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<b>Title</b>	AED Policy
<b>Policy Owner</b>	Health & Safety Officer
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<b>Approved By</b>	UMT

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**Appendix 1** Applicable Documents

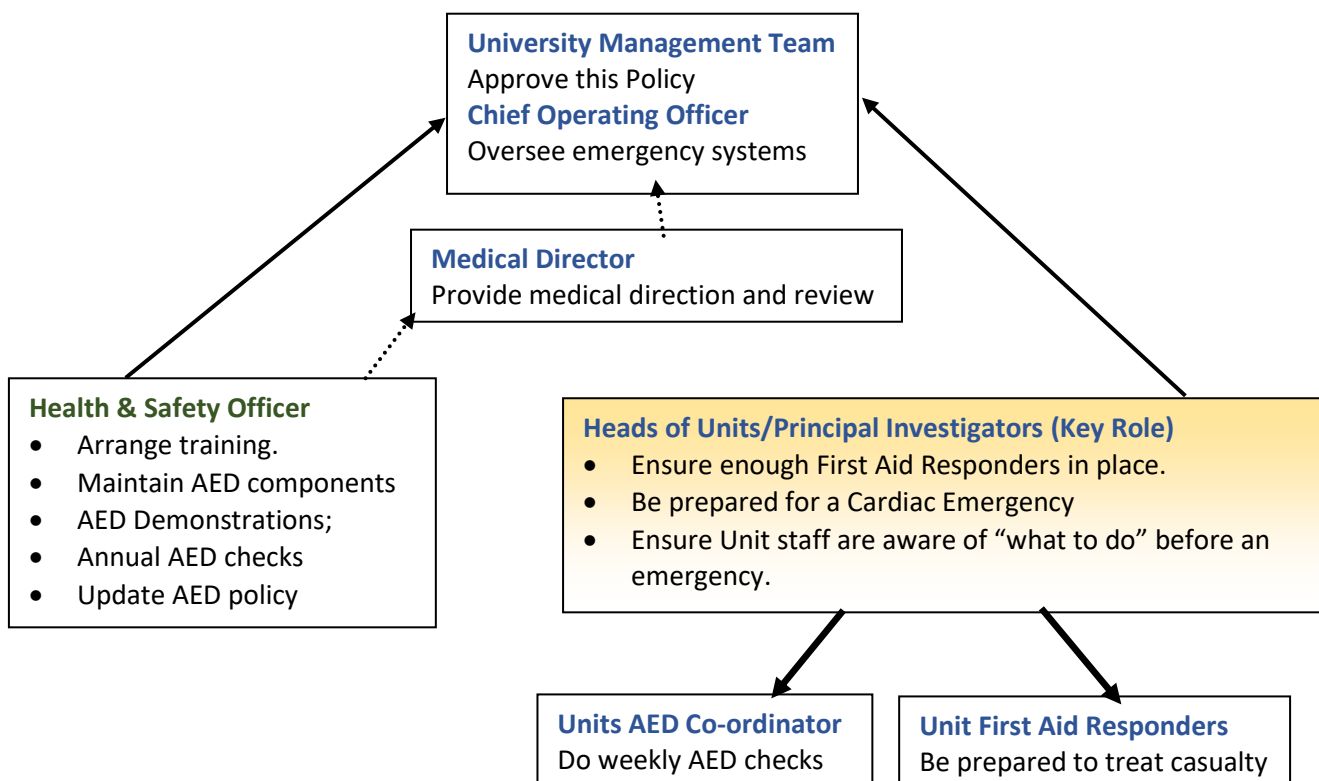
**Appendix 2** University of Galway Units - Local Cardiac Arrest Response Plan

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**1.0 Purpose**

The purpose of this policy is to set out the personnel, equipment, documentation and information necessary to maintain an effective University of Galway AED programme for the benefit of all the University community and environs.



An automated external defibrillator (AED) is used to treat victims of sudden cardiac arrest (SCA). It is only to be used on victims who are unresponsive and not breathing. The AED when applied correctly will analyse 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.

The Task Force on Sudden Cardiac Death (2006) highlighted that the current survival rate for sudden cardiac conditions is very poor, typically less than 1% in the absence of an effective emergency response system. But if an AED is used promptly, the victims chances of survival can increase significantly, e.g. if an AED is used within five minutes the victim has a 50% chance of survival and potentially higher with younger patients. The Task Force identified “universities and colleges” as facilities where AEDs should be placed because the incidence of cardiac arrest is high. In 2007, the first AED was provided in University of Galway and since then the programme has expanded to there being over 21 AEDs in the University. AEDs are in the Sports Centre, on the Park & Ride buses and are also in place in Áras Shorcha Ní Ghuairim, Carna, Áras Uí Chadhain, An Cheathru Rua and Shannon College of Hotel Management.

## **2.0 AED Roles and Responsibilities**

**2.1 University of Galway AED Co-ordinator:** The University of Galway Health & Safety Officer co-ordinates this AED policy and practical requirements on University of Galway Campus other than where other local arrangements are in place. See #7.0. Responsibilities below.

### **2.2 Unit AED Co-ordinators:**

The AEDs on Campus are regarded as being “owned” by their respective Units (see Appendix 4). Heads of these Units need to ensure that local staff will carry-out the weekly checks of their AED(s) i.e. the Unit AED Co-ordinator(s). The Head also needs to ensure that sufficient First Aid Responders are trained to use the AED in their Unit, before there is a medical emergency.

### **2.3 Medical Advisor:**

The Medical Advisor of the AED program is Dr Eoin Mac Donncha (Student Health Unit). See #7.0 Responsibilities below.

### **2.4 First Aid Responders:**

See #7.0 Responsibilities below.

### **2.5 Others Responsibilities:**

**Heads of Units** must also:

**2.5.1** Ensure that adequate local arrangements/plans are in place to provide a prompt response to a cardiac emergency as part of their occupational first aid arrangements. This is set out in #7.0 Responsibilities below. Verification of the adequacy of the plan should be based on the profile of the Unit’s size and activities and the historical data available.

**2.5.2** Review current plan and report on all events for the preceding year in the Unit Safety Statement.

**2.5.3 Bystanders (all other University of Galway staff and students)** are encouraged to provide voluntary assistance to casualties in medical emergencies. The extent to which these individuals can respond shall be appropriate to their training, experience and capability. The assistance a bystander can provide is invaluable, ranging from making the emergency 112/999 call to bringing the AED to the emergency location. The Health & Safety Office organises “AED Demonstrations” to show staff and students the use of an AED and how untrained staff can critically assist in a cardiac emergency where every second counts (Appendix 3 AED Demonstration Handout).

### **2.6 Switchboard Operator Responsibilities Only available during office hours:**

See #7.0 Responsibilities below.



### 3.0 The AEDs:

There are three AED models available throughout University of Galway. These are: Defibtech lifeline AED, Medtronic Life Pak CR Plus and Laerdal Heart Start FR 2+ Defib. All AEDs operate on similar user friendly principles so each model will be straightforward for the First Aid Responders to use. The AED and kit will be brought to all cardiac emergencies. In all cases the casualty must display **ALL** the symptoms of a cardiac arrest i.e. the AED will be used only after the following symptoms are confirmed:

- Casualty is unresponsive when tapped on shoulder and asked if they are OK
- Casualty is not breathing normally (quiet, no regular chest rise and fall)

In these circumstances:-

- CALL 999 or 112 immediately to request an Ambulance, put phone on loudspeaker and the Dispatcher can assist in guiding the First Aid Responder until advanced help arrives.
- If the collapse is witnessed, where all the symptoms of cardiac arrest are confirmed, the AED should be used as soon as it arrives at the scene on any person who is at least 1 year of age. Have Minimal Interruptions in CPR to apply pads. Follow AED prompts.
- In the case of any casualty >8 years old where the collapse is NOT witnessed, where all the symptoms of cardiac arrest are confirmed, the AED should be used as soon as it arrives at the scene.
- In the case of a child casualty (i.e. aged between 1 – 8 years old) where the collapse is NOT witnessed, do 2 minutes of conventional CPR (30 compressions to 2 breaths x 5 rounds) before applying any AED pads.
- If Paediatric pads are not available, adult pads can be used on any age of casualty as long as they do not overlap on the chest.
- If First Aid Responders/Bystanders are unwilling or unable to deliver rescue breaths (e.g. due to infection/other concerns), rescuers are recommended to provide chest compressions only.
- Following an event, the First Aid Responder immediately contacts their Head of Unit who informs the Health & Safety Office directly. A first aid record is also completed at the time.

### 3.1 Location of AEDs – See Appendix 4

Each AED will have one set of defibrillation electrodes for both adults and children with the device and one spare set of the adult type with the AED. Also with each AED there will be a kit with:

Aspirin (300mg) X 2 (individual packs/doses).	Scissors;	Face mask (with valve);
Large & medium disposable gloves (total 2 pairs);	Razor;	Antiseptic wipe(s)
	Flannel or other means of drying;	
Pre-Hospital Emergency Care Council's (PHECC) Cardiac First Response Report (CFRR) and completion guide		

### 3.2 AED Checks and Maintenance:

Each AED and accessories necessary for support of medical emergency responses shall be maintained in a state of readiness.

Specific checks and maintenance requirements include:-

**3.2.1 Weekly AED Check:** Once each week, the Unit AED Co-ordinator shall conduct and document a system check (see Appendix 5). The weekly check shall include the following:

- Verify the AED is operating correctly (Flashing indicator);
- Emergency kit supplies are all in place;
- Verify that the list of First Aid Responder's phone numbers is available and current (Located beside the AED – if updates required contact the Health & Safety Office directly).

When the sheet is fully complete, please return to the Health & Safety Office who collate these.



- 3.2.2 Annual AED Checks** Once a year the Health and Safety Office completes a check of all the campus AEDs.
- 3.2.3** Batteries, pads or other accessories are managed by the Health & Safety Office who organise replacements. If any problems are noted they are to be reported immediately to the Health & Safety Office.
- 3.2.4** The University of Galway Switch Board (dial "0") shall be informed of changes in availability of emergency medical response equipment. If equipment is withdrawn from service, the Switch Board shall be informed and then notified when the equipment is back in service.
- 3.2.5** Any AED maintenance tasks shall be performed according to equipment maintenance procedures, as outlined in the specific AED's operating instructions.
- 3.2.6** No staff member shall attempt any repairs other than the standard replacement of an expired battery or component.
- 3.2.7** If an AED seems to have an operational problem or a malfunction it should be reported immediately to the Health & Safety Office who will contact the supplier directly.

#### **4.0 Training in AED use**

##### **4.1 Initial Training:**

- First Aid Responders must complete approved AED training which covers basic first aid, CPR and AED use. Training will be arranged by the Health & Safety Office in University of Galway. In Ireland AED training follows the American Heart Association (AHA) protocols.
- The University of Galway Health & Safety Office keep training records of the University of Galway staff whose training they have arranged.

##### **4.2 Renewal/Skills Review Training:**

First Aid Responders must obtain documented renewal training at least every 2 years. The AHA recommends that Responders regularly complete AED skills reviews. In consultation with relevant agencies and trainers it is recommended this AED refresher training take place every 8 months giving all First Aid responders the opportunity to attend training twice annually.

##### **4.3 AED Demonstrations**

The Health & Safety Office organises "AED Demonstrations" to show University of Galway staff and students how an AED is to be used in an emergency and critically how untrained staff can assist in a cardiac emergency where every second counts (Appendix 3 AED Demonstration Handout).

#### **5.0 Use of an AED in an emergency**

Following use of emergency response equipment, all equipment shall be cleaned and/or decontaminated as required. If necessary, the equipment shall be disinfected according to the procedure set out in Appendix 6.

##### **5.1 Internal Post AED-use Documentation:**

The following forms are to be sent to the University of Galway Health & Safety Office within 24 hours of a medical event:-

- The First Aid responder must fill in a First Aid Report Form when the AED is used. Within 72 hours of the emergency:-
- The information on how the AED was used will be sent to the Medical Director and the University of Galway AED Co-ordinator. At a minimum, event information shall include any recorded data, and all electronic files captured by the AED.

In the event of a cardiac emergency (including chest pain, CPR, use of an AED, etc.) the Pre-Hospital Emergency Care Council's (PHECC) Cardiac First Response Report (CFRR) is to be completed **at the time of the emergency**. A copy of this form together with the completion guide is available at each of the AEDs, and the form and its completion is covered at the First Aid Responder's training.



**5.2 Post event review:**

Following each emergency use of an AED, a review shall be conducted to learn from the experience. The Medical Director shall conduct and document the post event review. All key participants in the event shall partake in the review. Included in the review shall be the identification of actions that went well as well as any aspects that need to be improved. A summary of the post event review shall be sent to the University of Galway Safety Working Group and relevant parties and a copy of the post event review summary shall be kept in accordance with the record retention policy. The appropriate debriefing of the First Aid Responder(s) will be arranged directly after the incident as part of the Critical Incident Stress Awareness see University of Galway Safety Statement Part 5 – First Aid.

**6.0 System Checks and Review:**

The AED system is ultimately successful if necessary medical assistance is provided to casualties in a timely and safe manner. Since actual use of this system is expected to be very infrequent, other measures of effectiveness are required.

**6.1 Annual System Assessment:**

Once a year, the Medical Director, the University of Galway AED Co-ordinator and a number of Unit AED Co-ordinators will conduct a system readiness review. This review shall include the following:

- AED Checks and Maintenance Records.
- Other AED issues of concern.

In addition the Health & Safety Office will review:

- Training Records.

**6.2 Adverse Events/Complaints**

In the event of any adverse event or complaint e.g. equipment failure or dissatisfaction as to how an incident was handled, the University of Galway AED Co-ordinator is to be contacted in the first instance, then where appropriate the Medical Director or Chief Operating Officer. First Aid Responders/Safety Representatives will be consulted as appropriate. In the particular case of AED device failure the University of Galway AED Co-ordinator will contact the Medical Devices Department of the Health Products Regulatory Authority.

**7.0 Responsibilities**

Name	Responsibility
UMT	Approve this policy.
Chief Operating Officer	Oversee Health and Safety systems including effective emergency response services in University of Galway.
Medical Director	<ul style="list-style-type: none"> <li>• Providing medical direction for the use of AEDs in University of Galway.</li> <li>• Reviewing and approving guidelines for emergency procedures related to the use of AEDs.</li> <li>• Evaluation of post event review forms and digital files downloaded from the AED.</li> </ul>
Health and Safety Officer/University of Galway AED Co-ordinator	<ul style="list-style-type: none"> <li>• Co-ordination of training for First Aid Responders;</li> <li>• Promotion of the AED availability amongst the university community e.g. organising AED Demonstrations;</li> <li>• Annual checks of all campus AEDs;</li> <li>• Checking centrally that the equipment and supplies are in date;</li> <li>• Revision of this AED policy as required;</li> </ul>



	<ul style="list-style-type: none"> <li>Monitoring the effectiveness of the system in conjunction with the Medical Director;</li> <li>Communication with the Medical Director on required issues including post event reviews;</li> <li>Centrally restocking consumable items as required.</li> </ul>
Safety Working Group	<ul style="list-style-type: none"> <li>Consultation and review of this Policy</li> <li>Review report following the use of an AED in University of Galway</li> </ul>
Heads of Units and Principal Investigators in the case of their Research Staff.	<ul style="list-style-type: none"> <li>Ensuring that sufficient Unit First Aid Responders (and other staff where appropriate) are ready to respond to a cardiac emergency;</li> <li>Appoint a Unit AED Co-ordinator(s) where there is an AED in their Unit;</li> <li>Ensuring that there is a Unit plan (Appendix 2) in place to respond to a cardiac emergency, setting out the different roles and required actions;</li> <li>Ensuring that all staff are aware of the location of the nearest AED(s), and what they can do in the event of such an emergency.</li> </ul>
Unit AED Co-ordinators	Weekly check of AED device and kit (#17 above).
First Aider Responders Responsibilities	<ul style="list-style-type: none"> <li>All authorised trained First Aid Responders or other personnel to commit to attending the initial and Skills Review training every 8 months.</li> <li>First Aid Responder (and those with equivalent up to date training will have their names and extension numbers displayed beside the relevant AED device and on the AED webpage.</li> <li>In recognising that First Aid Responders are acting in a voluntary capacity, as far as possible they should be tactful and respectful e.g. not removing the casualty's clothing unnecessarily.</li> <li>Maintain confidentiality following an event</li> <li>Provide a written record of the event.</li> </ul>
General Staff and Students	<ul style="list-style-type: none"> <li>Assist the First Responder if requested e.g. phone emergency services; flag down ambulance; fetch AED equipment; assist with CPR or recovery.</li> <li>Move away from scene so as to maintain dignity of patient.</li> </ul>
Switchboard Operator (Marketing & Communications)	<ul style="list-style-type: none"> <li>Receiving emergency medical calls from internal locations;</li> <li>Contacting the 112/999 Emergency Services if required (RED card);</li> <li>Contacting trained University of Galway First Aid Responders or others, where notified about a cardiac incident or other unconscious casualty;</li> <li>Contacting Security so that they can assist in responding to the emergency e.g. by directing the ambulance to the scene.</li> </ul>

**Appendix 1 Applicable Documents:**

- Signs and lists of First Aid Responders beside the AEDs and emergency contact details.
- Emergency and AED information on the University of Galway Health & Safety Office website.
- Safety Contacts Posters (Units to display locally).
- Infection control procedure for occupational exposure to blood borne pathogens (App. 5).
- University of Galway insurance policy
- First Aid Report Form
- Pre-Hospital Emergency Care Council's (PHECC) Cardiac First Response Report (CFRR) and completion guide
- The AED Policy when finalised will be generally available to University of Galway personnel via the Health & Safety Office web-site**



**In addition a hard-copy will be provided to:**

- The Medical Director
- Each Unit AED Co-ordinator (Appendix 4).
- Security
- Switchboard (Marketing & Communications)

**Appendix 2 University of Galway Units**

**[Local Cardiac Arrest Response Plan](#)**

**Appendix 3**

**[AED Demonstration Handout](#)**

**Appendix 4**

For the current list of University of Galway **AED Locations** see **[AED Map](#)** and

**List on <http://www.nuigalway.ie/health-safety/emergencyinformation/>**

Which also lists the Unit AED Co-ordinators.

**Appendix 5**

**Weekly Equipment Checks Use [AED Weekly Inspection Record](#)**

**Appendix 6 - Infection Control Policy for AED Use**

**The First Aid Responder:**

1. While the risk is minor, a First Aider Responder may be at risk of exposure to infectious diseases in while administering Cardio-Pulmonary Resuscitation (CPR) and using an AED.
2. Exposure can occur if:
  - (a). Blood or other body fluid/substance comes into contact with broken skin, open wounds, eyes or mouth of the responder.
  - (b). A skin penetrating injury happens to the responder.
  - (c). Contaminated first aid equipment or materials are used.In administering CPR/using an AED, route (a). is the most likely exposure route and will only be an issue if the recommended Personal Protective Equipment is not used.
3. The infectious diseases which may be transmitted by body fluids include Hepatitis A, B, C and HIV.
4. Responders must take the appropriate precautions to reduce their risks of infection to biological agents in the course of administering first aid.
  - Use the appropriate personal protective equipment i.e. put on gloves before touching the casualty and have a pocket mask to hand. Gloves and pocket masks are available in all first aid kits and AED cabinets, and pocket masks are also provided to personnel at AED training. **Use gloves/Pocket Mask once only.**
  - Assume that all blood and body fluids of the casualty are infectious.
  - Do not use gloves/pocket mask if they appear defective or contaminated in any way
  - Where possible, wash hands with soap and water before and after administering first aid, and after removing protective gloves. Refer to University of Galway Health and Safety Guidance Note – [Hand Wash Protocol](#)
  - Use protective gloves once only. Avoid using latex gloves and only use after consulting the University's [Latex Glove policy](#) see Part 5 and risk assessing that their use is in order.
  - Cover new or existing cuts and grazes with waterproof dressings.





- Responders with known skin disorders especially of the hands should seek medical advice regarding the risk of infection and required protective/preventive measures they personally need to take.
  - Avoid hand-mouth and hand-eye contact.
5. Management Of Spillage Of Body Fluids/Contaminated Waste:
- In the case of spills of body fluids or any contaminated waste after the emergency report directly to Buildings & Estates highlighting the issue.
6. It is not normally necessary for First Aid Responders in the workplace to be immunized against Hepatitis B virus unless the risk assessment indicates that it is appropriate (see Health and Safety Executive's – [Blood Borne Viruses in the Workplace](#)).
- For further information contact the Health and Safety Office and refer to University of Galway Health and Safety information on [Vaccination](#)

#### **The AED Itself:**

Periodically clean the AED of any dirt or contaminants on the case and connector socket.

- The battery pack should be installed when cleaning the AED.
- **Only** use the following cleaning agents to clean the AED case and the connector socket:
  - Soapy water
  - Chlorine bleach (10 ml/100 water ~0.5% hypochlorite)
- Soak a soft cloth in soapy water and wring out excess liquid. Wipe AED and accessory before using diluted bleach (by the same approach) to further decontaminate.
- Ensure that the connector socket is completely dry before reinstalling the pads cable.
- After cleaning the device and before returning it to service, always turn the unit on for a few seconds to run a standard power-on self-test."