

COVID-19: Care Home Infection Prevention and Control (IPC) Addendum

Version 1.3

08 July 2021

Archived for information only

The purpose of this addendum is to provide COVID-19 specific Infection and prevention control (IPC) guidance for care home staff and providers on a single platform to improve accessibility. When an organisation adopts practices that differ from those recommended/stated in this national guidance, that individual organisation is responsible for ensuring safe systems of work, including the completion of a risk assessment(s) approved through local governance procedures.

IMPORTANT: Whilst guidance contained within this addendum is specific to COVID-19, staff must consider the possibility of infection associated with other respiratory pathogens spread by the droplet or airborne route and therefore Transmission Based Precautions (TBPs) should not be automatically discontinued where COVID-19 has been excluded.

Any resident who has a coinfection with COVID-19 must not be cohorted with other COVID-19 residents.

Version History

Version	Date	Summary of changes
V1.0	16/12/2020	First publication
V1.1	25/1/2021	Inclusion of new section 6.2.4 'Discontinuing IPC precautions in care homes for residents who are COVID-19 positive'
V1.2	4/3/2021	<p>6.0.2 Definition of suspected case; Additional information and links included</p> <p>6.0.3 Triaging of residents being admitted to a care home. International travel isolation changed to reflect current guidance</p> <p>6.1 Resident Placement/Assessment of Infection Risk section updated.</p> <p>6.1.5 Residents returning from overnight stay included</p> <p>6.1.4 Stepdown table renamed (Discontinuation of IPC) to be consistent with Acute Addendum. Discontinuing IPC precautions in care homes for residents who are COVID-19 positive information clarified. Residents discharged from hospital to care homes – additional information included to clarify 14 day isolation requirements.</p> <p>6.1.4 Links have been removed that are no longer available.</p> <p>6.4 Additional information included on PPE & link to hierarchy of control.</p> <p>6.4.1 New FRSM poster (ways to improve fit) link included</p> <p>6.4.2 Face masks for residents, additional advice on wearing masks when moving around the care home</p> <p>6.4.3 Table 2 PPE for direct resident care determined by risk category. Update to PPE guidance specifically in relation to visors.</p> <p>6.4.4 PPE – Putting on (Donning) and Taking off (Doffing) further detailed information included</p> <p>6.4.5 Aerosol Generating procedures (AGPs) Additional information added under table on requirements for respirators/fluid resistant requirement.</p>

Version	Date	Summary of changes
		<p>6.4.8 Additional section added on delivery of COVID-19 vaccinations.</p> <p>6.6 Safe Management of the Care Environment. Additional detail provided where items cannot stand application of chlorine releasing agents. Also additional information if an organisation adopts practices that differ from those recommended/stated.</p> <p>6.7 Wording amended to clarify linen categorisation where no outbreak.</p> <p>6.9 Safe disposal of waste. Wording amended to provide clarity.</p> <p>6.10.2 Engineering and Administration control measures added.</p> <p>6.11 New section on hierarchy of controls</p> <p>6.12 Visiting in care homes updated following publication of 'Open with Care'</p> <p>6.14 Resources and Tools section updated.</p> <p>6.15 Rapid reviews section added</p> <p>6.16 Education resources added.</p>
1.3	08/07/21	<p>Update to PPE table to emphasise Risk Assessment in low and medium risk pathway</p> <p>Addition of risk associated with valved respirators</p> <p>Change in controls for management of linen, waste and environmental cleaning from TBPs to SICPs within the Medium Risk pathway</p>

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6.1 COVID-19 case definitions and triage questions

6.1.1 Definition of a confirmed case

A laboratory confirmed (detection of SARs-CoV-2 RNA in a clinical specimen) case of COVID-19.

6.1.2 Definition of a suspected case

An individual meeting one of the following case criteria taking into account atypical and non-specific presentations in older people with frailty, those with pre-existing conditions and residents who are immunocompromised; ([further information on presentations and management of COVID-19 in older people and Scottish Government](#) and [Appendix 1 :Think COVID: Covid-19 Assessment in the Older Adult - Checklist](#)).

Community definition:

Recent onset new continuous cough

OR

Fever

OR

Loss of/change in sense of taste or smell (anosmia)

Definition for residents who may require hospital admission:

Clinical or radiological evidence of pneumonia

OR

Acute Respiratory Distress Syndrome

OR

Influenza like illness (fever $\geq 37.8^{\circ}\text{C}$ and at least one of the following respiratory symptoms, which must be of acute onset; persistent cough (with or without sputum),

hoarseness, nasal discharge or congestion, shortness of breath, sore throat, wheezing, sneezing)

OR

A loss of, or change in, normal sense of taste or smell (anosmia) in isolation or in combination with any other symptoms

6.1.3 Triaging of residents being admitted to a care home

To aid prioritisation for residents who may be at most risk, admission triage should be undertaken to enable early recognition of potential COVID-19 cases. Wherever possible, triage questions should be undertaken prior to arrival at the care home. If the resident has capacity issues this should be undertaken with the individual's guardian or power of attorney.

The 14 day self-isolation requirement for residents on admission to the care home from the community follows a **Protection Level** approach as set out by the Scottish Government. This removes the blanket approach for self-isolation on admission to a care home from the community. In Protection Levels 0-2, a risk assessment should be agreed on a case by case basis by the care home manager to determine whether the resident should isolate for 14 days on admission to the care home. Given the diversity of settings, there may be some residential settings where a 14 day period of isolation is more appropriate (e.g. settings with older or clinically vulnerable residents, and communal areas where residents mix); the decision on this is at the care home manager's discretion subject to local risk assessment as guided by the local oversight group.

In Protection Levels 3-4, the resident will need to isolate on admission for 14 days.

A risk assessment prior to admission should be undertaken to ensure that appropriate isolation facilities are available, taking into account requirements for the resident's care. Risk assessment can include factors such as presence of COVID-related symptoms, COVID status of household they have come from, resident travel history, resident vaccination status, care home staff vaccination uptake rate, general IPC and PPE training/supplies/usage in the care home.

All admissions from the community, irrespective of Protection Level, should have one negative PCR test within 3 days of their admission date. In exceptional circumstances where testing is not possible before admission then testing on admission to the care home is acceptable and should be considered. **Where it is in the clinical interest of the resident and negative testing is not feasible** (e.g. resident does not consent, detrimental consequences or it would cause distress), an agreed care plan for admission to the care home will document this. Advice on this process is available from the local Health Protection Team, if needed.

For information on residents being admitted to the care home for respite purposes – see PHS COVID-19 information and guidance for care home settings.

<https://publichealthscotland.scot/publications/covid-19-information-and-guidance-for-care-home-settings-adults-and-older-people/covid-19-information-and-guidance-for-care-home-settings-adults-and-older-people-version-22/>

Suggested questions for triage:

- **Do you or any member of your household/family have a confirmed diagnosis of COVID-19?**
If yes, wait until self-isolation period is complete before admission or if urgent transfer is required, follow high risk category.
- **Are you or any member of your household/family waiting for a COVID-19 test result?**
If yes, follow the high risk category.
- **Have you been an inpatient in hospital in the past 14 days?**
If yes, follow the high risk category.
- **Have you travelled internationally to any country which isn't exempt from self-isolation rules in the last 14 days?**
If yes, should wait for 10-day quarantine before admission to care home, or if urgent transfer is required, follow high risk category.

The Scottish Government website details [quarantine \(self- isolation\) rules and information on the process for people entering the UK.](#)
- **Have you had contact with someone with a confirmed diagnosis of COVID-19, or been in isolation with a suspected case in the last 14 days?**
If yes, wait until self-isolation period is complete before admission or if urgent transfer is required, follow high risk category.
- **Do you have any of the following symptoms?**
 - High temperature or fever
 - New, continuous cough
 - A loss or alteration to taste or smellIf yes, provide advice on who to contact (GP/HPT) and follow high risk category, or delay admission.

A [word version of these questions for triage](#) is available to download.

6.2 Resident placement/assessment of infection risk

Defined risk categories have been agreed at UK level to inform resident placement and the precautions required. Any other known or suspected infections must be taken into consideration before resident placement within each of the risk categories.

Examples of risk categories for care homes are described below and staff should familiarise themselves with these. **NHS Boards must also undertake risk assessments of clinical areas to help ensure that the high risk pathway is placed appropriately reducing risk to staff, patients and visitors and taking account the hierarchy of controls (see section 5.12 Hierarchy of controls)**

Details of the Low Risk Category are not included here as it is expected that all residents in care home settings will fall into the Medium (Amber) or High (Red) risk categories. Guidance beyond this section will only refer to the medium and high risk categories.

- 1. Known as the High Risk COVID-19 risk category in the UK IPC remobilisation guidance and is more commonly known as the red risk category.**
 - a) Confirmed COVID-19 residents within the first 14 days of onset (or test date if asymptomatic). Symptomatic or suspected COVID-19 residents (as determined by hospital or community case definition or clinical assessment where there is a suspicion of COVID-19 taking into account atypical and non-specific presentations in older people with frailty those with pre-existing conditions and patients who are immunocompromised).
 - b) Those who are known to have had close contact with a confirmed COVID-19 individual and are still within the 10-day self-isolation period
 - c) Residents who are symptomatic or suspected COVID-19 but who decline testing or who are unable to be tested for any reason.

- 2. Known as the Medium Risk COVID-19 risk category in the UK IPC remobilisation guidance and may be commonly known as the amber risk category.**
 - a) All residents who do not meet the criteria for the pathways above and who **do not** have any symptoms of COVID-19.
 - b) Asymptomatic residents who refuse testing or for whom testing cannot be undertaken for any reason.
 - c) Those who are asymptomatic, have been tested and results are awaited.

6.2.1 Staff cohorting

Efforts should be made as far as reasonably practicable to dedicate assigned teams of staff to care for residents in each of the high and medium risk categories. There should be as much consistency in staff allocation as possible, reducing movement of staff and the crossover between risk categories. Rotas should be planned in advance wherever possible, to take account of different risk categories and staff allocation. For staff groups who need to go between risk categories, efforts should be made to see residents on the medium risk categories, then the high risk category. Facemasks should be changed between risk categories.

6.2.2 Requirements for risk category movement

Any resident on the medium risk category who develops symptoms of COVID-19 should be isolated on the high risk category immediately and tested for COVID-19 and notify your local Health Protection Team (HPT). Any resident who is asymptomatic and tests positive for COVID-19 should be then cared for as per the high risk category.

Care homes are likely to have residents with dementia and/or cognitive impairment and so staff are advised to conduct a local risk assessment to ascertain appropriate placement. This does not mean resident needs to move their room or be moved to a different area but advises of the relevant risk category precautions that require to be put in place.

6.2.3 Resident cohorting

Any resident who has a coinfection with COVID-19 and any other known or suspected infectious pathogen **must not** be cohorted with other COVID-19 residents.

Cohorting in care homes should be undertaken with care. Residents who are shielding (extremely high risk of severe illness) must not be placed in cohorts and should be prioritised for single occupancy rooms.

Where all single room facilities are occupied and cohorting is unavoidable, then cohorting could be considered whilst ensuring that:

- Confirmed COVID-19 residents are placed in multi-occupancy rooms together.
- Suspected COVID-19 residents are placed in multi occupancy rooms together.
- Confirmed and suspected residents should not be cohorted together.

6.2.4 Discontinuing IPC precautions in care homes for residents who are COVID-19 positive

Before IPC control measures are stepped down for COVID-19, it is essential to first consider the ongoing need for **transmission based precautions** (TBPs) necessary for any other alert organisms, e.g. MRSA carriage or *C. difficile* infection, or patients with ongoing diarrhoea.

Key notes to be referred to in conjunction with [table 1](#);

- **Completing the 14 day isolation period** - – Care homes residents must complete 14 days isolation. This is because there are considerable numbers of immunocompromised and vulnerable residents who will be at risk of nosocomial infection. **If they have completed their 14 days in isolation in hospital, no further isolation should be required on return/admission to the care home.**
- **COVID-19 clinical requirements for stepdown** – Clinical improvement with at least some respiratory recovery. Absence of fever (>37.8°C) for 48 hours without use of antipyretics. A cough or a loss of/ change in normal sense of smell or taste may persist in some residents, and is not an indication of ongoing infection when other symptoms have resolved.
- **Testing required for stepdown** – No testing is required routinely to stepdown IPC precautions in a care home unless discharged from hospital **before their 14 day isolation period has been completed.**

Table 1: Discontinuation of IPC requirements for care homes (COVID-19 positive)

	Number of isolation days required	COVID-19 Clinical requirement for stepdown*¹	Testing required for stepdown	Transferring between risk categories on stepdown
Care home current residents (known COVID-19 positive)	14 days from symptom onset (or first positive test if symptom onset undetermined)	Absence of fever for 48 hours without use of antipyretics & at least some respiratory recovery	Not routinely required unless being discharged from hospital	Residents should be managed on the high risk category until criteria described in this table is met and can then transfer to the medium risk category
Care home (known COVID-19 positive) residents, being admitted from hospital (see further guidance below)	14 days from symptom onset (or first positive test if symptom onset undetermined) If they have completed the 14 day isolation in hospital, no further isolation should be required on return/admission to the care home.	Absence of fever for 48 hours without use of antipyretics & at least some respiratory recovery	If COVID recovered patient discharged to care home before 14 day isolation ended 2 negative PCR tests before discharge at least 24 hr apart. In addition, if not completed 14 days isolation, can do so in care home and do not require to start new isolation period, nor require further testing.	Residents should be managed on the high risk category until criteria described in this table is met and can then transfer to the medium risk category

	Number of isolation days required	COVID-19 Clinical requirement for stepdown* ¹	Testing required for stepdown	Transferring between risk categories on stepdown
Care home staff	10 days from symptom onset (or first positive test if symptom onset undetermined)	Absence of fever for 48 hours without use of antipyretics & at least some respiratory recovery	Not routinely required	Staff can return to work as normal once criteria is met

Residents/Patients discharged from hospital to care homes (COVID-19 recovered)

Since PCR testing can take several weeks to revert back to negative due to persistence of non-viable viral RNA remnants, repeat PCR testing within 90 days of a COVID diagnosis in preparation for discharge must be considered carefully.

COVID recovered patients in hospital can be discharged to the care home after 14 days from symptom onset (or first positive test, if asymptomatic) without further testing. In such instances, discharge at 14 days providing the person is afebrile for 48 hours without anti-pyretics and clinically stable, is based on clinical judgment of fitness for discharge. This decision should be made in collaboration with the receiving care home manager who needs to agree to patient transfer before this occurs. If COVID recovered patients have completed their 14 days of isolation in hospital, no further isolation should be required on return to the care home.

If a COVID recovered patient is to be discharged before their 14 day isolation period has ended, they should have two negative PCR tests before discharge from hospital. Tests should be taken at least 24 hours apart. In addition, if they have not completed their 14 days isolation then they can do so in the care home, and do not require to start a new period of isolation, nor do they require further testing.

Where it is in the clinical interest of the resident and negative testing is not feasible (e.g. resident does not consent, detrimental consequences or it would cause distress) a risk assessment and a care plan for the remaining period of isolation up to 14 days in the care home must be agreed.

Note: an admission to hospital is considered to include only those patients who are admitted to a ward. An attendance at A&E that didn't result in an admission would not constitute an admission.

Residents/Patients discharged from hospital to care homes (non- COVID-19)

All non-COVID-19 residents being discharged from hospital should be isolated for 14 days from or including the date of discharge from hospital.

Risk assessment prior to hospital discharge for residents with a non-COVID-19 diagnosis should be undertaken in conjunction with the care home. A single negative result should be available preferably within 48 hours prior to discharge from hospital. The exception is where a resident is considered to suffer detrimental clinical consequence or distress if they were not able to be discharged to a care home. In these cases, the resident may be discharged to the care home prior to the test result being available, whether the result is positive or negative, but the 14 days of isolation must be completed regardless in the care home.

For further guidance on admission of COVID-19 recovered and non COVID-19 residents from hospital or from community please refer to PHS COVID-19: Information and Guidance for Care Home Settings (Adults and Older People)

<https://publichealthscotland.scot/publications/covid-19-information-and-guidance-for-care-home-settings-adults-and-older-people/covid-19-information-and-guidance-for-care-home-settings-adults-and-older-people-version-22/>

6.2.5 Residents returning from day visit or overnight stay

Residents who leave care home for the day or for an overnight stay should be triaged in advance of their immediate return to the care home and again on arrival at the care home to determine which category they should be placed on.

6.3 Hand Hygiene

Hand hygiene is considered one of the most important practices in preventing the onward transmission of any infectious agents including COVID-19. Hand hygiene should be performed in line with [section 1.2 of SICPs](#).

Hand hygiene is essential to reduce the transmission of infection in care home settings. All staff, residents and visitors should clean their hands with soap and water or, where this is unavailable, alcohol-based hand rub (ABHR) when entering and leaving the care home and when entering and leaving areas where care is being delivered.

Hand hygiene must be performed immediately before every episode of direct care and after any activity or contact that potentially results in hands becoming contaminated, including the removal of personal protective equipment (PPE), equipment decontamination and waste handling.

Before performing hand hygiene:

- expose forearms (bare below the elbows)
- remove all hand and wrist jewellery (a single, plain metal finger ring is permitted but should be removed (or moved up) during hand hygiene)
- ensure finger nails are clean, short and that artificial nails or nail products are not worn
- cover all cuts or abrasions with a waterproof dressing

If wearing an apron rather than a gown (bare below the elbows), and it is known or possible that forearms have been exposed to respiratory secretions (for e.g. cough droplets) or other body fluids, hand washing should be extended to include both forearms. Wash the forearms first and then wash the hands.

Staff should support residents with hand hygiene regularly where required.

6.4 Respiratory and cough hygiene

Respiratory and cough hygiene is designed to minimise the risk of cross transmission of respiratory pathogens including COVID-19. The principles of respiratory and cough hygiene can be found in [section 1.3 of SICPs](#).

Residents, staff and visitors should be encouraged to minimise potential COVID-19 transmission through good respiratory hygiene measures which are:

- disposable, single-use tissues should be used to cover the nose and mouth when sneezing, coughing or wiping and blowing the nose – used tissues should be disposed of promptly in the nearest waste bin
- tissues, waste bins (lined and foot operated) and hand hygiene facilities should be available for residents, visitors and staff
- hands should be cleaned (using liquid soap and water if possible, otherwise using alcohol based hand rub (ABHR) after coughing, sneezing, using tissues or after any contact with respiratory secretions and contaminated objects
- encourage residents to keep hands away from the eyes, mouth and nose

Some residents may need assistance with containment of respiratory secretions; those who are immobile will need a container (for example a plastic bag) readily at hand for immediate disposal of tissues.

6.5 Personal Protective Equipment (PPE)

PPE exists to provide the wearer with protection against any risks associated with the care task being undertaken. PPE requirements as per standard IPC measures are detailed in [section 1.4 of SICPs](#). PPE requirements during the COVID-19 pandemic are determined by the care pathways and are detailed in [6.5.3](#).

It is of paramount importance that PPE is worn only at the recommended appropriate times, selected appropriately and donned and doffed properly to prevent transmission of infection.

PPE is the **least** effective control measure for COVID-19 and other mitigation measures as per the hierarchy of controls must be implemented and adhered to wherever possible. More details on the hierarchy of controls can be found in [section 6.12](#).

6.5.1 Extended use of Face Masks for staff and visitors

New and emerging scientific evidence suggests that COVID-19 may be transmitted by individuals who are not displaying any symptoms of the illness (asymptomatic or pre-symptomatic). The extended use of facemasks by all health and social care workers and the wearing of face coverings by visitors is designed to protect staff and residents and [guidance and associated FAQs for extended use of facemasks](#) is available.

A poster detailing the [‘Dos and don’ts’ of wearing a face mask](#) is also available for use in the care home.

Extended use of face masks relates to the specific guidance that staff should wear Fluid Resistant (Type IIR) Surgical Mask (FRSM) at all times for the duration of their shift in the care home setting. Face masks must be removed and replaced as necessary (observing hand hygiene before the mask is removed and before putting another mask on).

In Scotland, health and social care staff, within a care home setting, should be provided with Type IIR masks for use as part of the extended wearing of facemask.

It is recommended that FRSMs should be well fitting and fit for purpose, covering the nose and mouth in order to prevent venting (exhaled air ‘escaping’ at the sides of the mask). A [‘How to wear facemasks’ poster](#) suggests ways to wear facemasks to help improve fit.

6.5.2 Face masks for residents

Residents in the medium or high risk category should be encouraged to wear a FRSM, if these can be tolerated and do not compromise care, when moving around the care home and when individuals enter the room.

Appropriate physical distancing and wider IPC measures are critical, with the use of face masks being a further line of defence.

Scottish Government guidance is available on the [extended use of face masks in hospitals and care homes](#).

Where clinical waste disposal is not available, used face masks should be double bagged and disposed of in domestic waste.

6.5.3 PPE determined by COVID-19 risk categories

[Table 2](#) details the PPE which should be worn when providing direct resident care in each of the COVID-19 care risk categories.

Type IIR Fluid Resistant Surgical Masks (FRSMs) should be worn for all direct care regardless of the risk category. This is a measure which has been implemented alongside physical distancing specifically for the COVID-19 pandemic. FRSMs should be changed if wet, damaged, soiled or uncomfortable and must be changed after having provided care for a resident isolated with a suspected or known infectious pathogen and when leaving resident areas on high risk categories.

Further guidance on glove use can be found in [Appendix 5](#).

Table 2: PPE for direct resident care determined by risk category

	Gloves	Apron	Face mask	Eye face protection
Medium Risk Category	<p>Risk assessment – wear if contact with BBF is anticipated,</p> <p><u>Single use</u></p>	<p>Risk assessment – wear if direct contact with patient, their environment or BBF is anticipated (Gown if extensive splashing anticipated),</p> <p><u>Single use</u></p>	<p>Always within 2 metres of a resident -</p> <p>Type IIR fluid resistant surgical face mask.</p>	<p>Risk assessment – wear - if splashing or spraying</p> <p>with BBF, including coughing/sneezing, is anticipated</p> <p><u>Single use or reusable following decontamination</u></p>

	Gloves	Apron	Face mask	Eye face protection
High Risk Category	Worn for all direct care. Single use.	Always within 2 metres of a resident (Gown if splashing anticipated). Single-use.	Always within 2 metres of a patient - Type IIR fluid resistant surgical face mask.	Always within 2 metres of a resident. Single-use, *sessional or reusable following decontamination.

*Sessional use see section [6.4.7](#)

6.5.4 PPE – Putting on (donning) and taking off (doffing)

All staff must be trained in how to put on and remove PPE safely. A [short film showing the correct order for putting on and the safe order for removal of PPE](#) is available. The video will also describe safe disposal of PPE. A [poster describing the donning and doffing of PPE is available in the NIPCM Appendix 6](#).

Putting on PPE

Before putting on PPE:

- Check what the required PPE is for the task/visit
- Select the correct size of PPE
- Perform hand hygiene

PPE should be put on before entering the room.

- The order for putting on is apron, surgical mask, eye protection (if required) and gloves – you may require some of these items or all of them
- When putting on mask, the mask should be well fitting, position the upper straps on the crown of head and the lower strap at the nape of the neck. Mould the metal strap over the bridge of the nose using both hands. Further link to a poster on fitting masks can be found in section 6.4.1

When wearing PPE:

- Keep hands away from face and PPE being worn.
- Change gloves when torn or heavily contaminated.
- Limit surfaces touched in the care environment.
- Always perform hand hygiene after removing gloves

Removal of PPE

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

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 glove off 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.

Eye Protection (if worn)

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

Fluid Resistant Surgical facemask

- Remove after leaving care area.
- Untie or break bottom ties, followed by top ties or elastic and remove by handling the ties only (as front of mask may be contaminated) and discard as clinical waste.
- For face masks with elastic, stretch both the elastic ear loops wide to remove and lean forward slightly. Discard as clinical waste.

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.

6.5.5 Aerosol Generating procedures (AGPs)

An Aerosol Generating Procedure (AGP) is a procedure that can result in the release of airborne particles from the respiratory tract when treating someone who is suspected or known to be suffering from an infectious agent transmitted wholly or partly by the airborne or droplet route.

Below is the list of procedures for COVID-19 that have been reported to be aerosol generating and are associated with an increased risk of respiratory transmission:

- Respiratory tract suctioning*
- Dental procedures (using high speed devices such as ultrasonic scalers and high speed drills)
- High Flow Nasal Oxygen (HFNO)
- High Frequency Oscillatory Ventilation (HFOV)
- Induction of sputum using nebulised saline
- Non-invasive ventilation (NIV); Bi-level Positive Airway Pressure Ventilation (BiPAP) and Continuous Positive Airway Pressure Ventilation (CPAP)
- Tracheal intubation and extubation
- Upper ENT airway procedures that involve respiratory suctioning

* NB: The available evidence relating to Respiratory Tract Suctioning is associated with ventilation. In line with a precautionary approach open suctioning of the respiratory tract regardless of association with ventilation has been incorporated into the current (COVID-19) AGP list. It is the consensus view of the UK IPC cell that only open suctioning beyond the oro-pharynx is currently considered an AGP i.e. oral/pharyngeal suctioning is not an AGP.

Chest compressions and defibrillation (as part of resuscitation) are not considered AGPs; first responders can commence chest compressions and defibrillation without the need for AGP PPE while awaiting the arrival of other personnel who will undertake airway manoeuvres. On arrival of the team, the first responders should leave the scene before any airway procedures are carried out and only return if needed and if wearing AGP PPE.

Chest compressions and defibrillation (as part of resuscitation) are not considered AGPs; first responders (any setting) can commence chest compressions and defibrillation without the need for AGP PPE while awaiting the arrival of other clinicians to undertake airway manoeuvres. This recommendation comes from Public Health England and the New and Emerging Respiratory Viral Threat Assessment Group (NERVTAG). The published evidence view and consensus opinion can be found at <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/phe-statement-regarding-nervtag-review-and-consensus-on-cardiopulmonary-resuscitation-as-an-aerosol-generating-procedure-agp--2>.

Certain other procedures/equipment may generate an aerosol from material other than an individual's secretions but are not considered to represent a significant infection risk and do not require AGP PPE. Procedures in this category include:

- administration of humidified oxygen;
- administration of medication via nebulisation.

Note: During nebulisation, the aerosol derives from a non-resident source (the fluid in the nebuliser chamber) and does not carry resident-derived viral particles. If a particle in the aerosol coalesces with a contaminated mucous membrane, it will cease to be airborne and therefore will not be part of an aerosol.

Staff should use appropriate hand hygiene when helping residents to remove nebulisers and oxygen masks.

For residents with suspected/confirmed COVID-19, any of the potentially infectious AGPs listed above should only be carried out when essential. The required PPE for AGPs should be worn by those undertaking the procedure and those in the room, as detailed above. Where possible, these procedures should be carried out in a single room with the doors shut. Only those staff who are needed to undertake the procedure should be present.

It is the responsibility of care home providers to ensure that all staff have been fit tested for FFP3 respirators, when appropriate. If you do not anticipate the need for FFP3 respirators and are not caring for anyone currently receiving AGPs such as CPAP, these should not be ordered or stockpiled and any surplus stock should be returned.

A [Situation, Background, Assessment and Recommendations \(SBAR\)](#) has been produced by Health Protection Scotland (HPS)/ARHAI Scotland and agreed by New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) specific to AGPs during COVID-19.

The NERVTAG consensus view is that the HPS document accurately presents the evidence base concerning medical procedures and any associated risk of transmission of respiratory infections and whether these procedures could be considered aerosol generating. NERVTAG supports the conclusions within the document and supports the use of the document as a useful basis for the development of UK policy or guidance related to COVID-19 and aerosol generating procedures (AGPs).

Airborne precautions **are required** for the medium and high risk categories where AGPs are undertaken and the required PPE is detailed in [table 3](#). **Ongoing requirement for airborne precautions in the medium risk pathway when a patient is undergoing an AGP recognises the potential aerosolisation of COVID-19 from an asymptomatic carrier.**

****Work is currently underway by the UK Re-useable Decontamination Group examining the suitability of respirators, including powered respirators, for decontamination. This literature review will be updated to incorporate recommendations from this group when available. In the interim, ARHAI Scotland are unable to provide assurances on the efficacy of respirator decontamination methods and the use of re-useable respirators is not recommended.**

Table 3: PPE for Aerosol generating Procedures determined by pathway

	Gloves	Apron/ Gown	Face mask/ Respirator	Eye face protection
Medium Risk Category	Single use	Gown – Single use	FFP mask or Powered respirator hood	Single use or re-useable
High Risk Category	Single use	Gown – Single use	FFP mask or Powered respirator hood	Single use or re-useable

FFP3 masks must be fluid resistant. Valved respirators may be shrouded or unshrouded. Respirators with unshrouded valves are not considered to be fluid-resistant and therefore should be worn with a full face shield if blood or body fluid splashing is anticipated. **There is a theoretical risk of exhaled breath from the wearer of a valved respirator transmitting COVID-19 where asymptomatic carriage is present however, following introduction of staff testing and uptake of vaccination, this risk is likely to be low. Valved respirators should not be used when sterility directly over a surgical field/surgical site is required and instead a non-valved respirator should be worn.

6.5.6 Post AGP Fallow Times (PAGPFT)

Time is required after an AGP is performed to allow the aerosols still circulating to be removed/diluted. This is referred to as the post AGP fallow time (PAGPFT) and is a function of the room ventilation air change rate.

The post aerosol generating procedure fallow time (PAGPFT) calculations are detailed in [table 4](#). It is often difficult to calculate air changes in areas that have natural ventilation only. All point of care areas require to be well ventilated. Natural ventilation, provides an arbitrary 1-2 air changes per hour. To increase natural ventilation in many community health and social care settings may require opening of windows. If opening windows staff must conduct a local hazard/safety risk assessment.

If the area has zero air changes and no natural ventilation, then AGPs should not be undertaken in this area.

The duration of AGP is also required to calculate the PAGPFT and staff are therefore reminded to note the start time of an AGP. It is presumed that the longer the AGP, the more aerosols are produced and therefore require a longer dilution time. During the PAGPFT staff should not enter this room without FFP3 masks. Residents, other than the resident on which the AGP was undertaken, must not enter the room until the PAGPFT has elapsed and the surrounding area has been cleaned appropriately. As a minimum, regardless of air changes per hour (ACH), a period of 10 minutes must pass before rooms can be cleaned. This is to allow for the large droplets to settle. Staff must not enter rooms in which AGPs have been performed without airborne precautions for a minimum of 10 minutes from completion of AGP. Airborne precautions may also be required for a further extended period of time based on the duration of the AGP and the number of air changes (see [table 4](#)). Cleaning can be carried out after 10 minutes regardless of the extended time for airborne PPE.

Table 4: Post AGP fallow time calculation:

Duration of AGP (min)	Air change rate (AC/h)									
	1	2	4	6	8	10	12	15	20	25
3	230	114	56	37	27	22	18	14	10	8* (10)
5	260	129	63	41	30	24	20	15	11	8*(10)
7	279	138	67	44	32	25	20	16	11	9*(10)
10	299	147	71	46	34	26	21	16	11	9*(10)
15	321	157	75	48	35	27	22	16	12	9*(10)

*The minimum fallow time (to allow for droplet settling time) is 10 minutes

6.5.7 Sessional use of PPE

During the peak of the pandemic, some PPE was used on a sessional basis and this meant that these items of PPE could be used moving between residents and for a period of time where a member of staff was undertaking duties in an environment where there was exposure to COVID-19. A session ended when the member of staff left the care setting or exposure environment.

As supplies of PPE are now sufficient, sessional use of PPE is not recommended with the exception of when wearing a visor/eye protection in a communal area where residents in high risk pathway and when wearing a fluid resistant surgical face mask (FRSM) across all pathways. Sessional use of all other PPE is associated with transmission of infection amongst residents and is considered poor practice.

FRSMs can be worn sessionally when providing direct care or as part of extended use of facemask policy. FRSMs and visors or eye protection must be changed if wet, damaged, soiled compromised or uncomfortable or after having provided care for a resident isolated with a suspected or known infectious pathogen and when leaving high-risk (red) pathway areas. The same principles should be observed for staff post toilet and meal breaks, when a new face mask should be put on, once removed the FRSM must **never** be reused.

Employers are encouraged to plan breaks in such a way that allows 2 metre physical distancing and therefore staff not having to wear a face mask, with natural ventilation where possible.

6.5.8 PPE for delivery of COVID-19 vaccinations

Healthcare workers (HCWs) delivering vaccinations must;

- wear a fluid resistant surgical facemask (FRSM) for all direct contact and where 2 metre physical distancing cannot be maintained. This will protect both the HCWs and resident from exposure to COVID-19 should either be pre-symptomatic or an asymptomatic carrier of COVID-19.
- perform hand hygiene regularly including before and after each resident /individual contact and as per 4 moments for hand hygiene laid out in the National Infection Prevention & Control Manual (NIPCM).
- wear a visor where there is anticipated splashing to the face. For example, where nasal vaccinations induce sneezing, HCWs may choose to wear a visor to prevent droplet contamination to the face following risk assessment.

The resident on whom the nasal vaccination is being administered should be provided with disposable tissues to cover their mouth where any sneezing is likely. They should dispose of the tissues in a suitable waste receptacle and wash hands with warm soap and water. If there are no hand hygiene facilities available, ask the individual to use alcohol based hand rub (ABHR) and wash their hands at the earliest opportunity.

- other items of PPE are unlikely to be required for routine vaccination and a risk assessment should be carried out considering both IPC and COSHH guidance.

As per SICPs;

- Aprons should be worn where there is anticipated contamination to the healthcare workers uniform or clothing.
- Gloves should be worn where blood and body fluid exposure is anticipated. Tiny amounts of blood resulting from vaccination site pose little risk to a HCW where the skin of the healthcare workers hands is intact. There is therefore no need to

wear gloves when delivering a vaccination provided the skin on the HCWs hands is intact and the skin of the person receiving the vaccination is intact. An [SBAR which considered the need for HCWs to wear gloves when delivering vaccinations](#) was produced by HPS in 2014.

A [poster detailing safe PPE practice for staff vaccinators](#) and [poster aimed at those attending vaccination clinics](#) is available.

6.6 Safe management of care equipment

Care equipment is easily contaminated with blood, other body fluids, secretions, excretions and infectious agents. Consequently, it is easy to transfer infectious agents from communal care equipment during care delivery. All care equipment should be decontaminated as per [table 5](#).

Table 5– Equipment cleaning determined by risk category

Pathway	Product
Medium Risk Category	General purpose detergent for routine cleaning. See Appendix 7 of the NIPCM for cleaning of equipment contaminated with blood or body fluids or it has been used on a patient with a known or suspected infectious pathogen.
High Risk Category	Combined detergent/disinfectant solution at a dilution of 1000 ppm av chlorine or general purpose neutral detergent in a solution of warm water followed by a disinfectant solution of 1000ppm av chlorine.

6.7 Safe management of the care environment

There are many areas in care homes that become easily contaminated with micro-organisms (germs) for example toilets, waste bins, kitchen surfaces.

Furniture and floorings in a poor state of repair can harbour micro-organisms (germs) in hidden cracks or crevices.

To reduce the spread of infection, the environment must be kept clean and dry and where possible clear from litter or non-essential items and equipment.

Maintaining a high standard of environmental cleanliness is important in care homes as residents living there are often elderly and vulnerable to infections.

It is the responsibility of the person in charge to ensure that the care environment **across all pathways** is safe for practice (this includes environmental cleanliness/maintenance). The person in charge should consider and implement what improvements are required if this is deficient.

The care home environment should be:

- visibly clean, free from non-essential items and equipment to facilitate effective cleaning;
- well maintained and in a good state of repair.

The cleaning frequency and use of general purpose detergent for cleaning in the **Medium Risk pathway** as per the NHS Scotland National Cleaning Services Specification is sufficient with the exception of isolation/cohort areas where residents with a known or suspected infectious agent are being nursed. These areas require to be cleaned twice daily with a chlorine releasing agent containing 1000ppm av chlorine.

Environmental cleaning in the High Risk COVID-19 categories should be undertaken using either a combined detergent/disinfectant solution at a dilution of 1000 ppm available chlorine or a general purpose neutral detergent in a solution of warm water followed by a disinfectant solution of 1000ppm av chlorine.

Cleaning across the categories is summarised in [table 6](#).

Table 6 – Environmental cleaning determined by risk category

	1 st daily clean	2 nd daily clean	Product
	Frequency		Product
Medium Risk pathway	At least daily as per NHS Scotland National Cleaning Services Specification.		General purpose detergent*
High Risk Pathway	At least twice daily 1 st clean - Full clean 2 nd clean - * Touch Surfaces within clinical inpatient areas		Combined detergent/disinfectant solution at a dilution of 1000 ppm av chlorine or general purpose neutral detergent in a solution of warm water followed by a disinfectant solution of 1000ppm av chlorine.

*Cleaning in the medium risk pathways should be carried out with chlorine based detergent for resident rooms where the resident is known to have any other known or suspected infectious agent.

* Touch surfaces as a minimum should include door handles/push pads, taps, light switches, lift buttons. Resident areas should include the resident bedroom and any treatment areas and staff rest areas.

Any areas contaminated with blood and body fluids across any of the 2 pathways require to be cleaned as per [Appendix 9 of the National Infection Prevention Control Manual \(NIPCM\)](#).

Decontamination of soft furnishings may require to be discussed with the local HPT/ICT. If the soft furnishing is heavily contaminated, you may have to discard it. If it is safe to clean with standard detergent and disinfectant alone then follow appropriate procedure.

If the item cannot withstand chlorine releasing agents staff are advised to consult the manufacturer's instructions for a suitable alternative to use following or combined with detergent cleaning. However, when an organisation adopts practices that differ from those recommended/stated in this national guidance with regards to cleaning agents, the individual organisation is fully responsible for ensuring safe systems of work, including the completion of local risk assessment(s) approved and documented through local governance procedures.

6.8 Safe Management of Linen

All linen should be handled as per section [1.7 of SICPs – Safe Management of Linen](#)

Linen used on residents who are **in the high risk category** or where there is a confirmed outbreak should be treated as infectious. Following local risk assessment/ if no outbreaks in the care home laundry can be processed as normal.

Care homes with their own in-house laundries may also refer to <https://www.nss.nhs.scot/publications/national-guidance-for-safe-management-of-linen-in-nhsscotland/> for more information.

6.9 Safe management of blood and body fluid spillages

All blood and body fluid spillages across the 3 pathways should be managed as per [section 1.8](#) of SICPs – Safe management of Blood and Body Fluid Spillages and [Appendix 9](#).

6.10 Safe disposal of waste (including sharps)

Waste should be handled in accordance with [Section 1.9 of SICPs](#). Waste generated from patients/individuals who are **in the high risk category** or suspected or

where there is a confirmed outbreak, should be disposed of as clinical waste where clinical waste contracts are in place.

NB: Type IIR facemasks worn as part of the extended use of facemasks policy should be disposed of as clinical waste.

If the community health and care setting does not have a clinical waste contract, or for care at home, ensure all waste items that have been in contact with the patient/individual (e.g. used tissues and disposable cleaning cloths) are disposed of securely within disposable bags. When full, the plastic bag should then be placed in a second bin bag and tied. These bags should be stored in a secure location for 72 hours before being put out for collection.

6.11 Occupational Safety

[Section 1.10](#) of SICPs remains applicable to COVID-19 residents.

[Occupational risk assessment guidance](#) specific to COVID-19 is available.

PPE is provided for occupational safety and should be worn as per [Tables 2](#) and [3](#).

6.11.1 Car/vehicle sharing for staff

Wherever possible, car sharing should be avoided with anyone outside of your household or your support bubble. This is because the close proximity of individuals sharing the small space within the vehicle increases the risk of transmission of COVID-19. All options for travelling separately should be explored and considered such as:

- Staff travelling separately in their own cars to and from work;
- Geographical distribution of visits (if this is required)– consider if these can be carried out on foot or by bike;
- Use of public transport where social distancing can be achieved via use of larger capacity vehicles;

However, it is recognised that there are occasions where car sharing is unavoidable such as:

- Staff who carry out community visits;
- Staff who are commuting with residents as part of supported care;
- Staff who are commuting with students as part of supported learning/mentorship;

- Staff living in areas where public transport is limited and car sharing is the only means of commuting to and from the workplace;

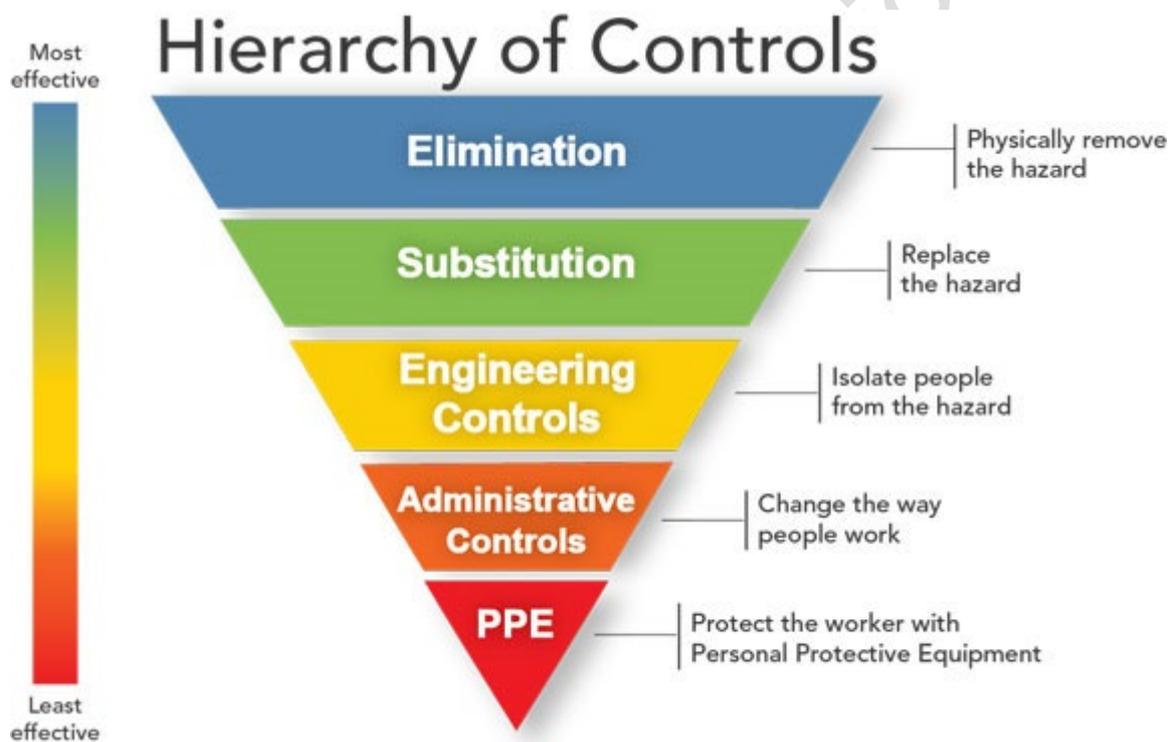
Where car sharing cannot be avoided, individuals should adhere with the guidance below to reduce any risk of cross transmission;

- Staff (and students) must not travel to work/car share if they have symptoms compatible with a diagnosis of COVID-19;
- Ideally, no more than 2 people should travel in a vehicle at any one time;
- Use the biggest car available for car sharing purposes;
- Car sharing should be arranged in such a way that staff share the car journey with the same person each time to minimise the opportunity for exposure. Rotas should be planned in advance to take account of the same staff commuting together/car sharing as far as possible;
- The car must be cleaned regularly (at least daily) and particular attention should be paid to high risk touch points such as door handles, electronic buttons and seat belts. General purpose detergent is sufficient unless a symptomatic or confirmed case of COVID-19 has been in the vehicle in which case a disinfectant should be used;
- Occupants should sit as far apart as possible, ideally the passenger should sit diagonally opposite the driver;
- Windows in the car must be opened as far as possible taking account of weather conditions to maximise the ventilation in the space;
- Occupants in the car, including the driver, should wear a fluid resistant surgical mask (FRSM) provided it does not compromise driver safety in any way;
- Occupants should perform hand hygiene using an alcohol based hand rub (ABHR) before entering the vehicle and again on leaving the vehicle. If hands are visibly soiled, use ABHR on leaving the vehicle and wash hands at the first available opportunity;
- Occupants should avoid eating in the vehicle;
- Passengers in the vehicle should minimise any surfaces touched – it is not necessary for vehicle occupants to wear aprons or gloves;
- Keep the volume of any music/radio being played to a minimum to prevent the need to raise voices in the car;

Adherence with the above measures will be considered should any staff be contacted as part of a COVID-19 contact tracing investigation.

6.12 Hierarchy of controls

Controlling exposures to occupational hazards, including the risk of infection, is the fundamental method of protecting healthcare workers. Below is a graphic specifying the general principles of prevention legislated in the Management of Health and Safety at Work Regulations 1999, Regulation 4, Schedule 1. It details the most to the least effective hierarchy of controls and can be used to help implement effective controls in preventing the spread of COVID-19 within healthcare settings. The hierarchy of controls will help protect all users of the NHS facility and not just staff. NHS Boards and NHS staff should first employ the most effective method of control which inherently results in safer control systems. Where that is not possible, all others must be considered in sequence. PPE is the last in the hierarchy of controls.



Hierarchy of Risk Controls

Centers for disease control and prevention. The National Institute for Occupational Safety and Health. Hierarchy of Controls. 2015.

<https://www.cdc.gov/niosh/topics/hierarchy/default.html>

Examples of ways in which the hierarchy of controls can be applied in health and social care settings is as follows;

Hierarchy of controls	Examples in practice & Resources
Elimination	<ul style="list-style-type: none"> • Patients must not attend for routine appointments if they have symptoms of COVID-19 or have been advised to self-isolate • Staff must not report to work if they have symptoms of COVID-19 or have been advised to self-isolate • Staff who have tested asymptotically positive using LFD test must isolate and not report to work further to confirmation via PCR test. • Visitors must not enter the facility if they have symptoms of COVID-19 or have been advised to self-isolate • Staff who can work from home should be supported to do so • Consideration should be given to non-clinical staff who typically enter clinical areas as part of their job role and alternative arrangements made wherever possible • Support adherence with isolation and testing criteria contained within SIGN guidance SIGN Guidance for Reducing the risk of postoperative mortality due to COVID-19 in patients undergoing elective surgery.
Substitution	<ul style="list-style-type: none"> • Consider what aspects of patient care could be performed remotely and undertake consultations over phone or using other digital means as far as possible rather than in person.
Engineering controls	<ul style="list-style-type: none"> • Installations of partitions at appropriate places (e.g reception desks) to separate staff from presenting patients (consideration needs to be given to impact on air flow before installation and any cleaning requirements) • 2 metre physical distancing in all areas of the premises (see section 5.11.4 for further information) and the space requirements necessary to allow adequate bed spacing for patients and physical distancing for staff working within the areas. • Effective mechanical ventilation • Improve ventilation by opening windows on the premises • Optimal bed spacing and chair spacing (see section 5.11.5) for further information) throughout health and care facilities, including clinical and non-clinical areas, eg. Dining and office areas.

Hierarchy of controls	Examples in practice & Resources
	<ul style="list-style-type: none"> Consider availability of single room facilities for performing AGPs <p>Resources Link to CIBSE guidance Link to SAGE documents Link to HFS document</p>
Administrative controls	<ul style="list-style-type: none"> Reduce waiting time for individuals in clinic and radiology departments e.g outpatients should wait in their car or outdoors if possible until telephoned by the OPD to advise to enter the building for appointment. Inpatient radiology departments should aim to request attendance by inpatients from wards which will limit the time waiting in the department. Reduce movement of patients where procedures can be performed in their own room rather than requiring transfer to another department. Make efforts to reduce number of people on premises at any one time e.g consider reduction in number of staff involved in ward rounds. Consider whether MDT case conferences be undertaken using digital methods Reduce number of deliveries to areas by coordinating as many supplies as possible in as few deliveries as possible. Ensure measures in place to prevent wards and clinical departments being used as through corridors. Reduce number of staff in break areas/changing rooms/offices and display maximum occupancy on entry to and within the room. Working from behind or at the side of the individual (no face to face close contact) wherever possible Development of pathways/one way systems on the premises Use of various COVID-19 related signage Provision of additional hand hygiene and face mask stations Increased cleaning as per Scottish COVID-19 addendum
Personal Protection Equipment (PPE)	<ul style="list-style-type: none"> Use of FRSMs as per extended use of facemasks guidance Use of face coverings (although not classed as PPE) by patients and visitors – in healthcare they can be provided with a Type IIR mask

Hierarchy of controls	Examples in practice & Resources
	<ul style="list-style-type: none"> PPE when a risk assessment indicates this is required (see section *** for further information)

6.12.1 General organisational Preparedness and COVID-19 Risk Assessment of the healthcare Environment

A structured risk assessment should be undertaken with Health and Safety (H&S) representatives, Estates and Facilities representatives, Occupational Health Services (OHS) Infection Prevention and Control Team (IPCT) and the clinical team to systematically consider potential hazards in the context of COVID-19 which could negatively impact users of that environment including staff, patients and visitors and ensure application of mitigation measures to eliminate, reduce or control risk.

Due to the wide variance in the lay out, structure and fabric of NHS facilities across Scotland it is not possible to be descriptive in exactly how these should be applied and a full risk assessment should be undertaken locally. Environmental considerations should take account of;

- Ventilation within the building/room/space (see section 5.12.3 for more information)
- Ways in which patient and staff numbers within the area can be reduced (NB: visiting guidance - in areas with high numbers of suspected/confirmed COVID19 cases (high risk pathway) then previous guidance on limiting support to “essential visits only” may need to apply in this area)
- Spacing to adequately allow for physical distancing and related room occupancy (see section 5.12.4) in clinical areas, non-clinical areas and staff only areas e.g office spaces, dining rooms, changing rooms. This should take account of circulating space for staff
- Partitions and individual positioning (consideration needs to be given to impact on air flow and necessary cleaning regimes before installation of partitions)
- Inpatient bed spacing and OPD chair spacing (see section 5.12.5)
- Signage and one way systems
- Administrative controls (e.g. Hand Hygiene stations, Facemask stations, waste bins)
- The planned patient cohort e.g. consider the planned COVID-19 pathway for that setting and clinical group - patients with cognitive impairment present a higher risk of transmission in care settings
- Previous IPC healthcare incidents and outbreaks within the area

6.12.2 Organisational Preparedness and COVID-19 Risk Assessment when determining appropriate location for High Risk Pathway

Some clinical environments present a greater risk in terms of COVID-19 transmission if used to care for cohorts of suspected and/or confirmed COVID-19 cases. NHS Boards must seek to identify and prepare the most suitable clinical area for planned placement of patients requiring care on the high risk (red) pathway. This is not required for areas used for the medium and low risk pathways where sporadic cases of 'unexpected' positive COVID-19 cases may arise.

Prior to determining areas for placement of the high risk pathway a full risk assessment of the proposed area must be carried out led by Health and safety teams and involving Estates and Facilities representatives, Occupational Health Services (OHS) Infection Prevention and Control Team (IPCT) and the clinical team. This should be undertaken using the hierarchy of controls and recognise that there is lowest risk where elimination can be achieved and highest risk where PPE is the only control in place. Risk assessments should be undertaken regularly as determined by the NHS Board to ensure no change to the level of risk.

The risk assessment should take account of the following questions;

- Which COVID-19 risk pathway is the proposed area to be used for?
- Does the bed spacing in the area meet requirements as per SHPNs in section 5.12.3 below?
- As a minimum, can windows in the area be opened and realistically remain open whilst the space is occupied?

If the risk assessment concludes that an unacceptable risk of transmission remains within the environment after rigorous application of the hierarchy of controls (e.g. inadequate bed spacing AND natural ventilation where windows cannot be opened) and only if there are no other more optimal low risk clinical areas suitable for the high risk pathway cohort then the NHS Boards should consider utilising the area for this purpose with provision of Respiratory Protective Equipment (RPE) for the staff working in this area.

The evidence continues to support the most likely route of COVID-19 transmission being via the droplet and contact route. However, it is accepted that in some high risk environments housing COVID-19 cases where mitigations in line with the hierarchy of controls cannot be applied, the level of risk is unknown and as a precautionary approach, the use of RPE by staff in the designated area may be considered by the organisation. This takes account of interim guidance issued by the World Health Organisation (WHO) occupational health and safety for healthcare workers.

The following subsections provide information to help support risk assessments.

6.12.3 Ventilation in the healthcare setting

Adequate ventilation reduces how much virus is in the air by dilution. It helps reduce the risk of COVID-19 transmission - the risk is greater in areas that are poorly ventilated. A number of studies have linked transmission to recirculating air conditioners, with the high velocities created by these units potentially allowing larger viral aerosols to remain airborne over longer distances. It is also possible that directional flow from desk fans could have a similar effect however the evidence of this is weak. Fans should be avoided as much as possible and should not be used without prior risk assessment.

Mechanically ventilated areas

NHS Scotland Boards should seek assurance that their ventilation systems must comply with current guidance, including:

Best practice guidance for healthcare engineering policies and principles (SHTM 00)

Ventilation for Healthcare - Design and validation (SHTM 03-01 Part A)
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Ventilation for Healthcare - Operational and verification (SHTM 03-01 Part B)

Ensure ventilation systems are well maintained ensuring functionality of air handling units and correct delivery of assigned air change rates. Controls should be set to maximise the amount of fresh air coming into the space and avoid recirculation of air as much as possible. Dampers should also be opened as far as possible.

Specific guidance applies to specialist ventilation areas such as theatres, ICU, isolations rooms and endoscopy suites. See here for more information.

Naturally ventilated areas (No mechanical ventilation)

Ensure areas are as ventilated as much as possible by opening windows if temperature/weather conditions allow. NHS organisations should consider any other risks with opening the windows where adjacent building works are in progress. If possible open windows at different sides to get a cross flow of ventilation. Where it is safe to do so, doors may be opened. NB fire doors should NEVER be propped open. Airing rooms as frequently as you can will help improve ventilation.

Aerosol Generating Procedures (AGPs) should be avoided in rooms with natural ventilation unless it is a single side room and all staff are wearing appropriate PPE, AGP fallow times are adhered to and door remains closed during the AGP and resulting AGP fallow time.

Air scrubbers (also known as HEPA units)

The Board may consider using portable industrial grade air filtration units containing HEPA filters where air-supply systems to high-risk clinical settings are suboptimal following risk assessment including assurance of the efficacy and safety of the filtration unit. As yet, evidence on the use of air scrubbers is limited and as such these should be used with caution. The units should be capable of recirculating all of the room air, without interfering with the existing pressure differential of the room and should provide the equivalent of ≥ 12 air changes per hour. The unit must be sized appropriately for the room in which it will be utilised and maintenance contracts should be procured to accompany the unit. It should be noted that these units do not provide additional fresh air into a space and there is no standard to measure the efficacy of these devices. NHS Boards should satisfy themselves that these devices are suitable and if required, seek advice from NHS Assure. Boards should also assess (not limited to) the noise levels, power requirements, heat gains and potential trip hazards

Currently, the CIBSE and SAGE resources below provide the best available independent views of air cleaning devices.

“Air purifiers” should not be used.

More information on ventilation in the context of COVID19 can be found at the following resources;

CIBSE: [Covid-19 Guidance: Ventilation](#)

SAGE: [Role of ventilation in controlling SARS-CoV-2](#)

SAGE: [Potential applications of air cleaning devices](#)

6.12.4 Spacing and Physical distancing

NHS Boards should have a process in place for all occupied rooms within wards and departments and healthcare settings to be risk assessed for maximum occupancy using the guide provided by Health Facilities Scotland (HFS) and taking into account the need for all staff working with NHS Scotland healthcare facilities to maintain 2 metres physical distancing (NB: does not apply to the provision of direct patient care where appropriate PPE should be worn in line with section 5.5).

Outbreaks amongst staff have been associated with a lack of physical distancing in changing areas and recreational areas during staff breaks and it is particularly important to utilise all available rooms and spaces to allow staff to change and have rest breaks without breaching maximum occupancy in any single area. Staff must ensure they are wearing face masks/coverings in line with the extended use of facemasks 5.4.1 outside of all clinical care unless exempt or eating/drinking.

6.12.5 Inpatient bed spacing and day patient chair spacing

Health Facilities Scotland have undertaken an assessment of bed and chair spacing within NHS Scotland facilities taking account of compounding factors applied in conjunction with physical distancing. The purpose of this document aims to help support boards in reviewing bed spacing to ensure 2 metre (m) physical distancing can be maintained for inpatient beds and treatment chairs. The summary document and the detailed technical diagrams can be accessed here including;

[NHSS Social Distancing Guidance & Signage \(nhsnss.org\) DL\(2021\)09 & NSS 29 Jan 21 –](#)

[NHS Scotland COVID-19 remobilisation –Built Environment incl. physical distancing support diagrams \(IM/2020/024\) 18 Sep 20](#)

Current NHSScotland Guidance on bed spacing include:

[Core guidance - General design for healthcare buildings \(HBN 00-01\)](#)

[Core guidance - Clinical and clinical support spaces \(HBN 00-03\)](#)

[Critical care units \(HBN 04-02\)](#)

[HAI-SCRIBE Manual information for project teams \(SHFN 30 Part A\)](#)

[HAI-SCRIBE Implementation strategy and assessment process \(SHFN 30 Part B\)](#)

[HAI-SCRIBE questionsets and checklists \(SHFN 30 Part C\)](#)

[Adult in-patient facilities \(SHPN 04-01\)](#)

[In-patient accommodation - supp 1 - Isolation facilities in acute settings \(SHPN 4 sup 1\)](#)

Guidance consistently recognises that bed spacing requirements contribute towards the control of healthcare associated infections. Adult in-patient facilities designed post 2010 should achieve 3.6m (width) x 3.7m (depth) dimensions of SHPN 04-01, HBN 00-03 and SHFN 30. Width of 3.6m is measured from bed centre to bed centre.

Since 2014, HBN 00-03 (Figure 45) states a day treatment bay should achieve 2.45m width. Assuming a 0.5m diameter zone for the patient head, this bay size achieves the minimum 2.5m centre-to-centre dimension between each day treatment couch or chair.

For older facilities, designed post 1995, HBN 40 bed bay minimum of 2.7 x 2.9m, the preferred minimum bed centre is 2.9m. Facilities designed pre 1995, or for clinical specialties e.g. Mental Health (SHPN 35 / HBN 03-01) or Care of Older People (HBN 37), had a bed bay minimum of 2.4 x 2.9m. For this specific group, the pragmatic minimum of 2.7m bed centres should be adhered to, and/or reduction to total patient

numbers/ occupation per multi-bed room and ventilation enhancements should be considered where practicable.

6.12.6 Local data to inform risk assessment

Organisations should have local systems in place for monitoring COVID-19 cases in their NHS Board, triggers and a defined escalation process which takes account of bed capacity, COVID-19 cluster data and risks associated with disruption to elective services. These considerations may be site specific or board wide.

As case numbers of COVID-19 fluctuate, so too will the volume of patients on each of the pathways. Where critical care units need to expand, this action plan should include allocated areas for additional ITU beds and sufficient staffing and equipment to support the expansion.

6.13 Caring for someone who has died

The IPC measures described in this document continue to apply whilst the resident who has died remains in the care home. This is due to the ongoing risk of infectious transmission via contact although the risk is usually lower than for living residents. Where the deceased was known or suspected to have been infected with COVID-19, there is no requirement for a body bag, and viewing, hygienic preparations, post-mortem and embalming are all permitted. Body bags may be used for other practical reasons such as maintaining dignity or preventing leakage of body fluids.

For further information, please see the following guidance produced by [Scottish Government Coronavirus \(COVID-19\): guidance for funeral directors on managing infection risks](#).

6.14 Visiting in care homes

The Scottish Government has published [visiting guidance](#), [Open with Care: supporting meaningful contact in care homes](#).

Care homes should familiarise themselves with the content of this guidance to ensure resident, staff and visitor safety. **The guidance on visiting during the pandemic includes tools and resources on visiting, and supporting residents in homes during COVID-19.**

Open with Care sets out how indoor contact in care homes will gradually increase while minimising COVID-19 risks to residents, staff and visitors. Continued attention to safety measures in relation to the pandemic are essential for everyone.

This includes hand hygiene, PPE as appropriate, ensuring good airflow (as far as reasonably comfortable), and rigorous cleaning of surfaces before and after visits.

Visitors must be informed of and adhere to IPC measures as advised, including FRSM, hand hygiene and not attending with COVID-19 symptoms or before a period of self-isolation has ended, whether identified as a case of COVID-19 or as a contact.

A log of visitors must be kept, which may be used for [Test and Protect](#) purposes.

6.15 Physical distancing

All staff working in the care home must maintain 2 metres physical distancing wherever possible. This does not apply to the provision of direct resident care where appropriate PPE should be worn in line with [section 6.5](#). Outbreaks amongst staff have been associated with a lack of physical distancing in recreational areas during staff breaks and when car sharing. There are many areas within a care home where maintaining 2 metres physical distancing is a challenge due to the nature of the work undertaken. Where 2 metres physical distancing cannot be maintained, staff must ensure they are wearing face masks/coverings in line with the extended use of facemasks guidance. See section [6.5.1](#).

Staff must adhere to physical distancing as much as possible and should;

- stagger tea breaks to reduce the number of staff in recreational areas at any one time.
- maintain 2 metre physical distancing when removing FRSMs to eat and drink.
- not care share with colleagues when commuting to and from work unless absolutely necessary. Where this is absolutely necessary, staff should sit as far apart as possible, wear a face covering or FRSM and keep windows open in the car to improve ventilation.

6.16 Resources and Tools

- [PPE poster – Low Risk Pathway](#)
- [PPE poster - Medium Risk Pathway](#)
- [PPE poster - High Risk pathway](#)
- [PPE COVID-19 Vaccinations](#) (Staff)
- [PPE for COVID-19 vaccinations \(public\)](#)

- [COVID-19 Safe Practice in acute healthcare settings poster](#)
- [COVID-19 Wearing a facemask poster \(staff\)](#)
- [Wearing a non-medical face mask or face covering](#)
- [Suggested ways of wearing a FRSM poster](#)
- [Key messages in the workplace poster](#)
- [Stop the spread: COVID-19 good practice points poster](#)
- [4 moments for hand hygiene poster](#) – residential and care home settings
- [How to wash hands – Appendix 1 - NIPCM](#)
- [How to use alcohol based hand rub – Appendix 2 - NIPCM](#)
- [PHS Primary Care COVID-19 guidance](#)
- [PHS Social Care and Residential Care settings COVID-19 guidance](#)
- [COVID-19 Outbreak Checklist](#)

6.17 Rapid Reviews

This section contains rapid reviews of the literature undertaken to support the Infection prevention and Control response to the COVID-19 pandemic.

- [Assessing the Infection Prevention and Control Measures for the Prevention and Management of COVID-19 in Healthcare Settings.](#)
- [Review of the National and International Guidance on Infection Prevention and Control Measures for Personal Protective Equipment \(PPE\) and Aerosol Generating Procedures \(AGPs\) for COVID-19.](#)
- [Eye protection in health and care settings for the prevention of COVID-19 transmission.](#)
- [Infrared Thermal Imaging in Health and Care Settings.](#)
- [SBAR: Assessing the evidence base for medical procedures which create a higher risk of respiratory infection transmission from patient to healthcare worker.](#)
- [Provision of gloves for COVID-19 in health and care settings.](#)
- [Respirators in health and care settings for the prevention of COVID-19 transmission.](#)

- [Rapid review of the literature: SARS-CoV-2 variants VOC-202012/01 \(B.1.1.7\) and 501Y.V2 \(B.1.351\) – implications for infection control within health and care settings](#)
- [Ultraviolet light technology for decontamination of health and care settings in the context of COVID-19](#)
- [Risk of SARS-CoV-2 acquisition in healthcare workers](#)

6.18 COVID-19 education resources

This section contains a number of educational resources to support the COVID-19 response in partnership with a range of stakeholders.

- [TURAS - COVID-19 vaccination programme](#)
- [Correct use of Alcohol Based Hand Rub](#)
- [Correct Hand Hygiene Technique using soap and water](#)
- [Correct order for putting on, the safe order for removal, and the disposal of PPE](#)
- [Obtaining a sample swab test in care homes](#)
- [Protecting yourself and your work environment](#)

6.19 COVID-19 Compendium

Additional IPC resources can be found <https://www.hps.scot.nhs.uk/web-resources-container/covid-19-compendium/>