

# Infection prevention and control advice for acute care settings

Acute respiratory illness from novel or emerging pathogens (Coronavirus (COVID-19))
Version 9.0

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### **Version History**

Version	Date	Summary of changes			
V7.4	29/01/20	Section2.1			
		Patients/Isolation			
		3 <sup>rd</sup> bullet, 2 <sup>nd</sup> sub-bullet. Last sentence amended to read:			
		'In an isolation room with 10-12 air changes per hour (ACH) a			
		minimum of 20 minutes is considered pragmatic; in a side room with 6			
V7.4	29/01/20	AcH this would be approximately one hour.			
V / .4	29/01/20	Appendix 4 Category A Waste flowchart added showing procedure for handing			
		waste from dealing with patients who present with HCID. Includes			
		contact details for NSS Waste Contingency Service			
V7.5	31/01/20	PPE: highlight that two pairs of gloves are required and update of			
		appendix 1 to reflect this			
		Waste: waste no longer requires to be treated as category A waste			
		Linen: to be treated as 'infectious linen' rather than category A waste			
		Care of the deceased: changed to reflect that embalming is permitted			
		and link to appendix 13 of the NIPCM			
V7.6		HPS review and amends due to changes to PHE guidance			
	07/02/20	7 7			
V7.7	07/02/20	Amendments made following consultation with ICMs across Scotland			
V7.8	13/02/20	Amendments made following consultation with ICMs across Scotland			
V8.0	04/03/20	Change made to title and content to make guidance COVID-19			
		specific i.e. removal of references to avian influenza, MERS-CoV etc.  Theatre –time conventionally ventilated theatre should not be used			
		after the patient leaves updated from 15 minutes to 20 minutes.			
		Additional text to highlight the use of a full face shield/visor is required			
		if using a valved FFP3 respirator that in non-shrouded.			
		Additional text linked to powered respirators.			
		Additional of footnote (2) to highlight PPE required during patient			
		transfer.			
		Section 2.7 –time the virus can survive in the environment updated			
		from 48 hours to 72 hours.  Update to section 2.9 – 'specimen should be placed in the first bag in			
		the isolation room'.			
		Addition of section 2.10 point of care testing.			
		Inclusion of Appendix providing guidance when a patient requires			
		urgent medical care or has planned care/treatment scheduled.			
		Inclusion of Appendix for facial hair and FFP3 respirators.			
V8.1	05/03/20	Change made to title to include Avian Influenza, MERS CoV, etc, (as			
		version 7.8).			
V 0 0	40/02/2022	Additional signage added to appendices.			
V 9.0	10/03/2020	Table of changes to PPE/RPE, addition of High Flow Nasal Oxygen as an AGP.			
		as all AGE.			
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#### 10th March 2020

#### Version 9.0

The current situation necessitates that clinicians have a high index of suspicion for possible COVID-19, in patients presenting with acute respiratory illness.

(For HPS case management algorithms and other documentation refer to: **coronavirus** (COVID-19) webpages).

COVID-19 is currently classified as a High Consequence Infectious Diseases (HCID) spread by respiratory droplets in addition to contact routes and require airborne precautions when in a High Risk AGP hot spot<sup>1</sup> or when undertaking Aerosol Generating Procedures.

#### 1. General Information

This document outlines the infection prevention and control advice for healthcare workers who may be involved in receiving, assessing and caring for patients, within acute healthcare settings, who are a **possible or confirmed case**. If a **contact of a confirmed case** develops a respiratory illness and is hospitalised, then this guidance should be followed until results of testing are available.

#### 2. Patient management

In the absence of effective drugs or a vaccine, control of this disease relies on prompt identification and appropriate risk assessment management and isolation of cases, (including isolation of possible, or confirmed cases) and the investigation and follow up of their close contacts to minimise potential onward transmission. In preparation, acute healthcare facilities that may receive and care for possible/confirmed cases should ensure that staff are:

- Familiar with the Scottish Patient Care Pathways for Confirmed cases of COVID-19;
- Familiar with all Personal Protective Equipment (PPE) required including, provision of adequate supplies, where stored and how it should be used<sup>1</sup>;
- Aware of what actions to take if a case presents:
- Aware of where a case will be isolated and the need for a negative pressure isolation room, if available;

<sup>&</sup>lt;sup>1</sup> Personal Protective Equipment (PPE) requirements, provisions relating to the use of hazardous materials and occupational health requirements, alongside wider infection control and health and safety obligations, are not addressed within this guidance document and must be considered and addressed by individual organisations in accordance with legislation/regulations, principally: The Health and Safety at Work Act 1974 ('HSWA'), Sections 2 and 3; The Control of Substances Hazardous to Health (COSHH) Regulations 2002; The Management of Health and Safety at Work Regulations 1999; Personal Protective Equipment at Work Regulations 1992; and Provision and Use of Work Equipment Regulations 1998.

- Familiar with FFP3 respirator use and that fit testing and checking has been undertaken before using this equipment;
- Aware of how to access any national/local record sheets.

#### 2.1 Patient Placement

#### **Patients**

#### Isolation

Patients with confirmed COVID-19 should be admitted as per the Scottish Patient Care Pathway for Confirmed COVID-19 and directly to a **negative pressure** isolation room. If this is not possible then a single room with en-suite facilities should be used. Room door(s) must be kept closed.

Possible cases must also be isolated in a negative pressure isolation room or a single room with en suite facilities if a negative pressure room is not available. Room door(s) must be kept closed.

Positive-pressure single rooms must not be used.

Display signage to control entry into the isolation room. Patient confidentiality must be maintained.

All necessary procedures and investigations should be carried out within the isolation room. The minimum number of required staff should be present and they must wear PPE as described below in <u>section 2.3</u>. Entry and exit from the room should be minimised during care procedures, specifically when these care procedures that produce aerosols or respiratory secretions i.e.

- Intubation, extubation and related procedures e.g. 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 (e.g. high-speed drilling);
- Non-invasive ventilation (NIV) e.g. Bi-level Positive Airway Pressure Ventilation (BiPAP) and Continuous Positive Airway Pressure Ventilation (CPAP);
- High Frequency Oscillatory Ventilation (HFOV);
- High Flow Nasal Oxygen (HFNO)
- Induction of sputum.

When a room is vacated by healthcare staff following an aerosol generating procedure, the large particles will fall out within seconds, however, the smaller aerosol particles behave almost like a gas. Clearance of small aerosol particles is dependent on the ventilation and air change within the room. A single air change is estimated to remove 63% of airborne contaminants; after 5 air changes, less than 1% of airborne contamination is thought to remain. In an isolation room with 10-12 air changes per hour (ACH) a minimum of 20 minutes is considered pragmatic; in a side room with 6 ACH this would be approximately one hour.

#### **Critical care**

- If on a critical care unit, the patient should be nursed in a negative pressure isolation room where available; if not available, a neutral pressure side room with a closed ventilator circuit should be used.
- All respiratory equipment must be protected by a filter with high efficiency e.g. BS EN 13328-1. The filter must be disposed of after use.
- Disposable respiratory equipment should be used wherever possible. Re-usable equipment must be decontaminated in accordance with the manufacturer's instructions.
- Ventilator circuits should not be broken unless absolutely necessary.
- Ventilators must be placed on stand-by when carrying out bagging.
- Water humidification should be avoided, and a heat and moisture exchange should be used if possible.
- Use only closed system suction.

#### **Theatres**

- Staff must wear personal protective equipment (PPE) as outlined in <u>Section 2.3</u>.
- Possible or confirmed cases of COVID-19 should be placed at the end of the theatre list where feasible.
- Theatres must be informed in advance of any patient transfer.
- The patient should be transferred directly to the operating theatre and should wear a surgical mask if it can be tolerated.
- The patient should be anaesthetised and recovered in the theatre.
- Disposable anaesthetic equipment should be used wherever possible.
- Anaesthetic equipment must be protected with viral filter efficiency of 99.99%.
- Used instruments and devices should be decontaminated in the normal manner, in accordance with manufacturer's instructions.

- Laryngoscope handle and blade should be with single use or re-processed within the Sterile Supply Department. Video laryngoscope blades should be single use and the scope/handle decontaminated as per manufacturer's instructions.
- The theatre should not be used for 20 minutes after the patient leaves if conventionally ventilated or 5 minutes if ultraclean ventilation used.
- The theatre should be decontaminated as per local policy.

#### Intra-hospital transfers to other departments

- Any patients transfer must be in collaboration with the Infection Prevention and Control Team (IPCT):
  - The receiving department must be informed in advance.
  - The patient must be taken straight to and from the investigation/treatment room and must not wait in any communal area.
  - The patient should wear a fluid resistant surgical mask if this can be tolerated to minimise the dispersal of respiratory secretions and reduce environmental contamination.
  - During patient transfer between departments, there should be a process to ensure that individuals not wearing PPE are in the vicinity of the patient.
  - To allow decontamination after any procedure, these patients should ideally be at the end of a clinical list (see <u>patient care equipment</u> and <u>environmental control</u>).

#### Transfer to another hospital

• If transfer to another hospital is required, the IPCT at the receiving hospital and the ambulance staff must be advised in advance of the circumstances of the transfer.

#### **Outpatient settings**

Non-urgent care should be deferred until the individual is well, has been discharged from isolation and is considered non-infectious as advised by specialist virology laboratory.

Urgent/necessary care e.g. renal dialysis, chemotherapy, should be undertaken following **Appendix 1**.

All individuals should be risk assessed and discussed on a case-by-case basis with the local IPCT and responsible clinician.

#### Staff

Staff must comply with all infection control procedures as set out in this guidance.

Only **essential staff** should enter the isolation room, wearing personal protective equipment (see <u>section 2.3</u>).

A record of all staff that has or had contact with a possible case, confirmed case or symptomatic contact of a confirmed case must be maintained.

The use of bank or agency staff should be avoided wherever possible.

Staff who are pregnant or otherwise immunosuppressed should not provide direct care for a patient with possible or confirmed COVID-19, this includes obtaining samples. Any deviation from this should be a local decision. Pregnant staff or staff who are immunosuppressed should seek advice from the Occupational Health Department.

In general, all healthcare staff should be vigilant for respiratory symptoms (influenza like illness) specifically during the incubation period which can be up to 14 days (for pathogen specific incubation periods and respiratory symptoms please see case management algorithms in the <u>coronavirus (COVID-19)</u> webpage on the HPS website). Refer also to <u>section 2.11 on occupational exposure</u>).

Risk assessment and follow up of healthcare staff returning from COVID-19 risk areas or staff contacts of patients will be co-ordinated by the local Health Protection Team or Occupational Health Department as per local policy.

#### **Visitors**

Visitors should be restricted to essential visitors only; such as parents of paediatric patients or an affected patient's partner/main carer. Local risk assessment and practical management should be considered, ensuring a pragmatic and proportionate response, including the consideration of whether there is a requirement for visitors to wear PPE including RPE. These visitors must not visit any other care areas or facilities.

A log of all visitors should be kept.

Any follow up of family/community contacts of patients will be co-ordinated by the local Health Protection Team.

#### 2.2 Hand Hygiene

This is essential before and after all patient contact, removal of protective clothing and cleaning of equipment and the environment.

Wash with soap and water, or use alcohol-based hand rub if hands are not visibly dirty or soiled

#### 2.3 Personal Protective Equipment (PPE)

Table 1 (next page) describes the type and level of PPE required for both possible and confirmed cases of COVID-19.

NB: This is a rapidly Evolving Situation and is subject to change. Please ensure you refer to the live version at all times.

It is expected that as the COVID-19 situation evolves, Regional Infectious Diseases Units (RIDUs), Local Infectious Disease Units (LIDUs) and Intensive Care Units (ITUs) will be admitting those possible and confirmed cases who are more unwell/symptomatic and therefore AGPs will be taking place more frequently in these areas (i.e. AGP hotspots).

Table 1: Transmission Based Precautions (TBPs): Personal Protective Equipment (PPE) for care of patients with Possible or Confirmed COVID-19.

	High Risk AGP Hot spot setting; ITU/RIDU/LIDU – working in a cohort area with possible/confirmed cases	High Risk AGP Hot spot setting; ITU/RIDU/LIDU – working in a negative pressure or single side room with a possible/ confirmed case providing routine care or AGPs	General ward setting – working in a single room or cohort area/room with possible/confirmed case(s) providing routine care (no AGPs)	General ward setting; undertaking an AGP (this should be undertaken within a negative pressure or single side Room)	General ward setting; on entry to a cohort area only if necessary and with <u>no direct</u> <u>patient contact</u>
Type of precautions	Appendix 16 – Level 2 - Airborne Precautions	Appendix 16 Level 2 - Airborne Precautions	Appendix 16 Level 2 – Droplet Precautions	Appendix 16 Level 2 - Airborne Precautions	Standard Infection Control Precautions
Filtering Face Piece (class 3) FFP3 respirator	Yes	Yes	No	Yes	No
Fluid Resistant (Type IIR) Surgical mask (FRSM)	No	No	Yes	No	Yes – but only if within 2 metres of a possible/confirmed patient or expected to be in the room for more than 15 minutes
Disposable plastic apron	NO	NO	Yes	Yes - but consider fluid resistant disposable gown if high risk of spray or splashing	No
Disposable Gown	YES	YES	No	Only if high risk of spray or splashing	No
Disposable gloves	Yes x2	Yes x2	Yes	Yes	No
Disposable Eye Protection/face visor	Yes	Yes	Risk Assessment	Yes	No

#### All tight fitting RPE i.e. FFP3 respirators must be:

- Single use (disposable) and fluid-resistant.
- Conform to EN149:2001
- Fit tested on all healthcare staff who may be required to wear a respirator to ensure an adequate seal/fit according to the manufacturers' guidance.
- Fit checked (according to the manufacturers' guidance) every time a respirator is
  donned to ensure an adequate seal has been achieved, compatible with other facial
  protection used i.e. protective eyewear so that this does not interfere with the seal of
  the respiratory protection. Regular corrective spectacles are not considered adequate
  eye protection against droplets, sprays and splashes.

If wearing an FFP3 respirator that is valved and non-shrouded a full-length face shield/visor must be worn, rather than goggles or a half face visor, to protect against splash and spray risks.

Powered respirators are not recommended by HPS for use with HCIDs in Scotland. This is due to the absence of robust, validated decontamination guidance from manufacturers. HPS guidance is that a powered respirator may be used if a HCW cannot pass a face fit-test with an FFP3 respirator and a powered respirator is considered by the NHS board as the only alternative.

#### **Powered respirators must:**

- Use hoods which are single use (disposable) and fluid-resistant;
- Have filters which are enclosed and for which the exterior and belt can withstand decontamination with 10,000 ppm av. cl.

If there is no alternative and a powered respirator is used for a possible or confirmed case of COVID-19:

- any components that have been protected under PPE e.g. the belt, battery and/or enclosed filter unit, may be decontaminated with neutral detergent and 10,000ppm av.cl. following a risk assessment;
- any components that have not been protected under PPE must be disposed of i.e. treated as single-use disposable.

This advice is specific to COVID-19.

HPS recognise that HCID Units will have established processes and procedures for PPE/RPE requirements which will be clearly defined as 'standard practice' for that area, which may include the application of a high level unified ensemble for all HCIDs.

Refer to <u>Appendix 2 - Putting on and removing Personal Protective Equipment (PPE)</u> for instructions on the safe donning and doffing of required PPE.

Refer to **Appendix 3** for information on facial hair styles and FFP3 respirators.

#### 2.4 Safe Management of Linen

Treat all linen as infectious and bag in an alginate bag then a secondary clear bag before removing from the isolation room and then place directly into the laundry hamper/bag.

#### 2.5 Safe Disposal of Waste

Dispose of all waste in the isolation room as healthcare waste (orange or yellow stream) as per ward/unit current practice.

Waste such as urine or faeces from patients with possible or confirmed COVID-19 does not require special treatment and can be discharged into the sewage system. If ambulant, the patient can use the en suite WC; if a commode is used, excreta should be solidified using super absorbent polymer gel granules and then disposed of as clinical waste. Communal facilities must not be used.

#### 2.6 Patient Care Equipment

Dispose of single-use equipment as healthcare waste inside the room.

Use dedicated patient care equipment in the isolation room.

Re-useable equipment should be avoided if possible. If used, decontaminate in accordance with **Appendix 4**.

Do not use fans that re-circulate the air, and have the potential to turn a negative pressure room into a positive pressure room.

Avoid storing any extraneous equipment or soft furnishings in the patient's room. Unnecessary equipment should not be stored in the anteroom.

#### 2.7 Environmental Decontamination

It is possible that these viruses can survive in the environment with the amount of virus contamination on surfaces likely to have decreased significantly by 72 hours, so environmental decontamination is vital.

If domestic staff are required to clean the isolation room before it is vacated by the patient, they must wear PPE as indicated above, prior to entering the isolation room. They must also be familiar with the required environmental decontamination processes and have been trained in these accordingly.

Domestic staff should be advised to clean the isolation room(s) after the rest of the ward areas have been cleaned

Ideally, isolation room cleaning should be undertaken by clinical staff who are also providing care to the patient in the room, in which case, clinical staff may require additional training on standards and order of cleaning. Decontaminate the isolation room(s) at least daily using and following an AGP or other potential contamination.

Coronaviruses are readily inactivated by commonly available disinfectants such as alcohol (70% ethanol) and chlorine releasing agents (sodium hypochlorite at 1,000 ppm av. cl.). Therefore, decontamination of equipment and the environment should be performed as per <a href="Chapter 2">Chapter 2 (section 2.3)</a> of the National Infection Prevention and Control Manual, i.e. using either:

 A combined detergent disinfectant solution at a dilution of 1000 parts per million available chlorine (ppm available chlorine (av.cl.));

or

• A detergent clean followed by disinfection (1000ppm av.cl.)

Decontaminate hand-touch surfaces throughout the unit/ward and anteroom or lobby more frequently (at least twice daily).

Environmental cleaning equipment must be single use or dedicated to the isolation room. Cleaning trollies should not enter the isolation room.

Following transfer (recovery) and/or discharge of the patient, follow the guidance above on air changes required prior to entering the room (guidance applies whether an <u>AGP</u> was carried out in the room or not.

- Before entering the room, perform hand hygiene then put on a disposable plastic apron and gloves.
- Collect all cleaning equipment and healthcare waste bags before entering the room.
- The person responsible for undertaking the cleaning with detergent and disinfectant should be familiar with these processes and procedures:

#### Remove:

- All healthcare waste and any other disposable items
- Bedding/bed screens, treat as infectious linen
- Patient care equipment following decontamination

The room/area should be decontaminated using:

A combined detergent disinfectant solution at a dilution (1000ppm av.cl.);

or

A detergent clean followed by disinfection (1000ppm av.cl.).

Any cloths and mop heads used must be disposed of as single use items

#### 2.8 Managing Blood and Body Fluids Spillages

Disinfect all blood and body fluid spills in accordance with Appendix 5.

#### 2.9 Specimens

All specimens must be treated as biohazard:

- Use biohazard label
- Mark lab Request form accordingly
- Double bag samples. The specimen should be placed in the first bag in the isolation room by a member of staff wearing full PPE

Please see <u>laboratory guidance on HPS website</u> for further details on handling and transportation of specimens.

#### 2.10 Point of Care Testing

Point of care tests, including blood gas analysis, should be avoided unless a local risk assessment has been completed and shows it can be undertaken safely. For further information refer to the **HPS Guidance for Sampling and Laboratory Testing**.

#### 2.11 Care of the Deceased

Guidance can be found in appendix 12 of the NIPCM

The act of moving a recently deceased body onto a hospital trolley for transportation to the morgue might be sufficient to expel small amounts of air from the lungs and thereby present a minor risk.

A body bag should be used for transferring the body and those handling the body at this point should wear full PPE.

Once in the hospital mortuary the body bag can be opened for viewing only.

If a post mortem is required, then use safe working techniques (e.g. manual rather than power tools and wearing appropriate PPE).

Mortuary staff and funeral directors must be advised of the biohazard risk.

Throughout the process of caring for the deceased individual, staff should, at a minimum, wear PPE equivalent to that worn when caring for a confirmed case. Additional or alternative PPE may be required for specific tasks such as post mortem examinations, hygienic preparation or embalming.

Relevant professional guidelines such as the HSE 'Managing Infection Risks When Handling the Deceased: Guidance for the mortuary, post-mortem room and funeral premises and during exhumation' should be followed.

Information on PPE requirements during a post mortem examination can be found on the **Royal College of Pathologist** website. This will be updated should information and advice change.

#### 2.11 Occupational Exposure

All HCWs should be vigilant for respiratory symptoms during the incubation period which can be up to 14 days following last exposure to a confirmed case and should not come to work if they have a fever or cough. They should seek advice from their HPT/occupational health department as per the local policy. The hospital occupational health and/or local HPT will advise on where they should be medically assessed. During this period, symptomatic HCWs should avoid contact with people both in the hospital and in the general community.

# Appendix 1: Possible/Confirmed cases requiring urgent medical care or with medical care/treatment scheduled to take place during infectious period.

#### **Advice for Health Protection Teams**

All individuals should be risk assessed and discussed on a case-by-case basis with the local Infection Prevention and Control Team and responsible clinician. In general, the following approach is recommended:

#### 1. Confirmed cases

#### Non-urgent care

Non-urgent care should be deferred until the individual is well, has been discharged from isolation and is considered non-infectious as advised by specialist virology laboratory.

#### **Urgent care**

Urgent/necessary care (e.g. renal dialysis, chemotherapy) should be undertaken following COVID-19 guidance for **acute care settings**.

#### 2. Possible cases

#### Non-urgent care

Non-urgent care should be deferred until the individual has a negative test result and it is more than 14 days since their last exposure (i.e. reached the end of the incubation period).

If the individual is still symptomatic after 14 days, then they should be managed in line with **Appendix 11** and **Appendix 16 (droplet/airborne)** of the National Infection Prevention and Control Manual.

#### **Urgent care**

Urgent/necessary care (e.g. renal dialysis, chemotherapy) should be undertaken following COVID-19 guidance for **acute care settings**.

Following a negative test result, symptomatic patients should be managed in a single room using PPE. Asymptomatic patients can be managed as per sections 3 and 4 below.

## 3. Asymptomatic contacts of a confirmed case or with travel to a <u>category 1 risk</u> area<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Contacts of possible cases requiring ITU/HDU treatment who have been advised to self-isolate (see contact tracing guidance) should be managed as per contacts of confirmed cases.

#### Non urgent care

Non-urgent care should be deferred until the individual is beyond their 14-day incubation period

#### **Urgent/necessary care**

The asymptomatic patient should be managed in a single room using PPE as per section 2.3 If the patient develops relevant symptoms they should be managed as possible cases as above.

#### 4. Asymptomatic individuals with travel to a category 2 risk area3

No deferral as long as the individual remains asymptomatic

The asymptomatic patient should be managed in a single room<sup>4</sup> using PPE as per section 2.3. If the patient develops relevant symptoms they should be managed as a possible case as above.

A patient assessed as suitable for home isolation while awaiting test results will have received guidance on home isolation while undergoing diagnostic testing for COVID-19 and this includes advice not to attend any medical appointments without first discussing with their named medical contact.

<sup>&</sup>lt;sup>3</sup> Individuals returning from Hubei province or other Category 1 risk areas will have been advised to self-isolate and should be managed as per contacts of confirmed cases.

<sup>&</sup>lt;sup>4</sup> If a single room is not available, then patient placement should be risk assessed and discussed on a case-by-case basis

# **Appendix 2 - Putting on and removing Personal Protective Equipment (PPE)**

#### **Putting on (donning) PPE**

PPE should be put on before entering the room. This is also required during an aerosol generating procedure, all staff in the room or entering the room following the procedure (within one hour if in a side room, or twenty minutes if in an isolation room) should wear the following PPE put on in the following order:

- 1. Inner pair of non-sterile, disposable gloves
- 2. Disposable, fluid-resistant gown
- 3. FFP3 respirator (perform a fit check)
- 4. Eye/face protection i.e. goggles or full facial visor
- 5. Outer pair of non-sterile or sterile depending on task, disposable gloves worn over gown cuffs

The order given above is practical but the order for putting on is less critical than the order of removal given below.

#### Removal of (doffing) PPE

PPE should be removed in an order that minimises the potential for cross-contamination. Either in the anti- room/lobby or if unavailable before leaving the room gloves, gown and eye protection should be removed (in that order) and disposed of as healthcare waste. After leaving the area, the respirator can be removed and disposed of as healthcare waste. Guidance on the order of removal of PPE is as follows:

#### **Outer gloves**

- Remove outer gloves without touching the inner gloves
- Grasp the outside of the glove with the opposite gloved hand; peel off.
- Hold the removed glove in gloved hand.
- Slide the fingers of the un-gloved hand under the remaining glove at the wrist.
- Peel the second glove off over the first glove and discard appropriately.





#### Gown

- Unfasten or break ties.
- Pull gown away from the neck and shoulders, touching the inside of the gown only.
- Turn the gown inside out, fold or roll into a bundle and discard.



#### Inner gloves

- Grasp the outside of the glove with the opposite gloved hand; peel off.
- Hold the removed glove in gloved hand.
- Slide the fingers of the un-gloved hand under the remaining glove at the wrist.
- Peel the second glove off over the first glove and discard appropriately.





#### **Eye protection**

 To remove, handle by headband or earpieces and discard appropriately.





#### Respirator

- Remove after leaving clinical area
- Stand up straight and bring the bottom strap or elastic up to meet the top strap or elastic
- Avoid bending your neck
- Lift both straps over the top of the head, allow the respirator to fall away from the face and discard appropriately.

To minimise cross-contamination, the order outlined above should be applied even if not all items of PPE have been used.

Perform hand hygiene immediately after removing all PPE.

#### **Appendix 3: Facial hair and FFP3 respirators**



<sup>\*</sup>Ensure that hair does not cross the respirator sealing surface

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.

Available online at <a href="https://www.cdc.gov/niosh/npptl/RespiratorInfographics.ht">https://www.cdc.gov/niosh/npptl/RespiratorInfographics.ht</a>ml. Accessed 26/02/2020.

<sup>\*</sup>Adapted from The Centers for Disease Control and Prevention, The National Personal Protective Technology Laboratory (NPPTL), NIOSH. Facial Hairstyles and Filtering Facepiece Respirators. 2017.

#### **Appendix 4 - Routine decontamination** of reusable non-invasive patient care equipment

Routine decontamination of reusable noninvasive care equipment

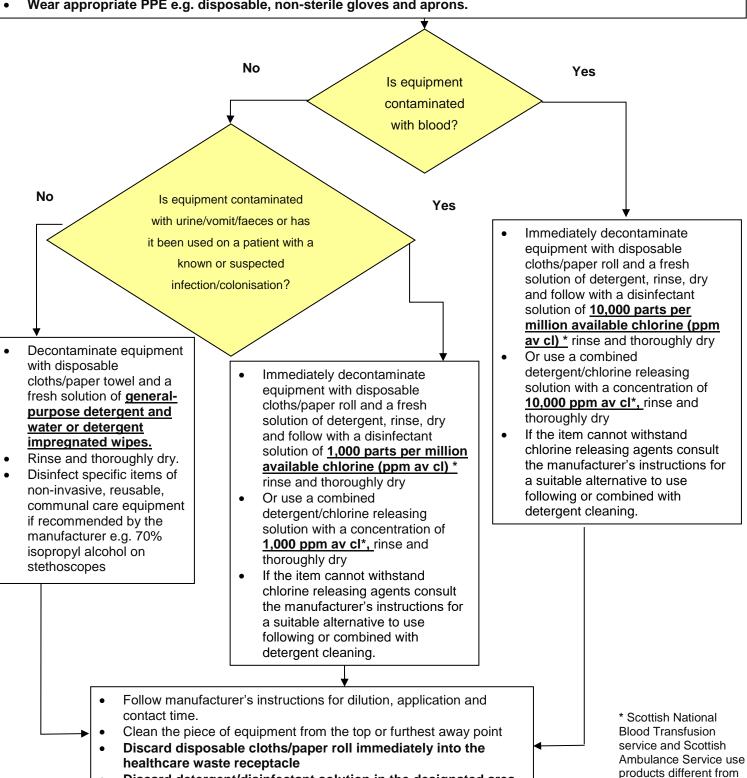
those stated in the

National Infection

Manual

Prevention and Control

- Check manufacturer's instructions for suitability of cleaning products especially when dealing with electronic equipment.
- Wear appropriate PPE e.g. disposable, non-sterile gloves and aprons.



Discard detergent/disinfectant solution in the designated area

Clean, dry and store re-usable decontamination equipment

Remove and discard PPE

Perform hand hygiene

#### Appendix 5 - Management of blood and body fluid spillages

