Paediatric Advanced Life Support
(with COVID-19 considerations)

**COVID-19 confirmed / suspected?**

Principles for CPR management
- Minimise delays for effective CPR
- Appropriate PPE for AGPs (including ECC, BVM, SGA, endotracheal intubation)
- Anticipate & prepare for deterioration, minimise delays in PPE application

Treatment recommendations for CPR
- Minimise people in room
- PPE in accordance with local guidelines for AGPs
- Vital filter between airway circuit and face mask, SGA or ETT
- Oxygen switched off before circuit disconnected
- Most experienced airway operator, using familiar airway techniques
- Aerosol generation minimised with following airway preferences:
  1. ETT, prefixed refer to
  2. SGA (LMA 2nd gen or l-Gel)
  3. BVM, non-person technique, OPA, minimise leak

**During CPR**
- Airway adjuncts (LMA/ETT)
- Oxygen
- Waveform capnography
- IV/IO access
- Minimise interruptions to CPR
- Plan actions before interrupting compressions (e.g., charge manual defibrillator to 4 J/kg)
- Consider and correct
  - Hypoxia
  - Hypovolaemia
  - Hypo/hyperkalaemia/metabolic disorders
  - Hypothermia/hyperthermia
  - Tension pneumothorax
  - Toxins
  - Thrombosis (pulmonary/ coronary)

**Post-resuscitation care**
- Re-evaluate ABCDE
- 12 lead ECG
- Treat precipitating causes
- Re-evaluate oxygenation and ventilation
- Temperature control (cool)

*PPE = personal protective equipment
AGP = aerosol-generating procedure
ECC = external cardiac compression
BVM = bag valve mask ventilation
SGA = supraglottic airway
LMA = laryngeal mask airway
OPA = oropharyngeal airway