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1.0 Purpose

The document is complementary to, and should be read in conjunction with the NHS Lothian Health and Safety, Respiratory Protective Equipment (RPE) Policy 1.0.

2.0 Scope

This procedure provides:

Guidance to identify the need and the selection of RPE that is adequate and suitable, provides a signpost to appropriate instruction, training, supervision to staff and direction to adequate maintenance and disposal.

An outline of good practice to comply with requirements of the Control of Substances Hazardous to Health (COSHH) Regulations (as amended) 2002 and the National Infection Prevention and Control Manual in order to protect individuals from exposure to substances hazardous to health.

Information about how to conduct face fit testing if required (use of tight-fitting face-piece respirators).

The procedure is for use by managers and also provides information for staff of those Services who use and dispose of RPE.

3.0 Risk Assessment

Every ward/department must:

Assess the risks presented due to the exposure to substances hazardous to health conducting COSHH assessments and identify the steps needed to adequately control the risks; put them into operation and ensure they remain effective. RPE may be one of the control measures where adequate control of exposure cannot be achieved by other means.

If the outcome of the COSHH Assessment is that RPE is needed as one of the control measures, the things that managers need to do are:

- Select the RPE that is adequate and suitable for the hazardous substance, the environment in which it is going to be used, the task and the wearer.
- Inform and arrange for education and training RPE users. - [Respiratory Equipment Turas Learn](#)
- Ensure RPE is maintained in accordance with the manufacturer's instruction.
- Monitor RPE wearers to ensure that they are using the RPE in accordance to manufacturer's instruction and the training provided.
- Ensure that there is a system in place to safely dispose of damaged or used RPE and its components, ensuring compliance with the NHS Lothian Waste Management Policy.
- Ensure the compatibility with other PPE. If staff cannot wear the PPE properly without affecting the function of the RPE or vice versa, an alternative PPE product must be considered.

4.0 RPE Types

There are many different RPE types designed to protect the wearer from a variety of hazards, work situations and to match the specific requirements of the wearer. There are two main types of RPE: respirators (filtering devices) and breathing apparatus. Refer to the RPE Policy 1.0 for further information.

Fluid-resistant (Type IIR) surgical masks (FRSM) are not RPE. FRSM is classed as an item of Personal Protective Equipment (PPE) that provide barrier protection against respiratory droplets reaching the mucosa of the mouth and nose. These masks must be worn in accordance with the infection prevention and control guidance and conform to the International Standard: EN14683.

The most common RPE used in NHS Lothian are:

4.1 Filtering Facepieces (FFP) disposable respirators

FFP respirators are a form of respiratory protective equipment that provide a higher level of respiratory protection than surgical face masks. Their safety is dependent on wearers undergoing a 'fit' test, to ensure that there is an adequate personal fit and seal to protect the wearer from hazardous substances.

FFP3 respirators (minimum filtration of 99%) offer the highest level of protection. FFP2 respirators (minimum filtration of 94%) can be used in the event that there are no FFP3 respirators available for use.

Each model of FFP3 and FFP2 respirator is slightly different in its fit to each individual face. The only way to ensure that it will protect you is to repeat the fit test again with each model of respirator provided and regularly (every 3 years) or whenever there is a change to the circumstances of the wearer that could alter the fit of the mask e.g. facial changes such as weight loss or gain, piercing, rhinoplasty, fillers (cheeks and lips).

Additionally, a fit self-check check is required every time a respirator is donned.

4.2 Reusable half and full mask respirator

Reusable half and full face respirators are fitted with the appropriate filters depending on the hazard as identified in the COSHH assessment and provide the same level of protection as FFP disposable respirators.

These respirators should be provided for individual staff members, where that person has been fit tested for the reusable respirator.

Manufacturer's instructions for cleaning and maintenance of the respirator must be followed. A risk assessment should include the compatibility with other PPE.

Reusable half and full mask respirators are not currently used in NHS Lothian in relation to COVID-19 as National guidance is awaited on:

- Filter change frequency
- Decontamination methodology

4.3 Powered air purifying respirators (PAPR)

The purpose of a Powered Air Purifying Respirator (PAPR) is to prevent the inhalation of harmful airborne substances.

The PAPR uses a motor to pull contaminated air through a P3 filter, or a combined filter, that removes the contaminant and supplies the purified air to the inside of a loose fitting hood, which does not require fit testing.

PAPRs are an alternative when testing to tight fitting face pieces such as FFP and reusable masks cannot be achieved. A PAPR should only be used if the member of staff is trained in their use.

PAPRs in local areas should have:

- Appropriate storage facility
- User instructions
- Standard Operating Procedure for use, decontamination, maintenance and disposal of the equipment.
- PPM record template
- Education and training records for staff

Local arrangements and authorisation should be in place for allocation of PAPR equipment and the PAPR standard operating procedure must be followed.

For more information on the current NHS Lothian PAPR products and associated information see [RPE Service](#) intranet pages.

4.4 Breathing apparatus (BA)

At the time that this procedure is written, the use of Breathing Apparatus (BA) within NHS Lothian Helideck Response Team (HRT) who provide support for helicopter landings on the new RHCYP – DCN building and Facilities Teams at Royal Hospital for Sick Children (RHSC) and Liberton Hospital are the only services that currently uses full face BA sets. This is specifically for their fire fighting role and for protection in the course of their duties related to aircraft landing activities and for tasks conducted by trained staff in confined spaces that are not controlled by specialist contractors.

Where there is a need for the use of breathing apparatus for works such as confined spaces undertaken by specialist contractors, they provide their own BA and are engaged by NHS Lothian Estates in line with the NHS Lothian Control of Contractors Policy.

5.0 Donning and doffing for FFP Respirators

The wearer should have received training in correct donning of the face piece before the fit test.

The wearer should position the respirator on the face, set the strap tension and determine an acceptable fit.

Looking in the mirror after donning the mask is a helpful way of evaluating the fit and positioning of the face-piece.

The wearer should be able to don the face piece in accordance with the manufacturer's instructions, without any assistance.

Donning and doffing Posters are available to download from the [RPE Service](#) intranet pages.

6.0 Storage

Any RPE or PPE requires to be stored in accordance with the manufacturer's user instructions in order to prevent contamination, damage and deterioration. This should be stored in a clean, dry easy accessible area within your departments.

7.0 Disposal

All FFP Respirators are single use must be disposed of after use through the clinical waste stream.

Contaminated RPE or components, may need to be considered as hazardous waste dependant on the work activity, substance or biological hazard.

If you are in any doubt to the safe disposal of FFP respirators. Specialist advice should be sought from the NHS Lothian Infection Prevention Control team or NHS Lothian Waste Manager or an H&S Advisor.

8.0 Procurement

Acute hospitals can order their FFP3 masks and wider PPE items via their top up teams.

For Community areas:

There are 4 PPE hubs which request product from the Pandemic allocation of FFP3 masks.

PPE hubs have their own arrangements in place to enable Health Board staff to order from them, the 4 hubs are noted below:

- Edinburgh - SMART Centre PPE Hub smart.ppe@nhslothian.scot.nhs.uk or EHSCP.PPEorder@nhslothian.scot.nhs.uk
- West Lothian – Deans Industrial Estate PPE-WLHSCP@nhslothian.scot.nhs.uk
- East Lothian – East Lothian Industrial Estate ELCHPPE@nhslothian.scot.nhs.uk
- Mid Lothian – Dander hall Leisure Centre midlothian.ppe@nhslothian.scot.nhs.uk

The Fluid-resistant (Type IIR) masks are ordered via PECOS as part of the standard ordering process for supply via the National Distribution Centre (NDC).

Dentistry teams across various sites and Endoscopy at Leith CTC, request direct deliveries of FFP3 masks via PECOS.

9.0 Face Fit Testing

Face fit testing is a method of checking that a tight-fitting face piece respirators (masks) matches the wearer's facial features and seals adequately to their face. It will help identify unsuitable facepieces that should not be used. All staff who are required to wear an FFP2 or FFP3 respirator must be fit tested prior to wearing a face-piece; including when there is a change to the model and style of mask. Re-testing will be carried out every three years or whenever there is a change to the circumstances of the wearer that could alter the fit of the mask e.g. facial changes such as weight loss or gain piercing, rhinoplasty, fillers (cheeks and lips).

Qualitative face fit testing relies on a wearer's taste subjective assessment of any leakage through the face seal region by detecting the bitter or sweet-tasting test solution. The wearer undertakes a series of simulated work exercise through a series of tests to challenge the mask's seal.

Qualitative face fit testing kits or solutions must be ordered via PECOS.

Quantitative face fit test relies on an objective assessment of the face fit and provides a numerical measure of how well a face piece seals against a wearer's face; known as the fit factor. The quantitative machine measures the ratio of particles inside and outside the face piece and provides a fit factor.

This method of testing is used for disposable single use FFP respirators and half-masks; ideal for wearer's who are unable to detect the test solution used in qualitative fit testing.

Requests to use the quantitative fit testing machine can be requested.

9.1 Face fit testing to avoid transmission during the coronavirus pandemic

During the coronavirus pandemic face fit testers and wearer must take additional measures to minimise the risk of transmission when carrying out a face fit test.

HSE has provided guidance on '[Putting on a respirator and fit checking](#)' this guidance must be followed.

9.2 Face fit testing and wearing a Hijab

When a healthcare worker attends to be face fit tested wearing a Hijab scarf, a face fit test will be conducted with the scarf on; if unsuccessful fit is achieved, the healthcare worker will be given the option for the test to be carried out in a private area with a female tester and asked to remove their Hijab and conduct the test wearing a disposable hat (e.g. theatre cap).

Every fit test includes information and instruction on donning and doffing the mask safely and the requirement for fit testing.

If unsuccessful again, then alternatives such as PAPR would be required.

A fit self-check should be carried out in line with the information and instruction delivered at the fit test when donning and doffing in clinical care and; when the tight-fitting respirator is worn in clinical care, the respirator must be worn in the same way, wearing the Hijab or disposable hat as instructed at the fit test.

9.3 Face fit testing and Facial Hair

NHS Lothian applies a policy of full face clean-shaven.

The HSE guidance (INDG 479) states that fit tests must not be conducted if there is any hair growth between the wearer's skin and the face-piece sealing surface, such as stubble beard growth, beard, moustache, sideburns or low hairline, which cross the respirator sealing surface and that the tester should ensure that any type of non-PPE apparel or adornment (e.g. piercing) does not interfere with the fit of the face piece.

Face Fit Testing must not continue if employee does not follow this instruction.

If unsuccessful, then alternatives such as PAPR would be required.

Accessing a face fit tester: Contact your Manager to arrange or identify the local point of contact for face fit testing via the email below or alternatively contact RPE.Service@nhslothian.scot.nhs.uk for more information.

RIE: PPEquipment.RIE@nhslothian.scot.nhs.uk

WGH: wghfacefittesting@nhslothian.scot.nhs.uk

DATCC: PPE.DATCC@nhslothian.scot.nhs.uk

SJH: SJHFacefit@nhslothian.scot.nhs.uk

RHSC: RHSC.FaceFitTesting@nhslothian.scot.nhs.uk

10.0 Becoming a Face Fit tester

Local face fit tester training in qualitative and quantitative testing can be arranged by contacting the accredited Fit2Fit trainer in the RPE Service. Once trained to Face Fit Test then competence should be maintained by attending refresher education/training every 2 years.

All staff who have received training on Qualitative & Quantitative Face Fit Testing should be added to the register for face fit testers and recorded on the Health and Safety FFT application dashboard (Tableau).

Local Fit Testers should establish a rolling programme of fit testing sessions and be given sufficient protected time to fit test all staff identified who require testing at every 3 years.

Information is available NHS Lothian RPE and Face Fit Testing Information pages including links to HSE RPE.

Fit2Fit accreditation (not a legal requirement) is available and can provide a formal qualification under the Fit2Fit RPE Fit Test Providers Accreditation Scheme. There is a cost attached to this qualification and involves an external formal individual assessment of a written multiple choice exam, an assessment and a practical demonstration. Contact RPE Service for cost and further information.

11.0 Face Fit testing records

Face fit testing records for qualitative and quantitative testing are completed electronically via the FFT application, by the face fit tester during the time of testing.

All fit testers require access to the FFT application. Access to the application can be requested via RPE.Service@nhslothian.scot.nhs.uk

Managers can access the data associated with face fit testers, staff who have been face fit tested via the Health and Safety dashboards (Tableau). Access to the application can be requested via RPE.Service@nhslothian.scot.nhs.uk

New and rotating medical and clinical staff will be asked to confirm evidence of face fit testing with a fit test certificate of test completed within two years. This must be input to the FFT application for reference. A re-test would be required if the same model of respirator is not available.

Face fit testing records are required to be kept for ten years in line with the NHS Lothian Records Management Policy.

12.0 Reporting an adverse event

Consideration should be made to all adverse events relating to respiratory protective equipment, the face fit testing and any products and is one part of effective risk management.

Avoidance, prevention and reductions of risks should be the primary defence to prevent adverse events occurring and reference should be made to NHS Lothian Adverse Events Management Policy and Procedure.

13.0 Reference materials

[Health & Safety Policy](#)

[RPE Policy](#)

[COSHH Policy](#)

[National Infection Prevention and Control Manual](#)

[Adverse Event Management Policy and Operational Procedure](#)

[Records Management Policy.](#)

[HSE Guidance respiratory protective equipment at work](#)

[HSE Guidance on respiratory protective equipment \(RPE\) fit testing](#)

[Fit2Fit Companion Guidance on RPE Qualitative fit testing method](#)

[Fit2Fit Companion Guidance on RPE Quantitative fit testing method](#)

[HSE Fit testing face masks to avoid transmission during the coronavirus pandemic](#)

[NHS Lothian PPE Guidance](#)

[NHS Lothian PPE Framework](#)

14.0 Resources

[HSE Using disposable respirators Poster](#)

[NHS Lothian RPE Service Information](#)