

Cardiopulmonary Resuscitation (CPR)

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Editorial

A cardiac arrest occurs when the heart stops pumping. Cardiopulmonary Resuscitation (CPR) is a set of treatments, including chest compressions, that are used to pump the heart and get blood flowing and oxygen to the brain until the heart can be stimulated to start working again.

When portion of the heart is deprived of oxygen, a heart attack develops. The heart can be 'stunned,' causing its rhythm and capacity to pump to be disrupted. This is due to the heart's inability to pump blood across the body due to a lack of oxygen. Because the heart isn't pumping, there is no heartbeat (pulse). Acute Myocardial Infarction is the medical term for a heart attack (AMI).

When the blood supply to the brain stops, the brain runs out of oxygen, and the person becomes unconscious and stops breathing. The person will die if they are not treated.

Causes of Cardiac Arrest

A cardiac arrest can be induced by a variety of factors, and the causes vary from adult to child.

■ They may include the following for adults

Heart disease is the leading cause of reversible adult cardiac arrest (70 percent), followed by trauma and respiratory diseases.

■ They may include the following for children

SIDS is the most common cause of reversible cardiac arrest in children. It is caused by heart disease (typically congenital) trauma, and respiratory infection.

CPR is A Life-Saving First Aid Procedure

If performed promptly after the heart has stopped beating, CPR can be life-saving first aid and boost the person's chances of survival. If CPR is not performed, the person will become brain dead in three to four minutes owing to a lack of oxygen. CPR keeps the brain and other organs alive while you wait for an ambulance by circulating the blood and allowing it to give oxygen to the body. Although there is normally enough oxygen in the blood to keep the brain and other organs alive for a few minutes, it is not circulating unless CPR is performed. CPR does not guarantee that the individual will live, but it does give them a chance when they might not have had one otherwise.

■ Steps

When CPR is given as soon as possible, it is most effective. It should only be carried out when a person displays no indications of life or is:

- Un-conscious
- Unresponsive
- Not breathing or not breathing regularly (with cardiac arrest, some persons will take gasping breaths every now and then - they still require CPR at this stage). Don't wait until they're completely out of breath)

When a person is found with no signs of life, it is not necessary to look for a pulse. Finding a person's pulse can be challenging at times, and time can be lost in the process. If CPR is required, it must be administered as soon as possible.

Adults, children, and infants can all benefit from the basic CPR steps. They are based on recommendations that were modified in 2010 and are simple to understand and remember. This information should only be used as a guide and not as a replacement for taking a CPR course.

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