



This booklet contains information and guidance
published in respect of COVID-19

Date: 25th Feb 2021



This booklet contains

- PHECC COVID-19 Advisory
- HPSC A selection of posters in relation to Wearing of Masks and Donning/Doffing PPE
- HPSC Current recommendation for the use of PPE (published 9 Feb. 2021)
- HPSC Infection Prevention and Control when performing Aerosol Generating Procedures

Further information can be found at:

<https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/newupdatedguidance/>

Information taken from the PHECC Website on 25th February 2021

https://www.phccit.ie/PHECC/Publications_and_Resources/Newsletters/Newsletter_Items/2020/PH_ECC_COVID_19_Advisory_v1.aspx?WebsiteKey=e406219d-01ae-4393-b7e5-dea9321c039d

PHECC COVID-19 Advisory v2

4th June 2020

To: All PHECC Responders, Registered Practitioners, Recognised Institutions, Approved Training Instructions and Licensed CPG Providers.

Dear Colleagues,

The global pandemic of SARS NCOV2 (COVID-19) has resulted in significant challenges and changes in how healthcare (including pre-hospital emergency care) is being delivered in Ireland.

This innovation and flexibility is likely to be required even more in the weeks and months ahead.

The PHECC Medical Advisory Committee wishes to provide guidance to practitioners and responders of all levels at this time. We are conscious that many individual licensed CPG providers and others are already taking steps to deliver their services in this context and also to support the state in how we all manage this unprecedented situation.

The overarching national guidelines on precautions and clinical management of COVID-19 are issued by the Health Protection Surveillance Centre (HPSC) and updated regularly with input from a national [Expert Advisory Group \(EAG\)](#). This should be your main source of accurate information along with the HSE and Department of Health; there is a lot of information in circulation regarding COVID-19, not all of it accurate.

There are some specific issues that are pertinent to pre-hospital emergency care, which PHECC would like to highlight in **patients with confirmed or suspected COVID-19 infection**. This advisory guidance is intended to complement existing HPSC guidelines and your own training.

Personal Protective Equipment (PPE) is a component of the [WHO standard infection control precautions](#) and remains unchanged in light of COVID-19.

The level of PPE required is based on the risk, which includes close personal contact.

The Medical Directors for licensed CPG providers may issue updated advice based on evolving national guidance - please be cognisant of any such advice.

COVID-19

The SARS NCOV2 virus which causes COVID-19, infects through droplets and contact with the mucous membranes. **It does not infect through the skin.**

The greatest element of risk for a healthcare worker (responders and practitioners) is transfer of the virus to the mucous membranes by contact of contaminated hands (including contaminated gloved hands) with the eyes, nose or mouth. The key interventions to manage this risk are to minimise hand contamination (keep your hands to yourself when possible), avoid touching your face and clean your hands frequently (with soap and water or alcohol hand-rub).

There is also a significant risk of direct transfer of the virus on to mucous membranes by droplet transmission, that is, by direct impact of larger infectious virus droplets generated from the patient's respiratory tract landing directly in your eyes, nose or mouth. This is more likely to happen, the closer you are to the patient; This risk is managed by use of appropriate PPE (surgical facemask,

gloves, long sleeved gown and eye protection) and by requesting the patient to wear a surgical facemask and cover their nose and mouth when coughing or sneezing (respiratory hygiene and cough etiquette). In the presence of a patient with COVID-19, small poorly ventilated areas will have a higher concentration of virus.

There is evidence that airborne transmission can occur when certain procedures, aerosol generating procedures (AGPs), are performed. The biggest risk is related to a healthcare worker performing endotracheal intubation, ventilation or suctioning.

Keeping safe means focusing on the major identifiable risk. In almost all healthcare settings the greatest risks of infection of healthcare workers are likely to be related to anxiety, fatigue, distraction and multi-tasking in critical situations resulting in unintended contact of contaminated hands with the eyes, nose or mouth.

Infection Prevention & Control (IP&C), Personal Protective Equipment (PPE)

The HPSC has provided detailed guidance on IP&C and PPE requirements for healthcare workers. This guidance from the HPSC should be followed and appropriate PPE used for all potential COVID-19 patients. If AGPs are being performed a surgical facemask is not sufficient therefore a properly fitted respirator mask (FFP2 or higher specification) is required.

Personal protective equipment while important is the last line of defence

PPE should match the route of transmission	When to use in a patient being treated as COVID +ve	Recommended PPE
Contact precautions	> 2m away from patient	Hand hygiene Gloves Apron
Droplet precautions	Within 2m of patient	Hand hygiene Gloves Apron Surgical facemask +/- Eye protection* (risk assess)
Airborne precautions**	Aerosol generating procedure	Hand hygiene Gloves Fluid repellent long sleeved gown Eye protection* FFP2 mask

*Eye protection may be goggles or a visor. Personal spectacles are insufficient.

** In situations where responders/practitioners are with a patient and there is a significant risk that a planned or an unplanned aerosol generating procedure may need to be performed urgently, for example oral suctioning, it may be appropriate to wear an FFP2 mask while with the patient.

Case Definition – The current HPSC screening case definition for COVID-19 should be used at all times. As of today, this includes:

Clinical criteria

A patient with acute respiratory infection (sudden onset of at least one of the following: cough, fever [$\geq 38^{\circ}\text{C}$], shortness of breath) **AND** with no other aetiology that fully explains the clinical presentation,

OR

A patient with any acute respiratory illness **AND** having been in close contact (< 2 metres for > 15 minutes) with a confirmed or probable COVID-19 case in the last 14 days prior to symptom onset,

OR

A patient with severe acute respiratory infection (fever and at least one sign/symptom of respiratory disease [e.g. cough, fever, shortness of breath]) **AND** requiring hospitalisation (SARI) **AND** with no other aetiology that fully explains the clinical presentation.

Please check [HPSC](#) for changes to case definition, as it is regularly updating.

Screening questions for COVID-19 infection

Do you have any new cough or new shortness of breath?

Do you have a high temperature/ fever?

Have you had contact with a confirmed COVID-19 patient within the past 14 days?

If **yes to any** question regard the patient as suspect COVID-19

If **no to all** questions regard the patient as low risk for COVID-19

Currently (as of June 2020) the prevalence of COVID-19 in the community is low. The highest risk of COVID-19 transmission to responders and practitioners appears to be from obviously ill patients (e.g. respiratory symptoms with fever etc). The clinical index of suspicion for COVID-19 infection should, however, be high as non-symptomatic persons are known to transmit infection.

Training & Education

Training at all levels remains important. The COVID-19 pandemic is likely to persist for some time, so we must give thought to how training continues in this new environment. Training and education (including assessment & examinations) should be conducted in such a way that infection risk is minimised. This may require delivery on-line or in smaller groups than normal to facilitate social distancing. HPSC advice for contacts and symptomatic cases should also be followed here.

PHECC recommends that mouth to mouth or mouth to mask ventilation should not be taught in the current situation. Such elements of training may be omitted and taught at a later date.

The HPSC has placed significant emphasis on hand washing as a preventative measure. Details on correct hand washing is available at [HSE hand washing advice and demonstration](#);

Similarly, donning and doffing of PPE requires training to reduce accidental self-contamination, particularly when doffing the PPE. [Details on correct donning and doffing is available at HPSC](#).

As a means of updating training on infection prevention and control principles PHECC strongly recommends that all responders and practitioners should review both of these resources.

To minimise the risk follow the steps:

Wash/alcohol rub hands – don gloves – do the clinical intervention – doff gloves – wash/alcohol rub hands. If a subsequent clinical intervention is required repeat the process.

If a Recognised Institution or Approved Training Institution is making a decision to return to training, they should:

- Consider reduced numbers
- Adhere to adequate social distancing measures
- Ensure effective PPE is used
- Explore the use of equipment ratios
- Consider temperature checks for participants

This is not an exhaustive list.

Returning to work/training is a decision for government and PHECC cannot give advice on when it is safe to do so.

Public Awareness

All PHECC responders and practitioners are in a position to take a lead in ensuring that important public health messages regarding hand washing, cough etiquette and social distancing are reinforced. This can be particularly effective when good behaviour is modelled to others.

Personal Well Being

This will be a difficult time for everyone in the health services including PHECC responders and practitioners. Many of you will work long hours and may become ill yourselves. As with all incidents, personal safety comes first. A sick responder or practitioner cannot help others. So please ensure you use your PPE and take time to look after your own physical and mental well-being. PHECC will support you in any way we can and I know you will all support each other too.

Clinical Matter- General advice

Standard infection control precautions must be applied when treating all patients. Patients should be treated according to CPGs, however, when responding to an emergency medical incident;

- Complete a preliminary assessment, if possible, while maintaining social distancing (> 2 metres).
- If the patient requires close contact assessment and/or treatment don appropriate PPE.
- If the patient demonstrates respiratory symptoms, fever or other cause for concern re COVID-19 apply a surgical facemask to the patient.
- If the patient is unresponsive, check for breathing without using the look, listen and feel (ear to the patient's mouth) process.
- Minimise the number of unnecessary bystanders, responders and/or practitioners within the vicinity of the patient, especially in a small room/area or ambulance.
- When patient information is being recorded i.e. PCR/ACR, request another person, who has maintained physical distancing from the patient, to record the details to avoid cross contamination.
- When the patient encounter is complete, doff and dispose of the PPE appropriately and finally wash your hands.

There are three scenarios where pre-hospital emergency care is provided in Ireland

1 First Aid Response (FAR) in the workplace

FAR responders are an important component of the provision of first aid within the workplace. Responders have been taught the importance of standard infection control precautions as part of their training. To date this has primarily involved the wearing of gloves and handwashing. With the increased threat of droplet transmission, because of COVID-19, additional personal protection may be used (consisting of gloves, surgical facemask, eye protection and clinical apron). If such PPE is provided or used, it is important that the FAR has received training in the use of same, including how to don and doff safely, preventing contamination to themselves. A surgical facemask is recommended where social distancing cannot be maintained.

On the basis that FARs are often already sharing the workplace with their colleagues, the risk of COVID-19 does not apply solely in the context of first aid provision. It is not feasible to expect a FAR to screen employees in need of first aid for signs and symptoms of COVID-19, so employers should take the lead in ensuring that employees are not working with symptoms of COVID-19 in the first place.

FARs should be supported by their employer, recognising that some FARs may have underlying medical conditions or other reasons which preclude their ability to remain in the FAR role during the COVID-19 pandemic.

Patients in cardiac arrest should have compression only CPR applied. An AED should be used as normal.

A more detailed outline of care provision by FARs is [available here](#).

2 Emergency First Response (EFR) who are tasked to respond to incidents

EFR responders may encounter patients with suspected COVID-19 when tasked to normal everyday emergency incidents (Firefighters etc.). Some industries, due to the risk profile, may utilise responders who are trained to a higher clinical level than FAR and/or may be privileged for specific clinical interventions i.e. oxygen therapy. Patients presenting to a responder, with symptoms of COVID-19, should be treated as per CPGs and when close patient contact is required responders to wear PPE consisting of gloves, surgical facemask, eye protection and full sleeved clinical gown.

Patients in cardiac arrest should have compression only CPR applied. An AED should be used as normal.

A more detailed outline of care provision by EFRs is [available here](#).

3 PHECC registered practitioners

By ensuring PHECC practitioner protection, because of the risk of COVID-19 infecting, other healthcare practitioners, including not only doctors, nurses or practitioner colleagues, but also other support personnel necessary to maintain the continuity of care for patients will be protected.

Patients presenting with symptoms of COVID-19 should be treated as per CPGs and when close patient contact is required practitioners to wear PPE consisting of gloves, surgical facemask, eye protection and full sleeved clinical gown. For cardiac arrest, PHECC practitioners should commence resuscitation with the application of defibrillator pads and attempt defibrillation if indicated while PPE is being donned by a colleague. In the case of a single practitioner, it is reasonable to apply the AED and deliver a single shock prior to applying PPE but this may not be practical in every situation. Follow CPGs for ongoing resuscitation.

A more detailed outline of care provision by PHECC practitioners is [available here](#).

Dispatch

PHECC notes that CFR groups are currently stood down by NAS and supports this decision pending a solution to minimise infection risk from COVID-19. Attention is drawn to the HSE advice on community CPR and defibrillation.

Ambulance Vehicle

The patient compartment should be cleared of any unnecessary exposed equipment prior to transporting a patient with COVID-19.

Ambulance windows should be kept closed in transit to avoid turbulent airflow and potential distribution of droplets. The partition between the patient compartment and the driver compartment should be closed if present. If there is no partition, the driver must wear appropriate PPE, including surgical facemask, for the full journey.

Decontamination of the ambulance and equipment should be performed according to HPSC guidelines. After removal of a COVID-19 patient from the ambulance, it should be left with doors open for at least 20 minutes before cleaning to allow droplets to settle

It is likely that there will be further updates to this advisory as the COVID-19 situation develops. PHECC is committed to working with all stakeholders to maximise the health service response to this unprecedented situation and to ensuring the safety of the patient, the public and responders/practitioners.

References

HPSC Guidance and direct communications, HSE Advice on Community CPR, ICSI Advisory on COVID-19, NAS Decontamination Policy, NASCCRS MICAS COVID-19 Advisory, IHF Guidance on CPR Training, Department of Health.

Safe use of Masks

THE MASK YOU NEED

DO: REMEMBER TO WEAR THE CORRECT MASK FOR THE TASK:

Wear **Surgical or FFP2 mask:** for droplet precautions, or when providing care within 2 metres of any patient, or when working within 2 metres of another healthcare worker for more than 15 minutes.



Always wear a **fit tested FFP2/ FFP3 respirator mask for AGPs.** **Fit check** your respirator mask every single time.



WEARING THE MASK

DO: Wear your mask so it comes all the way up, close to the bridge of your nose, and all the way down under your chin.



DO: Press the metal band so that it conforms to the bridge of your nose.

DO: Tighten the loops or ties so it's snug around your face, without gaps. If there are strings, tie them high on top of the head to get a good fit.



DO NOT: Wear the mask below your nose.



DO NOT: Leave your chin exposed.



DO NOT: Wear your mask loosely with gaps on the sides.



DO NOT: Wear your mask so it covers just the tip of your nose.



DO NOT: Push your mask under your chin to rest on your neck.



ONCE YOU HAVE ADJUSTED YOUR MASK TO THE CORRECT POSITION, FOLLOW THESE TIPS TO STAY SAFE:

- ALWAYS change your mask when you answer the telephone or you take a drink/break.
- ALWAYS change mask when leaving a cohort area or exiting a single patient isolation room
- NEVER fidget with your mask when it's on.
- NEVER store your mask in your pocket.
- ALWAYS wash your hands before and after handling a mask.
- ALWAYS change mask if it is dirty, wet or damaged

REMOVING THE MASK



Use the ties or ear loops to take the mask off.

Do not touch the front of the mask when you take it off.

DISPOSING OF THE MASK



Dispose of mask properly in a bin as ordinary household waste unless you were caring for a person with COVID-19. If you are disposing a mask after contact with a person who has a COVID-19 infection or suspected COVID-19, please follow these disposal instructions. Place the mask in a healthcare risk waste bin.

IF HEALTHCARE RISK WASTE SERVICE IS NOT AVAILABLE:

The mask, along with any other PPE used when treating a person with COVID-19 or suspected COVID-19, needs to be double-bagged and stored for 72hrs in a secure location, then put in the domestic waste.



Safe use of **FFP2** respirator mask



1
Separate the edges of the respirator mask to fully open it.



2
Slightly bend the nose wire to form a gentle curve.



3
Hold the respirator mask upside down to expose the two headbands.



4
Using your index fingers and thumbs, separate the two headbands.



5
While holding the headbands with your index fingers and thumbs, cup the respirator mask under your chin.



6
Pull the headbands up over your head.



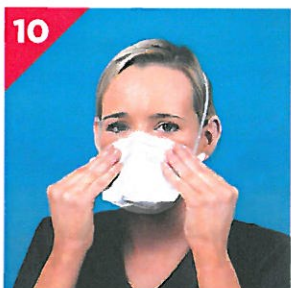
7
Release the lower headband from your thumbs and position it at the base of your neck.



8
Position the remaining headband on the crown of your head.



9
Conform the nose piece across the bridge of your nose by firmly pressing down with your fingers.



10
Continue to adjust the respirator mask and secure the edges until you feel you have achieved a good facial fit. Now, perform a fit check.

Check the fit of the respirator mask every time you wear it.



The wearer should be clean shaven to achieve a good fit.

Forcefully inhale and exhale several times.

The respirator mask should collapse slightly when you inhale and expand when you exhale. You should not feel any air leaking between your face and the respirator mask.

If the respirator mask does not collapse and expand, or if air is leaking out between your face and the respirator mask, then you have NOT achieved a good facial fit.

Adjust the respirator mask until the leakage is corrected and you are able to successfully Fit Check your respirator mask.

For coloured masks the coloured side **MUST** be worn facing outward and upward in order to provide fluid resistant protection.

HELPFUL TIPS:

The wearer should remove the respirator mask if:

- The respirator mask becomes uncomfortable
- Breathing becomes difficult
- The respirator mask is damaged or distorted
- The respirator mask becomes obviously contaminated by respiratory secretions, blood or bodily fluids.

Stay safe. Protect each other.



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Coronavirus COVID-19



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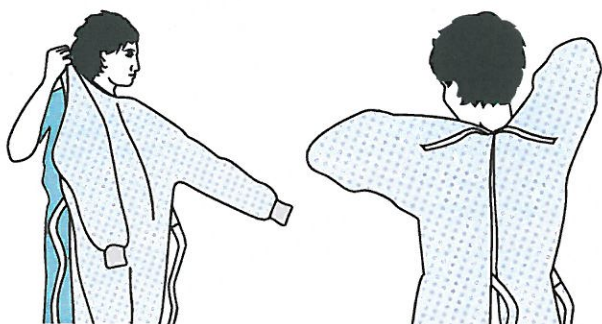
Putting on (donning) personal protective equipment (PPE)

Pre-donning instructions: This is undertaken outside the patient's room.

- Be well hydrated and have taken a toilet break
- Have secured your hair back off your face
- Have removed all jewellery including earrings
- Do not bring mobile phones/bleeps into an isolation area
- Be bare below the elbows

PERFORM HAND HYGIENE BEFORE PUTTING ON PPE

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

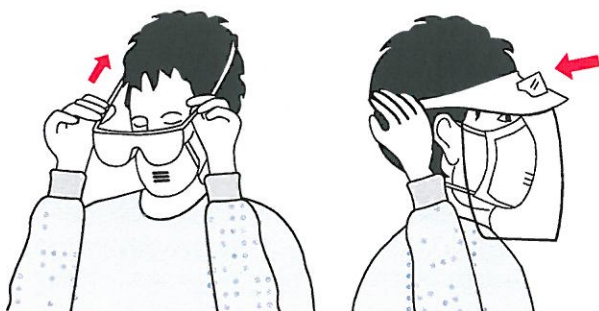


- 2** A. Respirator (FFP2) Mask- for Aerosol Generating procedures only. Remember to Fit Check

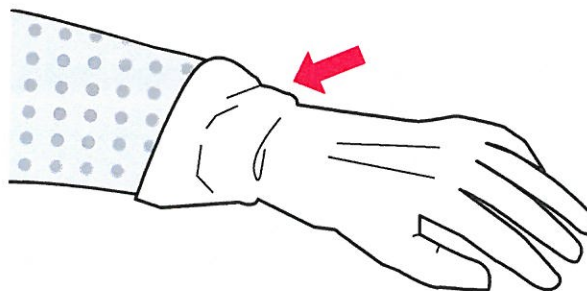
B. Surgical Facemask- for all other care



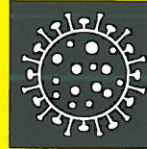
- 3** Eye protection - always required for AGP. In all other situations risk assess the requirement.



- 4** Gloves should cover the cuff of the gown.



Coronavirus COVID-19



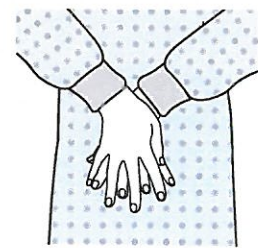
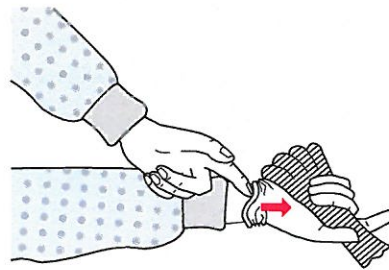
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Removal of (doffing) personal protective equipment (PPE)

PPE should be removed in an order that minimises the potential for cross contamination. The Surgical facemask/FFP2 respirator must always be removed outside the patient's room or cohort area.

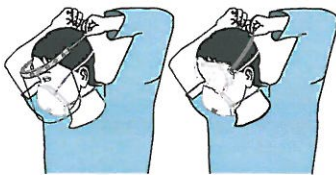
THE ORDER OF REMOVAL OF PPE IS AS FOLLOWS:

- 1** Gloves – the outsides of the gloves are contaminated.



Perform Hand Hygiene

- 2** Eye protection - the outside will be contaminated



- 3** Gown – the front of the gown and sleeves will be contaminated.



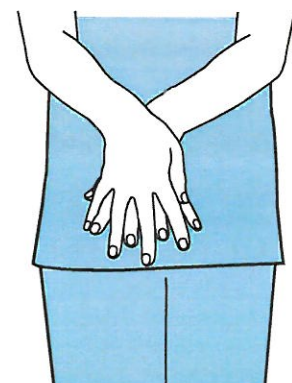
- 4** Do not remove facemask or respirator until after you have left the patient room or cohort area.

Lean forward slightly, grasp the ties/straps from the top of the head and gently pull off the facemask/respirator. Do not touch the front of the mask.

If the mask has ear loops- lean forward and grasp the loop from each earlobe and take off and discard. **DO NOT** reuse once removed.



- 5** Perform Hand Hygiene



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Donning Coveralls in the context of COVID 19

PERFORM IN A DESIGNATED AREA OUTSIDE THE PATIENT ROOM

BEFORE YOU BEGIN

- Check you have a chair to sit on if needed
- Check that items of PPE in your size are available and near you, as well as alcohol based hand rub (ABHR)
- The sequence of donning PPE for a coverall with a hood is slightly different, depending on whether you are going to wear goggles or a visor, so follow the recommended sequence for coverall with either goggles or visor below

BEFORE YOU PUT ON PPE

- Be well hydrated and have taken a toilet break
- Have removed all jewellery including earrings
- Be bare below the elbows
- Have secured your hair back off your face
- Do not bring mobile phones/bleeps into an isolation area

1 Perform hand hygiene.



2 Put on coverall, but do not put up the hood. Depending on the style of coverall, it may or may not have integrated feet. Your normal work shoes may be worn with the coverall.



Sit down to put feet in.



Pull coverall towards arms and shoulders.



Zip halfway up

Push your thumb through the fabric approximately one inch up from the wrist cuff on the medial side of each coverall sleeve to create an artificial thumb loop.

3 A. Put on Respirator (FFP2) Mask- for Aerosol Generating procedures only. Remember to Fit Check



B. Put on facemask - Mask with ties - tie the upper straps on top of head and bring the lower straps up in front of the ears and tie on top of head. Mask with loops - loop straps over the ears.

4 If using goggles put on now. *Eye Protection is always required for AGP. In all other situations risk assess the requirement.



5 Now put up the hood of the coverall and close the zip.



6 If wearing a visor, apply after hood in position*



7 Put on gloves and pull the gloves up so they cover the cuff and lower sleeve of the coverall.



Check PPE is secure and comfortable – extend arms, bend at waist, turn and walk up and down – use the mirror to self-check and if available, ask your buddy to confirm

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Advice

Doffing Coveralls in the context of COVID 19

DOFFING: if the isolation room has an ante room, the HCW can exit the isolation room and remove all PPE in the ante room. If the HCW is in a patient room or cohort area which does not have an anteroom, remove PPE prior to exit EXCEPT for the surgical face mask/respirator mask which should be removed after exit from the patient room or cohort area.

- 1 Remove gloves and dispose.



- 2 Perform hand hygiene. The coverall thumb loop will still be in position, so proper hand hygiene will not be feasible.



- 3 Put on a new pair of gloves to complete the doffing process.



- 4 If wearing face shield remove now.



- 5 Grasp the outer edges of the hood and lift it up and off the head.



- 6 Remove the coverall- Unzip the coveralls by tilting your head back, slide your fingers up to reach the top of the zipper, holding the zip taut, unzip completely without touching any skin or clothing.

- A. Free your shoulders



- B. Remove your arms from the coveralls by keeping them behind your back and pulling each arm out of the sleeves, remove the gloves from each hand at the same time.



- C. Place hands inside coverall and roll the coverall, from the waist down to the footwear. Sit down and step out of the coverall.



- D. Roll the used coverall into a ball, taking care not to touch the outside of the coverall. Discard the coverall into the healthcare risk waste bin.

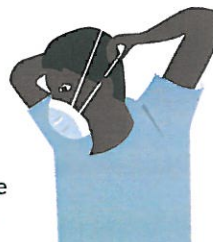
Remember - only touch the inside of the coverall

- 7 Remove Goggles if wearing.



If in the patient room or cohort area, you will need to exit to the corridor to remove your mask.

- 8 Remove Respirator or Surgical Facemask. Lean forward slightly, grasp the ties /straps from the top of the head and gently pull off the facemask. Do not touch the front of the mask. If the mask has ear loops- lean forward and grasp the loop from each earlobe and take off and discard.



- 9 Perform hand hygiene.



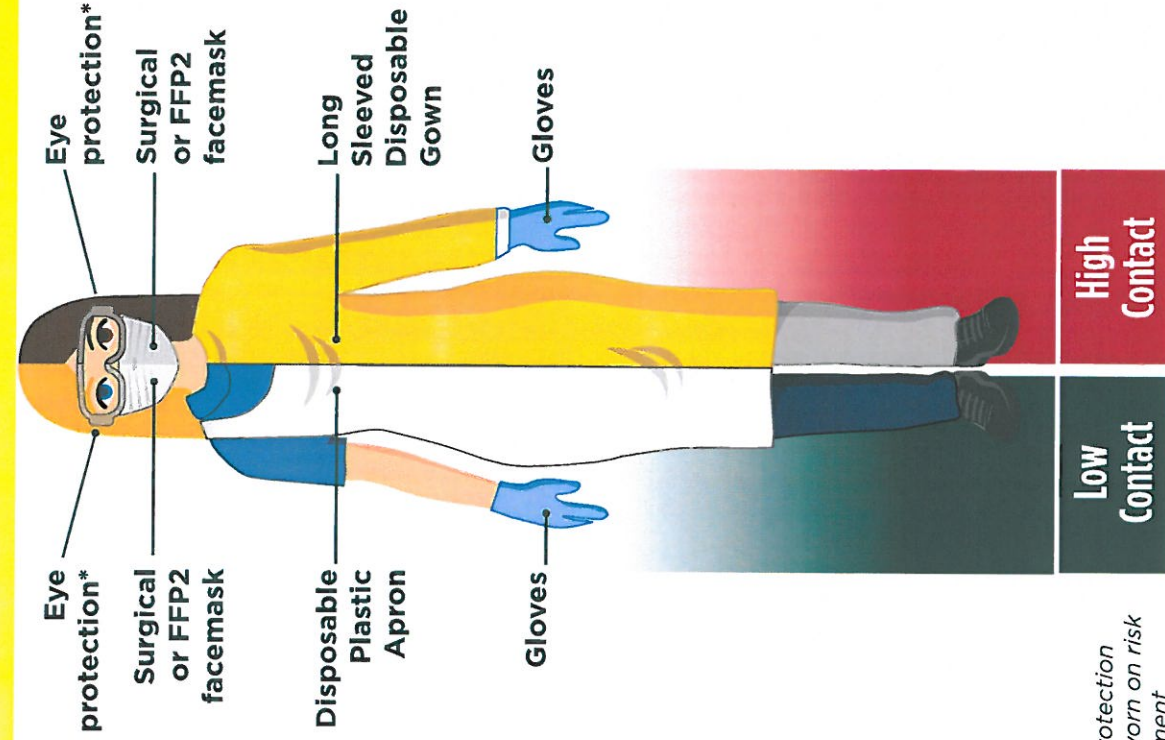
COVID-19 Safe PPE

Care of patients with respiratory symptoms/suspected/confirmed COVID-19

Always wear a fit tested FFP2/FFP3 respirator mask for AGPs.

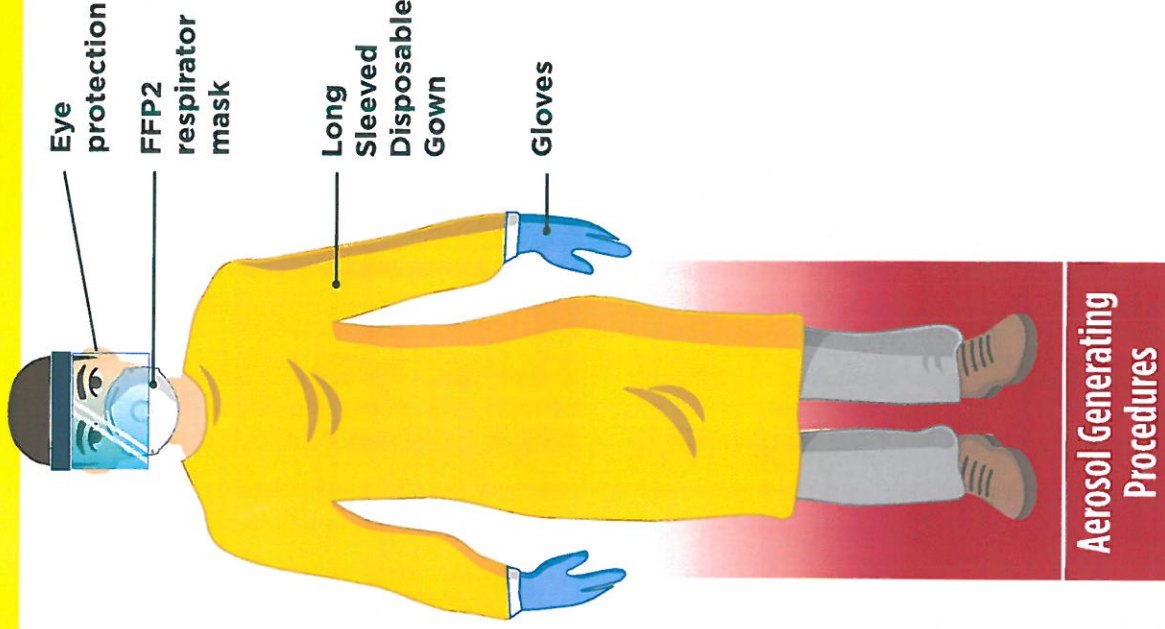
Fit check your respirator mask every single time.

HAND HYGIENE FIRST IN ALL CASES



Low Contact

Unlikely to provide opportunities for the transfer of virus/other pathogens to the hands and clothing.



Aerosol Generating Procedures

Also if there is a risk of an unplanned aerosol generating procedure.

*Eye protection to be worn on risk assessment

High Contact

Increased risk for transfer of virus and other pathogens to the hands and clothing.

With thanks to Samantha Weston and James Fox, Creative & Midlands Partnership, NHS Foundation Trust.



Videos can be viewed on the following links:

Hand Washing: <https://youtu.be/lsgLivAD2FE>

Donning and Doffing PPE plus Swabbing techniques

<https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/videoresources/acutehealthsettingcovid-19videoresources/>