CARDIOPULMONARY RESUSCITATION OF PEOPLE WITH COVID-19 IN HEALTHCARE SETTINGS

NATIONAL CLINICAL EVIDENCE TASKFORCE
COVID-19
VERSION 3.0
PUBLISHED 25 NOVEMBER 2022

Key points
- This guidance applies to **people** with **suspected or confirmed COVID-19**.
- The guidance for **first responders** is for healthcare workers trained in Basic Life Support, providing healthcare in settings including hospitals, primary care clinics, transport, aged care facilities and those providing in-home care.
- The guidance for **ongoing resuscitation** is for healthcare workers trained in Advanced Life Support.
- **Maximise staff safety** and **commence chest compressions as soon as possible,** except where resuscitation is likely to be futile or there is a documented DNACPR (Do Not Attempt Cardiopulmonary Resuscitation) for the patient.
- Undertake resuscitation procedures according to the **level of PPE** worn by responders.
- For CPR provided by community members outside healthcare settings, refer to **BASIC LIFE SUPPORT IN THE COMMUNITY DURING THE COVID-19 PANDEMIC** flowchart.

HEALTH SERVICE PLANNING, PPE & INDIVIDUAL PATIENT CONSIDERATIONS

Refer to **PREPAREDNESS FOR CARDIOPULMONARY RESUSCITATION DURING THE COVID-19 PANDEMIC** flowchart

First Responders

PPE RECOMMENDATIONS
PREFERRED — **Contact, droplet & airborne** — P2/N95 respirator, eye protection, gloves
Gown, visor, head & neck protection as per local guidelines

RECOMMENDED ACTIONS
- Commence resuscitation **where the patient is found** (e.g. in a waiting room, or corridor, or en route to a negative pressure room).
- Look, but do **not** listen or feel for breathing.
- If a defibrillator is readily available, do not delay **early defibrillation of shockable rhythms**.
- If not responding and not breathing normally, start **chest compressions** (continuous until ready for additional resuscitation techniques – see below)
- If healthcare providers are concerned about aerosol generation with compression-only CPR, first responders could **consider covering the patient's mouth and nose with an oxygen mask** with flow of up to 6 L/min.

Rationale
- An oxygen mask provides passive oxygen delivery while compression-only CPR is ongoing.
- Defibrillation or compression-only CPR are thought to be low-risk procedures with regard to disease transmission.
- Theoretical benefits of covering the face/mask include a potential reduction in risk of virus transmission and may increase the likelihood that a responder will start compressions.

Ongoing resuscitation

PPE RECOMMENDATIONS
REQUIRED — **Contact, droplet & airborne** — P2/N95 respirator, eye protection, gloves
Gown, visor, head & neck protection as per local guidelines

Any first responders who are not wearing contact, droplet & airborne PPE should leave the area before any additional resuscitation techniques (i.e. ventilation, airway interventions) commence.

RECOMMENDED ACTIONS
Optimise the setting for resuscitation:
- Ongoing resuscitation should occur in the highest level of isolation immediately available.
- Resuscitation should not be withheld if a single room is not immediately available.

Ensure high quality CPR according to established guidelines:
- With the use of appropriate PPE, an adequately vaccinated health care worker is at low risk of suffering significant harm due to infection during resuscitation. We therefore recommend adhering to standard resuscitation protocols.

Ongoing compressions:
- An appropriate heat and moisture exchanging (HME) viral filter must be connected to any positive pressure oxygen delivery device, as close to the patient as possible. Take care to ensure that all connections are secure.
- Mechanical CPR devices may be useful to reduce the number of health care workers present during resuscitation. They should only be used when staff are adequately trained in their use.

Rationale
- **Ventilation may generate additional respiratory particles**, regardless of whether it is delivered through a supraglottic airway, endotracheal tube or face mask.
- Negative pressure rooms do not provide additional protection for people in the room, but do minimise the risk of transmission to patients, staff and visitors in adjacent areas. However, negative pressure rooms may not be optimal settings for resuscitation due to staff unfamiliarity, and communication and equipment challenges.

Post resuscitation

RECOMMENDED ACTIONS
Following return of spontaneous circulation (ROSC):
- Connect a closed inline suction system if available.

Termination of resuscitation:
- Clinicians should give early consideration to the appropriateness of ongoing resuscitation when no reversible cause of cardiac arrest can be identified.

Sources
ACEM – Management of adult cardiac arrest in the COVID-19 era: consensus statement from the Australasian College for Emergency Medicine. MJA. 2020;213:126-133.
RCUK – Resuscitation Council UK Statement on COVID-19 in relation to CPR and resuscitation in acute hospital settings. Version 5 (1 May 2020).
ICEG – ICEG-endorsed infection control guidance.