

## **Important information for participants attending qualitative fit testing sessions**

Updated 02.07.20: Updates highlighted

### **1. Why do I need to be fit tested?**

Dental teams must be **fit tested** by a trained fit tester for every make, model, material and size of respirator they wish to wear. These may be disposable FFP3/FFP2/N95 or reusable half masks with replaceable P3 particle filters. **Fit checking** should be also performed every time a respirator is worn.

### **2. Details of your fit testing session**

You will receive an email from your fit tester with information about the:

- Venue for fit testing: address, contact number and map/website
- Date of fit testing session
- Time to arrive - to allow for social distancing. The session will take 1-2 hours.

### **3. Risk assessment**

People put forward for fit testing should have been risk assessed by their employer/line manager to check their medical suitability for being fit tested and providing dental care PRIOR to attending a fit testing session. People in the clinically extremely vulnerable (shielded) group would not be suitable. Many people in the clinically vulnerable group would also be unsuitable (as per individual risk assessment).

Anyone who is COVID-19 positive/symptomatic/in household isolation/been asked to self-isolate by NHS Test and Trace should NOT attend the fit testing session.

Sensitivity and fit testing solutions containing denatonium benzoate (Bitrex) are usually used in the fit testing process. Anyone with an allergy to this should not attend the session. Instead, they should make contact with the fit tester before the session to discuss whether alternative solutions (containing sodium saccharin) are available, and whether they have any allergy to it.

Participants need to be clean shaven in the region of the face seal for the fit test (and subsequent clinical work), or if they have a moustache/goatee this must not impinge on the border of the mask. For any style, hair should not cross or interfere with the respirator sealing surface. If the respirator has an exhalation valve, hair within the sealed mask area should not impinge upon or contact the valve. The link for the information on facial hair is near the bottom of this webpage: <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control>

For dental staff who are unable to shave their facial hair for religious, cultural or personal reasons, there are alternative styles of respirator which may be used, such as a powered air purifying respirator (PAPR or powered hood/helmet). There are different styles, some of which are able to accommodate a turban. Manufacturer's guidelines should be sought prior

to purchase around decontamination to prevent cross-infection. For more information see: <https://www.hse.gov.uk/pubns/priced/hsg53.pdf>

Good hand hygiene must be performed before, during and after the fit testing session; and where possible social distancing will be applied.

#### **4. Documents and videos for all participants to read and watch before coming to the session**

In order to prepare for treating patients during COVID-19, there are some useful documents to read and videos to watch which refer to respirators.

**The OCDO England dental standard operating procedure: transition to recovery** (which is also referenced in the urgent dental care standard operating procedure):

<https://www.england.nhs.uk/coronavirus/publication/dental-standard-operating-procedure-transition-to-recovery/>

**The PHE infection prevention and control guidance is at:**

<https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control>

**The information on PPE for aerosol generating procedures (AGPs) with useful videos on donning and doffing of PPE (right at the bottom of the webpage) is at:**

<https://www.gov.uk/government/publications/covid-19-personal-protective-equipment-use-for-aerosol-generating-procedures>

**The information on PPE for non-aerosol generating procedures with useful video on donning and doffing of PPE (right at the bottom of the webpage) is at:**

<https://www.gov.uk/government/publications/covid-19-personal-protective-equipment-use-for-non-aerosol-generating-procedures>

The videos (particularly the donning and doffing for AGPs) will be made available to watch at the fit-testing session, with the necessary bits of PPE for people to practice donning and doffing if they wish (at their own risk). Participants should also ensure they watch the videos **before** attending the fit-testing session.

#### **5. Things to remember on the day**

1. For the men – they need to be clean shaven that morning or if they have a moustache/goatee this must not impinge on the border of the mask. For any style, hair should not cross or interfere with the respirator sealing surface. If the respirator has an exhalation valve, hair within the sealed mask area should not impinge upon or contact the valve. The link for information on facial hair is near the bottom of this webpage: <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control>
2. Hair must be tied back away from the face (in the style which will be worn in the clinic).

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3. Avoid wearing make-up.
4. Participants must have nothing to eat or drink, and must not smoke or chew anything, or brush their teeth for 30 minutes before the session starts.
5. Participants should bring their own eye protection goggles/safety specs/loupes **and** full face shield or visor with them. The wearer should wear during the fit test any other PPE normally used in the workplace which may interfere with the fit of the facepiece. Participants will **only** be asked to **wear the headband/frame** part of their full-face shield or visor if it has potential to interfere with the fit of the respirator. **They will not wear the perspex front part of the visor itself for the purposes of the fit test, as this would interfere with the test.** If the perspex front part of the visor cannot be detached from the headband/frame, it will not be worn at all for the fit test. The fit testers will help participants decide what they will need to wear on the day.
6. Participants will need a supply of respirators for the session. If using disposable respirators, each participant will need two in case they need a re-test on the day. **Each participant being fit tested for a reusable respirator should have their own (cleaned according to manufacturer's instructions before and after fit testing).** Participants should read the manufacturer's instructions on how to don their respirator. All respirators are different hence this request. The fit testing will be specific to the make, model, material and size of respirator fit tested on the day. Participants will be given a copy of their qualitative fit test results sheet or asked to photograph the original. This provides the evidence for whether they have passed or failed the test for that make, model, material and size of respirator. This should be kept safely by the individual. Records should also be kept at the dental practice **for at least 5 years.**
7. If a participant has passed their qualitative fit test for **a disposable** respirator, they may wrap it back up in its packaging (or put it in a new, clean bag) to take back to their clinic to use (by the same wearer) when treating a patient for an Aerosol Generating Procedure.
8. **If people subsequently use supplies of respirators which are different types, they will need to be fit tested for each make, model, material and size of respirator they propose to use.**

## 6. Future fit testing

A fit test should be repeated whenever there is a **change in RPE (respiratory protective equipment) type, size, model, or material**, or whenever there is a **change to the circumstances** of the wearer that could alter the fit of the RPE. For example:

- weight loss or gain
- substantial dental work
- any facial changes (e.g. scars, moles, effects of ageing) around the face seal area
- facial piercings
- introduction or change in other head-worn personal and protective equipment (PPE)

In addition, Fit2Fit recommends that fit testing of RPE should also be repeated every 2 years. In some situations, it should be repeated more regularly, particularly where RPE is being used as a primary or sole means of control.

## 7. National guidance on respirators

### **OCDO England dental standard operating procedure: transition to recovery**

(which is also referenced in the urgent dental care standard operating procedure)

<https://www.england.nhs.uk/coronavirus/publication/dental-standard-operating-procedure-transition-to-recovery/>

**Table 1: Personal protective equipment (PPE) for COVID-19 dental care settings**

|  | Waiting room/reception | Dental surgery    | Dental surgery            |
|--|------------------------|-------------------|---------------------------|
|  | No clinical treatment  | Non AGP treatment | Treatments Involving AGPs |
| <b>Good hand hygiene</b>                               | Yes                    | Yes               | Yes                       |
| <b>Disposable gloves</b>                               | No                     | Yes               | Yes                       |
| <b>Disposable plastic apron</b>                        | No                     | Yes               | No                        |
| <b>Disposable gown*</b>                                | No                     | No                | Yes*                      |
| <b>Fluid-resistant (type IIR) surgical mask (FRSM)</b> | Yes                    | Yes               | No                        |
| <b>Filtering face piece (FFP3) respirator**</b>        | No                     | No                | Yes                       |
| <b>Eye protection***</b>                               | No                     | Yes               | Yes                       |

\* Fluid-repellent gowns must be worn during aerosol generating procedures (AGPs). If non-fluid-resistant gowns are used, a disposable plastic apron should be worn underneath.

\*\*If wearing an FFP3 mask that is not fluid-resistant, a full-face visor must be worn. Operators who are unable to wear a FFP3 mask due to facial hair, religious head coverings or other reasons should wear alternatives such as a positive pressure 'hood'.

\*\*\*Eye protection ideally should be disposable. Re-usable eye and face protection (such as polycarbonate safety glasses/goggles) is acceptable if decontaminated between single or single sessional use, according to the manufacturer's instructions or local infection control policy. Regular prescription glasses are not considered adequate eye protection

"FFP3 (filtering 98% of airborne particles) respirators are advised for all AGPs to prevent inhalation of aerosols. This is because FFP3 respirators offer a slightly higher level of protection than FFP2 respirators and advice aims to offer the greatest protection. However, the HSE has stated that FFP2 and N95 respirators (filtering at least 94% and 95% of airborne particles respectively) offer protection against COVID-19 and so may be used if FFP3 respirators are not available. These respirators offer protection against AGPs, are recommended by the World Health Organization and are used routinely in other countries by dentists for AGPs. All respirators need to be fit tested and checked.

Other respirators can be utilised by individuals if they comply with HSE recommendations. Reusable respirators should be cleaned according to the manufacturer's instructions."

“All respirators should:

- be well fitted, covering both nose and mouth
- be specifically fit-tested and fit-checked for the specific make and model of the respirator on all staff undertaking AGPs to ensure an adequate seal/fit according to the manufacturers’ guidance
- be fit-checked (according to the manufacturers’ guidance) by staff every time a respirator is donned to ensure an adequate seal has been achieved
- not be allowed to dangle around the neck of the wearer after or between each use
- not be touched once donned
- be compatible with other facial protection used such as protective eyewear so that this does not interfere with the seal of the respiratory protection
- be disposed of and replaced if breathing becomes difficult, the respirator is damaged or distorted, the respirator becomes obviously contaminated by respiratory secretions or other body fluids, or if a proper face fit cannot be maintained
- be removed outside the dental surgery where AGPs have been generated in line with the doffing protocol
- be worn with a full-face visor if a non-fluid resistant respirator is used. (Note that valved respirators are not fully fluid-resistant unless they are also ‘shrouded’)
- cleaned according to manufacturer’s instructions if re-usable “

“It is important to ensure that facial hair does not cross the respirator sealing surface and if the respirator has an exhalation valve, hair within the sealed mask area should not impinge upon or contact the valve.

Operators who are unable to wear respirators due to facial hair or religious head coverings or other reasons should wear alternatives such as positive pressure hoods. These deliver clean air through a High Efficiency Particulate Air filter using a fan mounted on the wearer’s belt. Hoods have integral visors.”

“All PPE worn for patients that are shielding must be single use.

FFP3/FFP2/N95 respirators have a large capacity for the filtration and retention of airborne contaminants. Sessional use can be used in dental practice. A full-face visor changed between patients will protect the respirator from droplet/splatter contamination.

Although good practice, there is no evidence to show that discarding disposable respirators, facemasks or eye protection in-between each patient reduces the risk of infection transmission to the health worker or the patient.

The rationale for recommending sessional use in certain circumstances is to reduce risk of inadvertent indirect transmission, as well as to facilitate delivery of efficient clinical care.”

## **8. Valved and unvalved respirators**

**Valved respirators** protect the wearer from airborne hazardous contaminants. The purpose of a respirator’s exhalation valve is to reduce the breathing resistance during exhalation; it does not impact a respirator’s ability to provide respiratory protection. The valve is designed

to open during exhalation to allow exhaled air to exit the respirator and then close tightly during inhalation, so inhaled air is not permitted to enter the respirator through the valve. They are not splash-resistant (unless they have a 'shrouded valve', which has a raised breathing cage over the valve covered with a special filter medium), so they need to be worn with a full-face shield or visor for AGPs. Taping over or otherwise covering a respirator valve (e.g. by 'double masking' with a surgical mask) is not recommended as it may impact how the respirator functions. **In fact, the 'double masking' of any type of respirator is not advised. Instead, a full-face visor changed or decontaminated between patients will protect the respirator from droplet/splatter contamination during an AGP.**

**This is supported by the PHE COVID-19 infection prevention and control guidance** <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control> **and the PHE infection prevention and control guidance on PPE** <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/covid-19-personal-protective-equipment-ppe>

**Section 10.1** says:

*"Respirators can be single use or single session use (disposable) and fluid-resistant. Note that valved respirators are not fully fluid-resistant unless they are also 'shrouded'. Valved, non-shrouded FFP3 respirators are not considered to be fluid resistant and therefore should be worn with a full face shield if blood or body fluid splashing is anticipated."*

Furthermore, **Section 10.3** which refers to eye and face protection states that: *"While performing AGPs, a full-face shield or visor is recommended."*

#### **Additional References:**

[https://www.6thplanet.com/store/technical/pdf/3m1863\\_Infection%20Prevention.pdf](https://www.6thplanet.com/store/technical/pdf/3m1863_Infection%20Prevention.pdf)

<https://multimedia.3m.com/mws/media/1792732O/respiratory-protection-faq-healthcare.pdf>

## **9. Choosing a respirator**

Please source respirators from a reputable and trusted supplier, and check that they meet the appropriate standards **and are CE marked.**

Useful sites for reading and seeking advice about procuring appropriate PPE:

- Please click on the Essential Technical Specifications (face masks, gloves, gowns, coveralls, respirators, eye protection)  
<https://www.gov.uk/government/publications/technical-specifications-for-personal-protective-equipment-ppe>
- If you are unsure of what you are buying, please seek advice from the Health and Safety Executive.  
<https://www.hse.gov.uk/respiratory-protective-equipment/index.htm>

Before purchasing a reusable half mask respirator, please ensure they comply with the HSE recommendations. Reusable respirators should be cleaned according to the manufacturer's instructions for COVID-19. Please check that they have replaceable P3 particle filters, which

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are enclosed in a box which can be disinfected. Open/exposed filters cannot be easily cleaned, and are therefore unsuitable for dental practice. HSE and local IPC teams (e.g. <https://www.infectionpreventioncontrol.co.uk/healthcare-professionals/>) can be contacted if you have questions around decontamination processes.

Reusable half masks should also have a cleaning, inspection (e.g. checking seal, filters, and valves for faults/damage), storage and maintenance protocol as per manufacturer's instructions. They should be stored in a container which will protect the shape of the mask and seal. Some masks have inserts which help to maintain their shape. Filters should be replaced according to manufacturer's instructions. Written records should be kept of mask maintenance and dates for review fit testing. Records of fit tests, inspections/checks and repairs/replacements should be kept for at least 5 years.

There are many counterfeit masks in circulation, and there is guidance about spotting fakes:

<http://www.bohs.org/wp-content/uploads/2020/05/Spotting-a-Fake-Understanding-FFP-Markings-Branded.pdf>

<https://www.bsif.co.uk/wp-content/uploads/2020/04/CE-Certificate-Checklist-2020-2.pdf>

Employers and suppliers have been urged not to purchase or use KN95 facemasks as PPE by HSE. They have released a safety alert: see <https://press.hse.gov.uk/2020/06/11/hse-safety-alert-issued-against-kn95-facemask/> and [https://www.hse.gov.uk/safetybulletins/use-of-face-masks-designated-kn95.htm?utm\\_source=press.hse.gov.uk&utm\\_medium=referral&utm\\_campaign=kn95-safety-alert&utm\\_content=press-release](https://www.hse.gov.uk/safetybulletins/use-of-face-masks-designated-kn95.htm?utm_source=press.hse.gov.uk&utm_medium=referral&utm_campaign=kn95-safety-alert&utm_content=press-release)

Products manufactured to KN95 requirements rely on a self-declaration of compliance by the manufacturer. There is no independent certification or assurance of their quality.

This respirator has been identified as suspect by HSE experts and locally arranged testing has confirmed they would not meet requirements, including to protect against the ongoing coronavirus pandemic. About 90% of the PPE concerns and queries currently being received by HSE involve KN95 masks which are often accompanied by fake or fraudulent paperwork.

KN95 has not been a principal source of PPE for the NHS, who has already made the decision not to supply this respirator to frontline clinicians fighting the coronavirus pandemic.

**Author:**

Dr Sarah Robertson, Consultant in Dental Public Health -Yorkshire and the Humber, North East and Yorkshire Region, PHE.

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