

# 2010

## Automatic External Defibrillator Guidelines



OU Staff  
University of Otago  
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## INTRODUCTION

The University of Otago provides Automatic External Defibrillators (AEDs) on campus as a part of their comprehensive emergency management plan. The aim is to provide AEDs within the recommended 3 minute period as initial first aid response following a potential cardiac event.

These guidelines should be read in conjunction with the AED policy. Together, these documents are designed for the implementation of an AED programme that ensures AEDs are operational and accessible at all times.

## WHAT IS AN AED AND WHY DO WE NEED THEM?

An automated external defibrillator (AED) is used to treat victims who experience sudden cardiac arrest (SCA). It is only to be applied to victims who are unconscious, not breathing normally and showing no signs of circulation, such as normal breathing, coughing and movement. The AED will analyze the heart rhythm and advise the operator if a shockable rhythm is detected. If a shockable rhythm is detected, the AED will charge to the appropriate energy level and advise the operator to deliver a shock.

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.

The Heart Start AED's have been installed at the University of Otago campuses – for location details see appendix one.



## HOW AND WHEN ARE THEY USED?

### 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 the Emergency Services, on 1 -111 (internal phone, or 111 from external phone) to request an ambulance. Please also notify Campus Watch on x 5000 (or 0800 479 5000). They 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 followed by.

#### Early Defibrillation

Get someone to bring an AED from a known location (or wait for Campus Watch to arrive with an AED)

- Turn the AED on by opening the lid, 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 swab 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. If the AED detects a shock is not needed it will not activate a shock.

- Respect the victim's dignity and privacy – Keep the crowd back and don't let anyone take videos or photos.

### **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.

## **AFTER AN EVENT**

If an AED has been used, please notify Health and Safety at 479 4903 to ensure that the AED is cleaned and refurbished so that can be quickly returned to service. The operator must also fill out an Incident/Injury Report form and forward it to Health and Safety.

The Health and Safety Office will be responsible for downloading of any AED data as soon as possible after the event. They will arrange for this data to be sent to the appropriate parties. No other people (other than Emergency Services) should attempt to download or store any of this data.

## **AED KIT**

An AED should have the following items stored in the case or attached by bag:

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

## INSPECTION AND MAINTENANCE

The University of Otago's AEDs are capable of conducting daily, weekly and monthly self-tests to ensure they are 'rescue-ready' at all times. These units should also be checked on a monthly basis by a Department Health & Safety Officer or trained First Aider in the area the AED is situated. A record of the checks should be kept by this person.

Contact the Health and Safety Office immediately 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 are out of date
- AED kit is not complete

## TRAINING

The Health and Safety Office encourages as many staff as possible to complete First Aid training. Training will cover the use of AED's.

## LIST OF LOCATIONS

The Health & Safety Office will keep a list of the locations of the AED's. DHSO's shall make staff within their Departments/Divisions aware of the location of the nearest AED. Staff delegated with new staff inductions shall ensure that new staff are made aware of where their nearest AED is. Signage will also be placed near the AED to make staff aware of their locations.

## Defibrillators (AED's) at the University of Otago - Dunedin Campus

Department/ Building	Location
Abbey College	900 Cumberland St . Main foyer Ph 479 4890
Adams Building	Frederick St. Ground floor foyer (Phone extension 7201)
Aquinas College	74 Gladstone Rd. Main foyer Ph. 479 5560
Arana College	110 Clyde Street, Main office. Ph. 479 5509
Arts (Burns) Building	Ground floor foyer
Barrington Building	Room 111, Dunedin Multidisciplinary Health and Development Research Unit, (Phone extension x 8508)
Biochemistry Dept	Ground floor in the corridor (immediately to the left of the CELS office)
Campus Watch	St David St Lecture Theatre complex, St David St - Campus Watch Machine room. (Phone extension x 5000)
Carrington College	57 Heriot Row, Main Admin area Ph 479 5533
Centre for Innovation	CFI Building, 87 St David St -Ground floor reception (Phone extension x 8469)
Cumberland College	250 Castle St, Main foyer area Ph 479 5570
Dental School	Walsh Building, 310 Great King St (Phone extension x 1200) <ul style="list-style-type: none"> <li>• First floor operating theatre recovery area - a combined manual/AED on a trolley</li> <li>• 2nd and 4th floor reception areas</li> </ul>
Hercus Building	Ground floor foyer, Hanover St entrance
Human Nutrition	Union Court, 85 Unions St West-Outside room G01
Hunter Centre	Corner Great King and Frederick St. Right hand wall as you enter the main doors. (Phone extension 7487)
Jamieson Building	398 Cumberland St, 1 <sup>st</sup> floor foyer. (Phone extension 8269)
Link Building	Between ISB and University Union, on wall by main library entrance (Phone extension 8910)
PE	55 Union St West - Outside room G04 (Phone extension 8991)
Physiology	Lindo Ferguson Building, 270 Great King St -Tea room, Room 104 (Phone extension x 7317)

Physiotherapy	325 Great King Street, Ground floor foyer
Polaris boat	(Marine Science Department)
Psychology	William James Building, Level 1, 275 Leith Walk. Reception area (Phone extension 7645)
Portobello Marine lab	185 Hatchery Road, Portobello (479 5826)
Property Services	111 Albany St. Main foyer (Phone extension 8003)
Recreation Services (Unipol)	Unipol Sports Centre, 96 Anzac Avenue. (Phone extension 5888)
Registry Building (Clocktower)	Foyer by Admissions and Enrolments area
Richardson Building	8 <sup>th</sup> Floor foyer, Outside main entrance to Law Library (Phone extension 8837)
Robertson Library	135 Union St East, Lending area (Phone extension 3793)
School of Business	Corner Clyde and Union Pl West, 3 <sup>rd</sup> Floor Foyer (Phone extension x 8149)
Staff Club	80 Union Place West (Phone extension 5311)
Student Health	3 Walsh St, Hilton/Treatment room, Ground floor. (Phone extension x 8212)
Toroa College	8 Regent St. Main foyer area Ph 479 5500
University College (Unicol)	315 Leith Walk. Right side of main foyer as enter main doors. Ph 479 5580