

COVID-19 -Personal Protective Equipment (PPE) Types and Use

Introduction

This document supports the [PPE rationale document](#) and is designed to provide BHCC staff with further details on the various PPE items available, their application, management and disposal. The information applies to all BHCC staff who need to wear PPE for COVID-19 protection, however, where there are differences for social care staff, this is highlighted. Hyperlinks have been added to signpost to supporting information; please note some of these may need to be copied into a browser should they fail to open correctly.

What is PPE

PPE is equipment that will help protect staff against Health and Safety risks at work, but for the purposes of Covid-19 prevention, it also includes items that help protect clients/service users from infection; which are traditionally described as medical devices. Using data from Covid-19, and other viral respiratory infections, Public Health England (PHE) are confident that some of these medical devices, such as fluid resistant surgical masks, do protect both staff and clients from Covid-19 droplet inhalation, and so act as effective PPE.

The protection provided by PPE must be considered along with the essential series of other recognised [management controls](#) of hands/space/ventilation/cleaning/waste etc, which is outlined in [government sector guidance](#) and the Health & Safety Executive's [ventilation guidance](#). The need for PPE is to be identified in a [team risk assessment](#), and the choice should match the PPE rationale document. There are no permitted exclusions from wearing a surgical mask (where advocated) in the care or domiciliary care environment. In addition, incorrect use of PPE may lead to false confidence, especially where inappropriate PPE is worn, and this will affect the stocks available for critical areas like social care and the NHS.

Types of PPE

All BHCC services can request PPE items through the council's PPE Hub free of charge, further details can be found [here](#). The PPE hub provides staff with equipment that is highlighted in government guidance and is approved/certified by government agencies. Each item of PPE, such as disposable gloves, plastic aprons, gowns, surgical face masks, and goggles/face shields, provide a barrier to Covid-19 viral particles, and are described in more detail in the [government guidance for each industry sector](#); particularly those aimed at working safely in [care homes](#) or [domiciliary care](#).

There are various types of **surgical face masks**, which provide specific levels of protection for different work situations (reflected in the PPE rationale). The Medicines & Healthcare products Regulatory Agency (MHRA) indicate that certified Type I surgical masks have at least 95% bacterial filtration rates, Type II has at least 98% and Type IIR has additional splash resistance, and so would offer similar large particle/droplet filtration rates. This is because the droplets, containing viral particles, would attach themselves to the surgical mask material, offering protection to the wearer and/or those around them (e.g. clients or other staff).

Type 1 masks are not designed to protect the wearer but do protect those around them, and they also help reduce droplet contamination of surfaces. Where these cannot be obtained, Type II surgical masks could be offered instead. As a rule of thumb Type II is used where coronavirus is believed to be present in a household and/or when care staff are working within 2m of residents, but not providing personal care. Type IIR masks are generally utilised in social care settings where close

personal care is provided and/or where symptomatic residents are present. However, BHCC are likely to issue Type IIR in place of Type II so that there is no confusion over the different types in a workplace.

FFP respirator type masks provide a higher level of protection but are only needed where there is a high risk of staff inhaling fine droplets contaminated with coronavirus. Essentially this risk is limited to clinical activities known as Aerosol Generating Procedures (AGPs) (like intubation, ventilation, suctioning or hi-flow oxygen therapy) but these masks MUST be fit tested and donned/doffed correctly (see Resources 15 & 16 below). There is no evidence that FFP3/2 masks add value over Type IIR for droplet protection when both are used with other recommended control measures; except in the context of clinical AGPs.

Face Coverings are not approved PPE for work purposes, as they are not designed to stop the inhalation of virus particles, and they have no approved manufacturing standards. They are designed to protect others from the wearer spreading droplets only. Staff may need to use them on their journey to/from work in line with current legislation, but these will not be provided by BHCC. It is also mandatory that staff are to wear face coverings while travelling through the workplace or being in a shared space, such as kitchens and toilets. This is in addition to maintaining a minimum 2m distance from others, having good ventilation, and washing your hands regularly.

The wearing of a face mask inhibits verbal communication, and this may impact on those with hearing difficulties especially. There is currently no approved clear surgical mask to aid lip reading and so alternative communication methods will need to be considered from relevant organisations [like this](#). The NHS trials of clear masks is being monitored and BHCC will support their use if/when approved for use at work.

The wearing of a mask may also exacerbate challenging behaviour in some settings. The removal/non-use of masks can be considered for some exceptional circumstances, but a comprehensive documented RA will need to be carried out and approved by senior management. This assessment will need to be client specific and identify alternative staff/client protection measures (see sector guidance on page 1 e.g. [Supporting adults with Learning Difficulties](#)). Under no circumstances should this assessment be applied to a whole care setting.

Eye and face protection provide protection against contamination to the eyes from respiratory droplets, aerosols, and from splashing of secretions, blood, body fluids or excretions. Types include, approved goggles, visors/face shields, but not regular corrective spectacles or safety glasses. Safety glasses may be appropriate for general tasks where there is a risk of substance splashing (like cleaning) but they do not fit closely enough to prevent coronavirus aerosols or viral particles from reaching the eyes.

Selection will be based on local covid risk assessments and the users fit and tolerance of the items, (particularly where spectacles are needed as well), although approved goggles should be the primary choice due to their close fit. The protection choice will also need to acknowledge, whether items are designed/marked as single-use and/or if they are approved to be cleaned & disinfected. Face shields do not remove the need to wear a surgical mask where advocated. They only provide eye protection, which can also be worn over corrective spectacles, and can be used to provide additional face mask protection where there is a high risk of droplets from AGPs or clients spitting/coughing.

PPE and Service Users – No PPE is recommended currently, except for hospital clinical areas or communal waiting areas, but not if there is potential for their clinical care to be compromised.

PPE Use & Management

Reference should be made to the government covid-safe [sector guidance](#) to understand what PPE is needed for certain work circumstances. Once identified and sourced, staff need to be familiar with what PPE to use, how to use it safely, when to change it, and how to dispose of it. Listed below are some general management considerations for teams to apply:

- **How/where to store it** – PPE must be properly looked after and stored when not in use, e.g. in a dry clean cupboard. If it is certified as reusable it must be cleaned/decontaminated in accordance with manufacturer’s instructions and kept in good condition - See useful Resource 11 below.
- **How to apply it** – PPE should be put on/taken off in a manner that avoids staff potentially contaminating themselves with viral particles. All BHCC staff using PPE for Covid-19 risks should understand and follow the donning/doffing guidance, in addition to the good hand-hygiene practices – see useful Resources 1, 9, and 18 below.
- **How long to use items** – The Government’s ‘working safely’ guidance highlights that there are some circumstances where PPE may be kept on for a certain period of time (sessional use). This is most likely to apply to staff undertaking maintenance or general cleaning duties, or where working in enclosed public/communal spaces. However, staff will still need to change their face mask when it becomes blocked, damaged, soiled, damp, compromised, or uncomfortable.

A single session refers to a period of time where a worker is undertaking duties in a specific setting/exposure environment e.g. non-care work in a unit, house, or distinct wing/area. A session ends when the worker leaves that setting/exposure environment. The sessional use of PPE in social care settings is rare, especially when close personal care is provided by staff, or where staff are within 2m of known or suspected Covid cases. As a result, these staff must change their PPE in a covid-safe area between each task or contact with clients/service users.

Due to the ongoing need for PPE use and the length of time PPE is used for, all staff wearing PPE need to be mindful of the hot weather guidance and the general tips for skin care, please refer to Resource 1 below.

- **How to report concerns/issues** – Details regarding the management of PPE comfort or suitability, or concerns relating to ill-health or effectiveness, are described in the [PPE rationale document](#).
- **What to do after using it** – Following personal care support, covid-testing, the wearing of PPE, hand hygiene, and or the cleaning & disinfecting items, various different articles will need to be disposed of correctly. Each has an identified waste stream, denoted by a colour coded bag/receptacle, and must have an associated waste collection & disposal method, as identified in legislation. BHCC is currently reviewing its COVID-19 waste management guidance to comply with the requirements at Resource 22, and until that time it has been agreed that:
 - PPE waste in care settings or waste generated from any areas/sites with known/suspected covid cases – use yellow striped or orange bags (as available or as used by waste contractor) and associated clinical waste bins, or use a double bagged domestic waste bag with 72hrs storage before final disposal in a household waste bin.
 - Home care, domiciliary care or similar support – small amounts of PPE waste can go into the client’s waste/pedal bin for disposal into the wheelie or commercial bin later. Larger amounts should be placed into a tied bag and placed into the wheelie or commercial bin once that particular care provision session has finished. Clinical waste should be managed in line with local policies.

- Children’s services, schools, and LD houses – dispose of PPE items in usual domestic waste sacks but place into wheelie or commercial bin at the end of each working day.
 - Offices and general work sites, or mobile teams – dispose of PPE items in usual domestic waste bin/sack and dispose of bags as per usual frequencies
- How to supervise staff PPE use – It is important for managers to take steps to ensure that their staff are familiar with PPE use, the work risk assessments/procedures, and associated covid-management controls. This helps to reinforce the need for PPE application and supports the training given. It also helps maintain the level of protection needed and helps to reduce the spread of infection/cross-contamination.

Feedback from infection control specialists has highlighted some common pitfalls, which might be useful to consider when monitoring staff, especially in care settings:

- Dropping/lowering face masks to take a drink and replacing the mask over the nose and mouth
- Taking a face mask off and putting it on a table, in a pocket, or hanging it from a nail, car mirror etc
- Wearing the mask just over the mouth and not the nose - Be vigilant where masks slip off the nose
- Hanging masks from one ear then replacing it across their mouth and nose
- Taking the face mask/PPE off and not performing hand hygiene
- Not changing face masks or re-using them – Monitor for discolouration/staining
- Touching the mask while wearing it, without removing it and without performing hand hygiene
- Using alcohol-based hand rub to decontaminate gloves
- Wearing gloves all the time and or Wearing PPE in a COVID safe area
- Wearing gloves, and aprons sessionally rather than single use i.e. walking around the building, and not changing them between tasks

The Care Quality Commission (CQC) has provided an overview of some issues found by inspectors in a small percentage of care providers, namely:

- No or incorrect PPE being worn by staff
- PPE stores and staff changing areas within potentially contaminated areas
- Poor provision of correct waste disposal facilities
- Not updating risk assessments or infection control policies to reflect Coronavirus.

The Health & Safety Executive (HSE) are also carrying out spot checks of workplaces to help ensure covid-safety arrangements. There is currently no general feedback from these for PPE, but it is worth non-care managers reviewing the [HSE website](#) for details of their inspections, which includes visits to local authorities and schools.

Useful resources for managers/staff to use - Please contact [Health and Safety](#) or [Public Health](#) if other related information is needed.

These are a selection of resources to help managers and staff with PPE use and cleaning activities. They are not exhaustive and other information can be found from related links within these sites: **NB – Some links may fail to open in some browsers. Please copy the hyperlink and paste into your web browser/internet search engine web address (URL) bar.**

1. General guidance and links to other information - [BHCC covid 19 website](#) – Includes donning & doffing videos, waste management, hot weather guidance, and risk assessment guidance (for BHCC staff)
2. [UK Government Covid 19 website](#) – various infection prevention & control topics for the public, non-social care settings, health professionals, and social care.
3. UK Government Covid 19 guidance for [working safely in care homes](#)
4. UK Government Covid 19 guidance for [the domiciliary care sector](#) – includes donning & doffing PPE for home carers
5. UK Government Covid 19 guidance for supporting adults with [learning disabilities and autism](#)
6. [UK Government Covid 19 PPE guidance](#) – Details Infection Prevention & Control for COVID-19 and gives a general overview of PPE needs along with links to PPE choices for different settings.
7. [Visual Guide of PPE](#) needs in care & clinical settings (Poster).
8. [Visual PPE guide](#) for community and social care settings
9. UK Government guidance on the [donning & doffing of PPE for non-aerosol generating procedures](#)
10. Staff training on covid and PPE use – [see learning gateway](#)
11. UK Government guidance on the [decontamination of reusable equipment](#) – **to be used in conjunction with equipment manufacturers’ guidance**
12. UK Government guidance on the [cleaning of non-healthcare settings](#) – includes waste management
13. UK Government IPC guidance containing [cleaning in care homes](#) – includes waste management
14. UK Government guidance on [working safely in Education and Child Care settings](#) and [operational guidance for schools](#)
15. Public Health England – [when to use FFP3 masks](#) – gives a clear outline of when filtered masks might be needed and emphasises the need for qualitative/quantitative fit testing.
16. Health & Safety Executive – [Respiratory Protective Equipment fit testing](#) – describes the fit testing of respirator/filter type masks and the process that needs to be done by a competent person using approved test equipment.
17. UK Government guidance on [the donning & doffing of PPE for aerosol generating procedures.](#)
18. Hand washing and the use of hand gels (hand rub) visual guide ([posters](#))
19. [Local Public health Guidance](#) – including covid signs & symptoms, social distancing, general hand hygiene, and skin care.
20. Medicines and Healthcare products Regulatory Agency (MHRA) – [PPE technical guidance](#)
21. Care Quality Commission - [COVID-19 Insight](#) into Infection prevention and control in care Homes
22. Government guidance on [Covid waste management](#) and general [healthcare waste management](#)