

American Red Cross Scientific Advisory Council Answers A-B-C vs. C-A-B

Scientific Advisory Council

Questions to be addressed:

Why has the American Red Cross retained the A-B-C (Airway – Breathing – Circulation) mnemonic and does the American Red Cross use the mnemonic C-A-B (Circulation – Airway – Breathing)?

Answers:

The American Red Cross Scientific Advisory Council believes that the A-B-C mnemonic is the best single mnemonic that has universal application to all rescuers in all situations.

The American Red Cross Scientific Advisory Council recommends that the American Red Cross retain and promote A-B-C as the universal approach for all rescuers in all situations. Changing the mnemonic to C-A-B is problematic for the following reasons:

- Lay, certified lay and professional rescuers care for victims with many types of emergencies
 besides cardiac arrest. Medical experts agree that the priority for assessment and intervention
 across all possible injuries and illnesses is airway, followed by breathing and then
 circulation. This is why we, along with other groups that provide broad-based resuscitation and
 first aid training (including EMS and Emergency Medicine Training Programs), teach the correct
 assessment sequence as A-B-C.
- We have strong evidence to tell us that rescuers at all levels of training may find it very hard to determine whether a patient has a pulse. This is why we have eliminated pulse checks from the emergency response sequence. We now teach that rescuers check for breathing, and, if breathing is absent, to assume the person's heart has stopped and to start CPR. In order to check for breathing, a rescuer must first open the airway. Thus, our recommended sequence for adults is open the airway, check for breathing, and, if absent, start compressions which is A-B-C.
- This approach has broad international support. It is endorsed by the International Consensus on Science and the Red Cross and Red Crescent International Guidelines for First Aid, Resuscitation and Education.
- All guidelines recommend that rescuers should immediately provide chest compressions to adults that are not breathing, unless known to have a problem related to low oxygen levels. The current American Red Cross materials support these guidelines.
- Rescuers who are either untrained or unwilling to provide rescue breaths should provide Hands-Only CPR. Those who provide full CPR could use the mnemonic C-A-B, but this approach has drawbacks. Not everyone in cardiac arrest has had an arrest due to a primary cardiac cause, and many may have very low amounts of oxygen in the blood at the time of arrest. The priority for these victims is to get oxygen to the vital organs. This is particularly important in cases such as drowning, or with infants and children.

• In infants and children, cardiac arrest most often will be due to respiratory causes. The assumptions for a C-A-B mnemonic do not apply to these victims. The correct sequence, based on science and epidemiology of pediatric cardiac arrests, should be airway and rescue breathing followed by compressions. The American Red Cross teaches this approach in both the certified lay and professional CPR courses. For the rescuer who is untrained or the unwilling to give rescue breaths, compressions alone are better than doing nothing. That is why the American Red Cross does teach Hands-Only CPR to some groups.

Based on the above evidence, the American Red Cross Scientific Advisory Council recommends teaching the A-B-C approach for assessment in all emergencies. For adult cardiac arrest and sudden pediatric arrests, the correct resuscitation sequence is compressions first, followed by breaths if the rescuer is trained and able. For hypoxic adult arrests and other pediatric arrests, the preferred sequence is airway and breathing first and then compressions.

The American Red Cross Scientific Advisory Council has recommended and American Red Cross Programs continue to teach an A-B-C approach as the key message for both public and professionals in how to correctly assess and triage interventions when approaching a victim. Any other mnemonic would be confusing, compromise care in non-cardiac arrest patients and not reflect current standard for assessment.

In addition, the American Red Cross Scientific Advisory Council has recommended and American Red Cross Programs teach rescuers to perform compressions immediately after assessment in the adult non-hypoxic and sudden pediatric cardiac arrest.

We do not recommend nor teach the mnemonic C-A-B as this sequence only applies to adult non-hypoxic cardiac arrest victims. We would not wish to alter or confuse years of teaching A-B-C, which is science-based, still valid, and still should be the approach for emergency assessment. We can easily differentiate the unique order in adult cardiac arrest resuscitation by teaching the sequence and procedures through the wording adult CPR which has always had differences from infant and child CPR.