Pediatric Basic Life Support Algorithm for Healthcare Providers—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 hyperlinked.

Box 1
Verify scene safety.

Box 2
- Check for responsiveness.
- Shout for nearby help.
- Activate the emergency response system via mobile device (if appropriate).

Box 3
Look for no breathing or only gasping and check pulse (simultaneously). Is a pulse definitely felt within 10 seconds? If there is normal breathing and a pulse is felt, proceed to Box 3a. If there is no normal breathing but a pulse is felt, proceed to Box 3b. If there is no breathing or there is only gasping and no pulse is felt, proceed to Box 5.

Box 3a
Monitor until emergency responders arrive.

Box 3b
- Provide rescue breathing, 1 breath every 2 to 3 seconds, or about 20 to 30 breaths per minute.
- Assess pulse rate for no more than 10 seconds.
Proceed to Box 4.

Box 4
Is heart rate less than 60 per minute with signs of poor perfusion? If Yes, proceed to Box 4a. If No, proceed to Box 4b.

Box 4a
Start CPR.

Box 4b
- Continue rescue breathing: check pulse every 2 minutes.
- If no pulse, start CPR.

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) and retrieve the AED or defibrillator, then proceed to Box 6.

Box 6
Start CPR.
- 1 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 as soon as it is available. Proceed to **Box 7**.

**Box 7**
After about 2 minutes, if still alone, activate the emergency response system and retrieve AED (if not already done). Proceed to **Box 8**.

**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 to allow a rhythm check).
- Continue until advanced life support providers take over or the child starts to move. Return to **Box 8**, if necessary.

**Box 10**
- Resume CPR immediately for 2 minutes (until prompted by the AED to allow a rhythm check).
- Continue until advanced life support providers take over or the child starts to move. Return to **Box 8**, if necessary.