

Heart information



CPR – cardiopulmonary resuscitation



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CPR

Cardiopulmonary resuscitation

D **R** **S** **A** **B** **C** **D**

Danger

- ▶ Check for danger.



Response

- ▶ Check for response.
- ▶ If no response...



Send for help

- ▶ Call Triple Zero (000)* and ask for an ambulance.

*If calling Triple Zero (000) does not work on your mobile phone, try 112.



Airway

- ▶ Check the airway is open and clear.



Breathing

- ▶ Check for breathing.
- ▶ If not breathing or not breathing normally...



CPR

- ▶ Start CPR.
- ▶ Give 30 chest compressions: 2 breaths.
- ▶ Continue CPR until responsiveness or normal breathing return.



Defibrillation

- ▶ Attach a defibrillator (AED*) if available and follow its voice prompts.

*Automated External Defibrillator



What is CPR?

Cardiopulmonary resuscitation (CPR) is a combination of mouth-to-mouth rescue breathing and chest compressions. It helps to keep blood and oxygen circulating to the heart and brain of a person whose heart has stopped beating. The term CPR is used in this booklet to describe all aspects of basic life support—the initial establishment and/or maintenance of airway, breathing, circulation, defibrillation and related emergency care.

Knowing how to do CPR and doing it as soon as someone's heart stops beating can save that person's life. CPR buys lifesaving time until ambulance paramedics arrive and give treatment that may restore the normal pumping action of the person's heart.

Learning cardiopulmonary resuscitation (CPR) from a trained instructor will prepare you to act quickly and confidently to save the life of a person whose heart has stopped beating—often a family member or friend.

We recommend that all adults and teenagers learn CPR.

What is cardiac arrest?

A cardiac arrest is when your heart suddenly stops beating.

A person who has a cardiac arrest collapses (falls down) and doesn't react to your voice or touch, and doesn't breathe normally. They will die if they are not treated immediately.

A person in cardiac arrest has the best chance of survival if CPR is started immediately and a 'defibrillator' is used on them as soon as possible.

A defibrillator is a machine that gives the person's heart a controlled electric shock that may make it start beating again.

In adults, cardiac arrest is often caused by a heart attack, but it can also be caused by other things, such as drowning and electric shock.

Cardiac arrest in a child or baby can be caused by many different things, including drowning, choking, sudden infant death syndrome, asthma, infections or congenital abnormalities.

Important

The information in this booklet complies with Australian Resuscitation Council guidelines. This booklet is intended to complement a CPR training course and to help you to remember the important steps of CPR.



Heart attack and cardiac arrest

In 2009, coronary heart disease (mainly heart attack) was the underlying cause of nearly 23,000 deaths in Australia. Many of the deaths from heart attack happen before the person reaches hospital—often in their own home.

A heart attack can cause serious disturbances to your heart's rhythm and may cause a cardiac arrest. For some people, cardiac arrest is the first ever symptom of coronary heart disease or a heart condition.

Cardiopulmonary resuscitation (CPR)

The steps of CPR are summarised by the initials DRSABCD:



- **D**anger
- **R**esponse
- **S**end for help
- **A**irway
- **B**reathing
- **C**PR
- **D**efibrillation.

For a small child (one to eight years old inclusive) or baby (a child under one year old), follow the steps for doing CPR on an adult but with minor changes (indicated in each section).

Important

Take special care when you do CPR on a child or baby. They can be hurt easily because their bodies are small and fragile.

Danger

Adult

Check for danger.

- ▶ Make sure that there are no hazards or risks to safety for you, the collapsed person or any other people nearby.
- ▶ Only touch the collapsed person if it is safe to do so. You may need to remove the person from danger, or remove the source of danger from the person, before doing anything else.
- ▶ Avoid bending or twisting the person's neck and back.



Child (1 to 8 years old inclusive)

- ▶ Take special care if you need to move or lift a child. Make sure that you support the child's neck and spine.

Baby (under 1 year old)

- ▶ Take special care if you need to move or lift a baby. Make sure that you support the baby's neck and spine.

R esponse

Adult

Check for response.

- ▶ Squeeze the person's shoulders firmly and say loudly, "Are you all right?"

If the person reacts to your voice or touch:

- ▶ make sure that they are comfortable
- ▶ get medical help if necessary.

If the person does not react to your voice or touch, or only gives a minor response, such as groaning, send for help.



Child (1 to 8 years old inclusive)

- ▶ As for an adult.



Baby (under 1 year old)

- ▶ As for an adult.



S end for help

Adult

Call Triple Zero (000)* for an ambulance.

If someone else is there, ask them to call Triple Zero (000)* while you do CPR.

*If calling Triple Zero (000) does not work on your mobile phone, try 112.



Child (1 to 8 years old inclusive)

▶ As for an adult.

Baby (under 1 year old)

▶ As for an adult.

Airway

Adult

Check the airway.

- ▶ Open the person's mouth and look inside.
- ▶ Clear the mouth of loose matter, such as food or broken teeth.
- ▶ If required, turn the person on to their side to let fluid drain from their mouth.
- ▶ Tilt the person's head back gently by placing one hand on their forehead and lifting their chin with your other hand.



Child (1 to 8 years old inclusive)

- ▶ As for an adult.



Baby (under 1 year old)



- ▶ Gently move the baby's head so that their face is looking up. Support their chin with the mouth open.
- ▶ If this does not open the baby's airway, gently tilt the head backwards very slightly.

B reathing

Adult

Check for breathing.

- ▶ Look for movement of the chest, listen for the sounds of breathing, and feel for air escaping from the person's mouth and nose.

If the person is breathing normally:

- ▶ roll them onto their side
- ▶ make sure that their head is tilted back
- ▶ continue to check for response and breathing
- ▶ stay with them until ambulance paramedics arrive.

If the person is not responding, not breathing or making only occasional gasps make sure they are lying flat on their back on a firm surface and start CPR.



Child (1 to 8 years old inclusive)

- ▶ As for an adult.



Baby (under 1 year old)

- ▶ As for an adult.



Important

If you can't perform rescue breathing on an adult, child or baby, just do chest compressions. Compress the chest continuously at a rate of about 2 compressions each second.

CPR

Adult

Start compressions.

- ▶ Make sure the person is lying flat on their back.
- ▶ Place the heel of your stronger hand on the lower half of their breastbone.
- ▶ Place your other hand securely on top of your stronger hand.
- ▶ Press down firmly and smoothly, compressing to one-third of the depth of the chest. Give 30 compressions at a rate of about 2 compressions each second.
- ▶ Try not to interrupt giving chest compressions.

Start rescue breathing.

- ▶ Make sure that their head is tilted back and their chin is lifted.
- ▶ Give 2 rescue breaths, taking about one second to complete each breath.

To give someone a rescue breath:

- ▶ cover their open mouth with your mouth
- ▶ seal their nose with your cheek or pinch their nostrils with your finger and thumb
- ▶ blow until their chest rises.

Continue CPR.

- ▶ Repeat the cycle of 30 chest compressions and 2 rescue breaths.
- ▶ Keep going until the person starts responding or breathing normally, you are not able to continue, or ambulance paramedics arrive.

If a second person is present, they should:

- ▶ call Triple Zero (000)* for an ambulance if no one has done this
- ▶ attach a defibrillator if there is one available
- ▶ help you to give the person CPR.

*If calling Triple Zero (000) does not work on your mobile phone, try 112.



Child (1 to 8 years old inclusive)

- ▶ Use the 'heel' of one of your hands, or use two hands as for adults.



Baby (under 1 year old)

- ▶ Use the pads of two of your fingers to compress the baby's chest.



Important

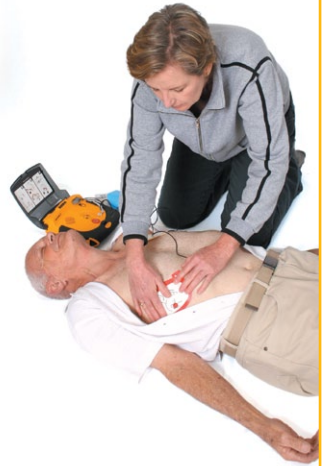
If the person starts responding or breathing normally when you are giving them CPR, roll them on to their side and stay with them until ambulance paramedics arrive.

Defibrillation

Adult

Attach an AED (automated external defibrillator) if one is available and follow its voice prompts.

- ▶ Keep doing CPR while the AED is being attached.
- ▶ Stand clear and don't touch the patient when the AED shock is being given. Touching the collapsed person while the AED shock is being given stops it from working properly and puts your safety at risk.



Child (1 to 8 years old inclusive)

If specialised AED equipment for children is not available, a standard adult AED may be used. When attaching the pads, ensure the pads do not touch each other on the child's chest.

Common questions about CPR

What if the person has dentures?

Remove loose or broken dentures. Leave firmly-fitting dentures in place because they will make it easier to seal the mouth if you need to give the person rescue breathing.

What should I do if the person vomits?

Roll the person on to their side to let the fluid drain from their mouth. Wipe the vomit from in and around the mouth using your fingers or a piece of clothing. Then return the person on to their back and continue CPR.

What if I hear the person's ribs 'crack' when I'm doing CPR?

Check your hand position on the person's chest. If necessary, correct your hand position, along with the depth that you are compressing. Continue CPR.

What if the person's chest doesn't rise and fall during rescue breathing?

Check that you are sealing the person's nose and mouth. You may need to adjust their head tilt slightly.

How do I know if CPR is working?

If you see the person's chest rise and fall during rescue breathing, you know the 'breathing' is working. If you are not sure that your chest compressions are working, check your hand position on the person's chest. If necessary, correct your hand position, along with depth and rate that you are compressing. Continue CPR.

How can someone help me do CPR?

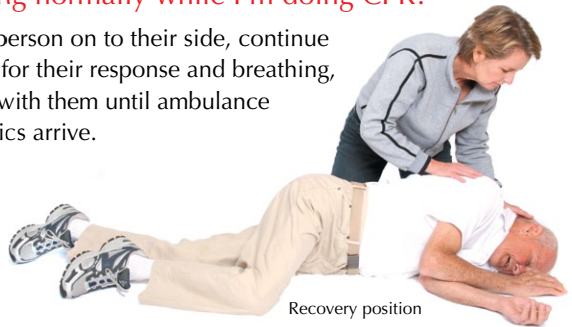
If someone is helping you give CPR, change roles about every two minutes so you don't get too tired. The changeover should happen as quickly as possible so that the chest compressions aren't interrupted.

When should I stop CPR?

Continue CPR until the person starts responding or breathing normally, or until you are not able to continue, or ambulance paramedics arrive.

What should I do if the person starts responding or breathing normally while I'm doing CPR?

Roll the person on to their side, continue to check for their response and breathing, and stay with them until ambulance paramedics arrive.



Can I get AIDS, hepatitis or other diseases from doing CPR?

Many cardiac arrests occur in the home, so the person on whom you are most likely to do CPR, and whose life you may save, will probably be a family member or friend.

If you are concerned about or if you know the person has a serious infectious disease, face masks and shields can be placed over the person's mouth and nose to act as a barrier device. Surfaces of the body exposed to blood, saliva, urine or faeces during CPR should be washed with soap and water as soon as possible. Alternatively, just perform the chest compressions only.

What is an AED?

AED is an abbreviation for 'automatic external defibrillator' or 'automated external defibrillator'. It is a piece of lifesaving equipment that gives the heart a controlled electric shock that may make it start beating normally again. AEDs are sometimes available in places where large numbers of people congregate, including some commercial aircraft, airports and football grounds. AEDs are designed to be used by the general public on a person in cardiac arrest.

CPR

Cardiopulmonary resuscitation

D **R** **S** **A** **B** **C** **D**

Danger

- ▶ Check for danger.



Response

- ▶ Check for response.
- ▶ If no response...



Send for help

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*If calling Triple Zero (000) does not work on your mobile phone, try 112.



Airway

- ▶ Check the airway is open and clear.



Breathing

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- ▶ If not breathing or not breathing normally...



CPR

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Defibrillation

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*Automated External Defibrillator





For heart health information
1300 36 27 87
www.heartfoundation.org.au

Key points to remember about CPR

A person in cardiac arrest has the best chance of survival if CPR is started immediately and a defibrillator is used on them as soon as possible.

Many cardiac arrests happen at home, so the person on whom you are most likely to do CPR, and whose life you may save, will probably be a family member or friend.

The Heart Foundation recommends that all adults and teenagers learn CPR.

If you can't perform rescue breathing on an adult, child or baby, just do chest compressions. Compress the chest continuously at a rate of about two compressions each second.

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