

## **Guidance**

### **Decision making**

The conversations and decision-making processes around resuscitation must continue and must be individualised unless directives state otherwise. Conversations, and treatment escalation planning must be a priority. Ensure “do not attempt cardiopulmonary resuscitation” (DNACPR) decisions are well documented and communicated.

Medical and nursing care for those who are at the end of life must follow local/national policy.

### **Resuscitation of adult COVID-19 patients in acute hospital settings**

Identify as early as possible any patients with a COVID-19 like illness, who are at risk of acute deterioration or cardiac arrest. Take appropriate steps to prevent cardiac arrest and avoid unprotected CPR.

Use of physiological track-and-trigger systems (e.g. NEWS2) will enable early detection of acutely ill patients. The NEWS2 scoring system for oxygen supplementation is binary. In patients with COVID-19 infection, once hospitalised and treated with oxygen, their oxygen requirement might increase rapidly if their respiratory function deteriorates but this may not result in any additional significant increase in the NEWS2 score. Therefore, in patients with COVID 19, all staff should be aware that ANY increase in oxygen requirements should trigger an escalation call to a competent clinical decision maker. This should be accompanied by an initial increase in observations to at least hourly until a clinical review happens, if this has not already happened as a result of NEWS2.

<https://www.rcplondon.ac.uk/news/news2-and-deterioration-covid-19>

For those for whom resuscitation would be inappropriate, decisions must be made and communicated. Equipment must be made readily available to protect staff during resuscitation attempts. It is acknowledged that this may cause a brief delay to starting chest compressions, but the safety of staff is paramount.

## Resuscitation of adult COVID-19 patients in acute hospital settings

1

Recognise cardiac arrest. Look for the absence of signs of life and normal breathing. Feel for a carotid pulse if trained to do so. Do not listen or feel for breathing by placing your ear and cheek close to the patient's mouth. When calling 2222, state the risk of COVID-19.

2

If wearing Level 2 PPE (surgical mask, gloves, apron and eye protection) and a defibrillator is readily available, defibrillate shockable rhythms rapidly prior to starting chest compressions. The early restoration of circulation may prevent the need for further resuscitation measures. Local guidance must be followed about equipment entering the area.

3

Full Aerosal Generating Procedure (AGP) Personal Protective Equipment (PPE) (disposable gloves, fluid resistant gown/suit, filtering face piece respirator and eye protection) must be worn by all members of the resuscitation/emergency team before entering the room. Sets of AGP PPE must be readily available where resuscitation equipment is being locally stored. No chest compressions or airway procedures such as those detailed below should be undertaken without full AGP PPE. Once suitably clothed, start compression-only CPR and monitor the patient's cardiac arrest rhythm as soon as possible. Do not do mouth-to-mouth ventilation or use a pocket mask. If the patient is already receiving supplemental oxygen therapy using a face mask, leave the mask on the patient's face during chest compressions as this may limit aerosol spread. If not in situ, but one is readily available, put a simple oxygen mask on the patient's face. Restrict the number of staff in the room (if a single room). Allocate a gatekeeper to do this.

4

Airway interventions (e.g. supraglottic airway (SGA) insertion or tracheal intubation) must be carried out by experienced individuals. Individuals should use only the airway skills (e.g. bag-mask ventilation) for which they have received training. For many HCWs this will mean two-person bag-mask techniques with the use of an oropharyngeal airway. Tracheal intubation or SGA insertion must only be attempted by individuals who are experienced and competent in this procedure. Use a viral filter between the self-inflating bag and airway (mask, SGO or tracheal tube). Liaise with your anaesthetic department about the use of filters

5

Identify and treat any reversible causes (e.g. severe hypoxaemia) before considering stopping CPR. Discussion should be maintained throughout the resuscitation event and early planning of the post resuscitation phase undertaken. Contact senior help and gain advice from critical care partners as part of the planning.

6

Dispose of, or clean, all equipment used during CPR following the manufacturer's recommendations and local guidelines. Any work surfaces used for airway/resuscitation equipment will also need to be cleaned according to local guidelines. Specifically, ensure equipment used in airway interventions (e.g. laryngoscopes, face masks) is not left lying on the patient's pillow, but is instead placed in a tray. Do not leave the Yankauer sucker placed under the patient's pillow; instead, put the contaminated end of the Yankauer inside a disposable glove.

7

Remove PPE safely to avoid self-contamination and dispose of clinical waste bags as per local guidelines. Hand hygiene has an important role in decreasing transmission. Thoroughly wash hands with soap and water; alternatively, alcohol hand rub is also effective.

8

Post resuscitation debrief is important and should be planned.