

Pediatric Basic Life Support Algorithm for Healthcare Providers—Single Rescuer for Suspected or Confirmed COVID-19

Text in cascading boxes describes the actions that a single rescuer should perform in sequence during cardiac arrest of a pediatric patient with suspected or confirmed COVID-19. Arrows guide the rescuer from one box to the next as the rescuer performs the actions. Some boxes have multiple arrows that lead outward, each to a different pathway depending on the outcome of the most recent action taken. Pathways are hyperlinked.

Box 1

There is an icon in this box that signifies the use of personal protective equipment appropriate for an aerosol-generating procedure (AGP): respirator (eg, N95), along with gown, gloves, and eye protection. Verify scene safety. Proceed to [Box 2](#).

Box 2

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

Proceed to [Box 3](#).

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

There is an icon in this box that signifies the use of a high-efficiency particulate air (HEPA) filter.

- Provide rescue breathing, 1 breath every 2 to 3 seconds, or about 20 to 30 breaths per minute **using a HEPA filter with bag-mask ventilation**. (This step includes suspected AGP, on the basis of current studies.)
- 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.

There is an icon in this box that signifies the use of a HEPA filter.

- **1 rescuer:** Perform cycles of 30 compressions and 2 breaths. (This step includes suspected AGP, on the basis of current studies.)
- 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 the 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. (This step includes suspected AGP, on the basis of current studies.) 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.