, roof spaces), they must complete a risk assessment of the area, and ensure the display of door entry signage to specify any mandatory PPE requirements. and organise the supply of the mandatory PPE and to organise that information and instruction on its correct use is provided to all required to access the specialised space), so to facilitate safe entry.

The Face-Fit Tester is responsible for performing a face-fit-test (FFT) of the wearer and the issued RPE to ensure adequate performance fit. Results from qualitative testing (disposable and half-masks) performed by trained University staff must be recorded on a template FFT record form provided by H&S Services. Results from quantitative testing (full-face masks) performed by an external contractor must recorded in a report.

Health and Safety Coordinators (HSCs) are responsible for supporting risk assessors in identifying suitable and sufficient PPE standards where requested, and by seeking assistance from H&S Services when the PPE requirements are outside of their own competence range. The HSC are responsible for helping arrange FFT of RPE with the competent local fit-tester, or by seeking assistance from H&S Services to arrange FFT, and for assisting the HoS/F in keeping records of the FFT reports.

Health and Safety Services is responsible for reviewing and publishing this Code of Practice on Personal Protective Equipment and related Safety Notes on individual PPE categories. H&S Services will provide template door signage for labs and workshops for communicating PPE requirements for entry, which can be adjusted to support the local area risk assessment (SN-57). H&S Services is responsible for providing learning materials on risk assessing, Control of Substances Hazardous to Health (COSHH), biological safety and other topics, to support the learning needs of those assessing the PPE requirements and the HSCs, who are supporting the assessors locally. In response to requests from HSCs and HoS/F, H&S Services will provide formal H&S advice on interpreting legal requirements on risk assessment, specialist hazards and PPE, and by engaging with external contractors to support formal inquiries.

5 REQUIREMENTS

5.1 Assessment, specification, purchase, issue

Managers, supervisors and researchers must be competent to assess risks and have suitable and sufficient risk assessments in place for the work activities under their control (CoP-04). The

assessor should select control measures other than PPE first, following the hierarchy of control priority order (Eliminate, substitute, engineering controls, administrative controls, PPE). PPE may be then used in conjunction with the other controls to reduce any residual risks to as low as reasonably practicable (i.e. proportional risk reduction to time/effort/cost involved). There may be additional requirements for specific hazards that must be considered when assessing PPE requirements, and individual Codes of Practice (CoP) and Safety Notes (SN) should be consulted. These include: noise (CoP-42), hazardous substances (CoP-28), biological agents (CoP-14), cryogenic gases (CoP-46 pt5), vibration (SN-23).

The assessor must identify PPE that is suitable for activities or work area (see section 5.4 for suitability). The selected PPE must then be recorded in a H&S Service template risk assessment form or COSHH assessment form. The assessment should specify the type of PPE (e.g. reusable nitrile gloves), type of protection required (e.g. the EN number, for example EN511 protection from cold) and protection standard required (e.g. protection category and protection performance). Where more than one PPE item is to be worn, the assessor must select the PPE items that are compatible, so that no one PPE item compromises the ability of another to protect the wearer against the hazards identified in the risk assessment. For example, the side-arms of safety glasses should not compromise ear-muffs from protecting hearing. The selection of PPE should also consider if the wearer has any protected characteristics (Equality Act (2010) disability, gender reassignment, relationship status, pregnancy and maternity, race, religious belief, sexual orientation). For example, requirement for safety glasses containing prescription lens for a sight condition, requirement for safety shoes with a step-sole for a disabled worker, exemption of helmet wear for a turban-wearing Sikh.

From January 2024 only PPE products displaying the UKCA markings must be purchased. Older purchased stocks of PPE that display the CE markings may be used whilst they remain within the manufacturers specified certification date. The purchased PPE must then be issued to those individuals or groups of people identified in the risk assessment at risk of harm, or anyone required to enter a mandatory PPE area. This includes visitors or contractors who are required to enter but who may not normally work in the area. The PPE should be provided free of charge to all, including agency workers, or those with a worker contract (e.g. Campus Job workers). Before the activity starts the manager or supervisor should check the suitability of the PPE for the wearer, to confirm that the PPE is comfortable, and it fits. Where RPE is issued, a face-fit test (FFT) must be undertaken to confirm the adequacy of the fit performance before use. PPE should be removed before eating, drinking or smoking and the wearer should apply good personal hygiene (using washing facilities) before eating and drinking to avoid ingestion or inhalation of any contaminants. All PPE should be then stored and maintained when not in use.



Figure 1. CE and UKCA markings

5.2 Storage and maintenance

The PPE should be stored when not in use and a suitable means to store the issued PPE must be provided. Storage is used to reduce the likelihood of loss, to prevent damage and to prevent contamination from any hazardous substances or dirt, so the PPE remains accessible, clean and ready for use. To be suitable the storage provided should be separate from that provided for other

clothing and equipment to prevent cross-contamination. Any suitable container (sealable bag or box) or stand (peg for overalls) can be used, provided it is suitable for the work area (building, vehicle, fieldwork) and the environment and surrounding conditions (temperature, humidity, light, weather), and so that workers can identify their own personal issued PPE (i.e. their own safety shoes, their own FFT RPE). The wearers must also be provided with a means to clean any dirty or contaminated reusable PPE before storing, following the cleaning requirements specified in the PPE manufacturer's instructions,

The wearer should check their PPE is ready to use before wearing/using. They should check for any dirt or contamination, wear and tear, damage and faults, and confirm it is ready for use. Any issues must be reported to their manager or supervisor for organising corrective action before work commences (cleaning, repair, replacement and disposal). Additionally before RPE is used the wearer should complete pre-use checks; confirm that the RPE and filters remain within the manufacturers' certification date, and perform a face-piece fit-check. A HSE video link on performing a fit-check is given in section 6. Disposable RPE should be replaced (and disposed) after the single day of use (an 8 hour shift), or sooner if the filtering parts shown signs of saturation. In contrast reusable RPE will be used repeated and must undergo regular thorough examination to confirm sound condition for use. It is recommended the thorough examination should occur at frequency of six-month intervals, or more often if used very regularly or the health risks from exposure are high if the RPE fails. If the RPE is used occasionally, the though examination should be carried out before the next use. An RPE examinations checklist form is provided on the H&S Services forms webpage.

5.3 Information, instruction and training

Before the PPE is used the wearer should be issued with information, instruction and training. This should include communicating:

- the findings of the risk assessment and what risks the PPE is protecting the wearer from.
- the limits of the PPE protection performance (e.g. the glove suitability is limited to splash contact rather than full emersion).
- how to correctly apply (donning) and remove (doffing) the PPE before the activity commences.
- how to correctly dispose of any single-use PPE or reusable PPE that is defective (see Code of Practice 48 for hazardous waste).
- how to take reasonable care of PPE, covering cleaning, storage and use in the way intended by the risk assessment and according to the manufacturer's instructions.
- the wearer understands who to report the loss, defect or the unsuitability of the issued PPE (e.g. change in body shape, change to the task design or substances used).

5.4 Suitability of PPE

PPE must be selected to be suitable for the both the work and wearer's requirements. The assessor must firstly assess the work for PPE requirements. The assessor should identify the risk the PPE protection is controlling, how long the PPE is to be worn/used, if means of visibility or

communication is required, and if the environment or surrounding conditions will affect the wearing of the PPE (weather, temperature, light (daylight and UV), noise, ventilation, dust). Where the PPE is being used to control exposure to a hazardous substance, a COSSH assessment must also be completed, and the PPE must be selected to ensure the workplace exposure limits (WELs) are not exceeded. For example, a suitable RPE protection level (FFP1-3) for the quantities of airborne particular mater expected. See Code of Practice-28 for COSHH risk assessment and WELs.

Having assessed the work requirements for PPE, the assessor must assess the requirements of the individual wearers. To be suitable, the PPE should fit the wearer's physical dimensions and have no conflict with any health conditions, such as allergies to latex or exacerbation of existing musculoskeletal problems. The PPE should also not fail to fit the wearer under the conditions required for its use (e.g. does not dislodge by sweat, deformed by heat). Overall, the PPE should be selected to provide the maximum protection with the minimum discomfort to the wearer and be suitable for the duration and frequency of the planned activity.

6 GUIDANCE

The Safety Notes on PPE selection can be used to support managers, supervisors or researchers with identifying PPE standards when risk assessing. However, the requirements under section 5 must still be applied when assessing PPE needs. Safety Notes on PPE selection are published on the $\frac{188S}{1000}$ policies webpage, covering eye protection, respiratory protection, gloves and footwear.

The HSE provide a simple tool for identifying the <u>correct hand/glove size</u>. The HSE also provide useful guides on how to <u>put on and remove single use gloves</u>, and <u>put on and remove reusable gloves</u>. These resources can be used to support information and training of glove wearers, The HSE also provide a useful video guide on <u>putting on RPE and performing a pre-use fit check</u> and can be used to support the information and training of RPE wearers.

6.1 FURTHER INFORMATION

The Health and Safety Executive have useful guidance documents on completing risk assessments and for specific subject/operational areas. See the HSE risk assessment pages for general guidance on assessing, and www.hse.gov.uk for topic specific sections.

You can also ask for advice from your <u>local HSC</u>, or alternatively the <u>topic leads at H&S Services</u> via safety@reading.ac.uk.

7 COMPETENCY

To be competent, it is recommended the risk assessor should have completed the H&S Services general <u>risk assessment e-learning course</u>. They should also have sufficient knowledge and experience or training in the activities, the equipment, hazardous substances and work layout involved, so that the suitable PPE can be selected and specified in the assessment. Where the activity involves a hazardous substance, the Risk Assessor should have also completed the H&S Services <u>COSHH assessment e-learning</u> course. The assessor may require assistance from other knowledgeable or experience staff in their School or Function in order to complete a suitable and sufficient risk assessment. Alternatively, the local Health and Safety Coordinator (HSC), or the Health and Safety Services staff may be able to provide advice within the scope of their

competency. For the face-fit-tester to be competent, they must have been trained by an accredited training provider (e.g. fit-2-fit scheme), and they should maintain competency by refreshment retraining every 3 years,

8 RECORDS & RETENTION

PPE specification should be recorded in risk assessments, which should be retained for ten years by Schools and Functions. Specialised risk assessments may have specific retention periods and the topic specific Codes of Practice should be consulted, for example: COSHH (CoP-28), GM0 (CoP-15), Radiation (CoP-16), Noise (CoP-42).

9 RELEVANT LEGISLATION

Health and Safety at Work Act Regulations (1974)

Management of Health and Safety at Work Regulations (1999)

Personal Protection Equipment at Work Regulations (1992)

Personal Protection Equipment at Work (Amendment) Regulation(2022)

Control of Asbestos at Work Regulations (2002)

Control of Lead at Work Regulations (2002)

Control of Noise at Work Regulations (2005)

Control of Substances Hazardous to Health Regulations (2002)

The Ionisation Radiations Regulations (2017)

The Equalities Act (2010)

10 VERSION CONTROL LOG OF DOCUMENT HISTORY

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