



## **Automated External Defibrillator - Procedure** **Cherry Burton Parish Council**



### **1. Purpose and Scope**

This procedure outlines the use of the Cherry Burton Parish Council Automated External Defibrillator (AED) should anyone in the vicinity suffer a sudden cardiac arrest.

Sudden Cardiac Arrest (SCA) is a condition that occurs when the electrical impulses of the human heart malfunction, causing a disturbance in the heart's electrical rhythm called ventricular fibrillation (VF). This is an erratic and ineffective electrical heart rhythm which causes complete cessation of the heart's normal function of pumping blood, resulting in sudden death. The most effective treatment for this condition is the administration of an electrical current to the heart by a defibrillator, delivered within a short space of time of the onset of VF.

An AED is used to treat victims who experience sudden cardiac arrest. It is only to be applied to victims who are unconscious, without pulse and no signs of circulation or normal breathing. The AED 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 when to deliver a shock

### **2. Aim**

The aims of this procedure is to provide guidance on the AED, its deployment and use including;

- Description of AED
- Supervision
- Training and authorisation
- Routine maintenance and safety checks
- Technical Support & Spares

The Resuscitation Council's (UK) advice regarding SCA is that electrical defibrillation is well established as the only effective therapy for cardiac arrest caused by ventricular fibrillation (VF) or pulseless ventricular tachycardia (VT). The scientific evidence to support early defibrillation is overwhelming; the delay from collapse to delivery of the first shock is the single most important determinant of survival. If defibrillation is delivered promptly, survival rates as high as 75% have been reported. ***The chances of successful defibrillation decline at a rate of about 10% with each minute of delay.*** Basic life support e.g. cardiopulmonary resuscitation (CPR) will help to maintain a shockable rhythm but it is not a definitive treatment.

The Resuscitation Council (UK) also recommends strongly a policy of attempting defibrillation with the minimum of delay in victims of VF/VT cardiac arrest. They have also stated that to avoid delay in using an AED,

- a) An AED can be used safely and effectively without previous training. Therefore, the use of an AED should not be restricted to trained rescuers. However, training should be encouraged to help improve the time to shock delivery and correct pad placement.
- b) Short video/computer self-instruction courses, with minimal or no instructor coaching, combined with hands-on practice can be considered as an effective alternative to instructor-led AED courses e.g. <https://life-saver.org.uk/>. Such courses should be validated to ensure that they achieve equivalent outcomes to instructor led courses.
- c) When using an AED, minimise interruptions in chest compression to the shock times. Do not stop to check the victim or discontinue CPR unless the victim starts to show signs of regaining consciousness, such as coughing, opening their eyes, speaking, or moving purposefully AND starts to breathe normally.

### 3. Description of AED

The AED is an iPad CU-SP1 model and is sited on the back wall of the Bay Horse Pub in Cherry Burton housed in a secure outdoor metal cabinet with its own power supply and alarm system. A location code (AF129) on the front panel enables emergency services to quickly pinpoint your location and provide guidance.

To gain access to the AED the user must first dial 999 to obtain the door code. The local ambulance service have been informed that an iPad AED is in place and have registered it. ***Under No circumstances should Parish Councillors divulge the door code number to a member of the public.***

### 4. Supervision

The Clerk to the Cherry Burton Parish Council shall ensure that,

- Training on the use of the supplied defibrillator is given to nominated individuals.
- Maintenance and safety checks have been allocated to individuals and these are carried out regularly.
- Training, testing and maintenance records are kept, these actions are to be carried out as per the manufacturer's recommendations.

### 5. Training and Authorisation

The HEY Smile Foundation, who funded the defibrillator, will fund up to 6 places for awareness training with Yorkshire Ambulance Service. These are 1 ½ hr. familiarisation sessions (not training sessions and uncertified), as a means by which they can explain how the system works and to demonstrate the device to the public. Contact is Ms Trish Kilner Tel (07789) 271071, e-mail [patricia.kilner@yas.nhs.uk](mailto:patricia.kilner@yas.nhs.uk), Community Defibrillation Trainer, Yorkshire Ambulance Trust.

Those expected to oversee the equipment will be given this training and a list of authorised users will be posted beside the equipment. It is the Cherry Burton Parish Council's preference that only those trained in the use of the equipment should inspect and maintain it.

***However, when it comes to use, where no trained personnel are available and as the equipment is fully automated then it may be used by any member of the public following the instructions given by the equipment.***

## 6. Routine Maintenance and Safety Checks

The Clerk to the Cherry Burton Parish Council responsible for the Parish Council AED will appoint persons to carry out regular (weekly/monthly) visual checks/tests on the equipment to ensure that it can be used when called upon.

### a) Control Circuit Light Check;

The cabinet is designed to maintain an internal temperature of 10 degrees C and the metal floor is thermostatically heated from below - always requiring an external power source to function. A flashing LED is visible on the left side of the top window;

- Green flashing indicates heater is functioning correctly.
- Blue light means temperature sensor has failed, or sensor has read below 0 Degrees C at any time.
- Red Light indicates that the heater is on. Check with hand on metal floor. On a cold day the floor should feel warm.

### b) Self-Diagnostic Checks

- The device performs a self-test as soon as the battery is inserted, turns itself off when the test is done, then periodically wakes up to perform daily, weekly and monthly self-tests.
- Run-time Test – self monitoring in real time.
- Periodic Self-Diagnostic Test – self checks daily, weekly and monthly on battery status, pad status and internal circuits.

### c) Power ON Test;

- Self-diagnostic when power button is pressed.

### d) Battery Insertion Test;

- To be performed after each use, when replacing the battery or when the device is suspected of being damaged.

### e) Other checks;

- Status LCD - Battery state and pad status symbols
- Two sets of pads present
- Towel, Razor, Scissors, Gloves, Face Shield all present.

## 7. Technical Support & Spares

iPAD defibrillators are manufactured by CU Medical. In the UK & Ireland, Hampshire based WEL Medical Ltd have Manufacturers' responsibility. However, all problems/faults with either the AED or the DefibSafe weatherproof cabinet need to be passed to DefibSafe as the main supplier. They hold the Warranty information (AED 10 yrs., Cabinet 1 yr.) and if necessary will contact the manufacturer direct if telephone resolution is not possible.

Spares and accessories are also supplied by DefibSafe. To re-order accessories please call DefibSafe and quote;

63032	Disposable Battery
63124	Dual Adult/Child pads
63040	AED Starter kit incl; – Nitrile Gloves (Large) – 2 large dry patient wipes – Gallant Prep Razor – CPR Face shield – Tuff-Cut Scissors

Further information can be obtained at <http://www.defibsafe.co.uk/> or for Customer Service – 01252 344007. For Technical Support – 01768 480111.

Further information on the AED can be obtained at <http://www.ipad-aed.com> and technical support can be obtained on (03333) 444789. There is a log-in facility for users and Cherry Burton Parish Council can log in to obtain further support and resources on the AED.

The power supply and the cabinet was installed by R & M Drewery, Electrical Contractor Tel: 01482 861641.

***NOTE: The equipment must be maintained in accordance with the manufacturers' instructions to avoid invalidating the warranties.***

## AED CHECKLIST – MONTHLY CHECKS

## Cherry Burton Parish Council

(Weekly check – see overleaf)

To be completed every month and when taken out for an event.

***For each item, please tick or cross the box and sign at the bottom.***

Any problems or missing items must be reported to The Clerk to Cherry Burton Parish Council Tel: 01964 550107 or e-mail [cbpc@pjm.karoo.co.uk](mailto:cbpc@pjm.karoo.co.uk). All spares are kept by the Clerk.

<b>Date</b> (Month & Year)												
Check AED is on standby mode – green flashing light in top left hand corner of box												
Check Door opens correctly (code available from the Clerk - not to be divulged to public)												
Check spare adult/child electrode pads are sealed and in date (inside pocket of carry bag)												
Check 2 spare AED starter kits												
Check paper towel present												
Check razor present												
Check scissors present												
Check disposable gloves present												
Check face shield present												
<b>Signed</b>												

If the AED shows a fault, reported to The Clerk to Cherry Burton Parish Council Tel: 01964 550107 or e-mail [cbpc@pjm.karoo.co.uk](mailto:cbpc@pjm.karoo.co.uk).

## AED CHECKLIST – WEEKLY CHECKS

## Cherry Burton Parish Council

(Monthly check – see overleaf)

**Check AED is in correct position with green light flashing.**

If AED is missing or green light not flashing, report to The Clerk to Cherry Burton Parish Council Tel: 01964 550107 or e-mail

[cbpc@pjw.karoo.co.uk](mailto:cbpc@pjw.karoo.co.uk)

Date of check	OK or Not OK and initial		Date of check	OK or Not OK and initial		Date of check	OK or Not OK and initial		Date of check	OK or Not OK and initial