

Adult Basic Life Support / CPR

Introduction

Cardio-pulmonary resuscitation, or CPR for short, is a life-saving technique which combines rescue breathing and chest compressions to maintain a supply of oxygenated blood around the body, most importantly to the brain. It's important to remember that there are different CPR techniques for babies (aged up to 12 months) and children (aged between one and puberty)

Cardiopulmonary resuscitation (CPR) can be attempted on any person who's cardiac or respiratory functions cease. Failure of these functions is part of dying and thus CPR can theoretically be attempted on every individual prior to death.



Adult basic life support sequence

- check for **DANGER** for you and any bystanders and the victim
- check for response if they are **UNRESPONSIVE**
- **shout for help**
- **open airway**
- **if they are not breathing normally**
- **call 999**
- **30 compressions**
- **2 rescue breaths**
- **continue 30 compression to 2 rescue breaths until help arrives**

Facts about CPR

Sudden cardiac arrest is the leading cause of death in adults. Most arrests occur in persons with underlying heart disease.

CPR doubles a person's chance of survival from sudden cardiac arrest.

75% of all cardiac arrests happen in people's homes.

The typical victim of cardiac arrest is a man in his early 60's and a woman in her late 60's.

Cardiac arrest occurs twice as frequently in men compared to women.

There has never been a case of HIV transmitted by mouth-to-mouth CPR.

In sudden cardiac arrest the heart goes from a normal heartbeat to a quivering rhythm called ventricular fibrillation (VF). This happens in approximately 2/3rds of all cardiac arrests. VF is fatal unless an electric shock, called defibrillation, can be given. CPR does not stop VF but CPR extends the window of time in which defibrillation can be effective.

CPR provides a trickle of oxygenated blood to the brain and heart and keeps these organs alive until defibrillation can shock the heart into a normal rhythm.

In hospital defibrillation should be performed as soon as possible (within 3 minutes of arrest)

The chain of survival (adapted from Nolan et al, 2005)

Early recognition and call for help to prevent cardiac arrest → early CPR to buy time → early defibrillation to restart the heart → post resuscitation care to restore quality of life

The Recovery Position

1. The recovery position is used to keep the airway clear in an unconscious person to prevent the person inhaling their own vomit and to allow fluid to drain from the mouth.
2. Bend the furthest arm across the person's chest so that the hand rests under the face. The other arm and far leg are bent upwards to stabilize the body. Roll the person onto their side and tilt the head back to clear the airway. Check the person regularly to see if they are breathing.

Warning: Do not put the person in the recovery position if you suspect a neck or spinal injury.



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