



CETS

**Cochrane Emergency Training
Services**

Automated External Defibrillator AED Workshop



What is CPR?

CPR (Cardiopulmonary Resuscitation) is an emergency procedure that can restore blood flow to someone suffering cardiac arrest, keeping the victim alive until advanced medical care arrives.

What is an AED?

An Automated External Defibrillator (AED) is a device that can check heart rhythms and deliver an electrical shock to restore its natural rhythms when needed.

How can CPR and an AED help?

When the heart stops beating in cardiac arrest, it no longer pumps blood to the body. The brain and organs can be seriously damaged without oxygen and nutrients from blood and the person can die within minutes if not treated immediately. CPR can help maintain blood flow and ventilation in a victim of cardiac arrest for a short period.

Arrhythmias (abnormal heart rhythms) such as ventricular fibrillation cause most cardiac arrests. Using an AED can restore the heart's normal rhythm in the event of cardiac arrest.

What can you do?

Most cardiac arrests occur in homes and public places, and many are witnessed by a family member, co-worker or friend. The survival rate of cardiac arrest outside a hospital is very low. Performing CPR and using an AED before Emergency Medical Services arrive can increase the chance of survival by up to 75%. AEDs are safe and easy to use. The Foundation urges anyone in close contact with those at high-risk of cardiac arrest to become trained in the use of AEDs.



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Canadian Heart and Stroke Foundation

Here are the steps:

Yell for help

Call 9-1-1 and get an AED (or if tell someone to)

Check breathing

If the person isn't breathing or is only gasping, perform CPR.

Push hard and push fast

Use an AED as soon as it arrives by turning it on and following the prompts.

Keep pushing until the person starts to breathe or move or someone with more advanced training takes over.

CETS AED Tips:

- An AED will only shock if it detects a “shockable” cardiac rhythm, this means that if it detects a normal rhythm or no rhythm at all it will NOT shock
- If AED says “Shock Not Advised” continue with CPR until unless patient is conscious
- Child/Infant pads are placed on the chest and back of the patient. It is very important that the pads are not touching.
- You CAN use an AED on a pregnant patient
- You CAN use an AED on an infants and children
- An AED will analyze the patients heart rhythm every 2 minutes. Do not touch the patient while the heart rhythm is being analyzed.
- Once Pads are applied DO NOT remove them even if patient regains consciousness. You may need to re-use them if patient goes into cardiac arrest again.
- DO NOT place AED Pads over any medication patches (nitroglycerin, nicotine, etc). Remove all medication patches prior to applying pads.
- AED's can detect if the adhesive pad is not sticking and will instruct you to re-apply pads.
- AED's are safe to use on individuals laying on snow, ice or small puddles
- Remember to remove hair or medical patches before applying pads

- AED's are safe to use on pregnant women
- Avoid placing and AED pad directly over an implanted pace maker
- Adult pads are safe to use on children/infants if no Child Pads are available
- Do not use Child Pads on an adult

Resources:

<https://resuscitation.heartandstroke.ca/programs/aed/manufacturers>

<http://www.jems.com/articles/print/volume-41/issue-11/departments-columns/street-science/are-aed-shocks-safe-during-hands-on-compressions.html?c=1>