

## Summary for Paediatric Life Support

CPR summary for paediatric cardiac arrests	Adolescents (> 12 yr)	Child (1–12 yr)	Infant (< 1 yr, excluding newborns)
Establish unresponsiveness; call for help ('995'/code team)	Immediately (community first responders: dispatcher-assistance for CPR will be available on calling '995'. If alone and no handphone is available, perform CPR for 2 minutes before getting help)		
Open airway (optional for community first responders)	Head-tilt, chin-lift; healthcare workers only: jaw-thrust (if trauma suspected)		
Recognition of cardiac arrest	Check for breathing (no breathing, gasping/agonal breathing) Simultaneously, check for definite pulse ( $\geq 60/\text{min}$ ) only by healthcare workers (do not take > 10 s) Adult/child: carotid; infant: brachial		
Compression landmarks	Lower half of sternum		Lower half of sternum (1 finger breadth below inter-nipple line)
Compression method	Heel of 1 hand with other hand on top	Heel of 1 hand, with or without other hand on top	2-thumb encircling method (or 2-finger method for community first responders)
Compression depth (push hard, push fast, full recoil)	Approximately 1/3 chest depth (4–6 cm)	Approximately 1/3 chest depth (4–5 cm)	Approximately 1/3 depth of chest (3–4 cm)
Compression rate	100–120/min; (push hard, push fast, full recoil)		
Compression-ventilation ratio			
Community first responders	30:2 (1 or 2 rescuers)		
Healthcare providers	30:2 (1 or 2 rescuers)	30:2 (1 rescuer); 15:2 ( $\geq 2$ rescuers)	
Unable/unwilling to perform ventilations	Continuous high-quality chest compressions		
Ventilation during cardiac arrest			
Without advanced airway	2 breaths at 1 second per breath; ventilate enough for chest to rise (pause to ventilate should not take > 6 s)		
With advanced airway	1 ventilation in 5–6 s (10–12/min)	1 ventilation in 3 s (20/min)	1 ventilation in 2 s (30/min)
Rescue breathing (for trained healthcare workers)	1 breath/ventilation per 5 s (12/min)	1 breath/ventilation per 3 s (20/min)	1 breath/ventilation in 2 s (30/min)
Signs of circulation or definite pulse $\geq 60/\text{min}$ present			
AED: 2 min of CPR and shock if indicated	Standard AED pads	$\geq 8$ yrs or $\geq 25$ kg: use standard AED pads  < 8 yr or < 25 kg: use energy attenuation systems if available; if unavailable, use standard pads	Neonates: manual defibrillators; use of AED not advised > 1 mth: manual defibrillators preferred; if unavailable, use AEDs with energy attenuation systems; if these are unavailable, consider use of standard AED pads
Foreign body			
Conscious	Abdominal thrust (chest thrust if obese and adult-size or pregnant)	Abdominal thrust	5 back blows, 5 chest thrusts
Unconscious	CPR (with ventilations) and look for foreign body before breaths		

### Reference:

Ong GY, Ngiam N, Tham LP, Mok YH, Ong JS, Lee KP, Ganapathy S, Chong SL, Pek JH, Chew SY, Lim YC, Shen GQ, Kua J, Tan J, Ng KC. Singapore Paediatric Resuscitation Guidelines 2021. Singapore Med J. 2021 Aug;62(8):372-389.