# NIAS Operational Guidance for incidents involving Coronavirus (COVID-19)

<table>
<thead>
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<th>Title:</th>
<th>NIAS Operational Guidance for incidents involving Coronavirus (COVID-19)</th>
<th>Issued Date: 16 April 2020</th>
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<tbody>
<tr>
<td>Author:</td>
<td>Emergency Planning Department</td>
<td>Review Date:</td>
</tr>
<tr>
<td>Approved by:</td>
<td>NIAS Strategic (Gold) Command</td>
<td>Version: 7.1 - YELLOW</td>
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## Version Control:

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<td>H. Sharpe</td>
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<td>Case definition changed to flow chart 1.5 and updated donning and doffing</td>
<td>H. Sharpe</td>
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<td>PPE requirements and disposal of linen updated to .Gov guidance</td>
<td>H. Sharpe</td>
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<tr>
<td>March</td>
<td>2.2</td>
<td>Contact HALO added to EAC action card, decontamination PPE requirements added</td>
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<td>PPE requirements updated to .Gov guidance</td>
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<td>March 15</td>
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<td>Risk assessment flow chart updated to v2.0</td>
<td>S Graham</td>
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<td></td>
<td>Minor wording changes to Appendices E, F, G &amp; H - all to v5.0 – PPE donning and doffing</td>
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<tr>
<td></td>
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<td>Update to Appendix J – Vehicle Decontamination</td>
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<tr>
<td>April 05</td>
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<td>Layout formatted and use of colour coding to assist in identifying current version</td>
<td>S Graham</td>
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<td></td>
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<td>Risk assessment flowchart updated to version 3.0</td>
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<td></td>
<td></td>
<td>Inclusion of Regional COVID Destination Protocol</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>Updated PPE Decision Making Algorithm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inclusion of HSC Regional Clinical Area Zoning &amp; PPE Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PPE Donning &amp; Doffing updated to highlight hand hygiene to extend to forearms, possibility of gown in place of Tyvek suit &amp; Powered Respirator Hood</td>
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<tr>
<td></td>
<td></td>
<td>Roles &amp; Responsibilities and Action Cards Updated</td>
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<tr>
<td>16 April 2020</td>
<td>7.1 - YELLOW</td>
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<td>S Graham</td>
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<td></td>
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<td>Inclusion of RIDDOR Reporting, Considerations for Cardiac Arrests &amp; Guidance for Care of the Deceased with Suspected or Confirmed Coronavirus</td>
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</table>
1. Aim

The aim of this operational document is to provide guidance to NIAS members of staff responding to and managing incidents involving patients with suspected and confirmed COVID-19.

This document should be read in conjunction with the latest Government guidance.

2. Objectives

To provide guidance for risk assessment at point of call (EAC/NEAC)

To provide guidance for NIAS Officers

To provide guidance for NIAS attending crews

3. Scope

This operational guidance applies to the Emergency and Non-Emergency Ambulance Control staff, NIAS Officers and responding resources.

4. Roles and Responsibilities

The operational guidance is owned by the Northern Ireland Ambulance service Trust. It is the responsibility of those listed above to familiarise themselves with the content of this document and ensure they reference the latest version.

This document is maintained and updated by the Emergency Planning Department.

For roles and responsibilities for responding to an incident of this type, refer Action Cards at the back of this document.

5. Criteria for implementation

- Call to EAC which meets the case profile
- Crew attend patient who fits the case profile
- Call from HCP indicating potential or confirmed case of COVID-19
6. Organisational learning
This operational guidance will take into account any emerging learning points that and will remain subject to further improvement and development.
The operational detail of this document should continue to be developed prior to any anticipated implementation and will be kept under annual (or post incident) review by the Incident Management Team.
Following any activation of this concept of operations secondary to a potential or confirmed pandemic, a debrief should be carried out ASAP to allow us to strengthen our response for action in the future.

7. Background
On the 23rd January, a Central Alerting System (CAS Alert) was released in relation to the coronavirus (COVID19). This alert was authorised by Professor Chris Witty, (Chief Medical Officer for England and Chief Scientific Adviser to the DHSC), Professor Sharon Peacock, (PHE National Infection Service Director) and Professor Stephen Powis (NHS England Medical Director).

Northern Ireland is part of a four nations approach to this to ensure consistency across the UK. The Alert refers to a whole systems approach to reducing the spread of infection and is a key public health measure accordingly. For details on case definition please reference the latest GOVERNMENT guidance.

COVID-19 infection should be considered in all cases of respiratory infection. A travel history is no longer a requirement for determining a possible case.
There is currently sustained transmission of COVID-19 throughout the UK as defined by the four nations Public Health experts, therefore there is an increased likelihood of any patient having coronavirus infection.
Appendix A - NIAS COVID-19 Risk Assessment Flow Chart

NIAS COVID-19 RISK ASSESSMENT - Flow Chart (v. 3.1) 16.04.20

Call received by EAC

Available information passed to responding resources

Crew don PPE

Level 2 (Droplet Protection) PPE to be worn when;
• providing direct patient care at any time, or
• when within two metres of any patient

Patient should be provided with a surgical mask to wear for the duration of the care provided, unless oxygen therapy is indicated.

Patient Assessment;

Clinical Condition & COVID-19 Case Definition

Crew reassess PPE

Level 3 (Airborne Precautions) PPE to be worn if undertaking an aerosol generating procedure on any patient at any time

Patient remains at home

or

Decision to Transport - Apply Regional COVID Destination Protocol

Patient conveyed to destination - attendant remain in vehicle with patient, driver to confirm access route, standby call for critical cases only

Ensure vehicle & equipment decontamination carried out, doff PPE, carry out hand hygiene and dispose of linen & clinical waste as per NIAS guidance

COVID-19 CASE DEFINITION – 04.04.20

1. Acute Respiratory Distress Syndrome

OR

2. High Temperature above 37.8

WITH

acute onset of one (or more) of the following:

• Persistent Cough
• Nasal Discharge or Congestion
• Sore Throat
• Wheezing
• Hoarseness
• SDB
• Sneezing

Only patients whose medical condition requires inpatient management need to be conveyed to hospital

CARDIAC ARREST CONFIRMED

Perform chest compression only CPR & DEFIB until Level 3 PPE donned to perform AGPs

Clarification of AGPs

The following are AGPs;
• Procedures related to CPR, for example advanced airway procedures such as laryngoscopy, intubation, extubation and surgical airway
• Manual Ventilation
• Suctioning
• Management of choking and foreign body airway obstruction removal

The following are not AGPs;
• Chest Compression
• Defibrillation
• Nasal cannula

PPE Levels

PPE - Level 1: Standard infection control precautions;
Consider if any PPE is required based on risk of contact or splashing with blood or bodily fluids, if yes then don gloves and an apron

PPE - Level 2 (Droplet Protection)
NO AGP required;
1. Disposable gloves
2. Disposable apron
3. Fluid repellent surgical mask
4. Eye protection (If risk of splashing)

PPE - Level 3 (Airborne Precautions) requiring AGP;
1. Disposable gloves - double glove if wearing a coverall
2. Fluid repellent coveralls
3. FFP3 or powered respirator hood
4. Eye protection

IF REQUIRED

Request support from Operational Support Unit (02890 400 721) or NIAS Tactical (Silver) Command during their hours of operation
Appendix B – Regional COVID Destination Protocol

DESTINATION PROTOCOL FOR PRESUMED COVID-19 PATIENTS

V2.1  ISSUE DATE 27.3.2020

NIAS has agreed a protocol with local hospital trusts who are implementing plans whereby patients who meet the diagnostic criteria listed and who require hospital assessment or admission should be brought directly to specified sites unless their primary complaint requires specialist care at another unit.

On arrival at the receiving department, the vehicle driver should check access arrangements with ED staff before the patient is offloaded from the ambulance. Hospital staff should work to minimise turnaround time.

We have been advised that the Downe ED will temporarily close to all patients at 2000hrs on Friday 27th March, and that the Daisy Hill ED will temporarily close to all patients at 1400hrs on Saturday 28th March. A new temporary ED is planned to open in the Ramone building* on the Craigavon site for non-COVID patients at 0800hrs on Sunday 29th March. These changes will remain in place until further notice.

Aside from patients requiring specialist care, NIAS crews should at all times take patients to the nearest emergency department as defined below.

**NOTE**: The Regional Destination COVID Protocol is subject to change at short notice.

### Primary Issue Requires Specialist Care
- e.g. STEMI requiring pPCI
- Major trauma

**YES**
- Transfer to specialist provider centre
  - If patient has any features of COVID-19
  - Then driver to liaise with receiving staff before patient leaves vehicle.
  - Standby call for critical cases only.
  - Vehicle cleaned by crew after handover.
  - Driver to complete PRF and pass to ED.

**NO**
- Patient demonstrates any of:
  - Known positive test for COVID-19
  - Acute respiratory distress of infective origin
  - Chest sepsis
  - Flu-like symptoms (pyrexia / muscle pains)
  - GP suspicion of COVID-19

**YES**
- Transfer to Mater or RBHSC ED (Belfast)
  - Usual ED @ Craigavon (South)
  - Ulster ED (South East)
  - Local ED (North)
  - Local ED (West)
- Attendant remain in vehicle with patient
- Driver to confirm access route
- Standby call for critical cases only
- Driver to complete PRF and pass to ED

**NO**
- Transfer to RVH or RBHSC ED (Belfast Trust)
  - Ramone Building @ Craigavon (Southern Trust)
  - Ulster or Lagans Valley ED (South Eastern Trust)
  - Local ED (Northern Trust)
  - Local ED (Western)

**Vehicle cleaned by crew after handover**

A STANDBY CALL IS NOT REQUIRED UNLESS PATIENT IS CRITICALLY UNWELL

*Ramone building is located directly between main hospital building and South Divisional HQ, and vehicle access is by the normal ED loop road.

20200327CovidDestProtocolV2.0

NJR/RMcL
**Appendix C – PPE Decision Making Algorithm**

NORTHERN IRELAND AMBULANCE SERVICE (NIAS) Personal Protective Equipment (PPE) decision making algorithm 02.04.20 V3

**Recommended PPE for ambulance staff, paramedics and other first responders such as Rapid Response Vehicles**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Context</th>
<th>Disposable Gloves</th>
<th>Disposable Plastic Apron</th>
<th>Disposable fluid-resistant coverall</th>
<th>Surgical mask</th>
<th>Fluid-resistant (Type III) surgical mask</th>
<th>Filtering face piece respirator</th>
<th>Eye/face protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance staff/paramedic/first responders/pre-hospital critical care/ Helicopter Emergency Medical Service</td>
<td>Performing an aerosol generating procedure e.g. intubation, suctioning on any patient</td>
<td>✓ single use</td>
<td>×</td>
<td>✓ single use coverall</td>
<td>×</td>
<td>×</td>
<td>✓ single use</td>
<td>✓ single use</td>
</tr>
<tr>
<td>Direct patient care—within 2 metres of any patient</td>
<td></td>
<td>✓ single use</td>
<td>✓ single use</td>
<td>×</td>
<td>×</td>
<td>✓ single use</td>
<td>×</td>
<td>✓ single use</td>
</tr>
<tr>
<td>Driver conveying any patient in vehicle with a bulkhead, no anticipated direct care</td>
<td></td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Driver conveying possible or confirmed cases) in vehicle without a bulkhead, no direct patient care and within 2 metres</td>
<td></td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>✓ single use</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

1. The full list of aerosol generating procedures (AGPs) is within the IPC guidance
2. In communal waiting areas and during transportation, it is recommended that suspected or confirmed cases wear a surgical face mask if this can be tolerated. The aim of this is to minimise the dispersal of respiratory secretions reduce both direct transmission risk and environmental contamination. A surgical facemask should not be worn by patients if there is potential for their clinical care to be compromised (e.g. when receiving oxygen therapy).

Please note that hand hygiene should be practiced and extended to exposed forearms, after removing any element of PPE.
Appendix D – HSC Regional Clinical Area Zoning & PPE Requirements

Care providers such as Acute Care Trusts and Private Providers such as care homes are moving to a system of geographical zoning and colour allocation of areas. The purpose of this is to provide an easy to understand guide to the type of PPE required in specific settings. You may see posters with the risk assessed colour for that area being displayed on entrance doors and bay areas within settings. Each area will be risk assessed at every shift change and a colour will be allocated to them depending on the type of patients that they are managing at that time. It is important to remember to check the colour level each time that you visit that area as circumstances can rapidly change and the risk level of the area can have to be increased/ decreased. The colours equate to a risk level and indicate which level of PPE should be worn.

- **Green Zone**: No PPE required unless providing direct patient care.
- **Amber Zone**: Wear a fluid shield mask (change sessionally).
- **Red Zone**: PPE required.
  - Long Sleeve Gown
  - Plastic Apron (for clinical duties)
  - Theatre Hat/Hood
  - Eye Protection
  - Disposable Gloves
  - FFP3 mask (changed sessionally)
  - Apron and gloves to be changed after each patient.
## Appendix E – PPE Donning – NO AGPs

<table>
<thead>
<tr>
<th>Donning of Personal Protective Equipment (PPE), COVID-19, NIAS V6 05.04.20</th>
<th>Cases involving no Aerosol Generating Procedures (NO AGPs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where possible PPE should be donned with the support of a buddy whose is to ensure that PPE is safely donned. A 360º turn should be undertaken and all PPE checked before any care activity</td>
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</table>

PPE should be donned carefully and should not be rushed. Please note that hand hygiene should be practiced and extended to exposed forearms

<table>
<thead>
<tr>
<th>Step 1: Prepare PPE</th>
<th>Pair of Gloves, Disposable Apron, Fluid Repellent Surgical Mask, Eye Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Ensure that all hair is tightly secured</td>
<td></td>
</tr>
<tr>
<td>Step 3: Carry out Hand Hygiene extended to exposed forearms</td>
<td></td>
</tr>
<tr>
<td>Step 4: Put on disposable apron</td>
<td></td>
</tr>
<tr>
<td>Step 5: Put on surgical mask, tie each strap in a bow behind the head with one strap above the ears and the other at the nape of the neck, mould nose bridge to nose</td>
<td></td>
</tr>
<tr>
<td>Step 6: Put on Eye Protection, ensure comfortable fit</td>
<td></td>
</tr>
<tr>
<td>Step 7: Apply gloves</td>
<td></td>
</tr>
<tr>
<td>Step 8: Stop and think, do not use this PPE if there are AGPs anticipated</td>
<td></td>
</tr>
</tbody>
</table>
Appendix F – PPE Doffing – NO AGPs

Doffing of Personal Protective Equipment (PPE), COVID-19 NIAS V6 05.04.20
Cases involving **no** Aerosol Generating Procedures (NO AGPs)

Where possible PPE should be doffed with the support of a buddy who should remain at a distance of 2 metres.

PPE should be removed carefully and should not be rushed. Please note that hand hygiene should be practiced and extended to exposed forearms, after removing any element of PPE.

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<tr>
<th></th>
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<tbody>
<tr>
<td><img src="image1" alt="Gloves" /></td>
<td><img src="image2" alt="Hands" /></td>
<td><img src="image3" alt="Apron" /></td>
<td><img src="image4" alt="Eye Protection" /></td>
</tr>
</tbody>
</table>

1. **Remove gloves**

2. **Decontaminate hands**

3. **Remove disposable apron**

   - Unfasten or break apron ties at the neck and let the apron fold down on itself.
   - Break ties at waist and fold apron in on itself – do not touch the outside – this will be contaminated. Discard.

4. **Remove eye protection – visor/safety glasses/goggles**

   - Reach to the back of the head with both hands to find the strap, lift strap over the top of the head, let the visor fall away from your face and place in bin.
   - Or
   - Use both hands to handle the Straps/legs by pulling away from face and discard.

<table>
<thead>
<tr>
<th>5. Decontaminate hands</th>
<th>6. Remove surgical mask</th>
<th>7. Decontaminate hands and wash with soap and water at earliest opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5" alt="Hands" /></td>
<td><img src="image6" alt="Face Mask" /></td>
<td><img src="image7" alt="Hands" /></td>
</tr>
</tbody>
</table>

5. **Decontaminate hands**

6. **Remove surgical mask**

   - Reach to the back of the head with both hands to find the bottom retaining strap, untie, reach to top strap and untie keeping hold of the strap and, lean forward, let mask fall away from face, control with strap, place in bin.

7. **Decontaminate hands and wash with soap and water at earliest opportunity**
# Appendix G – PPE Donning – With AGPs

Donning of Personal Protective Equipment (PPE), COVID-19, NIAS V6 05.04.20
Cases involving Aerosol Generating Procedures (AGPs)

Where possible PPE should be donned with the support of a buddy whose is to ensure that PPE is safely donned. A 360° turn should be undertaken and all PPE checked before any care activity.

PPE should be donned carefully and should not be rushed. Please note that hand hygiene should be practiced and extended to exposed forearms.

## Step 1: Prepare PPE
- Two Pairs of Gloves, Tyvek Suit (or Fluid Repellent Long Sleeve Gown), FFP3 Mask (or Powered Respirator Hood), Eye Protection

## Step 2: Ensure that all hair is tightly secured

## Step 3: Carry out Hand Hygiene extended to exposed forearms

## Step 4: Apply first pair of gloves

## Step 5: Don Tyvek suit (or Fluid Repellent Long Sleeve Gown), ensure that zip is fully pulled up (or if using Fluid Repellent Long Sleeve Gown fasten neck and back ties), pull cuffs of sleeves of suit/gown down to mid way down hands over first pair of gloves

*Note: the hood of the suit does not need to be applied for management of COVID-19*

## Step 6: Put on FFP3 Respirator Mask (or Powered Respirator Hood). If FFP3 - ensure that you have been fit tested to this mask, perform a fit check, only proceed if fit check is satisfactory

## Step 7: Put on Eye Protection, ensure comfortable fit (omit this step if Powered Respirator Hood used)

## Step 8: Put on second pair of gloves, ensure that suit/gown sleeves are tucked into second pair of gloves and that cuffs of gloves are pulled up as far as possible
Doffing of Personal Protective Equipment (PPE), COVID-19 NIAS V6 05.04.20

Cases involving Aerosol Generating Procedures (AGPs) with FFP3 Mask

Where possible PPE should be doffed with the support of a buddy who should remain at a distance of 2 metres.

PPE should be removed carefully and should not be rushed.
Please note that hand hygiene should be practiced and extended to exposed forearms, after removing any element of PPE.

1. Remove outer gloves
2. Remove Tyvek Suit (or fluid repellent long sleeve gown if used)
3. Remove inner gloves
4. Decontaminate hands

5. Remove eye protection – visor/safety glasses/goggles
6. Decontaminate hands
7. Remove FFP3 mask
8. Decontaminate hands and wash with soap and water at earliest opportunity

Reach to the back of the head with both hands to find the strap, lift strap over the top of the head. Let the visor fall away from your face and place in bin.

Or
Use both hands to handle the Straps/legs by pulling away from face and discard.

Reach to the back of the head with both hands to find the bottom retaining strap, bring it up to the top strap, lift straps over the top of the head let the mask fall away from your face and place in bin.
Doffing of Personal Protective Equipment (PPE), COVID-19 NIAS V6 05.04.20

Cases involving Aerosol Generating Procedures (AGPs) with Powered Respirator Hood

Where possible PPE should be doffed with the support of a buddy who should remain at a distance of 2 metres.

PPE should be removed carefully and should not be rushed.
Please note that hand hygiene should be practiced and extended to exposed forearms, after removing any element of PPE.

1. Remove outer gloves
2. Remove Powered Respirator Hood
   1. Reach to the back of the head to find the back of the hood
   2. Reach under the chin to find a tag at the bottom of the hood
   3. Move the hood in a forward and downward motion and set aside for decontamination
   4. Unbuckle the waist belt
   5. Switch off the respirator
   6. Detach the breathing tube

3. Remove Tyvek Suit (or fluid repellent long sleeve gown if used)
4. Remove inner gloves
5. Decontaminate hands and wash with soap and water at earliest opportunity
## Appendix I – Manager/Officer Suggested Contingency PPE

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyvek Suit – Small</td>
<td>1</td>
</tr>
<tr>
<td>Tyvek Suit – Medium</td>
<td>1</td>
</tr>
<tr>
<td>Tyvek Suit – Large</td>
<td>1</td>
</tr>
<tr>
<td>Tyvek Suit – X-Large</td>
<td>2</td>
</tr>
<tr>
<td>Tyvek Suit – XX-Large</td>
<td>2</td>
</tr>
<tr>
<td>FFP3 Mask (3M 8835+ or 3M 1895V+)</td>
<td>2</td>
</tr>
<tr>
<td>FFP3 Mask (3M 8833)</td>
<td>2</td>
</tr>
<tr>
<td>Face Shield (Disposable)</td>
<td>3</td>
</tr>
<tr>
<td>Alcohol Foam 50ml</td>
<td>3</td>
</tr>
<tr>
<td>Large Clinical Waste Bags</td>
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<td>Clinical Waste Tags</td>
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<tr>
<td>White Aprons (Disposable)</td>
<td>1 Packet</td>
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<tr>
<td>Nitrile Glove – Small</td>
<td>1 Box</td>
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<td>Nitrile Glove – Medium</td>
<td>1 Box</td>
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<tr>
<td>Nitrile Glove – Large</td>
<td>1 Box</td>
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<tr>
<td>Nitrile Glove – X-Large</td>
<td>1 Box</td>
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<tr>
<td>Clinell Wipes</td>
<td>1 Packet of 200</td>
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<tr>
<td>Surgical Mask</td>
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</table>
Appendix J – Decontamination

Decontamination

Adapted for NIAS from COVID-19: guidance for Ambulance Trusts issued on 11th April 2020

<table>
<thead>
<tr>
<th>If AGPs were not performed</th>
<th>If AGPs were performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where equipment is used on-scene for assessing/treating patients, which are not conveyed and AGPs were not performed, the equipment can be decontaminated using the Clinell Universal Sanitising Wipes</td>
<td>(Such as intubation, suctioning, or cardiopulmonary resuscitation) Where equipment is used on-scene for assessing/treating patients, which are not conveyed and AGPs were performed, the equipment can be decontaminated using Actichlor Plus</td>
</tr>
</tbody>
</table>

Following patient conveyance the vehicle will require an enhanced clean between patients ensuring thorough decontamination of all exposed surfaces, equipment and contact areas before it is returned to normal operational duties, with Clinell Universal Sanitising Wipes or Actichlor Plus - 1 tablet in 1 Litre of water to achieve 1,000 parts per million chlorine

- 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 Clinell Universal Sanitising Wipes or equivalent, 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
- Pay 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, more frequently where facilities exist
- Where possible, hospitals should support this practice by working with ambulance colleagues to identify access to appropriate sluice facilities and designated mop and bucket storage for ambulance use

<table>
<thead>
<tr>
<th>If AGPs were performed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Where equipment is used on-scene for assessing/treating patients, which are not conveyed and AGPs were performed, the equipment can be decontaminated using Actichlor Plus</td>
<td>Following patient conveyance the vehicle will require an enhanced decontamination of all exposed surfaces, equipment and contact areas before it is returned to normal operational duties, with Actichlor Plus - 1 tablet in 1 Litre of water to achieve 1,000 parts per million chlorine</td>
</tr>
</tbody>
</table>

- 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)
- Any exposed equipment (that is not within closed compartments) left on the vehicle will require decontamination with a Actichlor Plus
- Working from top to bottom in a systematic process, all exposed surfaces will require decontamination with Actichlor Plus
- Pay 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 Actichlor Plus this should be facilitated by the receiving department
- Where possible hospitals should support this practice by working with ambulance colleagues to identify access to appropriate sluice facilities and designated mop and bucket storage for ambulance use

Actichlor™ Plus is an effective chlorine disinfectant product for all aspects of surface and environmental disinfection. It combines a chlorine compatible detergent with NaDCC* in a single tablet format, offering excellent cleaning and disinfection performance in one easy step.

*Sodium dichloroisocyanurate is a chemical compound widely used as a cleansing agent and disinfectant.
Procedure for dealing with clinical waste/linen generated by a COVID-19 call:

All clinical waste (Including PPE) must be treated as Category B waste and disposed of as per normal NIAS procedures.

Any linen must be treated in line with NIAS infected linen procedures, i.e. placed in a water soluble bag and then a red infected linen bag.
# Roles & Responsibilities

<table>
<thead>
<tr>
<th>Group</th>
<th>Roles &amp; Responsibilities</th>
</tr>
</thead>
</table>
| NIAS Strategic (Gold) Command | Provide updates, guidance and assurance to Trust Board  
Provide strategic guidance to NIAS Tactical Command  
Nominate representatives to sit on regional working groups |
| NIAS Tactical (Silver) Command | Provide updates to NIAS Strategic (Gold) Command  
Ensure compliance with best practice and national guidelines  
To liaise with PHA and other Health Trusts and agencies |
| NIAS Operational Support Unit (OSU) | Provide updates, guidance and assurance to NIAS Strategic (Gold) Command  
Ensure compliance with best practice and national guidelines  
Provide guidance to NIAS staff  
Provide clear guidance on staff welfare issues |
| Emergency Planning | Liaise with PHA and other Health Trusts and Partner Agencies  
Ensure business continuity plans are in place  
Provide National Interagency Liaison Officer (NILO) and HART Advisor support to NIAS Tactical (Silver) Command |
| Hazardous Area Response Team (HART) | Provide HART response capability  
Provide support to Operations in relation to cases involving COVID-19  
Provide National Interagency Liaison Officer (NILO) and HART Advisor support to NIAS Tactical (Silver) Command |
| Ambulance Control | Maintain a heightened level of awareness of COVID-19 case definition  
Process calls using the AMPDS system and in line with current NIAS Guidance  
Provide responding/conveyancing resource with all available information and update as necessary  
Maintain communication links with NIAS Tactical Command |
| Officer/Manager | Maintain a heightened level of awareness of COVID-19 case definition  
Maintain communication links with NIAS Tactical Command (during hours of operation) or EAC outside of hours  
Provide relevant updates to NIAS Tactical Command (during hours of operation) or EAC outside of hours |
| Responding/Conveying Resource | Maintain a heightened level of awareness of COVID-19 case definition  
Provide clinical care, assessment and transportation as required to cases of COVID-19  
Select appropriate PPE and don and doff PPE as per NIAS guidance and training  
Deal with the clinical requirements of the patient  
Decontaminate vehicle and dispose of clinical waste and linen as per NIAS guidelines |
### ACTION CARD 1 – Ambulance Control

<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Retain a heightened level of awareness of COVID-19 case definition – see Appendix A NIAS Risk Assessment Flow Chart</td>
</tr>
<tr>
<td>2</td>
<td>Calls should be processed using the AMPDS system and in line with current NIAS Guidance (if this call is received via the buddy arrangements for Scotland, all notes to be inclusive and on completion, a call must be made to the duty supervisor of Scottish Ambulance Service)</td>
</tr>
<tr>
<td>3</td>
<td>Maintain communication links with NIAS Tactical Command (during hours of operation)</td>
</tr>
<tr>
<td>4</td>
<td>Allocate appropriate responding/conveyancing resource</td>
</tr>
<tr>
<td>5</td>
<td>Provide responding/conveyancing resource with all available information and update as necessary</td>
</tr>
<tr>
<td>6</td>
<td>When required, liaise with responding/conveying resources and facilitate communication with receiving departments in line with current guidance e.g. NIAS Destination Protocol for presumed COVID-19 patients – see Appendix B Regional COVID Destination Protocol</td>
</tr>
<tr>
<td>7</td>
<td>Allow sufficient time for crew to decontaminate vehicle and dispose of linen/clinical waste</td>
</tr>
<tr>
<td>No.</td>
<td>Action</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Ensure stock check of Officer/Manager vehicle PPE/contingency PPE completed at start of period of duty – see Appendix I Manager/Officer Suggested Contingency PPE</td>
</tr>
<tr>
<td>2</td>
<td>Maintain a heightened level of awareness of COVID-19 case definition when responding to all calls – see Appendix A NIAS COVID Risk Assessment Flow Chart</td>
</tr>
<tr>
<td>3</td>
<td>Contact NIAS Tactical Command at start of period of duty and confirm name, role, callsign and hours of period of duty</td>
</tr>
</tbody>
</table>
| 4   | Participate in Teleconferences;  
  - Ops Huddle (COVID-19 focus) at 09:30 hours daily  
  - Ops Huddle (COVID-19 focus) at 15:30 hours daily |
| 5   | Maintain communication links with NIAS Tactical Command (during hours of operation) or EAC outside of hours |
| 6   | Provide relevant updates to NIAS Tactical Command (during hours of operation) or EAC outside of hours |
| 7   | As appropriate, debrief call with responding/conveying staff and consider crew welfare issues |
| 8   | Identify any issues/learning outcomes to NIAS Tactical Command (during hours of operation) |
| 9   | If undertaking role of a responding/conveying resource follow appropriate action card – see Appendix O Action Card 3 Responding/Conveying Resource |
## ACTION CARD 3 – Responding/Conveying Resource

<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ensure stock check of vehicle PPE completed at start of period of duty</td>
</tr>
<tr>
<td>2</td>
<td>Retain a heightened level of awareness of COVID-19 case definition when responding to all calls – see Appendix A NIAS Risk Assessment Flow Chart</td>
</tr>
<tr>
<td>3</td>
<td>Ensure that the vehicle partition is closed and sealed</td>
</tr>
<tr>
<td>4</td>
<td>Relocate non-essential items in the saloon to cupboards where possible</td>
</tr>
<tr>
<td>5</td>
<td>Radio communication should be through the driver. Where it is necessary for the attendant to be in radio communication, remove the handheld NIAS radio from its cover to facilitate decontamination post call</td>
</tr>
<tr>
<td>6</td>
<td>Don appropriate PPE when indicated, as per NIAS Guidance – see Appendix C PPE Decision Making Algorithm, Appendix D – HSC Regional Clinical Area Zoning &amp; PPE Requirements, Appendix E PPE Donning NO AGPs, Appendix G PPE Donning With AGPs</td>
</tr>
<tr>
<td>7</td>
<td>As required, review level of PPE during incident (e.g. if patient subsequently requires AGPs to be performed)</td>
</tr>
<tr>
<td>8</td>
<td>When in attendance, the patient should be provided with a surgical mask to wear for the duration of the care provided, unless oxygen therapy is indicated. Explain use of PPE to patient/relatives as appropriate</td>
</tr>
<tr>
<td>9</td>
<td>Appropriate to the patient’s clinical condition, limit the equipment and time staff spend in close proximity to the patient</td>
</tr>
<tr>
<td>10</td>
<td>When transporting to vehicle; avoid touching outside of vehicle. Minimise patient contact with ambulance surfaces/equipment.</td>
</tr>
<tr>
<td>11</td>
<td>The driver of the vehicle to doff PPE and carry out hand hygiene in line with NIAS guidance prior to entering the cab of the vehicle – see Appendix F PPE Doffing NO AGPs, Appendix H PPE Doffing With AGPs</td>
</tr>
<tr>
<td>12</td>
<td>En-route to hospital, appropriately manage the clinical condition of the patient limiting the equipment and time staff spend in close proximity to the patient</td>
</tr>
<tr>
<td>13</td>
<td>Unless absolutely necessary due to the patient’s clinical condition, Aerosol Generating Procedures (AGPs) should be avoided during the care and transportation of COVID-19 patients</td>
</tr>
<tr>
<td>14</td>
<td>If transportation is required, determine the appropriate destination for the patient in accordance with current NIAS Destination Protocol for presumed COVID-19 patients – see Appendix B Regional COVID Destination Protocol</td>
</tr>
<tr>
<td>15</td>
<td>On arrival at receiving department;</td>
</tr>
<tr>
<td></td>
<td>• Attendant remain in vehicle with patient</td>
</tr>
<tr>
<td></td>
<td>• Driver to confirm access route</td>
</tr>
<tr>
<td></td>
<td>• Standby call for critical cases only</td>
</tr>
<tr>
<td></td>
<td>• Where possible, the driver should complete the PRF with information supplied by the attendant and pass to receiving department</td>
</tr>
<tr>
<td>16</td>
<td>At completion of call, ensure vehicle &amp; equipment decontamination carried out, doff PPE, carry out hand hygiene and dispose of linen &amp; clinical waste as per NIAS guidance – see Appendix F PPE Doffing NO AGPs, Appendix H PPE Doffing With AGPs, Appendix J Vehicle Decontamination, Appendix K Clinical Waste Management</td>
</tr>
<tr>
<td>17</td>
<td>Complete PRF if not already done</td>
</tr>
<tr>
<td>18</td>
<td>Re-stock PPE and clinical supplies as required and return vehicle to normal state of readiness</td>
</tr>
</tbody>
</table>
Appendix P - RIDDOR Reporting COVID-19 Incidents - Guidance for Staff

NIAS has been advised that certain COVID-19 related incidents must be reported to the Health and Safety Executive for Northern Ireland (HSENI) under the requirements of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (Northern Ireland) 1997, also known as RIDDOR.

To enable the Risk Management Team to comply with the RIDDOR Regulations, please ensure that the following incidents are reported in the normal way, i.e. via DATIX or paper / fax:

- An unintended incident at work that has led to exposure to COVID-19, for example a PPE breach whilst working with service users with suspected / confirmed COVID-19.
  - As there is currently sustained transmission of COVID-19 throughout the UK there is an increased likelihood of any patient having coronavirus infection. Therefore Level 2 (Droplet Protection) PPE to be worn when providing direct patient care at any time or when within two metres of any patient. Level 3 (Airborne Precautions) PPE to be worn if undertaking an aerosol generating procedure on any patient at any time.

- Member of staff diagnosed as having contracted COVID-19 (by a registered medical practitioner’s diagnosis) and there is reasonable evidence that it was caused by exposure at work.

NOTE: There is no requirement under the RIDDOR Regulations to report when a staff member is off work due to self-isolating with COVID-19 symptoms.

REMINDER: it is the role of the Risk Management Team to review incidents for the purposes of RIDDOR Reporting and submit RIDDOR reports. Line managers should not submit any reports directly to HSENI.

As always please do not hesitate to contact the Risk Manager (Katrina.Keating@nias.hscni.net) if you require any assistance.
Appendix Q - Considerations for Cardiac Arrests

Out-of-hospital cardiac arrest is frequently associated with a poor clinical outcome, particularly when presenting with a non-shockable rhythm. Resuscitation for cardiorespiratory arrest related to COVID-19 has a very low chance of success due to the underlying disease processes.

At the outset of any resuscitation, check the existence of any current DNAR / Advanced Directive and consider the normal criteria for ROLE.

**Whilst chest compressions and defibrillation are not considered AGPs, full resuscitation will require procedures that do involve potential for aerosol generation. Therefore the following approach to patients who require resuscitation is recommended.**

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 a patient 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, this guidance should be followed for all cardiac arrests until further notice.

**Cardiac Arrest - First person attending scene**

- In order to minimise any delay attending a time critical cardiac arrest, it is acceptable for the first person to enter the scene wearing Level 2 PPE (fluid repellent surgical mask, apron, gloves and eye protection).
  - Where trained and equipped to use Level 3 PPE this may be donned prior to arrival at scene where it is safe to do so and where it will not cause a delay
- Commence resuscitation where this is indicated by local clinical guidance. If resuscitation is not commenced, or is terminated before the arrival of other resources, provide an early SitRep to reduce the number of responders who need to enter the scene
- Do not place your face near the patient to assess breathing
- Where available, place a surgical mask or oxygen mask on the patients face
- Commence chest compressions, attach the defibrillator and defibrillate if indicated. None of these tasks are considered Aerosol Generating Procedures (AGPs)
- Do not progress to airway management or ventilation until Level 3 PPE donned to perform AGPs
- If not already available on-scene, request back up from a Level 3 PPE trained response
**Cardiac Arrest - Subsequent attendance at scene of responder(s) trained and equipped to use Level 3 PPE**

- Don Level 3 PPE
- Enter scene and determine whether the resuscitation should be continued according to local clinical guidance.
- If resuscitation is to be continued, take over patient management from any responder wearing Level 2 PPE
- All responders wearing Level 2 PPE are to leave the scene (more than 2m away from the patient) prior to the commencement of any airway management, ventilation or other AGPs. Responders may later re-enter if wearing Level 3 PPE (trained and equipped to do so)
- Level 3 PPE responders to continue the resuscitation, including airway management and ventilation

  Anyone who is not trained or does not have access to level 3 PPE
  must then withdraw from the scene

**Cardiac Arrest Conveyance**

If conveyance of a cardiac arrest patient is indicated by local clinical guidance, once AGPs are being conducted, only staff wearing Level 3 PPE must be within 2 metres of the patient.

In practice, this means that all responders in the patient compartment of the ambulance must be in Level 3 PPE.

The ambulance may be driven by someone who is not trained/equipped to use Level 3 PPE, but they must remain in the cab whilst the patient is unloaded.
16th April 2020

Cardiac Arrest PPE

On Arrival
First person can enter the scene wearing Level 2 PPE, confirm cardiac arrest & commence resuscitation
Where trained and equipped to use Level 3 PPE this may be donned prior to arrival at scene where it is safe to do so and where it will not cause a delay
Commence chest compressions, attach the defibrillator and defibrillate if indicated
Do not progress to airway management or ventilation until Level 3 PPE donned to perform AGPs

Identification
In PPE it can be difficult to recognise one another. A colleague can write your name and role on the front of your Tyvek suit

Work as a team
>2m
During AGPs
Plan & verbalise the task you are doing

Consider Creating Zones
Active Resus/AGPs
Ideally 360° Access
Kit dump & Drugs Area
‘Clean’ Clinician Area
>2M away from Hot Zone

‘Clean’ Clinician
If possible consider nominating a ‘Clean’ Clinician to assist with;
- Fetch equipment
- Help scribe (>2M from patient)
- Provide communication with EAC
- Provide support to next of Kin

This role will be skill dependent as Paramedics should take primacy of care with patient

Equipment
Consider the equipment you take into the scene. It will ALL be contaminated, so try to minimise to that which is clinically necessary. Keep pouches closed and place bags away from patient.
Hand Portable Radios can operate through PPE. Remove outer case to prevent it becoming contaminated
Vehicle keys need to be accessible should you require more equipment

Post Incident
Ensure your PPE is donned safely and in accordance with NIAS Operational Guidance
Support each other and access Peer Support if necessary

Clarification of AGPs
The following are AGPs;
- Procedures related to CPR, for example advanced airway procedures such as laryngoscopy, intubation, extubation and surgical airway
- Manual Ventilation
- Suctioning
- Management of choking and foreign body airway obstruction removal

The following are NOT AGPs;
- Chest Compression
- Defibrillation
- Nebulisation

Northern Ireland Ambulance Service
Health and Social Care Trust
Appendix R - Guidance for Care of the Deceased with Suspected or Confirmed Coronavirus

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.

No additional precautions are needed unless Aerosol Generating Procedures (AGPs) are being (or have recently been) undertaken.

For patients who die of suspected COVID-19 outside of a healthcare setting (e.g. hospital), the general guidance for Primary Care is applicable for Ambulance Responders;

- Advise others not to enter the room
- Wear PPE in line with standard infection control precautions, such as gloves, apron and fluid resistant surgical mask
- Keep exposure to a minimum