



COVID-19 IPC Guidance for Ambulance Trusts (Direct Patient Care)

National Ambulance Service IPC Group

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Version 4.0

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Summary of changes in this version:

This update is to reflect changes made to the overarching COVID IPC guidance for all healthcare services, which has been fully updated as part of the remobilisation of healthcare services. The main COVID-19 IPC Guidance for all Healthcare settings which this specialist guidance for the Ambulance sector is based on can be found:

- [COVID-19: Guidance for the remobilisation of services within health and care settings](#)
- [COVID-19: National Guidance for Ambulance Services](#)

The key updates within this guidance area as follows:

- Layout and sections changed and updated to better align with overarching national guidance documents, inclusion of a contents list
- Moving from high community and hospital transmission levels to a period of low prevalence rates with isolated clusters/ outbreaks areas.
- The introduction of COVID-19 risk pathways (High, Medium & Low),
 - Simple Triage Tool, available [here](#)
 - COVID-19 Risk Pathways Flowchart, available [here](#)
 - Action cards for each pathway, available [here](#)
- Clarification of changes to patient cohorting aligned to new COVID-19 risk pathways
- Level of PPE for low risk pathway has been changed to
 - Level 2 PPE for direct patient contact, including undertaking AGPs
- No changes to PPE levels for High or medium risk pathways,
 - Level 2 PPE for direct patient contact, no AGP performed
 - Level 3 PPE when undertaking AGP
- No changes to AGP list
- No changes to decontamination requirements

Novel Coronavirus (COVID-19) Guidance for Ambulance Trusts

This guidance has been written by the Trust IPC Team in consultation with National Ambulance Service IPC Group, NHS England/ Improvement, Public Health England, Scotland, Wales & Ireland and the National Ambulance Resilience Unit.

1. Identification:

Whilst the UK remains in the midst of the COVID-19 pandemic and, as it becomes endemic; guidance for working in a new healthcare environment will need to be developed and updated based upon emerging evidence, experience and expert opinion.

The epidemiological data indicates that we are moving from a period of high community and hospital prevalence/incidence into a period of low prevalence/incidence with isolated clusters/outbreaks still being identified. This guidance will support returning services using COVID risk pathways which are based on transmission risks using the local and national data.

COVID-19 infection should be considered in all cases of respiratory infection. A travel history will form part of the risk assessment to determine the patient risk pathway, the latest list of countries is available on Gov.UK-[Coronavirus \(COVID-19\): Travel Corridors](#). Although the UK remains in a state of sustained community transmission the case definition symptom criteria are required to be considered as part of the risk assessment to determine the patient risk pathway.

This guidance is for all patient contacts during the COVID-19 pandemic, where an ambulance response is required, including both emergency and non-emergency provision.

If patients meet the below criteria they are to be classified as a possible case:

High temperature (of 37.8°C or higher)

Or

New onset continuous cough

Or

Anosmia (loss of, or change in, sense of smell or taste)

Where possible or confirmed cases are identified this information must be passed to the responding resources (DSA, RRV or PTS) prior to arrival on scene.

1.1 COVID-19 Care Pathways

These pathways are specific to the COVID-19 pandemic and are aligned to the patient risk pathways outlined in the [COVID-19 Guidance for the Remobilisation of Services within Health and Care settings available on Gov.UK](#). Implementation strategies must be underpinned by patient/ procedure risk assessment, appropriate testing regimens and epidemiological data.

Additional information on specific settings can be found in: NICE (2020) '[COVID-19 rapid guideline: arranging planned care in hospitals and diagnostic services](#)'

Screening and triaging within all health and other care facilities must be undertaken to enable early recognition of COVID-19 cases. See Appendix 1 for an example of triage questions applicable to the Ambulance Sector. Triage should be undertaken by staff who are trained and competent in the application of the clinical case definition prior to arrival at the patient, or as soon as possible on arrival, and allocated to the appropriate pathway. This should include screening for other infections/multi-drug resistant organisms, including as per national screening requirements. Infection risk and infection prevention and control precautions e.g. Standard Infection Control Precautions (SICPs) or Transmission Based Precautions (TBPs) must be communicated between staff and care areas/ organisations.

High-Risk COVID-19 Pathway Section 5.3	Medium-Risk COVID-19 Pathway Section 5.2	Low-Risk COVID-19 Pathway Section 5.1
<ul style="list-style-type: none">a) Untriaged individuals for assessment or treatment (symptoms unknown) ORb) Confirmed SARS-CoV-2 (COVID-19) positive case ORc) Symptomatic or suspected COVID-19 individuals, including those who have a history of contact with a COVID-19 case, who have been triaged/ clinically assessed and are awaiting test results ORd) Symptomatic individuals who decline testing	<p>Triaged/ clinically assessed individuals that are asymptomatic and are:</p> <ul style="list-style-type: none">a) Awaiting SARS-CoV-2 (COVID-19) test result and have no recent COVID-19 contact ORb) Where testing is not required or feasible on asymptomatic individuals and their infectious status is unknown ORc) Asymptomatic individuals who decline testing	<ul style="list-style-type: none">a) Individuals triaged/ clinically assessed prior to treatment with NO COVID-19 contacts or symptoms, who have isolated/ shielded AND Have a negative SARS-CoV-2 (COVID-19) test within 72hrs of care, <i>and for planned admissions, have self-isolated from the point of the test</i> ORb) Patients who have recovered from COVID-19 and had at least three consecutive days without fever or respiratory symptoms and a negative test result

COVID-19 Care Pathways action cards are available [here](#)

2. Infection Prevention & Control precautions

2.1 Standard Infection Prevention & Control Precautions (SICPs): all patient pathways/ settings

SICPs are the basic infection prevention and control measures necessary to reduce the risk of transmitting infectious agents from both recognised and unrecognised sources of infection and are required across ALL COVID-19 pathways.

SICPs must therefore be used by all staff, in all care settings, at all times and for all patients, whether infection is known or not, to ensure the safety of patients, staff and visitors. This section highlights the key measures for the COVID-19 pathways please refer to the practical guide* for additional information on the other elements which remain unchanged.

The elements of SICPs are:

- Patient placement and assessment for infection risk (screening/ triaging)
- Hand Hygiene
- Respiratory and cough hygiene
- Personal Protective Equipment
- Safe management of the care environment
- Safe management of care equipment
- Safe management of healthcare linen
- Safe management of blood and body fluids
- Safe disposal of waste (including sharps)
- Occupational Safety: Prevention and exposure management
- Maintaining Social/Physical distancing (new SICP due to COVID-19)

*Practice guides and literature reviews to support SICPs can be found [here](#)

2.2 Transmission Based Precautions (TBPs)

Transmission Based Precautions (TBP) are **additional** precautions/ measures (to SICPs) required when caring for patients/ individuals with a known or suspected infection such as COVID-19.

Transmission Based Precautions are based upon the route of transmission and include:

a) Contact precautions

Used to prevent and control infections that spread via direct contact with the patient or indirectly from the patient's immediate care environment (including care equipment). This is the most common route of cross-infection transmission. **COVID-19 can be spread via this route.**

b) Droplet precautions

Used to prevent and control infections spread over short distances (at least 3 feet/1metre) via droplets ($>5\mu\text{m}$) from the respiratory tract of individuals directly onto a mucosal surface or conjunctivae of another individual. Droplets penetrate the respiratory system to above the alveolar level. **COVID-19 is predominantly spread via this route and the precautionary distance has been increased to 2 metres.**

c) Airborne precautions

Used to prevent and control infection spread without necessarily having close patient contact via aerosols ($\leq 5\mu\text{m}$) from the respiratory tract of one individual directly onto a mucosal surface or conjunctivae of another individual. Aerosols penetrate the respiratory system to

the alveolar level. **COVID-19 has the potential to spread via this route when Aerosol Generating Procedures (AGPs) are undertaken.**

Transmission Characteristic

Transmission of SARS-CoV-2 implications for infection prevention precautions is contained within the [scientific briefing paper](#)

Literature reviews to support TBPs can be found [here](#)

3.0 Personal Protective Equipment

For the purpose of this document, the term 'personal protective equipment' is used to describe products that are either PPE or medical devices that are approved by the Health and Safety Executive (HSE) and the Medicines and Healthcare products Regulatory Agency (MHRA) as protective solutions in managing the COVID-19 pandemic.

This guidance is for clinical care environments and is intended for use when in direct contact with patients, or patient care areas. There is further guidance specific to the ambulance sector available in the [Working Safely during COVID-19 in Ambulance sector non-clinical areas](#), which should be followed in non-clinical areas e.g. vehicle cabs.

Local or [national uniform policies](#) should be considered when wearing PPE.

All PPE should be:

- located close to the point of care (where this does not compromise patient safety, e.g. mental health/learning disabilities).
- stored safely and in a clean, dry area to prevent contamination
- within expiry date (or had the quality assurance checks prior to releasing stock outside this date)
- single use unless specified by the manufacturer or as agreed for extended/ sessional use including surgical facemasks
- changed immediately after each patient and/ or after completing a procedure or task
- disposed into the correct waste stream depending on setting e.g. domestic waste/ offensive (non-infectious) or infectious clinical waste
- discarded if damaged or contaminated
- safely doffed (removed) to avoid self-contamination. See [here](#), [here](#) and [here](#) for guidance on donning (putting on) and doffing (removing) PPE
- decontaminated after each use following manufactures guidance if reusable PPE is used, such as non-disposable goggles/ face shields/ visors.
- Contaminated PPE, that has been used during the care of a patient must not be worn within the cab of the vehicles

Gloves must be:

- worn when exposure to blood and/ or other body fluids, non-intact skin or mucous membranes is anticipated or likely
- changed immediately after each patient and/ or after completing a procedure/ task even on the same patient
- **never** be decontaminated with Alcohol Based Hand Rub (ABHR) or soap between use
- double gloving is **NOT** required or recommended for routine clinical care of COVID-19 cases.

Aprons must be:

- worn to protect uniform or clothes when contamination is anticipated or likely
- worn when providing direct care within 2 metres of suspected/ confirmed COVID-19 cases
- changed between patients and/ or after completing a procedure or task.

Fluid repellent coveralls or full body gowns must be:

- worn when there is a risk of extensive splashing of blood and/ or body fluids
- worn when undertaking aerosol generating procedures (High/ Medium pathways)
- worn when a disposable apron provides inadequate cover for the procedure or task being performed
- changed between patients and immediately after completing a procedure or task unless sessional use is advised due to local/ national data.

Eye or face protection (including full-face visors) must:

- be worn if blood and/ or body fluid contamination to the eyes or face is anticipated or likely and always during aerosol generating procedures Regular corrective spectacles are not considered eye protection
- not be impeded by accessories such as piercings or false eyelashes
- not be touched when being worn.

Fluid resistant surgical face (FRSM TYPE IIR) masks must:

- be worn with eye protection if splashing or spraying of blood, body fluids, secretions or excretions onto the respiratory mucosa (nose and mouth) is anticipated or likely
- be worn when delivering direct care within 2 metres of a suspected/confirmed COVID-19 case
- be well-fitting and fit for purpose, fully cover the mouth and nose (manufacturers' instructions must be followed to ensure effective fit and protection)
- not touched once put on or allowed to dangle around the neck
- be replaced if damaged, visibly soiled, damp, uncomfortable or difficult to breathe through.

Respiratory protective equipment (RPE) FFP3 (filtering face piece respirator/ facemask or powered respirator hood):

Respirators are used to prevent inhalation of small airborne particles arising from Aerosol Generating Procedures (AGPs).

Respiratory protective equipment should:

- be well fitting, covering both nose and mouth
- always worn when undertaking an AGP on a COVID-19 confirmed or suspected patient (High or Medium Risk Pathways)
- not be allowed to dangle around the neck of the wearer after or between each use
- not be touched once put on
- be removed outside the patient area
- RPE can be single use or single session use (disposable) and fluid resistant
- Valved respirators are not fully fluid resistant unless they are also 'shrouded'. Valved non-shrouded FFP3 respirators should be worn with a full-face shield if blood or body fluid splashing is anticipated
- All staff who are required to wear an FFP3 respirator must be fit tested for the relevant model to ensure an adequate seal or fit (according to the manufacturers' guidance). Fit checking (according to the manufacturers' guidance) is necessary when a respirator is put on (donned) to ensure an adequate seal has been achieved.

- Where fit testing fails, suitable alternative equipment must be provided, or the healthcare worker moved to an area where FFP3 respirators are not required.
- Respirators should be compatible with other facial protection used (protective eyewear) so that this does not interfere with the seal of the respiratory protection.
- The respirator should be discarded and replaced and NOT be subject to continued use if the facial seal is compromised, it is uncomfortable, or it is difficult to breathe through.
- Reusable respirators can be utilised by individuals if they comply with HSE recommendations. Reusable respirators should be decontaminated according to the manufacturer's instructions.
- Although FFP3 masks are effective for longer periods, the general recommendation would be to wear the FFP3 face masks for up to 3 hours. However, the duration of wear is dependent on the outcome of a dynamic risk assessment conducted by the staff member taking into consideration a number of factors such as the environment, personal comfort/ tolerance and the activity or task that is being undertaken.
- Powered respirator hoods can be utilised in place of FFP3 respirators/ face masks, and do not require FIT testing. However, staff are required to be trained in their safe use and the correct tests/ checks must be carried out prior to use. Refer to local guidance for the procedures and confidence/ safety checks required for the specific units.

Literature on RPE can be found [here](#).

Head/footwear:

- Headwear is not routinely required in clinical areas (even if undertaking an AGP)
- Headwear worn for religious reasons (e.g. turban, kippot veil, headscarves) are permitted provided patient safety is not compromised. These must be washed and/ or changed between each shift or immediately if contaminated and comply with Local and [national uniform policies](#)
- Foot/ shoe coverings are not required or recommended for the care of COVID-19 cases.

NB. Personal protective equipment may restrict communication with patient groups and other ways of communicating to meet their needs should be considered e.g. clear masks if available, voice-to-text apps to display conversation.

3.1 Ambulance Service PPE levels:

The appropriate level of PPE should be worn following a dynamic risk assessment of the presenting risks.

Use of PPE as described below should not detract from the usual infection prevention and control (IPC) risk assessments that staff carry out routinely to underpin all clinical practice and decision making. Staff should also ensure the correct level of PPE is worn dependant on the patient presentation and the clinical skills that are required during patient care.

The ambulance sector PPE for COVID-19 is categorised by level:

Level 1: Standard infection control precautions

Consider if any PPE is required based on risk of contact or splashing with blood or bodily fluids.

Level 2:

- Disposable gloves
- Disposable apron
- Fluid resistant surgical mask (Type IIR) (FRSM)
- Eye protection (if risk of splashing)

Level 3:

- Disposable gloves
- Fluid repellent coveralls/ long sleeved apron/ gown
- FFP3 or powered respirator hood
- Eye protection/ Face shield

Care should be taken to ensure that PPE is donned and doffed correctly to avoid inadvertent contamination. Donning and Doffing guidance can be found in [here](#).

4.0 Aerosol generating procedures (AGP)

An Aerosol Generating Procedure (AGP) is a medical procedure that can result in the release of airborne particles (aerosols) 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.

This is the list of medical 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
 - Upper ENT airway procedures that involve respiratory suctioning
 - Manual ventilation
 - Tracheal intubation and extubation
-
- Tracheotomy or tracheostomy procedures (insertion or removal)
 - Bronchoscopy
 - Dental procedures (using high speed devices e.g. ultrasonic scalers/high speed drills)
 - Non-invasive ventilation (NIV); Bi-level Positive Airway Pressure Ventilation (BiPAP) and Continuous Positive Airway Pressure Ventilation (CPAP)
 - High Flow Nasal Oxygen (HFNO)
 - High Frequency Oscillatory Ventilation (HFOV)
 - Induction of sputum using nebulised saline
 - Upper gastro-intestinal endoscopy where open suction of the upper respiratory tract occurs
 - High speed cutting in surgery/post-mortem procedures if respiratory tract/paranasal sinuses involved

The following are **not considered** as an AGP:

- Chest compressions
- Defibrillation
- Medication administration via nebulisation e.g. nebulised salbutamol

Certain other procedures or equipment may generate an aerosol from material other than patient secretions but are not considered to represent a significant infectious risk. Procedures in this category include administration of humidified oxygen, Entonox or medication via nebulisation.

The New and Emerging Respiratory Viral Threat Assessment Group (NERVTAG) advised that during nebulisation, the aerosol derives from a non-patient source (the fluid in the nebuliser chamber) and does not carry patient-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 patients to remove nebulisers and oxygen masks. In addition, the current expert consensus from NERVTAG is that chest compressions are not considered to be procedures that pose a higher risk for respiratory infections including COVID-19.

Literature review for AGPS during COVID-19 can be found [here](#):

5.0 Clinical Application

The recommended advice for possible COVID-19 patients with mild symptoms is for them to stay at home until they are well. Refer to [stay at home advice](#) for more information.

The correct level of PPE must be worn by all staff who have direct contact with a possible or confirmed COVID-19 patient and within 2 metres of the patient.

5.1 Low-Risk COVID-19 Care Pathway

This pathway applies to:

Individuals triaged/ clinically assessed prior to treatment with NO COVID-19 contacts or symptoms, who have isolated/ shielded

AND

Have a negative SARS-CoV-2 (COVID-19) test within 72hrs of care, and for planned admissions, have self-isolated from the point of the test

OR

Patients who have recovered from COVID-19 and had at least three consecutive days without fever or respiratory symptoms and a negative test result

Clinicians should advise people who are at greater risk of getting COVID-19, or having a poorer outcome from it, that they may want to self-isolate for a longer period before a planned procedure. The length of self-isolation will depend on their individual risk factors and requires individualised care and shared decision making.

Maintaining Physical Distancing

All staff and other care workers must maintain social/ physical distancing of 2 metres where possible. Where this is not possible a surgical mask must be worn. Low-risk patients may be conveyed in the same vehicle provided they wear surgical masks and must sit at least 1 metre apart. These patients must not be cohorted with patients who are not categorised as low-risk.

Personal Protective Equipment

SICPS/PPE	Disposable Gloves	Disposable Aprons/Gown	Face Masks	Eye/face protection (visor)
Droplet/Contact Level 2 PPE	Single use	Single use	Type IIR	Risk assess for anticipated spray/splashing

Aerosol Generating Procedure (AGP) Level 2 PPE	Single use	Single use	Type IIR	Single use / Reusable
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Aerosol Generating Procedures (AGPs): procedures that create a higher risk of respiratory infection transmission

Airborne precautions are **NOT** required for AGPs on patients in the **low risk COVID-19 pathway**, providing the patient has no other infectious agent transmitted via the droplet or airborne route. There is also no requirement for ambulance clinicians to change or upgrade their PPE for the purposes of entering the ED, or the receiving unit, to conduct patient handover.

5.2 Medium-Risk COVID-19 Care Pathway

This pathway applies to:

Asymptomatic individuals awaiting SARS-CoV-2 (COVID-19) test result and have no recent COVID-19 contact

OR

Where testing is not required or feasible on asymptomatic individuals and their infectious status is unknown

OR

Asymptomatic individuals who decline testing

Maintaining physical distancing and patient placement

All staff and other care workers must maintain social/ physical distancing of 2 metres where possible. Where this is not possible, a surgical mask must be worn. Medium-risk patients requiring conveyance should be restricted to one patient per vehicle, wearing a surgical mask. If a distance of 1 metre can be maintained between patients in larger vehicles, two patients may be transported together. These patients must not be cohorted with patients who are categorised as low-risk or confirmed as COVID-19 positive.

Personal Protective Equipment

Droplet/Contact PPE	Disposable Gloves	Disposable Coverall	Face Masks	Filtered Respirator	Eye/face protection (visor)
If suspected/ confirmed COVID-19 patient Level 2 PPE	Single use	Single use	Type IIR	N/A	Single use / Reusable
Aerosol Generating Procedure (AGP) Level 3 PPE <i>Undertaking AGPs on confirmed or suspected COVID-19 patients</i>	Single use	Single use	N/A	FFP3/ Hood	Single use / Reusable

FRSM can be worn sessionally if providing care for COVID-19 cohorted patients. For example – PTS staff

5.3 High-Risk COVID-19 Care Pathway

This pathway applies to:

Untriaged individuals present for assessment or treatment (symptoms unknown*)

OR

Confirmed SARS-CoV-2 (COVID-19) positive case

OR

Symptomatic or suspected COVID-19 individuals, including those who have a history of contact with a COVID-19 case, who have been triaged / clinically assessed and are waiting

**Once assessed, if asymptomatic with no contact history, patients may move to the Medium risk pathway awaiting test result.*

Maintaining physical distancing and patient placement

All staff and other care workers must maintain social/ physical distancing of 2 metres where possible. Where this is not possible, a surgical mask must be worn. High-risk confirmed patients requiring conveyance can be conveyed together with other confirmed patients wearing a surgical mask. There is no requirement for these patients to maintain social distancing with each other. These patients must not be cohorted with patients who are categorised as low-risk or suspected COVID-19 patients.

High-risk suspected patients requiring conveyance should be restricted to one patient per vehicle, wearing a surgical mask. If a distance of 1 metre can be maintained between patients in larger vehicles, two patients may be transported together. These patients must not be cohorted with patients who are categorised as low-risk or confirmed as COVID-19 positive.

Personal Protective Equipment

Droplet/Contact PPE	Disposable Gloves	Disposable Coverall	Face Masks	Filtered Respirator	Eye/face protection (visor)
If suspected/ confirmed COVID-19 patient Level 2 PPE	Single use	Single use	Type IIR	N/A	Single use / Reusable
Aerosol Generating Procedure (AGP) Level 3 PPE <i>Undertaking AGPs on confirmed or suspected COVID-19 patients</i>	Single use	Single use	N/A	FFP3/ Hood	Single use / Reusable

5.4 Considerations for cardiac arrests

The majority of patients who get COVID-19 will have mild symptoms, and it is estimated about 4% to 5% may be critically ill.

If you have assessed the patient and they are considered to be within the low-risk pathway then level 2 PPE is adequate for the full management of the cardiac arrest, including during any aerosol generating procedures undertaken.

If a patient who has been deemed to be within the medium or high-risk pathways experiences a witnessed cardiac arrest in front of ambulance responders, commence compression only resuscitation using level 2 PPE. If there is more than one responder on-scene, those trained in level 3 PPE should move to be at least 2m from the patient and don level 3 PPE before providing advanced life support assistance. The full procedure detailed here for any cardiac arrest applies.

In the event of a patient being in cardiac arrest it will not always be possible to determine the potential COVID-19 risk. Therefore, these patients should be considered to be high-risk until further details are able to be obtained.

Commence resuscitation where this is indicated by local clinical guidance. Minimise the delay in undertaking time-critical interventions in determining the risk pathway. Regardless of the risk-pathway, it is acceptable for the first person to enter the scene wearing level 2 PPE. Where trained and equipped to use level 3 PPE, this may be used initially where it will not cause a delay in commencing defibrillation and/ or chest compressions for medium/ high-risk pathways.

Key Considerations:

- Do not delay time-critical care and interventions, whilst assessing the patient risk-pathway
- Do not place your face near the patient to assess breathing if in the medium/ high risk category
- Do not progress to airway management or ventilation if in the medium/ high risk category until you have donned level 3 PPE
- Where available, place a surgical mask or oxygen mask on the patients face
- If required and not already available on-scene, request back up from a level 3 PPE trained response if patient is in the medium/ high risk category
- If resuscitation is not commenced, or is terminated before the arrival of other resources, provide an early sit-rep to reduce the number of responders who need to enter the scene.

5.5 Care of the deceased

Those handling bodies should be aware that there is likely to be a continuing risk of infection from the body fluids and tissues of cases where COVID-19 is identified. The usual principles of standard infection control precautions (SICPs) and transmission-based precautions (TBPs) apply for bodies that are possible or confirmed COVID-19.

As a minimum, the PPE required for handling a deceased possible or confirmed COVID-19 patient is Level 2 PPE. Refer to the [guidance for care of the deceased](#).

5. Conveyance and Patient Handover

It is important to follow the local guidance specific to the Trust/ area. This may require contact with the receiving unit prior to departure or on arrive to have a discussion regarding where to take the patient as this may not be the usual area within the hospital.

If patients within the low-risk pathway, or asymptomatic patients who have not experienced COVID-19 symptoms within the previous seven days require conveyance: they may be conveyed in the same vehicle provided they wear surgical masks and must sit at least 1 metre apart. These patients must not be cohorted with patients who are not categorised as low risk.

If suspected COVID-19 patients require conveyance, should be restricted to one patient per vehicle wearing a surgical mask. If a distance of 1 metre can be maintained between patients in larger vehicles, two patients may be transported together. These patients must not be cohorted with patients who are categorised as low-risk or confirmed as COVID-19 positive.

If confirmed COVID-19 patients require conveyance, they can be conveyed with other confirmed patients wearing a surgical mask. There is no requirement for these patients to maintain social distancing with each other.

During peaks of infection where the shielding programme has been recommenced, those who are shielding and/or are clinically extremely vulnerable, should be restricted to one patient per vehicle wearing a surgical mask. If a distance of 1 metre can be maintained between patients in larger vehicles, two patients may be transported together.

There is no requirement for ambulance clinicians to change or upgrade their PPE for the purposes of entering the ED, or the receiving unit, to conduct patient handover.

6.1 Utilising the most appropriate conveying resource

Note: Suspected or confirmed COVID-19 cases must not be conveyed by rapid response vehicle.

For vehicles where there is no closed bulkhead:

- if the patient is over 2 metres away from the driver there is no requirement for the driver to wear PPE during conveyance
- the patient must, wherever possible, wear a surgical mask during transportation

The following guidance applies whenever a patient is conveyed:

1. Avoid opening cupboards and compartments unless essential, if equipment is likely to be required then remove from the cupboard prior to loading patient.
2. Air conditioning or ventilation on vehicles must be set to extract and not recirculate the air within the vehicle (where possible).
3. Essential escorts/ carers/ support workers should not be restricted from travelling with the patient where their support is necessary for the benefit of the patient e.g. disabled patients
4. Non-essential persons (such as observers, family members) are not to travel within the patient compartment with a suspected or confirmed case, unless the patient is a child who requires conveyance, in this case it is acceptable for a parent or guardian to accompany the child.

5. Family members and relatives of these patients accompanying these patients may be restricted depending on the identified risk pathway for the patient. All visitors/ patient escorts will be required to wear face covering within the Ambulance and should remain in the vehicle saloon.
 - Low risk: Standard operational restrictions on visitors/ patient escorts,
 - Medium risk: Standard operational restrictions on visitors/ patient escorts
 - High-risk: Restricted to essential patient escorts/ visitors only e.g. birthing partner, carer/ parent/ guardian

6.2 Use of aviation for transfer of COVID-19 patients

There are circumstances where it is appropriate for suspected and confirmed COVID-19 patients to be flown, for example during transfer by air ambulance. Organisations responsible for these operations should evaluate options and take measures to minimise risk of transmission from contact, droplet and airborne routes to medical staff and aircrew.

On occasions, AGPs will be necessary during the airborne transfer of suspected and confirmed COVID-19 patients (e.g. emergency airway suction). Despite measures being taken to avoid AGPs being routinely delivered on the aircraft, planning must be made for this eventuality. Including consideration of donning the appropriate level of PPE prior to take-off.

Organisations should consider whether the cockpit can be isolated from the medical cabin sufficiently to prevent contact, droplet and airborne transmission, for example using an 'air-tight' bulkhead seal and separating cabin and cockpit ventilation systems. Where this can be achieved, the aircraft may be considered in a similar way to a land ambulance with a closed bulkhead between attending medical personnel and driver. In such circumstances, the same advice in terms of PPE and subsequent disinfection should be followed.

If the cockpit and medical cabin cannot be separated, organisations must consider whether other measures to avoid transmission are feasible. This includes contact and droplet avoidance, maintaining a distance from pilot(s) to the patient of >2 metres or appropriate PPE against these modes of transmission (which may or may not be practicable). Additionally, for the avoidance of airborne transmission, fit-tested FFP3 respiratory protection would need to be donned before any AGPs are undertaken. As donning PPE quickly in flight may be impossible for pilots, they may have to wear FFP3 throughout a patient transfer flight. Trials have shown this is feasible but individual organisations may have to determine if these measures are operationally acceptable.

Some organisations may consider the use of 'isolation pods' with appropriate air filtration where cabin separation is not possible. Careful assessment must be made to the practicality of emergency management of patients in such 'pods' and whether an AGP can be delivered safely without breaking the seal of the device. If not, other precautions must be in place as above.

Organisations should also consider ACH with respect to the medical cabin to determine post-AGP procedure for their particular aircraft type.

Following the carriage of a suspected or confirmed COVID-19 patient it is recommended that both aircraft cabin and equipment are decontaminated. This should be done with disinfectants approved for use on the aircraft type and equipment concerned.

6.3 Post conveyance

All linen should be managed as per local policy for the management of infectious linen at the receiving unit.

All waste should be segregated and disposed as per local procedure following the guidance within [HTM07:01 Safe management of Healthcare waste](#). Waste generated during the care of patients confirmed or suspected as COVID-19 should be disposed of as category B clinical waste, as per local policy, at the receiving unit.

The crew are to remove PPE in the designated area identified within the receiving unit.

7. Decontamination

As coronaviruses have a lipid envelope, a wide range of disinfectants are effective. PPE and good infection prevention and control precautions are effective at minimising risk but can never eliminate it.

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 thorough environmental decontamination is vital.

Decontamination of equipment must be performed using either:

- Hospec general-purpose neutral detergent (or equivalent) solution of warm water followed by an Actichlor solution at 1,000 parts per million available chlorine (ppm.av.cl); **or**
- Clinell universal Sanitising wipes (or equivalent)

If an alternative disinfectant is used within the organisation, the Infection Prevention and Control Team (IPCT) should be consulted on this to ensure that this is effective against enveloped viruses.

Where equipment is used on-scene for assessing/ treating patients, which are not conveyed the equipment can be decontaminated using universal sanitising wipes or equivalent approved disinfectant.

7.1 Any vehicle when no AGP procedures have been performed

The vehicle will require an enhanced between patient clean, ensuring thorough decontamination of all exposed surfaces, equipment and contact areas before it is returned to normal operational duties, with the locally approved disinfectant (as above).

Appropriate PPE must be worn to decontaminate the vehicle – as a minimum, this should include apron and gloves.

Any exposed equipment (that is not within closed compartments) including stretcher on the vehicle will require decontamination with the appropriate disinfectant, as per the standard between patient clean.

All contact surfaces (cupboards, walls, ledges), working from top to bottom in a systematic process, will require decontamination. Paying special attention to all touch points.

The vehicle floor should be decontaminated with a detergent solution. This should be at a minimum of the end of every shift and more frequently where facilities exist. Where possible, this can be completed at hospitals where facilities are available.

7.2 Any vehicle when AGP procedures have been performed (such as intubation, suctioning, or full ALS cardiopulmonary resuscitation)

The vehicle will require an enhanced decontamination of all exposed surfaces, equipment and contact areas before it is returned to normal operational duties, with the locally approved disinfectant (as above).

Appropriate PPE must be worn to decontaminate the vehicle – as a minimum, this should include apron and gloves (follow COSHH guidance for protective equipment when using chlorine).

Working from top to bottom in a systematic process, all exposed surfaces and any exposed equipment (that is not within closed compartments) on the vehicle will require decontamination with the locally approved disinfectant. Paying special attention to all touch points.

Ensure that the stretcher is fully decontaminated, including the underneath and the base.

The vehicle floor should be decontaminated with a detergent solution followed by a chlorine-based solution at 1,000 parts per million (or approved equivalent), where possible this should be undertaken at the receiving department.