



DEFIBRILLATOR OPERATION & MAINTENANCE POLICY

1. History

Woore Parish Council is responsible for two Semi- Automatic Defibrillators for use within the Parish of Woore. Following recommendations from West Midland Ambulance Service the units were placed and registered by Woore Parish Council and access via a 999 call was confirmed with Ambulance Control on 10th June 2019.

2. General

There are circumstances where the heart goes 'out of sync'. Being a four chambered muscular pump, it gets an electrical signal which contracts the muscles in order. Fibrillation occurs when the muscles are in a spasm which affects the flow of blood. Defibrillators give a shock to the heart in order to stop the spasms. Sometimes the heart has stopped and in this condition the machine will not allow a shock as the heart is not in spasm. When stopped the heart needs cardiac massage (CPR).

3. Maintenance

Minimal, the unit self- tests daily, weekly and monthly. An LED screen displays a black circle if all is well, and a battery level with three segments showing. A fortnightly visual check should be made to ensure the LED indicators are showing the correct readings. The batteries will require a check after four years or repeated use. The electrode pad condition should be checked every 3 months to ensure the use by date is not exceeded.

4. Records

A log of fortnightly, and quarterly checks should be maintained and kept on computer by Parish Clerk. There should also be electronic diary reminders for pads and battery replacement. There should be a record of unit usage/deployment (when/where). The Ambulance service can assist with this data if required. This will provide statistics for both the Parish and WMAS. Data is recorded using a national database called 'The Circuit'. The unit should be wiped down and replenished after use. Spare pads and shaving kits will be held by the Parish Clerk or alternatively, if spares are not made available, the units should be made 'out of service' whilst replacements are sourced.

5. Insurance

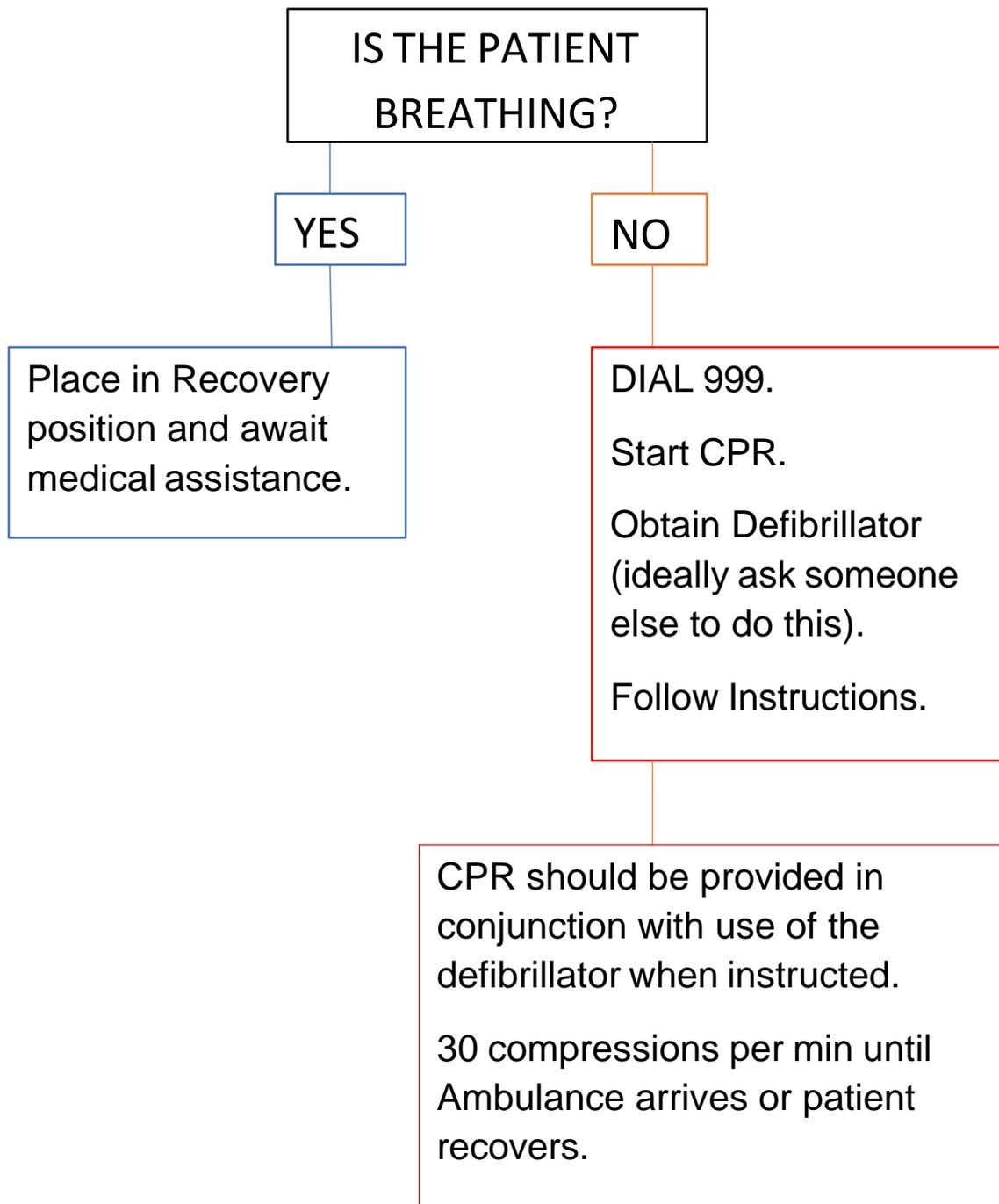
Defibrillators are covered under Parish Insurance for damage and theft. The Parish is accountable for ongoing maintenance and regular, recorded checks of the operation of all equipment, in line with best practice guidance from the manufacturer and the detail herein.

6. Operation

First dial 999. Control will advise of the closest defibrillator location and provide and a code. Cabinets should be clearly marked with a unit/location number that can be supplied to the Emergency Services Operator if the caller is already at the location.



CPR should be conducted from the moment the patient stops breathing and should work in conjunction with the defibrillator. The unit is semi-automatic and will tell the operator what and when to do (or not to do) resuscitation techniques. It will take electronic readings from the heart and decide whether a shock is appropriate, at which point CPR should be paused. Ideally, CPR will continue in conjunction with use of the defibrillator until the ambulance arrives. For every minute CPR is not carried out, chances of survival drop by 10%.





7. West Midlands Ambulance Service - 'The Circuit'

Registering any Parish owned defibrillators on 'The Circuit' will help improve survival rates from cardiac arrest, through sharing their location. The Circuit is a national database of defibrillators with a self-service portal for managing defibrillator details and data. The portal enables those responsible for the units, to manage data for each defibrillator including regular service checks and deployment. It also enables defibrillators to be temporarily removed from service and to help source volunteer 'guardians' to manage checks temporarily to cover holidays or restricted access to defibrillators due to works etc. Removing a defibrillator from service will make it unavailable to the ambulance service when a 999 call is received.

Link: www.thecircuit.uk

Username: tpstokes@live.co.uk

Password: Wooredefib24*

Contact: 0300 330 5482

Guardian Contact: Tim Stokes (t) 07964398957

*Guardian details are subject to change and must be agreed in writing by the Clerk and Full Council notified.

8. Best Practice Guidance

According to the Manufacturer of the SPI defibrillators currently in situ in the Parish of Woore, the recommended life span of a defibrillator is currently 10 years and the battery life is 4 years. This can vary based on the number of deployments (usage). *Refer to section 12 for manufacturer care instructions.

An instruction manual for the defibrillator is held by the Clerk.

Each defibrillator is stored within an external cabinet, designed to protect the defibrillator during cold, wet weather. Each cabinet contains a heater. The heater should be checked regularly to ensure that it is in working order. Electricity supply for the heaters is provided, free of charge, by the owners of the buildings on which they are located. A bracket is provided inside the cabinets for defibrillators to be hung, preventing them from sitting directly on top of the heater.

9. Service

Refer to Section 12 for troubleshooting advice.

For faults, immediate service support should be sought and the defibrillators taken 'out of service' via The Circuit database. Guardians/Volunteers should be alerted and where possible, public notified via social media, noticeboards and Parish website.



For service contact:

SP Services

Address: Hortonwood, Telford TF1 7XT

Email: sales@spservices.co.uk

Phone: 01952 288999

For replacements/spares contact:

WEL Medical Limited

Address: 1 Chancerygate Way, Farnborough, GU14 8FF

Email: enquiries@welmedical.com

Phone: 01252 344007

10. Deployment

If the defibrillator is used by the ambulance service, you will receive an email informing you that your defibrillator has been used and taken out of service on The Circuit. You will need to check your defibrillator, put back into position and perform a status check on The Circuit to make it Emergency Ready. If you're unable to locate your defibrillator, or have a query regarding your defibrillator being deployed, you will be required to contact your local Ambulance Service for assistance.

Defibrillators should be marked clearly with a unit number, name of the Parish and contact number. In the event that it is deployed, it will be removed from site by the ambulance service, and this is therefore essential for tracking purposes.

Following deployment, checks need to take place to ensure that the defibrillator has been replaced properly and that the battery is working, the pads are in date and the disposable items are present. The defibrillator should also be cleaned in accordance with the manufacturer's instructions.

In general terms, this should include the following steps;

1. Wash hands
2. Apply gloves (if available)
3. Inspect defibrillator for any damage, dirt or contamination
4. Remove defibrillator from protective case (if not done so already), do not remove battery.
5. Clean all outside surfaces with a disinfectant wipe, take care not to allow fluid to access ports or battery connections
6. Remove gloves and wash hands
7. Inspect/test unit for readiness and put back in protective case and then return to cabinet



11. Defibrillator Details

UNIT	No. 1	UNIT	No. 2
BRAND	CU Medical Systems / iPad	BRAND	CU Medical Systems / iPad
MODEL	SP1	MODEL	SP1
ACCESS TYPE	Public	ACCESS TYPE	Public
ACCESS HOURS	24x7x365	ACCESS HOURS	24x7x365
LOCATION ADDRESS	Woore Country Store 11, The Square, Woore, Crewe, Cheshire, CW3 9SD	LOCATION ADDRESS	Chetwode Arms, Pipegate, Market Drayton, TF9 4HD
SITUATED	Front facing external wall of Shop, to the left of the window.	SITUATED	Looking at the front of the front of the pub, the cabinet is sited to the left of the door porch.
LOCATION NUMBER:	1788	LOCATION NUMBER:	TF9 4HD
SERIAL NUMBER	GIJ48E0585	SERIAL NUMBER	G1L4200357
CODE	C123X	CODE	C1234X
SUPPLIER	Wel Medical	SUPPLIER	Wel Medical
UNIT MANUFACTURE DATE	20/12/2012	UNIT MANUFACTURE DATE	25/11/2013
BATTERY MANUFACTURE DATE	GT020280 01/2021	BATTERY MANUFACTUER DATE	GT020261 01/2021
PAD USE BY DATE	09/2021	PAD USE BY DATE	11/2021
PAEDIATRIC PADS	No	PAEDIATRIC PADS	No
CABINET LOCKED	Yes External case with heater at top.	CABINET LOCKED	Yes External case with heater at base. Bracket for hanging.
SHAVING KIT	Yes	SHAVING KIT	Yes



12. Care Instructions

Both defibrillators belonging to Woore Parish Council are Intelligent Public Access Defibrillators (IPADS) CU-AED SPI1. The following care instructions have been provided by WEL Medical as supplier of the units.

SP1 - LCD Display Icons



The 'Circle of Life' determines the current operation status of the defibrillator. If the iPAD SP1 picks up any errors during its self testing routines, the circle will change to an 'X'. At this point, the 'I' button on the device will turn red and flash. Pressing the 'I' button will tell you the current fault.

If you see a circle, your defibrillator is operating correctly.

The current battery power will be displayed as bars, similar to how mobile phones work.

- A full battery will display **all three segments**.
- A half-charged battery will display **two segments**.
- A quarter full battery will display **one segment**.



A flat or near flat battery will display **no segments**. At this point the machine will warn you that the battery is low by turning the 'circle of life' from a circle to a cross.

It is highly recommended you change the battery when the AED alerts you of 'Low Battery' status. This is when the 'I' button starts flashing red, accompanied by a flat battery icon. By pressing the 'I' button, it will audibly say "Low Battery—Replace with a new one".
You will have up to 15 shocks from this point.

Note: SP1 batteries are expected to last a minimum of four years or 200 shocks, if cared for correctly. Guides for this can be seen in the manufacturers manual supplied with each SP1.

All SP1 pads have an expiry date on them and this is reflected within the LCD as segments. When the pads have **three months or less** worth of life left in them, only the bottom segment will show. When the pads have expired, no segments will show.

OVER 3 MONTHS LIFE 	LESS THAN 3 MONTHS LIFE 	EXPIRED 
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SP1 - LCD Troubleshooting

	Screen is displaying all icons, each icon solid and easy to see.
	Icons on the screen are faded and difficult to see.
	Icons completely missing.
	If a black cross is displayed then the machine has developed a fault.

We advise you look at your AED weekly/daily shift check!

This is to ensure your AED is always in a life-saving condition, and allows you to keep tabs on battery and pad life.

However, sometimes faults can develop. The iPad SP1 typically will only present four types of faults, which can be visible on the left hand side.

Icons found in the **GREEN** box is what you should expect to see on your defibrillator. This means it is operational. You may see the battery indicator go down to two icons, or the pad icon to lose the top half segment. This is normal behaviour and it's the AED telling you that the life of your consumables has reduced. Sometimes the battery may be blank, with a X. This means your battery is empty. This is not considered a fault.

Icons found in the **AMBER** box suggests there is a LCD issue. **The AED is still working and can be used during an emergency situation.** If you do develop an LCD issue, we shall replace or fix your unit, free of charge.

Icons found in the **RED** box suggests your defibrillator has come across a fault, either internally or because it's detected a low battery. These types of faults are usually accompanied by a flashing red 'I' button.

Give us a call immediately if you ever receive icons found in the **RED** box.

Our helpline is: 03333 444 789

WINTER CARE



Most AED's use Lithium technology, a high energy storing battery that is designed to last a long period of time. Although these batteries are stable and reliable, Lithium battery technology does have some flaws which can impact the performance of the devices they are used in.

Specifically, with the AED's, these batteries can *lose charge* when exposed to cold temperatures over an extended period of time.

This can give the appearance that the battery has run flat, even though the day before the battery was full.

**Typical operating standards for AED's is: 0°C ~ 43°C
(32°F ~ 109°F)**

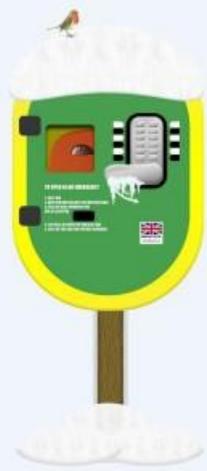


If you suspect your battery may have been exposed to cold during the night, and your AED is no longer functioning, bring it inside. Allow the battery to warm up - this may take a few hours. Once warmed back up within operational temperatures the AED should re-operate. When the battery is warmed up, it regains any charge it previously lost - however, repeated exposure can result in your battery's life degrading over time.

HOW TO CARE FOR MY AED

Protecting your AED during colder periods is imperative to ensure it is always operational and ready during rescue events. Here are some do's and don'ts for looking after a AED.

DON'Ts	DO's
Do not leave your AED inside a car during cold nights. Cars do not protect against the cold!	Bring in your AED every night and put it in an easy to grab place, where it is warm and dry. Do this if you keep your AED in a vehicle.
Do not store your AED outside in an <i>indoor</i> cabinet.	Outdoor AEDs should be stored in a waterproof, heated cabinet.
Do not leave your AED unattended for prolonged periods of time.	It's imperative you check your AED as often as you can, a minimum of once a week. This will allow you to monitor your AED's condition. If you have an outdoor cabinet, check that your heater is working by placing your hand on the heater during a cold night. It should be warm. Keep all moving parts of your cabinet well oiled and lubricated. Water can seep into moving parts and then freeze, causing it to seize up.



13. What you need to know about Defibrillators CPR Guide

Refer to Appendix 1.0 of this policy for the full 'What you need to Know about Defibrillators and CPR' guide.



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By: Full Council
By: Full Council

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