Paediatric Advanced Life Support for COVID-19 patients

**Conversations and decisions on emergency treatment completed and documented**

**Recognised and treatment of the sick and deteriorating patient**

**Use of PEWS scores and treatment of peri-arrest situations**

**End of life care**

**Unresponsive Not breathing or only occasional gasps**

- **Call resuscitation team**
  - (1 min CPR first, if alone)
  - State COVID-19

- **CPR**
  - (5 initial breaths then 15:2)
  - Attach defibrillator/monitor
  - Minimise interruptions

- **Assess rhythm**

- **Shockable (VF/Pulseless VT)**
  - 1 Shock
  - 4 J kg\(^{-1}\)
  - Don APG PPE
  - Immediately resume CPR for 2 min
  - Minimise interruptions

- **Return of spontaneous circulation**

- **Immediate post cardiac arrest treatment**
  - Use ABCDE approach
  - Controlled oxygenation and ventilation
  - Aim for SpO\(_2\) of 94-98%·
  - Investigations
  - Treat precipitating cause
  - Targeted temperature control
  - AGP PPE if AGP more interventions

- **Non-shockable (PEA/Asystole)**
  - Don AGP PPE
  - Immediately resume CPR for 2 min
  - Minimise interruptions

**During CPR**
- Ensure high-quality CPR: rate, depth, recoil
- Plan actions before interrupting CPR
- Give oxygen
- Vascular access (intravenous, intraosseous)
- Give adrenaline every 3-5 min
- Consider advanced airway and capnography
- Continuous chest compressions when advanced airway in place
- Correct reversible causes
- Consider amiodarone after 3 and 5 shocks

**Recommended PPE**
- **Level 2 PPE**
  - Disposable gloves
  - Disposable apron
  - Fluid resistant surgical mask
  - Disposable eye protection

- **Level 3 AGP (aerosol generating procedures) PPE**
  - Disposable gloves
  - Disposable gown
  - Filtering face piece (FFP3) respirator
  - Disposable eye protection

**Reversible Causes**
- Hypoxia
- Hypovolaemia
- Hyper/hypokalaemia, metabolic
- Hypothermia
- Thrombosis (coronary or pulmonary)
- Tension pneumothorax
- Tamponade (cardiac)
- Toxic/therapeutic disturbances

**Phase 1**
- At least Level 2 PPE

**Phase 2**
- AGP PPE