

Pediatric Basic Life Support Algorithm (Infants to Puberty) for Health Care Professionals--Single Rescuer

Text in cascading boxes describes the actions that a single rescuer should perform in sequence during a pediatric cardiac arrest. Arrows guide the rescuer from one box to the next as the rescuer performs the actions. Some boxes have 2 arrows that lead outward, each to a different pathway depending on the outcome of the most recent action taken. Pathways are linked.

Box 1

Verify scene safety.

Box 2

- Check for responsiveness.
- Shout for nearby help.
- Activate the emergency response system.

Box 3

Look for no breathing or only gasping and check pulse (simultaneously).

Is pulse **definitely** felt within 10 seconds?

If there is normal breathing and a pulse is felt, proceed to [Box 3a](#).

If there is abnormal breathing but a pulse is felt, proceed to [Box 3b](#).

If there is abnormal breathing and a pulse is not felt, proceed to [Box 5](#).

Box 3a

Monitor until advanced care arrives.

Box 3b

Support ventilation

- Open the airway and reposition.
- Provide breaths, 1 breath every 2 to 3 seconds, or about 20 to 30 breaths per minute.
- Assess pulse rate after 2 minutes.
- If suspected opioid overdose, administer opioid antagonist (eg, naloxone) if available.

Box 4

Is heart rate less than 60 per minute with signs of poor perfusion despite oxygenation and ventilation?

If Yes, proceed to [Box 5](#).

If No, proceed to [Box 4a](#).

Box 4a

Continue providing breaths; check pulse every 2 minutes.

Proceed back to [Box 4](#).

Box 5

Was the sudden collapse witnessed?

If Yes, proceed to [Box 5a](#).

If No, proceed to [Box 6](#).

Box 5a

- Activate the emergency response system (if not already done).
- Retrieve the AED/defibrillator and use immediately, then proceed to [Box 6](#).

Box 6

Start CPR.

- **First rescuer:** Perform cycles of 30 compressions and 2 breaths.
- When the second rescuer arrives, perform cycles of 15 compressions and 2 breaths.

- Use the AED/defibrillator as soon as it is available.
- If suspected opioid overdose, administer opioid antagonist (eg, naloxone) if available.

Box 7

After 2 minutes, if still alone, activate the emergency response system and retrieve AED/defibrillator (if not already done).

Box 8

Check rhythm. Is it a shockable rhythm?

If Yes, it is shockable, proceed to [Box 9](#).

If No, it is nonshockable, proceed to [Box 10](#).

Box 9

- Give 1 shock. Resume CPR immediately for 2 minutes (until prompted by the AED/defibrillator to allow a rhythm check).
- Continue until pediatric advanced life support professionals take over or the infant or child starts to move.

Box 10

- Resume CPR immediately for 2 minutes (until prompted by the AED/defibrillator to allow a rhythm check).
- Continue until pediatric advanced life support professionals take over or the infant or child starts to move.