



Advisory notice

Pre-hospital resuscitation and COVID-19

1. Introduction.

In response to Covid-19 the Resuscitation Council (UK) has recently provided three statements on CPR and resuscitation.¹ Whilst providing guidance for the first aid and community settings there is no focused practice guidance for first and other responders providing intermediate and advanced life support in the pre-hospital setting.²

Covid-19 is transmissible via close personal contact, droplets and aerosol transmission, all of which are encountered when resuscitating a patient. Whilst appropriate infection control precautions should be utilised within normal practice, pre-hospital resuscitation requires special consideration. In the absence of guidance in this setting, this short advisory notice extrapolates information from appropriate sources to provide an overview of pre-hospital life support practice for patients suspected of having, or who have Covid-19.

2. The guidance extrapolated

1. In determining whether or not the patient has suffered a cardiac arrest you should not place your cheek alongside the patients face to check for the presence of breathing.³ Cardiac arrest should be presumed in the absence of all other signs of life.
2. In the absence of PPE, resuscitation should be limited to defibrillation and compression-only CPR.⁴
3. Where a single responder is operating without backup, their primary focus should be on defibrillation and compression-only defibrillation.
4. Hypoxic-led cardiac arrests should similarly be restricted to compression-only CPR in the absence of PPE.⁵
5. Pre-hospital responders should take time to don PPE prior to commencing life support.⁶
 - a. The minimum PPE suitable for providing resuscitation is defined as a FFP3 facemask, eye protection, plastic apron, and gloves.⁷
 - b. Where sufficient practitioners are available and CPR is not being provided, one responder should commence immediate defibrillation and compression-only CPR whilst others don their PPE.

¹ Resuscitation Council (2020). *Resuscitation Council UK Statements on COVID-19 (Coronavirus), CPR and Resuscitation* ([online](#))

² Resuscitation Council (2020). *Resuscitation Council UK Statement on COVID-19 in relation to CPR and resuscitation in first aid and community settings* ([online](#))

³ *Ibid*

⁴ *Ibid*

⁵ *Ibid*

⁶ Resuscitation Council (2020). *Resuscitation Council UK Statement on COVID-19 in relation to CPR and resuscitation in healthcare settings* ([online](#))

⁷ *Ibid*

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6. Airway and breathing interventions must be carried out by trained and experienced practitioners.^{8,9}
 - a. The use of a second generation supraglottic airway with a bag, valve device should be used as the first line ventilatory strategy so as to reduce the risks associated with aerosol transmission.¹⁰
7. Intubation in Covid-19 patients carries risks for the operators as well as the patients.
 - a. Where endotracheal intubation is undertaken, it should only be provided by a clinician trained and experienced in this procedure in the pre-hospital environment.¹¹
 - b. Following intubation, so as to prevent aerosol generation, ventilations should not be provided until the airway provider has confirmed that the tube's cuff is inflated and the tracheal seal has been established.
8. Where ROSC has been achieved and the patient self-ventilates and self-extubates or is extubated, there is a significantly increased risk of aerosol and droplet transmission.
 - a. This can be reduced by the immediate provision of a facemask for the patient as well as an oxygen mask or nasal cannulae.¹²
9. Throughout the resuscitative phase of the patient's care all staff should ensure the following:
 - a. That they dispose of all clinical waste immediately into the appropriate containers/receivers.
 - b. Suction catheters to be reused are placed within a glove (or similar) rather than just discarded onto a nearby surface or under the patients pillow thus reducing droplet transmission.¹³
 - c. Ensure that their actions do not widen the area of contamination.
10. Post resuscitation staff should be especially careful so as not to contaminate themselves as they move away from the patient either through inadvertent movement and actions (i.e. wiping of their brow), as they removed their PPE or by coming into contact with contaminated equipment and surfaces within the scene/transport vehicle.
 - a. It is especially important to remember that in talking to relatives, family and friends of the patient they may also be a source of infection and contamination.

British Association for Immediate Care

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⁸ *Ibid*

⁹ Faculty of Intensive Care Medicine (2020). *COVID-19 Airway Management Principles* ([online](#))

¹⁰ *Ibid*

¹¹ Faculty of Intensive Care Medicine (2020). *COVID-19 Airway Management Principles* ([online](#))

¹² *Ibid*

¹³ Resuscitation Council (2020). *Resuscitation Council UK Statement on COVID-19 in relation to CPR and resuscitation in healthcare settings* ([online](#))