

# Management of a Cardiac Arrest in adult patients with confirmed Covid -19



## Emergency Identified

- Enter the sideroom with PPE - as per Public Health England's latest guidance
- 2nd person to remain outside to alert for assistance and ensure no-one enters the room without full PPE and facilitate the equipment and



## How to assess for Cardiac arrest

- Check for a pulse for 10 seconds and look (from the side of the patient) for absence of breathing
- DO NOT put your ear to the patient's mouth or bend into their line of respiration to check for breathing; this must be a visual check (as per resus

## Adult in established Cardiac Arrest

- Call 2222 for an adult cardiac arrest and don full PPE for aerosol-generating procedures (FFP3)
- The person once in full PPE must commence Compression only resuscitation until the cardiac arrest team arrives.
- An additional member of staff should don full PPE, then remove the defib from the resus trolley and take it into the room/area - the resus trolley must remain outside the sideroom or cohorted area.
- This additional person can then connect the defib pads and assist with compressions until the cardiac arrest team arrives - but not ventilation, this should only be done with a bag-valve-mask that has a viral HME in place.
- No other ward staff need to enter the room unless requested - this is to reduce unnecessary exposure and maintain essential team members only in the room.



## 2222 Team Arrival

- Do not enter the room without full PPE as compressions are an aerosol-generating procedure.
- Insert a viral HME between the facemask and the Ambu-bag and then convert to 30:2 compressions and ventilation
- Ensure that the number of people entering the room is considered; do not overpopulate the room, essential members of the team only (the team leader must be in the room).
- Early intubation is advocated and should be done by an appropriately trained member of staff.
- Before a decision to intubate, ceilings of care should be considered.



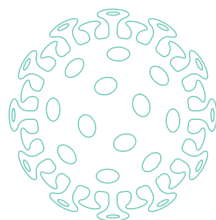
## Post Cardiac Arrest

- Full doffing procedures should be followed and full hand decontamination with soap and water.
- The defib and trolley should be decontaminated as per local infection control protocols.





Public Health  
England



## COVID-19 Safe ways of working

# A visual guide to safe PPE

**General contact with confirmed or suspected COVID-19 cases**

**Aerosol Generating Procedures**

Eye protection to be worn on risk assessment

Fluid resistant surgical mask

Disposable apron

Gloves

Wash your hands before and after patient contact and after removing some or all of your PPE

Clean all the equipment that you are using according to local policies

Use the appropriate PPE for the situation you are working in (General / AGPs or High risk areas)

Take off your PPE safely

Take breaks and hydrate yourself regularly

Eye protection eye shield, goggles or visor

FFP3 or FFP2 respirator

Long sleeved fluid repellent gown

Gloves

**For more information on infection prevention and control of COVID-19 please visit:**

[www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control](https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control)



# When to use a **surgical face mask** or **FFP3 respirator**

When caring for patients with **suspected or confirmed COVID-19**, all healthcare workers need to – prior to any patient interaction – assess the infectious risk posed to themselves and wear the appropriate personal protective equipment (PPE) to minimise that risk.

## When to use a surgical face mask



## When to use an FFP3 respirator



**In cohorted area (but no patient contact)**

### For example:

Cleaning the room, equipment cleaning, discharge patient room cleaning, etc

### PPE to be worn

- Surgical face mask (along with other designated PPE for cleaning)

**Close patient contact (within one metre)**

### For example:

Providing patient care, direct home care visit, diagnostic imaging, phlebotomy services, physiotherapy, etc

### PPE to be worn

- Surgical face mask
- Apron
- Gloves
- Eye protection (if risk of contamination of eyes by splashes or droplets)

**When carrying out aerosol generating procedures (AGP) on a patient with possible or confirmed COVID-19**

**In high risk areas where AGPs are being conducted (eg: ICU)**

### The AGP list is:

- Intubation, extubation and related procedures such as manual ventilation and open suctioning
- Tracheotomy/tracheostomy procedures (insertion/open suctioning/removal)
- Bronchoscopy
- Surgery and post-mortem procedures involving high-speed devices
- Some dental procedures (such as high-speed drilling)
- Non-Invasive Ventilation (NIV) such as Bi-level Positive Airway Pressure (BiPAP) and Continuous Positive Airway Pressure ventilation (CPAP)
- High-Frequency Oscillating Ventilation (HFOV)
- High Flow Nasal Oxygen (HFNO), also called High Flow Nasal Cannula
- Induction of sputum

### PPE to be worn

- FFP3 respirator
- Long sleeved disposable gown
- Gloves
- Disposable eye protection

**Always fit check the respirator**

## REMEMBER

- PPE should be put on and removed in an order that minimises the potential for self-contamination
- The order for PPE removal is gloves, hand hygiene apron or gown, eye protection, hand hygiene, surgical face mask or FFP3 respirator, hand hygiene

**These images are for illustrative purposes only. Always follow the manufacturer's instructions.**

## **Aerosol-generating procedures (AGP's)**

The following procedures are considered to be potentially infectious AGPs:

- **CARDIAC ARREST**
- Intubation, extubation and related procedures
- Tracheotomy/tracheostomy procedures
- Manual ventilation
- Open suctioning
- Bronchoscopy
- Non-invasive ventilation (NIV) e.g. Bi-level Positive Airway (BiPAP) and Continuous Positive Airway Pressure (CPAP)
- Surgery and post-mortem procedures in which high speed devices are used
- High-frequency oscillating ventilation (HFOV)
- High-flow Nasal Oxygen (HFNO)
- Induction of sputum (see glossary)
- Some dental procedures (e.g. High speed drilling)

**NOTE – Nebulizers are not classed as Aerosol Generating Procedures**



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## Quick guide

### Putting on (donning) personal protective equipment (PPE) for aerosol generating procedures (AGPs)

This is undertaken outside the patient's room.

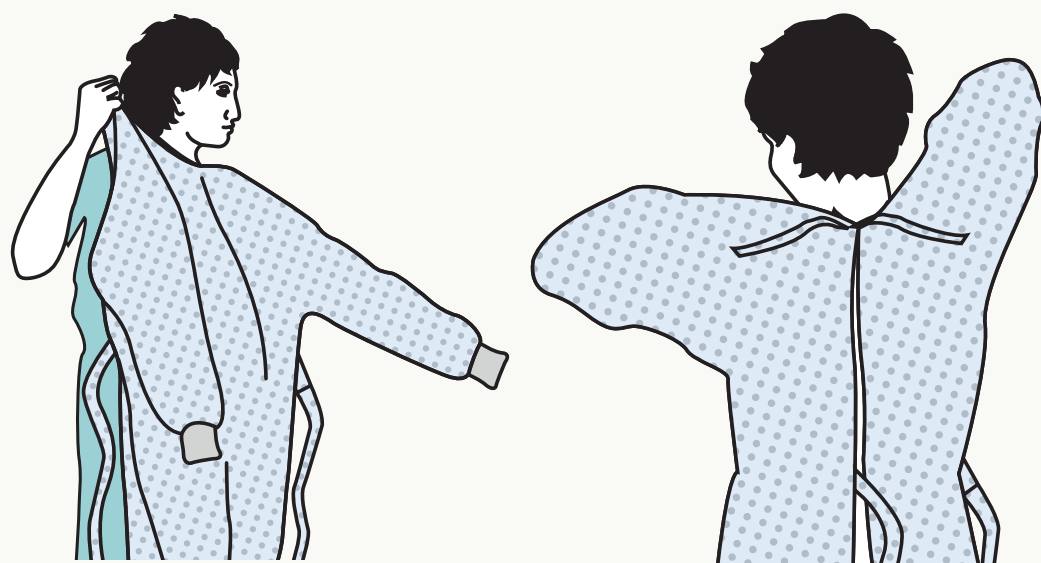
#### Pre-donning instructions

- ensure healthcare worker hydrated
- tie hair back
- remove jewellery
- check PPE in the correct size is available

**Perform hand hygiene before putting on PPE**

**1**

**Put on the long-sleeved fluid repellent disposable gown**



**2**

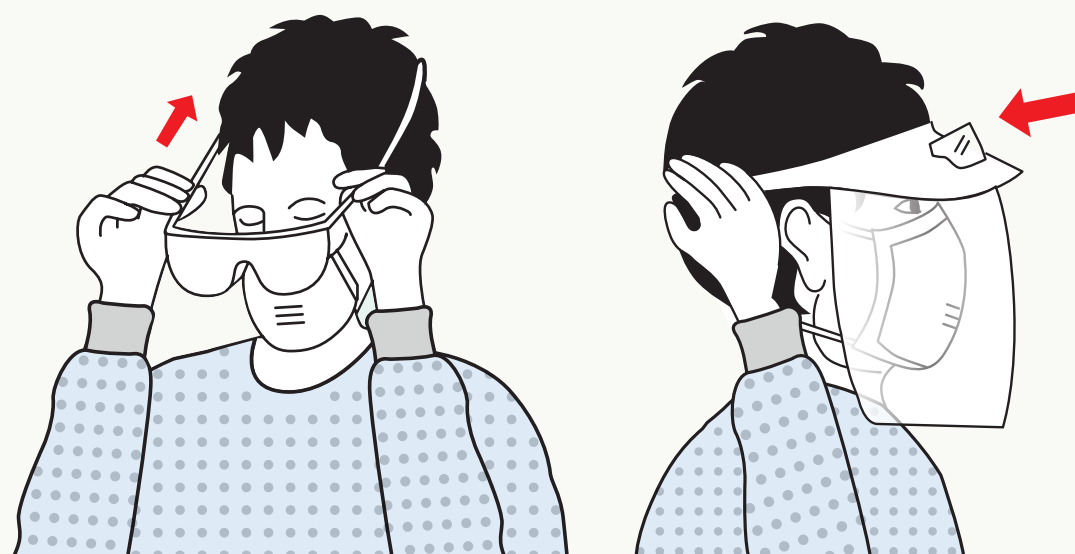
**Respirator**

Perform a fit check.



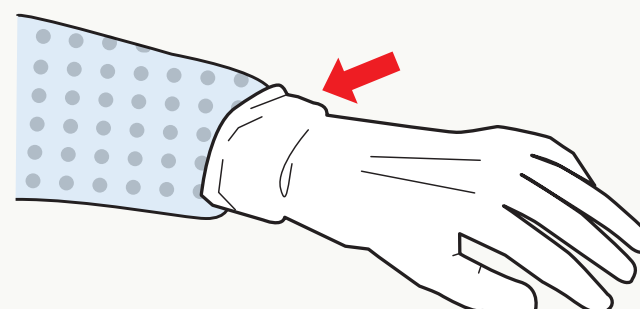
**3**

**Eye protection**



**4**

**Gloves**





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## Quick guide

### Removal of (doffing) personal protective equipment (PPE) for aerosol generating procedures (AGPs)

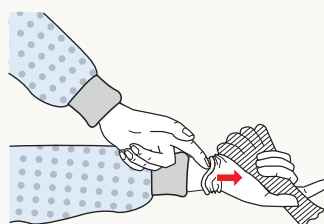
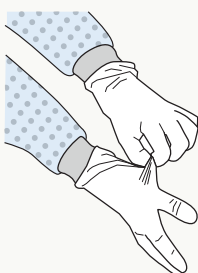
PPE should be removed in an order that minimises the potential for cross contamination.

**The order of removal of PPE is as follows:**

**1**

#### Gloves –

the outsides of the gloves are contaminated



Clean hands with alcohol gel

**Gel Hands**

**2**

#### Gown –

the front of the gown and sleeves will be contaminated



**Gel Hands**

**3**

#### Eye protection -

the outside will be contaminated



**Gel Hands**

**4**

#### Respirator

Clean hands with alcohol hand rub. Do not touch the front of the respirator as it will be contaminated

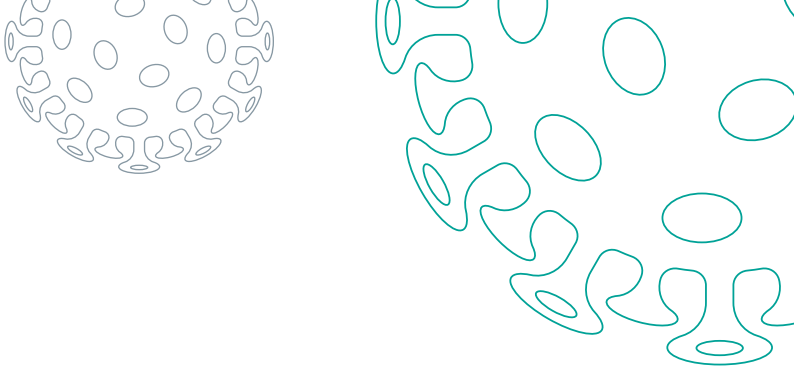


**5**

Wash hands with soap and water







# Putting on (donning) personal protective equipment (PPE) including coveralls for aerosol generating procedures (AGPs)

## Use safe work practices to protect yourself and limit the spread of infection

- keep hands away from face and PPE being worn
- change gloves when torn or heavily contaminated
- limit surfaces touched in the patient environment
- regularly perform hand hygiene
- always clean hands after removing gloves

## Pre-donning instructions

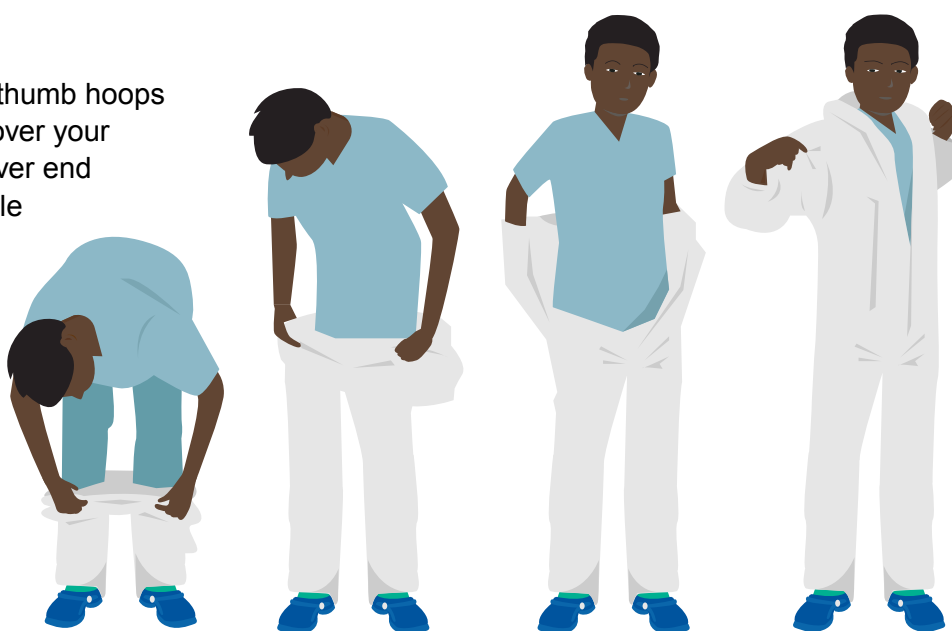
- ensure healthcare worker hydrated
- tie hair back
- remove jewellery
- check PPE in the correct size is available

Putting on personal protective equipment (PPE). The order for putting on is coverall, respirator, eye protection and gloves. This is undertaken outside the patient's room.

### 1 Don the coveralls

- Step into coveralls
- Pull up over waist
- Insert arms into sleeves, if thumb hoops available then hoop these over your thumbs, ensure sleeves cover end of gloves so no skin is visible
- Pull up over the shoulders
- Fasten zip all the way to the top

Do not apply the hood of the coverall as there is no requirement for airborne transmission.



## 2 Respirator

Note: this must be the respirator that you have been fit tested to use. Eye protection always be worn with a respirator. Where goggles or safety spectacles are to be worn with the respirator, these must be worn during the fit test to ensure compatibility.

Position the upper straps on the crown of your head, above the ears and the lower strap at the nape of the neck.

Ensure that the respirator is flat against your cheeks. With both hands mould the nose piece from the bridge of the nose firmly pressing down both sides of the nose with your fingers until you have a good facial fit.

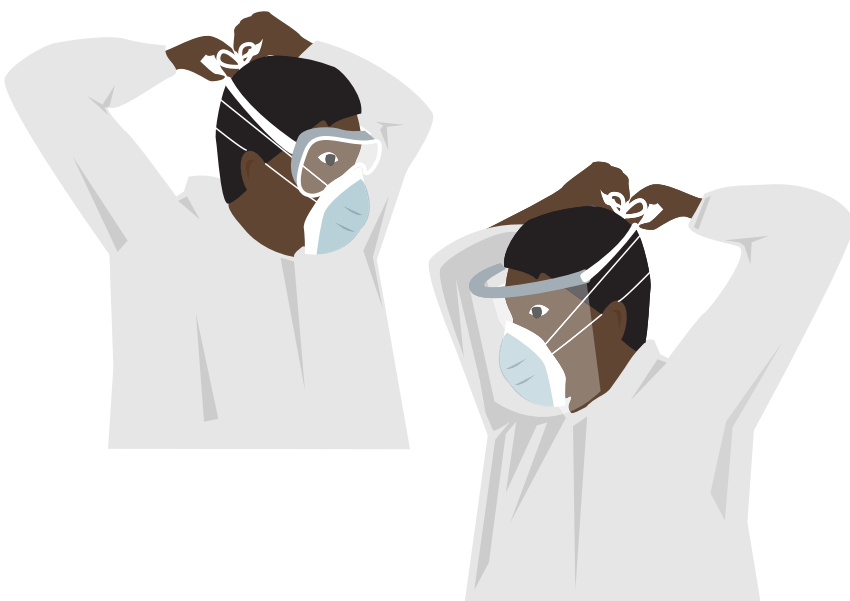
If a good fit cannot be achieved DO NOT PROCEED. Perform a fit check.

The technique for this will differ between different makes of respirator. Instructions for the correct technique are provided by manufacturers and should be followed for fit checking.



## 3 Eye protection

Place over face and eyes and adjust the headband to fit

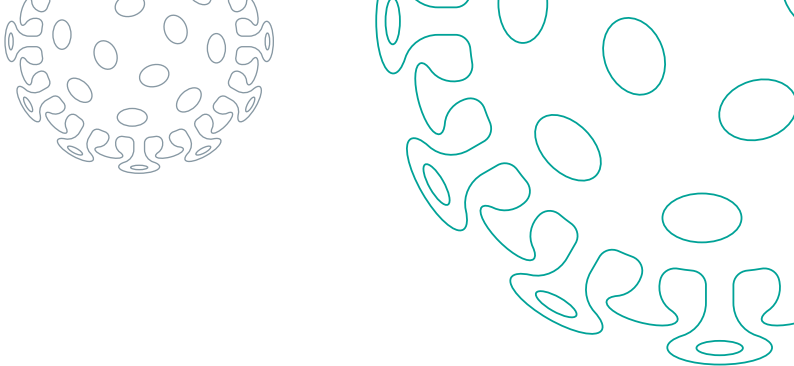


## 4 Gloves

- Select according to hand size
- ensure cuff of coverall is covered by the cuff of the glove







# Removal of (doffing) personal protective equipment (PPE) including coveralls for aerosol generating procedures (AGPs)

PPE should be removed in an order that minimises the potential for cross contamination. PPE is to be removed carefully in a systematic way before leaving the patient's room i.e. gloves, then gown/coverall and then eye protection.

The FFP2/3 respirator must always be removed outside the patient's room. Where possible in a dedicated isolation room with ante room or at least 2m away from the patient area.

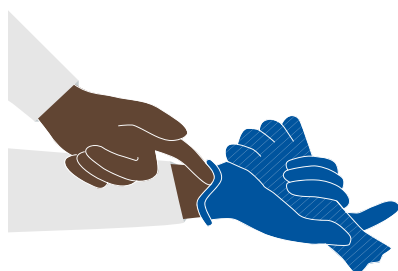
This is to reduce the risk of the healthcare worker removing PPE and inadvertently contaminating themselves or the patient while doffing.

The FFP2/3 respirator should be removed in the anteroom/lobby. In the absence of an anteroom/lobby, remove FFP2/3 respirator in a safe area (e.g., outside the isolation room). All PPE must be disposed of as infectious clinical waste.

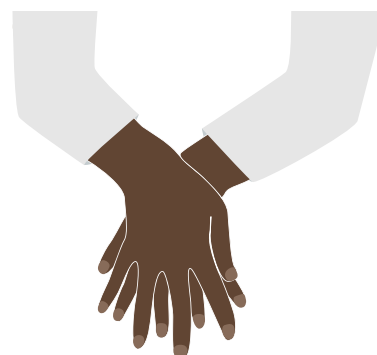
- 1 Firstly, grasp the outside of the outside of the glove with the opposite gloved hand; peel off  
Hold the removed glove in gloved hand



Then, slide the fingers of the ungloved hand under the remaining glove at the wrist  
Peel the remaining glove off over the first glove and discard



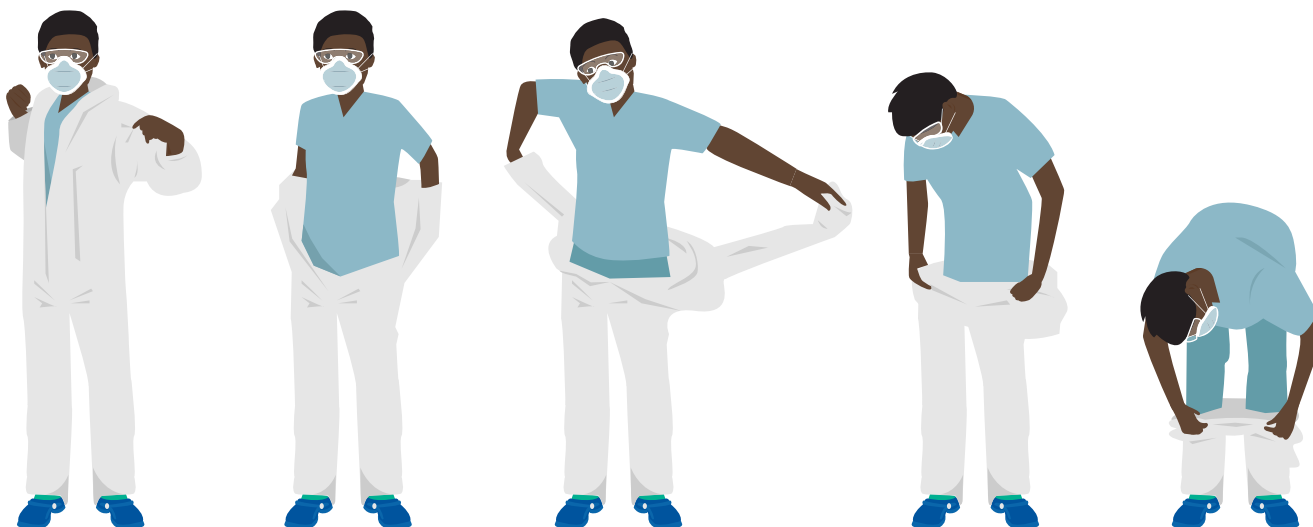
Clean hands with alcohol hand gel or rub



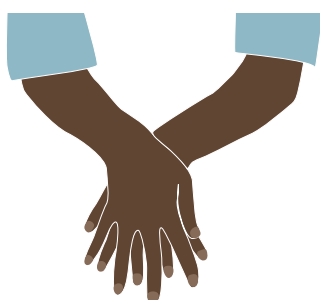
## Removal of (doffing) personal protective equipment (PPE) including coveralls for aerosol generating procedures (AGPs)

### 2 Remove coveralls

- Tilt head back and with one hand pull the coveralls away from your body
- With other hand run your hand up the zip until you reach the top and unzip the coveralls completely without touching any skin, clothes or uniform following the guidance of your buddy
- Remove coveralls from top to bottom. After freeing shoulders, pull arms out of the sleeves
- Roll the coverall, from the waist down and from the inside of the coverall, down to the top of the shoes taking care to only touch the inside of the coveralls
- Use one shoe covered foot to pull off the coverall from the other leg and repeat for second leg. Then step away from the coverall and dispose of it as infectious waste



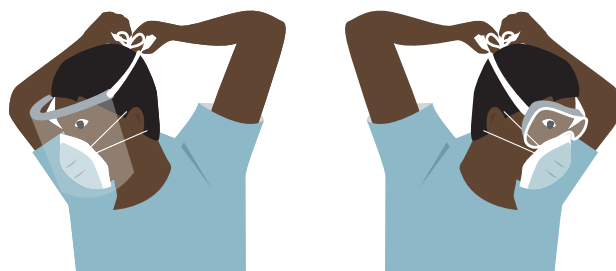
### 3 Clean hands with alcohol hand gel or rub



### 4 Eye protection

(preferably a full face visor – goggles can be used as an alternative) – the outside will be contaminated

To remove, use both hands to handle the restraining straps by pulling away from behind and discard



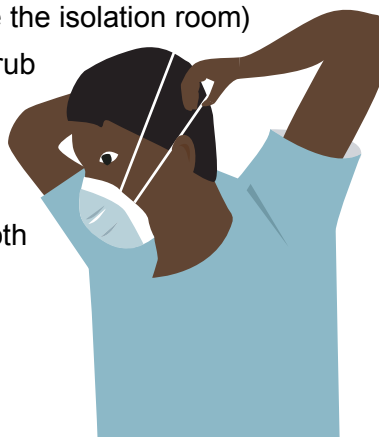
### 5 Respirator

In the absence of an anteroom/lobby remove FFP2/3 respirators in a safe area (e.g., outside the isolation room)

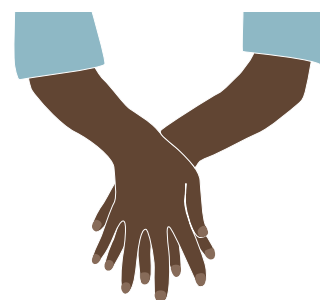
Clean hands with alcohol hand gel or rub

Do not touch the front of the respirator as it will be contaminated

- lean forward slightly
- reach to the back of the head with both hands to find the bottom restraining straps and bring it up to the top strap
- lift straps over the top of the head
- let the respirator fall away from your face and place in bin



### 6 Clean hands with soap and water



## DECONTAMINATION OF EYE PROTECTION

Please use Eye/Face protection only when necessary as per the infection control policy.

If there are limited quantities of Eye/Face protection, re-use may be considered for some products if they can be decontaminated with a Clinell wipe.

The following protocol outlines the LTH approved method for decontamination.

### **In red/amber -**

- Remove gloves
- Alcohol Gel hands
- Remove Apron/Gown
- Alcohol Gel hands
- Step outside of room/ cubicle

### **In green area – (outside bay/room)**

- Clean surface with clinel wipes and place a wipe on the surface (could be done prior to donning)
- Remove eye protection and place on wipes
- Alcohol Gel hands
- Remove mask and place in bin
- Alcohol Gel hands
- Don non sterile gloves and apron
- Clean visor/ eye protection with Clinel wipe and allow to air dry
- Remove gloves
- Alcohol Gel hands
- Remove apron
- Wash hands with soap and water

Have you experienced something distressing at work as a result of Covid-19? Are you experiencing a lot of anxiety?  
Feeling overwhelmed?  
**We are here to listen.**

There is now a  
**Staff Support Helpline**

for you to call to speak to a trained member of staff who  
can offer you support



Monday - Friday  
09:30 - 16:00



01772 521 394  
(Ext. 1394)



**Staffed by Lancashire Teaching Hospitals Psychologists and Incident Supporters offering psychological first aid.** In addition, suggestions from our staff Clinical Psychologist are available via the COVID-19 staff health and wellbeing intranet page, along with guidance for managers about supporting staff.