



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

Title:	NIAS Guidance for incidents involving suspected COVID-19	Issued Date: 14 March 2020
Author:	Emergency Planning Department	Review Date:
Approved by:	IMT	Version:5.0

Version Control:			
Date	Version	Comments	Author
January 2020	1.0	Document created	H. Sharpe
January 2020	2.0	Case definition changed to flow chart 1.5 and updated donning and doffing	H. Sharpe
February 2020	2.1	PPE requirements and disposal of linen updated to .Gov guidance	H. Sharpe
March	2.2	Contact HALO added to EAC action card, decontamination PPE requirements added	H. Sharpe
March 10	3.0	Case definition changed flow chart 1.6. PPE changed. Phone patient added to officer action card	H. Sharpe
March 11	4.0	Case definition changed flow chart 1.7. PPE requirements changed	H. Sharpe
March 12	4.1	Number for BHSCT modified – mobile number removed	H. Sharpe
March 14	5.0	Case definition changed flow chart 1.8 PPE requirements updated to .Gov guidance	J. McArthur

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 HART advisors and NIAS Officers

To provide guidance for 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. In recognition of this, it is important those who are assessed and fit the case definition, must be isolated and tested to confirm they are positive or negative to the virus. For details on case definition please reference the latest GOVERNMENT guidance.

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COVID 19 Operational Guidance

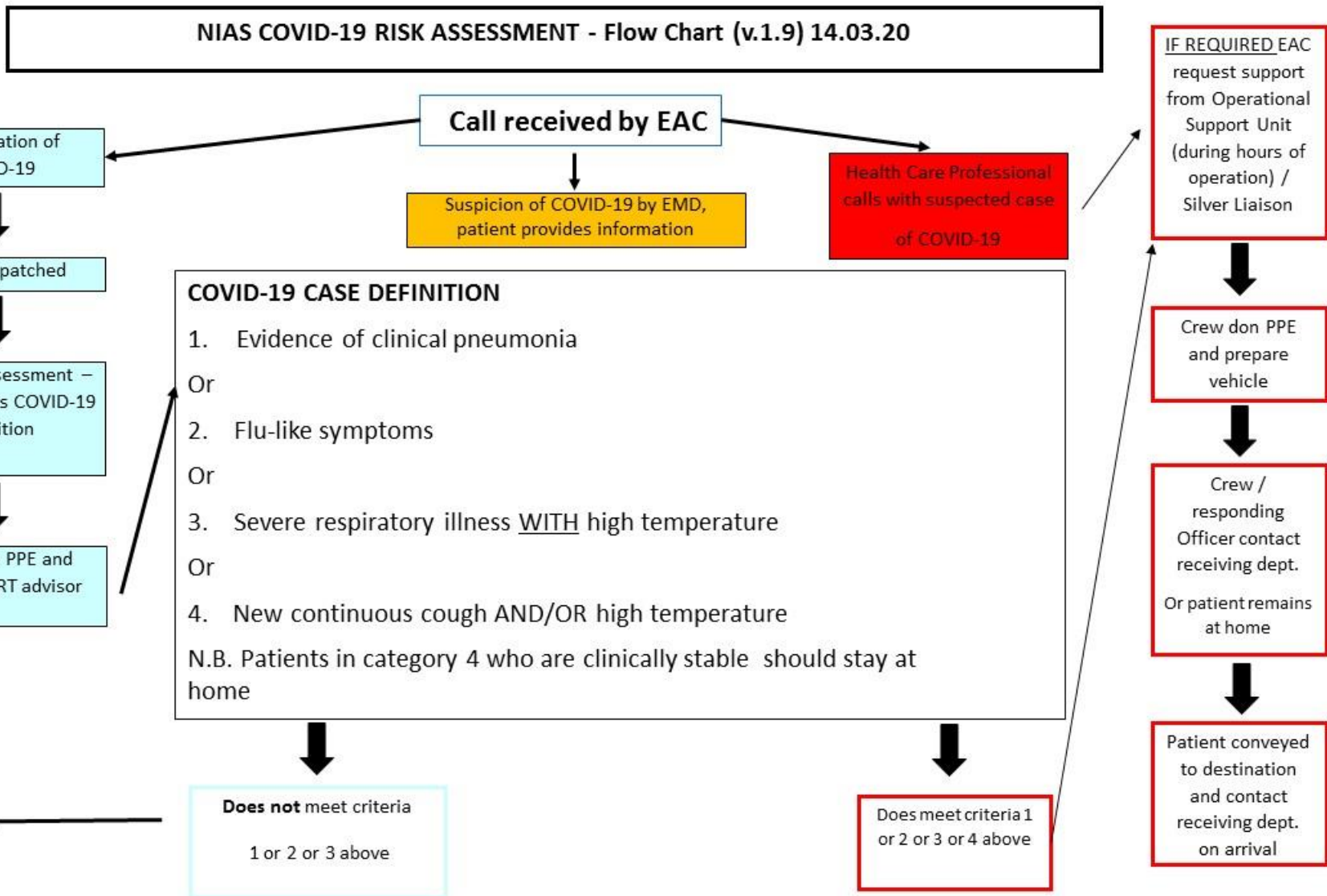
APPENDIX

A	Case definition /Risk assessment flow chart	NIAS COVID-19 RISK ASSESSMENT - Flow Chart COVID-19.pptx
B	<u>Contingency PPE</u>	Contingency PPE list for attending officer/manager's vehicle
C	<u>Single Point of contact</u>	List of HSC Single point of contact (SPOC) for COVID-19
D	PPE decision making aid	For determining PPE requirements for suspected and confirmed cases of COVID-19
E	Donning suspected and confirmed COVID-19 cases	Suspected and confirmed COVID-19 Donning instructions – NO AGPs
F	Doffing suspected and confirmed COVID-19 cases	Suspected and confirmed COVID-19 Doffing instructions – NO AGPs
G	Donning suspected and confirmed COVID-19 cases	Suspected and confirmed COVID-19 Donning instructions INVOLVING AGPs
H	Doffing suspected and confirmed COVID-19 cases	Suspected and confirmed COVID-19 Doffing instructions INVOLVING AGPs
I	<u>Linen / Clinical Waste</u>	Linen and clinical waste disposal
J	<u>Vehicle decontamination</u>	Coveralls or apron, fluid repellent surgical mask, eye protection, gloves.

ACTION

1	<u>ACTION CARD 1</u> EAC	Actions to be taken by EAC on identification of a possible COVID-19 case
2	<u>ACTION CARD 2</u> Attending officer/manager	Actions to be taken by the attending officer/manager on identification of COVID-19 cases
3	<u>ACTION CARD 3</u> Conveying crew	Actions to be taken by the conveying crew on identification of COVID-19 cases

Appendix A



B

Attending officer/manager suggested contingency PPE

Item	Quantity
Tyvek Suit – Small	1
Tyvek Suit – Medium	1
Tyvek Suit – Large	1
Tyvek Suit – X-Large	2
Tyvek Suit – XX-Large	2
FFP3 Mask (3M 8835+ / 3M 1895V+)	2
FFP3 Mask (3M 8833)	2
Face Shield (Disposable)	3
Alcohol Foam 50ml	3
Large Clinical Waste Bags	5
Clinical Waste Tags	5
White Aprons (Disposable)	1 Packet
Long cuff Nitrile Glove – Small	1 Box
Long cuff Nitrile Glove – Medium	1 Box
Long cuff Nitrile Glove – Large	1 Box
Long cuff Nitrile Glove – X-Large	1 Box
Clinell Wipes	1 Packet of 200
Surgical Mask	12

C

HSC Organisations Single Point of Contact (SPOC) for Coronavirus

In-hours			Out of Hours	
Trust	Name / Team	Contact Number	Name / Team	Contact Number
NHSCT	Infection Prevention & Control (IPC) Team	Antrim Hospital Switch Board: 02894424000	Infection Prevention & Control (IPC) Team	Antrim Hospital Switch Board: 02894424000
SEHSCT	Hospital Services Clinical Manager on duty	Ulster Hospital Switchboard: 02890484511	Hospital Services Clinical Manager on duty	Ulster Hospital Switchboard: 02890484511
BHSCT	SPOC	02896156000	SPOC	02896156000
SHSCT	Assistant Director on-call and Director on-call	Via CAH switchboard 02838334444	Assistant Director on-call and Director on-call	Via CAH switchboard 02838334444
WHSCT	Hospital Manager on-call	02871345171 and bleep manager on-call	Hospital Manager on-call	02871345171 and bleep manager on-call
NIAS	Ambulance HART Advisor	07798610618	Ambulance HART Advisor	07798610618

D



Northern Ireland Ambulance Service Decision Making Aid for Personal Protective Equipment for the management of patients with suspected or confirmed COVID-19 V2 14.03.20

To determine the level of PPE required you must know the following information:

- Will your patient require an Aerosol Generating Procedure (AGP)?

What is an Aerosol Generating Procedure (AGP)?

- Intubation, extubation and related procedures such as CPR, manual ventilation and open suctioning
- Tracheotomy/tracheostomy procedures (insertion/suction/ removal)
- Bronchoscopy
- Surgery and post mortem with high speed devices
- Some dental procedures
- Non-invasive ventilation, Bi-Level Positive Airway Pressure and Continuous Positive Pressure Airway
- High-frequency Oscillating Ventilation
- High flow** nasal oxygen, **high flow** nasal cannula
- Induction of sputum

Please note nebulisation of medication is **not** an Aerosol Generating Procedure

PPE requirement	Close contact, possible or confirmed case	AGP, possible or confirmed case
Hand Hygiene	✓	✓
Gloves	✓	✓
Aprons	✓	x
Surgical Mask	✓	x
FFP3	X	✓
Visor	Risk assessment	✓
Fluid repellent coverall	X	✓

E

Donning of Personal Protective Equipment (PPE), COVID-19, NIAS 14.03.20 V4.
Suspected and confirmed cases involving no Aerosol Generating Procedures (AGPs)

PPE should only be donned and doffed with the support of a buddy who should remain at a distance of 2 metres, the role of the buddy is to ensure that PPE is safely put on and removed, a 360° turn should be undertaken and all PPE checked before any care activity

PPE should be put on slowly and carefully, it should not be rushed.

Step 1: Prepare PPE  Pair of Gloves, Disposable Apron, Surgical Mask, Visor

Step 2: Ensure that all hair is tightly secured

Step 3: Carry out Hand Hygiene

Step 4: Apply gloves

Step 5: Put on disposable apron

Step 6: 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

Step 7: Put on Visor, ensure comfortable fit

Step 8: Stop and think, do not use this PPE if there are AGPs anticipated

F

Doffing of Personal Protective Equipment (PPE), COVID-19 NIAS 14.03.20, V4. Suspected and confirmed cases.

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

PPE should be removed slowly and carefully, it should not be rushed.

1. Remove gloves



2. Decontaminate hands



3. Remove disposable apron

Remove apron by breaking back strap then breaking neck strap, roll the apron downwards in a controlled manner touching the inside of the apron only as the front may have been contaminated, place in bin.

4. Remove visor

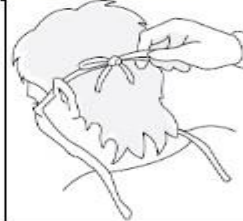


Reach to the back of the head with both hands to find the strap, lift strap over the top of the head. Let the visor fall away from your face and place in bin.

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. Wash Hands with soap and water



G

Donning of Personal Protective Equipment (PPE), COVID-19 NIAS 14.03.20 V4.
Suspected or confirmed cases involving Aerosol Generating Procedures (AGPs).

PPE should only be donned with the support of a buddy who should remain at a distance of 2 metres, the role of the buddy is to ensure that PPE is safely put on and removed, a 360° turn should be undertaken and all PPE checked before any care activity

PPE should be put on slowly and carefully, it should not be rushed.

Step 1: Prepare PPE  Two Pairs of Gloves, Tyvek Suit, FFP3 Mask, Visor

Step 2: Ensure that all hair is tightly secured

Step 3: Carry out Hand Hygiene

Step 4: Apply first pair of gloves

Step 5: Put on Tyvek suit, ensure that zip is fully pulled up, pull cuffs of sleeves of suit down to mid way down hands over first pair of gloves, the hood does not need to be applied for management of Covid-19

Step 6: Put on FFP3 Respirator Mask, 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 Visor, ensure comfortable fit


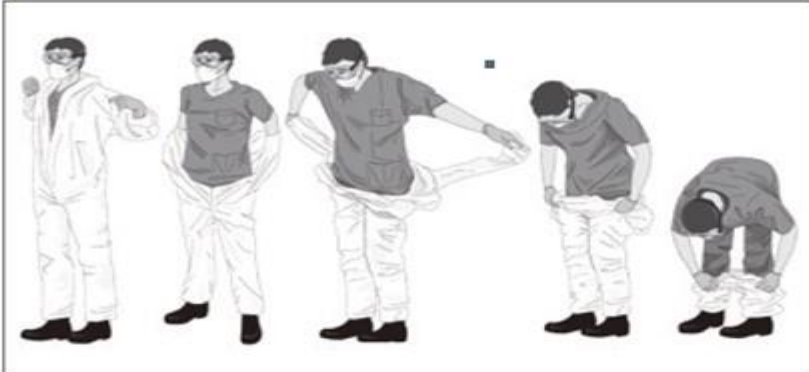
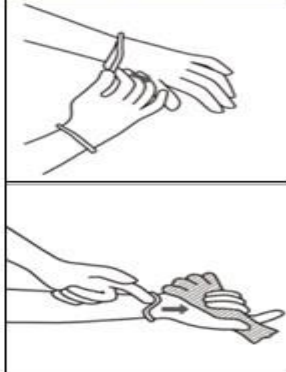


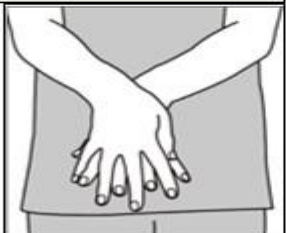


Step 8: Put on second pair of gloves, ensure that suit sleeves are tucked into second pair of gloves and that cuffs of gloves are pulled up as far as possible

H

Doffing of Personal Protective Equipment (PPE), COVID-19, NIAS, V4 14.03.20. Suspect or confirmed cases involving Aerosol Generating Procedures.

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

PPE should be removed slowly and carefully, it should not be rushed.

1. Remove outer pair of gloves	2. Remove Tyvek suit	3. Remove inner pair of gloves	4. Decontaminate hands
			
5. Remove visor	<p>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.</p>	6. Decontaminate hands	7. Remove FFP3 mask
			<p>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.</p>
			8. Wash Hands with soap and water
			

Procedure for dealing with clinical waste/linen generated by a Covid-19 call.



All clinical waste (Including PPE) must be disposed of as per normal procedures.

Any linen potentially contaminated 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.

Vehicle decontamination

J

Minimum PPE: fluid repellent surgical mask, eye protection, apron and gloves.

Any exposed equipment left on the vehicle will require decontamination with Actichlor plus at a concentration of 1,000 parts per million

Starting from the ceiling of the vehicle all exposed surfaces working from top to bottom in a systematic process will require decontamination with a Actichlor plus at a concentration of 1,000 parts per million

Pay particular attention to all touch points

The vehicle floor should be decontaminated with Actichlor plus at a concentration of 1,000 parts per million

If aerosol generating procedures were performed (e.g. intubation, suctioning, cardiopulmonary resuscitation) the vehicle will require a complete decontamination as above, including the removal and decontamination of all equipment before it is returned to normal operational duties.

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



ROLES AND RESPONSIBILITIES

Staff group	Role
SMT	<ul style="list-style-type: none"> To provide updates, guidance and assurance to Trust Board To provide strategic guidance to IMT
COVID-19 Incident Management Team	<ul style="list-style-type: none"> To provide updates, guidance and assurance to SMT To ensure compliance with best practice and national guidelines To liaise with PHA and other Health Trusts and agencies Nominate representatives to sit on regional working groups To provide guidance to NIAS staff To ensure adequate business continuity plans are in place for e.g. consumables, PPE etc. To give clear guidance on staff welfare issues
Attending Officer / Manager	<ul style="list-style-type: none"> To act as the initial point of contact for EAC in COVID-19 cases To carry out a risk assessment as per Risk Assessment Flow Chart To ensure correct processes for dealing with COVID -19 cases are followed Provide command and co-ordination at scene To act as a conduit between the conveying crew and receiving facility To retain overview of the call until its conclusion To ensure debrief of responding staff Report / provide a briefing to AD Emergency Planning
Emergency Ambulance Control	<ul style="list-style-type: none"> To remain vigilant and refer to latest Risk Assessment Flow Chart to early identify cases of possible COVID-19 To contact attending officer/manager and pass on relevant information To agree RVP with crew and attending officer/manager
HART	<ul style="list-style-type: none"> To provide support to operations in relation to confirmed cases involving COVID-19
Conveying crew	<ul style="list-style-type: none"> To provide transport for cases of suspected/confirmed COVID-19 Operate under direction of attending officer/manager To don and doff PPE as per guidance and training To deal with the clinical requirements of the patient To decontaminate vehicle and dispose of clinical waste and linen as per NIAS guidelines



ACTION CARD 1 – Emergency Control Centre

No	Action
1	EAC staff should process calls using the AMPDS system and follow the current COVID-19 Risk Assessment Flow Chart, where appropriate. (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)
2	On the identification of a patient who meets the case definition for a potential/confirmed COVID-19 patient, the call taker must inform the duty manager or control officer.
3	The Duty Manager/Control Officer will inform the designated attending officer/manager.
4	Allocate appropriate crew and confirm with the crew that they have been fit tested, trained and have the required PPE. Inform crew that patient meets the case definition for COVID-19
5	The Duty Manager/Control Officer will agree RVP with attending officer/manager which will be passed to the crew via DTR and MDT.
6	Liaise with attending officer/manager regarding transportation and any requirements at arrival at receiving facility
7	Inform HALO at receiving hospital
8	Allow sufficient time for crew to clean vehicle and dispose of linen / clinical waste.



ACTION CARD 2 – Attending Officer/Manager

No	Action				
	Upon receipt of the initial call from EAC, review the following:				
1	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; text-align: center; vertical-align: middle;">Call Information:</td> <td> <ul style="list-style-type: none"> Consider case definition relevant information Patient’s clinical symptoms Call Number Name of patient (if available) and DoB Location of patient </td> </tr> <tr> <td style="background-color: #ff0000; color: white; text-align: center; vertical-align: middle;">Confirm case definition met:</td> <td>Refer to current NIAS COVID-19 Risk Assessment Flow Chart and– Appendix A</td> </tr> </table>	Call Information:	<ul style="list-style-type: none"> Consider case definition relevant information Patient’s clinical symptoms Call Number Name of patient (if available) and DoB Location of patient 	Confirm case definition met:	Refer to current NIAS COVID-19 Risk Assessment Flow Chart and– Appendix A
Call Information:	<ul style="list-style-type: none"> Consider case definition relevant information Patient’s clinical symptoms Call Number Name of patient (if available) and DoB Location of patient 				
Confirm case definition met:	Refer to current NIAS COVID-19 Risk Assessment Flow Chart and– Appendix A				
2	Review case information with EAC to determine most appropriate clinical and conveyancing response. Make contact with patient where appropriate				
3	Ensure contingency stock of PPE in officer vehicle – Appendix B				
4	<p>(A) Where EAC have identified a potential COVID-19 patient – liaise/speak to crew to ensure appropriate PPE is available and that staff are aware of PPE requirements (surgical mask, apron, face shield, gloves).</p> <p>(B) If crew are already on-scene with a patient and have identified that the patient meets case definition of COVID-19; make contact with the crew and provide advice on actions and PPE. Rendezvous with crew at location and assume command.</p> <p>(C) Where EAC have identified a confirmed COVID-19 patient during call taking or call has originated from a HCP; liaise with EAC and agree the most suitable ambulance station/location to act as an RVP and brief the allocated crew.</p>				
5	Contact relevant HSCT single point of contact (SPOC) – Appendix C , and agree patient destination. Ensure receiving facility is aware of the patient’s ETA (provide updates to receiving facility as necessary).				
6	When responding to a confirmed case of COVID-19, rendezvous with crew at agreed location and supervise vehicle preparation and PPE donning as per Government/NIAS Guidance.				
7	For confirmed case - In your vehicle, accompany ambulance for the duration of the call. Agree radio talk group for communication with conveyancing driver. Agree emergency stop procedures.				
8	On arrival at hospital and prior to any patient movement, liaise with Trust staff and agree patient management process.				
9	If patient has been tested in ambulance and decision made to discharge home, accompany and supervise transfer – refer to point 6 & 7 above				
10	On conclusion of suspected case or testing remind attendant to remain in the back of the vehicle in PPE and vehicle returns to RVP station/nearest station. Oversee decontamination of vehicle as per Government/NIAS guidelines				
11	On conclusion of call, where confirmed case or AGPs performed, remind attendant to remain in the back of the vehicle in PPE and vehicle returns to RVP station/nearest station. Oversee decontamination of vehicle as per Government/NIAS guidelines to decontamination of all equipment				
12	Oversee doffing procedure as per Government/NIAS guidelines				
13	Keep EAC advised of crew status throughout				
14	Debrief call with conveyancing staff. Consider crew welfare issues. Identify any issues/learning outcomes to NIAS Incident Management Team (IMT) https://www.gov.uk/government/publications/wuhan-novel-coronavirus-self-isolation-for-patients-undergoing-testing/advice-sheet-home-isolation				
15	Report call, with full details (Action No 1), to epo@nias.hscni.net ,				



ACTION CARD 3 Conveying Crew

No	Action
1	Retain a heightened level of awareness of COVID-19 case definition when responding to all calls.
2	Upon receipt of the initial call from control to attend a suspected / confirmed COVID-19 case, confirm with EAC that you have the required PPE.
3	For suspected cases, don appropriate PPE (surgical mask, apron, face shield and gloves) and continue to call as per normal arrangements
4	For confirmed cases, or where you suspect that AGPs may be required, mobilise to the nominated RVP to meet up with attending officer if designated or address of call if indicated by control.
5	Relocate non-essential items in the saloon to cupboards, where possible. Bulky items can be transported in officer / manager vehicle when in attendance.
6	Ensure that the vehicle partition is closed and sealed where required.
7	Don PPE as per Government/NIAS Guidance. Ensure hair is tied back, remove all personal items; jewellery, keys etc. and secure in a safe place. Where attending officer/manager is not in attendance, follow buddy donning procedure as per Government/NIAS Guidance.
8	Agree a communication channel with officer/manager when in attendance. Radio communication should be through the driver.
9	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. Minimise patient contact where possible. Explain use of PPE to patient where appropriate.
10	When transporting patient to the vehicle; avoid touching outside of vehicle. Minimise patient contact with ambulance surfaces / equipment.
11	The driver of the vehicle is not required to wear PPE whilst driving. Where possible, the driver should complete the PRF with information supplied by the attendant via the intercom.
12	En-route to hospital, manage the clinical condition of the patient taking care to avoid unnecessary contact with the patient to minimise cross contamination. Officer will arrange destination facility and confirm ETA.
13	Unless absolutely necessary, Aerosol Generation Procedures (AGPs) should be avoided during the transportation of patients with suspected COVID-19. If you suspect that AGPs will be required during treatment/transfer, ensure appropriate PPE (FFP3 mask, face shield, Tyvek suit, gloves x 2). Rendez-vous with officer if mobilised.
14	On arrival the driver should speak to attending officer / hospital staff. Unload the patient as indicated by the attending officer / hospital staff, taking care to avoid unnecessary contact with the patient / vehicle / other persons, to minimise cross contamination.
15	Complete PRF if not already done, ensuring that it is not contaminated during patient handover.
16	Carry out vehicle decontamination and doff PPE at the nearest ambulance station or as indicated by the attending officer and as per Government / NIAS guidance. All linen must be treated as infected linen. Dispose of clinical waste as per normal procedures.
17	Participate in hot-debrief with attending officer / manager. Indicate any welfare issues.
18	RE-stock PPE supplies as required and return vehicle to normal state of readiness.