

# Automated External Defibrillator (AED)

## What is an AED?

An AED is a portable electronic device that automatically diagnoses potentially life threatening abnormal heart rhythms and is able to treat them through defibrillation. Defibrillation helps to stop the abnormal heart rhythm to allow the heart to reestablish an effective rhythm. With simple audio and visual commands, AEDs are designed to be simple to use for the layperson.

## How to use an AED?

**STEP 1** – If possible, cardiopulmonary resuscitation (CPR) should be continued while AED is being placed onto victim. Turn the device on. Usually, there is a button labelled “Power” or “On/Off,” and is usually green. Press this button to power the device on. Certain devices turn themselves on simply by opening the case

**STEP 2** – Remove the victim’s shirt utilizing the scissors in the CPR Ready Kit. If the victim is a female you must remove any bra or undergarment across the chest prior to pad placement. Place the pads on the victim’s bare chest. One pad goes on the victim’s upper right chest below the collar bone and the other goes on the victim’s left side underneath the armpit. The pads will have a picture on them showing which pad goes on what side. Always use the adult pads on an adult victim; if there are two sizes of pads, use the larger ones on an adult and the smaller ones on a child or infant.

**STEP 3** – Plug in the pads connector. Most AED pads will have a connector that plugs into a socket in the AED. This is often marked and sometimes may a flashing light to show where they plug in. Some AEDs may already have the pads connected to the machine.

**STEP 4** – Once the pads are plugged into the AED the unit will announce that is is analyzing the heart rhythm and to stand clear of patient. At this point CPR should be stopped temporarily, and no one should be touching the patient. The AED reads the victim’s heart rhythm to determine if the unit will deliver a shock.

**STEP 5** –If the unit prompts “shock needed” it will start to begin to charge, and then the button labelled “Shock” will flash and the unit will prompt you to press the button. Make sure to loudly state “CLEAR” and look to make sure no one is touching the patient, then push the “Shock” button. The victim’s muscles may contract causing them to spasm upward. CPR should then be restarted immediately, starting with chest compressions.

**STEP 6** – If the AED prompts you with “No shock needed,” immediately begin CPR, starting with chest compressions. The analyze-shock sequence will recur every two minutes, and CPR should continue, along with the AED analyze-shock cycle until EMS arrives.