1. Introduction
An AED (Automated External Defibrillator) is a portable and easy-to-operate medical device that has a built-in computer that analyses an unconscious victim's heart rhythm and automatically delivers a shock if they are having a Sudden Cardiac Arrest (SCA). An AED will not deliver a shock unless it detects a shockable heart rhythm.

AEDs could significantly improve the chance of survival for a victim of sudden cardiac arrest. A victim's chance of survival is reduced by ten percent with every minute that passes without CPR and defibrillation. Few attempts at resuscitation succeed after ten minutes.

Once turned on, the AED will use voice commands and screen messages to guide an operator through the defibrillation process. The AED will monitor the heart rhythm, advise the operator if a problem is detected as well as indicating when a shock to the patient is required.

UWA has strategically placed a number of AEDs on its campuses. The majority of these are Cardiac Science Powerheart G3 AED semi-automatic. Other units may very slightly in operation. Please see manufacturers instructions regarding use.

2. Chain of survival
In 1990, the American Heart Association developed the Chain of Survival. This protocol addresses the fact that most sudden cardiac arrest (SCA) episodes occur outside of a hospital, with death occurring within minutes of onset.

To provide the best opportunity for survival, each of these four links must be put into motion within the first few minutes of SCA onset. If someone becomes unconscious and stops breathing, you should immediately commence the Chain of Survival as follows:
Early Access
Call or have somebody else call 6488 2222 to request an ambulance. Security officers will attend and assist with first aid and also guide the ambulance to your location.

Early CPR
Start CPR immediately with 30 compressions on the victim's chest followed by two breaths into the victim's mouth.

Early Defibrillation
Get someone to bring an AED from a known location (or wait for Security to arrive with AED)

- Turn the AED on by opening the lid and pushing it back until it locks, then follow the voice and screen prompts.
- Ensure the defibrillation is performed on a non-conductive surface (not in water or on a metal surface).
- Expose the person’s chest. This may include cutting clothes or removing a bra or singlet.
- Shave the person’s chest (if hairy) with the razor provided in the AED carry case.
- Wipe dry the person’s chest with the towel provided in the AED carry case before placing the pads on their chest.
- Open the pouch containing the pads and peel off their liners.
- Place the AED pads on the person’s bare chest as shown on the back of the pads.
- Avoid placing the pads on a loose metal necklace or any metal piercings.
- Ensure that CPR stops and everyone stands well clear if the AED announces that a shock needs to be delivered to the person.
- Respect the victim’s dignity and privacy – Keep the crowd back and don’t let anyone take videos or photos.

Watch the videos:

For those at UWA http://www.cardiacscience.com/video-testimonials-demos/

For personnel in M, N and L blocks at QE11 view Zoll AEDPlus http://www.youtube.com/watch?v=vuMBQaBngvg and for demonstration of individual or team applications view http://www.youtube.com/watch?v=FqY2hrHrKQs’

Early Advanced Care
Keep the AED connected to the patient until the ambulance arrives and advanced care is available even if no shock is advised by the AED or the patient regains consciousness.
3. After the Event
If an AED has been used, the operator must notify UWA Security on 6488 2222 and Safety and Health 6488 3938 to ensure that the AED is cleaned and refurbished so that can be quickly returned to service. The operator must also fill out a Confidential Incident/Injury Report form and forward it to Safety and Health.

4. Warnings and Precautions
There are some precautions to take when operating an AED. These include:

- Do not use the AED if the victim is a child younger than 8 years of age or lighter than 25 kilograms (specific pads are required for this group).
- Ensure that defibrillation is performed on a non-conductive surface (not in water, rain or on metal surface).
- If an implanted pacemaker could be identified, place the pad at least 2.5 centimetres away. Ensure everyone stands clear when electric shock is delivered. Do not touch the victim except when performing CPR (this prevents interference and injury to bystanders when a shock is given).
- When attempting a rescue using an AED, do not operate wireless radiotelephones (such as cellular phones and two-way radios) within one meter of the AED to avoid radio frequency interference.
- Do not use an AED in the presence of flammable gases (including concentrated oxygen).
- Do not remove the pads until the ambulance arrives and paramedics take over, even if the victim regains consciousness or no shock is advised.

5. AED Kit
An AED should have the following items stored in the case or attached by bag if necessary:

1. A shaver to shave excessive hair if necessary
2. Scissors to cut bra or piercings if necessary; try to avoid putting the pads directly on top of any piercings if possible
3. Wipe towels to dry the victim’s chest if necessary
4. A mask for providing rescue breaths
5. Gloves for protecting the rescuer

6. Inspection and Maintenance
UWA’s AEDs are capable of conducting daily, weekly and monthly self-tests to ensure they are ‘rescue-ready’ at all times. These units are also maintained on a six monthly programme. Contact Safety and Health on 6488 3938 if you notice that:

- the light on the upper right corner of the AED has turned red or there is an audible beep
- the AED is damaged
- the AED is missing
- pads out of date
7. Good Samaritan Legislation
Even with the best intent, sometimes things could go wrong. The common law's position on this is it depends on all the circumstances of the case. Under current law, the fact that a person was acting in an emergency situation is relevant to deciding whether the person has been negligent. The emergency nature of the circumstances and the skills of the Good Samaritan are taken into account in determining whether the good Samaritan has acted reasonably.

The essential elements for good Samaritans to be protected from civil liability include:

- The assistance must be given in circumstances of emergency
- The acts or omissions are done or made in good faith and without reckless disregard for the safety of the person in distress or someone else
- The assistance is provided without expectation of payment or other consideration.

However, such protection from liability does not apply if the good Samaritan was significantly impaired by alcohol or other recreational drug.

Information about the Good Samaritan Bill - Western Australia Civil Liability Amendment Bill 2003:

8. Counselling
The University provides free, confidential and professional assistance to employees and to other persons whose care is the responsibility of the employee, through the Employee Assistance Program (EAP).

Please go to this link http://www.safety.uwa.edu.au/policies/eap

Students have access to counselling through UWA Counselling and Psychological Services:
Student Services
2nd Floor, South Wing
Guild Building
Phone: 6488 2423 (office hours)
Website: www.counselling.uwa.edu.au

For further information contact:

The University of Western Australia
Safety Health and Wellbeing
M350
First Floor 7 Fairway (corner of Cooper Street)
CRAWLEY WA 6009
Phone: 6488 3938
Website: www.safety.uwa.edu.au