



parkrun AED (Automated External Defibrillator) guide

UK & Ireland

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Introduction

As parkrun has grown and the number of people taking part in our events around the world each week has increased, we have recognised that the statistical likelihood that a critical medical incident will occur at one of our events increases similarly.

We recognise our responsibility to make our parkruns as safe as possible for everyone taking part, and take this duty extremely seriously.

That's why we started rolling out AEDs to our UK events in 2015, and worked hard to get universal coverage to all our UK events by 2019. Subsequently we have now got universal coverage of AEDs at our events in Australia, New Zealand, the Republic of Ireland and Japan.

parkrun have now made the commitment to deliver AEDs to every event globally, to ensure that wherever parkrun takes place around the world, the chance of survival for someone who experiences a Sudden Cardiac Arrest (SCA) is greatly improved.

We are proud that already today, numerous lives have been saved by our commitment to ensure access to an AED at our events.



What is an AED and why is it important?

An automated external defibrillator (AED) is a portable device that checks the heart rhythm and can send an electric shock to the heart to try to restore its normal rhythm.

AEDs are used to treat sudden cardiac arrest, which is a leading cause of death. SCA is a condition in which the heart suddenly and unexpectedly stops beating. When this happens, blood stops flowing to the brain and other vital organs. SCA usually causes death if it is not treated within minutes. In fact, each minute of SCA leads to an approximate 10% reduction in survival. It's usually too late to wait for an ambulance to arrive and for paramedics to administer the first shock.

New, portable AEDs enable more people to respond to a medical emergency that requires defibrillation. Having an accessible Automated External Defibrillator (AED) used to quickly deliver a life-saving shock often means the difference between life and death.

Remember - AEDs save lives!



Your AED & how to use it

All new events are being provided with the **Heartsine SAM 450/500P AED***. When you receive your AED, it will come with a **detailed user guide**, which you should read carefully. You will receive a warranty card that you should return to Heartsine.

Please note that the AED will operate in the native language of the country where your parkrun is located.

Your AED is designed to treat someone who may have experienced a Sudden Cardiac Arrest. This means that they are unresponsive to stimulus, not breathing normally and with no apparent circulation.

If a victim goes into Sudden Cardiac Arrest **it is very important** that CPR is administered as quickly as possible. CPR is a combination of techniques, including chest compressions, designed to pump the heart to get blood circulating and deliver oxygen to the brain until an AED can be deployed to stimulate the heart to start working again.

(* In North America the model is called the **Heartsine SAM 450 AED** - whilst the linked guide and videos in this document refer to the **Heartsine SAM 500 AED**, the two models are identical in operation.)

An AED will give instructions when to give CPR and the Heartsine SAM 450/500P model even tells you how good your chest compressions are.

We recommend that you watch these two videos which have been produced by Heartsine, the manufacturers of the device.

The first relates to unpacking and setting up the device when you receive it, including inserting the Pad-Pak (batteries and pads) and filling in the warranty card.

Unpacking and set-up

The second video guides you through all aspects of using the Heartsine SAM 450/500P AED, including performing CPR (Cardiopulmonary resuscitation) on the patient.

How to use

Training

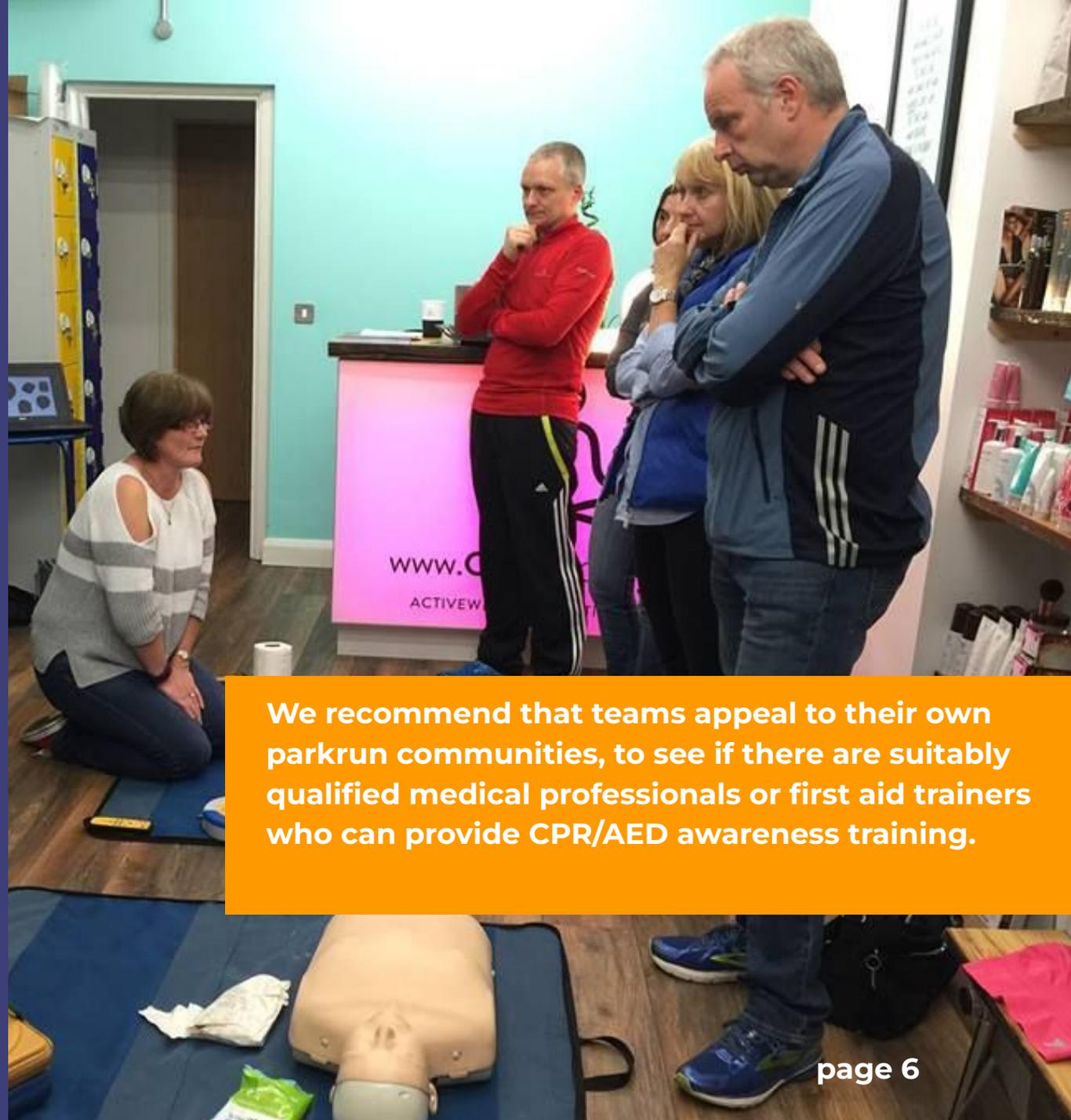
It is good practice for some members of your core teams to receive CPR/AED awareness training.

Nurses, First Aid Instructors, Community First Responders and Paramedics can provide this training. Please note that this does **not** need to be certified/accredited.

Alternatively you can see if there are training resources provided by local or national charities, such as heart charities or fire brigade services, which often provide free training, either online or in person.

In the UK & Ireland we have two training units for events to use as part of their AED/CPR training. If you would like to take advantage of this resource please contact [Event Support](#).

We have two AEDs held centrally which can go out on loan as a short-term emergency replacement if need be, subject to availability. Please email [Event Support](#) to discuss should the need arise.



We recommend that teams appeal to their own parkrun communities, to see if there are suitably qualified medical professionals or first aid trainers who can provide CPR/AED awareness training.

Fundraising for replacement AEDs, pads and batteries

From experience we have found that the quickest and most effective way to raise funds is via your parkrun community. Most events have raised funds in only a matter of days and in some cases in a few hours by using the following methods:

- making announcements during pre run brief and signposting parkrunners to the donations page
- handing out slips at the finish line with information of how to donate
- making an announcement on event Facebook and Twitter pages with link to Donate to parkrun tab

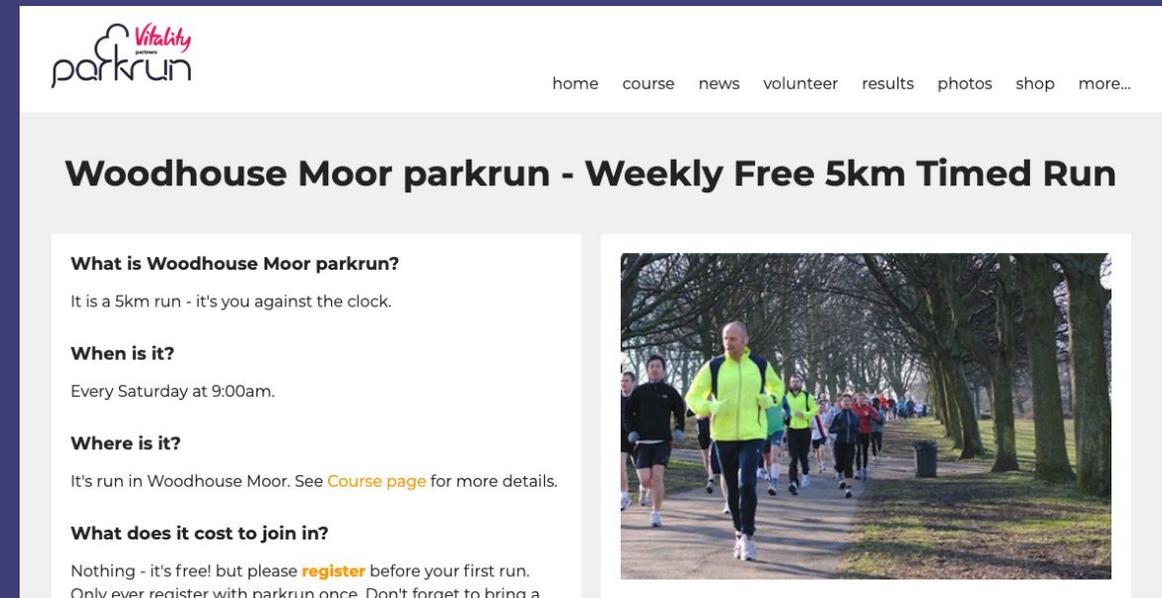
Please note that under no circumstances must cash be handled or cheques be made out to a team member, banked into their account and one cheque forwarded to HQ.

Please use the Donate to parkrun tab on your website.

To find the **Donate to parkrun** tab:

- go to the event website (e.g. [Woodhouse Moor parkrun](#))
- click on the **about us** tab under the option **more**
- And you will find the **donate** tab

You can see the available balance on your event's wiki page - there's a full list [here](#).



The screenshot shows the website for Woodhouse Moor parkrun. At the top left is the logo for 'Vitality parkrun'. To the right is a navigation menu with links for 'home', 'course', 'news', 'volunteer', 'results', 'photos', 'shop', and 'more...'. The main heading is 'Woodhouse Moor parkrun - Weekly Free 5km Timed Run'. Below this, there are four sections of text: 'What is Woodhouse Moor parkrun?' (It is a 5km run - it's you against the clock.), 'When is it?' (Every Saturday at 9:00am.), 'Where is it?' (It's run in Woodhouse Moor. See [Course page](#) for more details.), and 'What does it cost to join in?' (Nothing - it's free! but please **register** before your first run. Only ever register with parkrun once. Don't forget to bring a...).



Purchasing an AED

Once the event has sufficient funds an AED **must** be purchased through our supplier **Aero Healthcare**.

Please ensure that you have enough in your donations pot before placing an order. You can see the available balance on your event's wiki page - there's a full list [here](#).

Unit	Price
Samaritan 500P with CPR Advisor	£815.95
Samaritan 500P with backpack and first aid kit	£910.84
PAD-PAK-03- Replacement Pad pack (Grey) Adult For Heartsine Samaritan 350P/360P/500P	£80.00
PAD-PAK-04- Replacement Pad pack (pink) paediatric For Heartsine Samaritan 350P/360P/500P	£99.00

N.B. Other brands of replacement pads and batteries can be sourced by Aero. Please email sales@aerohealthcare.co.uk to request a quote using a parkrun.com account. Aero will request authorisation from parkrun HQ and will then ship to the event invoicing parkrun Ltd directly.

Ordering process:

- Click on [this](#) link
- Scroll down a little and click on *Resuscitation, Defibrillation & Oxygen*
- Scroll down again and click on *Defibrillators*
- Click on your chosen product - one of:
 - Samaritan 500P Defibrillator with CPR Advisor
 - Samaritan 500P with backpack and first aid kit
- Under the unit click on *ADD TO BASKET*,
- At the top of the screen, click on *Basket*: 
- Check your order, remembering that the price to look at is *excl VAT* one
- Click the *Continue to Authorisation* button
- Fill in the delivery details using your event's office email address
- Click the *Request Authorisation* button
- You should see the message 'Your order has been marked for authorisation'

The orders are processed manually so within 1-2 business days Event Support will receive a request to authorise your order.

Replacement of pads and batteries

For the **HeartSine SAM 450/500P AED**, the pads and batteries come together in what is known as a Pad-Pak. The Pad-Paks generally have an expiry date of 2-3 years, which is clearly marked on the AED. Please make sure that you order a new Pad-Pak at least 2 months before the expiry date shown.

If the battery light ever flashes red and you get the message 'battery low', then please order a new Pad-Pak immediately. You should also contact your Country Manager/Ambassador, to see if a temporary Pad-Pak can be provided before the upcoming Saturday.

To order a new Pad-Pak please send an email to [Event Support](#), indicating why you need a replacement Pad-Pak, and where the new Pad-Pak should be sent.

Please check with your local authority for recycling options when replacing your battery.



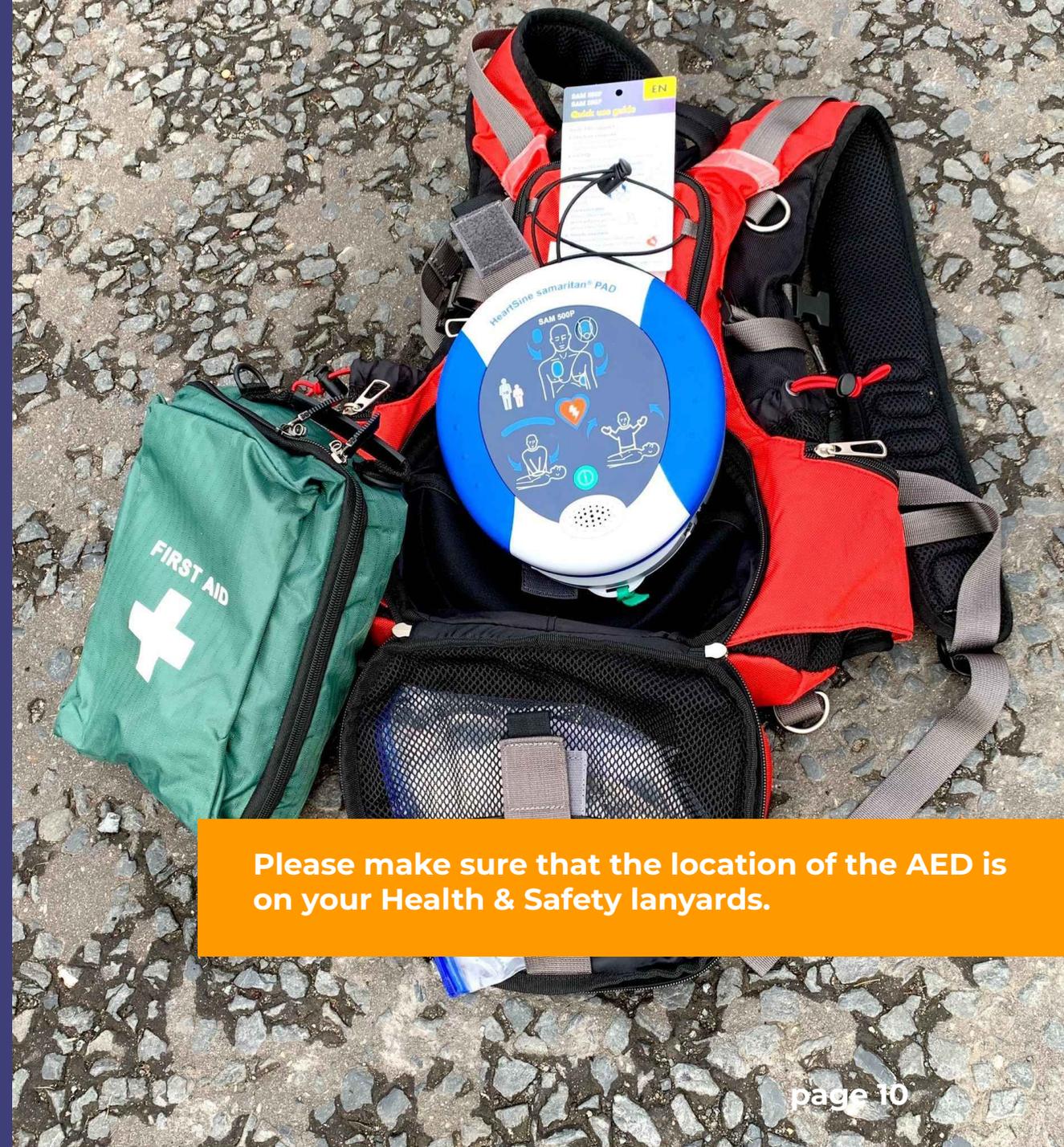
Location & storage of an AED

Evidence shows that the most likely location for an incident will be at or near your start & finish area (including incidents that happen both before and after your parkrun). If your event owns an AED, it **must** therefore be located at the finish line during the event.

It is vitally important that the Run Director on the day is contactable via mobile phone in case of an emergency, and that course marshals and Tail Walkers have the Run Director's phone number. Please check that mobile phone reception is available from all parts of the course.

Your team should also make plans for how you would deploy the AED to different parts of the course as quickly as possible. For example, do you have a bike available for use at the start/finish? If you receive information about a serious incident out on the course, please remember to **take the AED with you** when you make your way to the incident.

If your event does not own an AED, and it is located in another location close to the finish line, then you should similarly give careful consideration to how you will quickly access the AED and then transport it to different locations around the course.



Please make sure that the location of the AED is on your Health & Safety lanyards.

Location & storage of an AED

Between events

Your AED **must** be kept with the event team between events, and brought to the parkrun each week. Please do **not** keep the AED in unsecure storage due to the risk of theft, and also potentially the malfunction of the device if stored at sub-zero temperatures.

Each week

Please check that the AED is in good working order before each event. You can do this by checking that the green light is showing on the AED. Please note that you don't need to regularly turn on the AED as this will drain the battery. The AED performs an automatic weekly self-test and the status indicator will inform you if there is a problem with it.

On the right hand side there is a **helpful checklist** for the maintenance of your AED, including what to look out for each week, and over the longer term.

DOES YOUR DEFIB PASS THE TEST?

RECOMMENDED CHECKS FOR HEARTSINE DEFIBRILLATORS:

- 1** WEEKLY - CHECK ON STATUS INDICATOR HIGHLIGHTED BELOW

- 2** 12 MONTHLY - CHECK FOR ANY PHYSICAL DAMAGE

- 3** 12 MONTHLY - CHECK THE PAD-PAK EXPIRY DATE


Your defibrillator is event ready if you can confirm the following:

- ✓ Status indicator is flashing green and there is no physical damage
- ✓ The Pad-Pak (combined unit of the battery and electrodes) is in date
- ✓ Defibrillator prep kit is present and complete
- ✓ If your defibrillator is not a HeartSine, please check for separate battery levels/expiry dates and pads expiry dates. Please also check the rescue readiness indicator which will be in the form of an LED or 'circle of life' - usually a digital circle

Please note: If the green light is flashing, but your Pad-Pak is out of date, the device carries a reserved battery with 10 shocks and 20 minutes of data recording time. This means that in the event of an emergency, the 'expired' Pad-Pak can be used, however we don't recommend this as standard practice. The same goes for if the device is flashing with a red light and saying 'battery low'.

Location & storage of an AED

If you do not own your own AED

If you do not own your own AED but it is located close by, please make sure that it is a routine that you check that is in working order and available for the parkrun event each week.

Please remember to mention the whereabouts of the AED in your pre-run brief so that all parkrunners who are present know where it is located.

If your AED is unavailable

If you know in advance that your AED is unavailable you should attempt to locate a replacement and if that is not possible you should cancel your event citing this as the reason for cancellation on WebFMS.

AED & Risk Assessment

As part of mitigating against the risk of a critical medical incident please ensure details of your AED is added to the event Risk Assessment.

If you have just received a new AED, then you will therefore need to submit a new Risk Assessment.

On the Risk Assessment, section 4.0 should be added to confirm that the AED will be checked weekly, before the start of the event and that if it is not available, not working or missing then the event should be canceled until there is access to a working AED.

The mitigation in section 4.1 or 4.2 should include the location of the AED during the event.

Considerations for junior parkrun

Choosing Brand & Model

Almost all AEDs have the ability to be used for paediatric purposes. The Aero Healthcare 'HeartSine' models of AED (like most other brands of AED) will require paediatric pads, sold as a separate Pad-Pak.

Swapping the adult pack with the paediatric pack is a straightforward process only taking a few seconds.

The pads for children are generally smaller and may require different pad positioning (usually indicated by pictures on the pads themselves).

It's important to note that instances of cardiac emergency in children are rare and occur much less often than they do in adults. Usually a child or infant would have a respiratory emergency first (caused by injury, illness, choking, drowning, poisoning etc). That's not to say of course that it doesn't happen, because it does and can be as a result of an undiagnosed genetic heart disorder.

With the much greater likelihood of an adult suffering a cardiac emergency and with a large amount of adult volunteers/parents present at junior events, adult pads **must** be fitted to the AED and the paediatric pads readily to hand if needed. The majority

of the participants at a junior parkrun are aged over 8 years, giving further justification for keeping adult pads fitted.

The 'CPR Advisor' function on the HeartSine 500P model is intended for use with adult patients only. If the Paediatric Pad-Pak is inserted the CPR Advisor is disabled. The unit will still give clear audible/visual instructions.

IMPORTANT NOTE:

The term 'Paediatric' refers to children and infants (babies). A child is deemed as being aged from 1 to the onset of puberty and an infant being aged under 1 year old. Many manufacturers refer to children as being from the age of 1 to 8. If you are in doubt about whether a child has reached puberty, then use the age of 8 (or over 25 Kilograms / 55 pounds) as your guide. Any child that is older than 8 years of age should be treated as an adult, and the adult protocols for CPR and defibrillation should be adopted. **Do not delay treatment, trying to find out the patient's exact age/weight.**

Further details can be found in the [Resuscitation Council \(UK\) Guidelines](#).

Common Q&As

What if I do it wrong?

AEDs are very easy and safe to use. They are designed so that they can be used by practically anyone as the AED gives clear, verbal instructions to guide you through each step.

AEDs are safe for anyone to use as safeguards have been designed into the unit precisely so that non-medical responders can't use the AED to shock someone who doesn't need a shock.

If the AED determines that no shock is needed, it will **not** allow a shock to be given.

I'm nervous about using the AED

Remember that at an average parkrun event there are many people capable and qualified of deploying and using an AED.

Whilst it is good practice that the event team obtain CPR/AED awareness training, in our experience it is often a parkrunner who is medically trained who steps in, takes charge of the situation and uses the AED.

Are there any circumstances where I shouldn't use an AED?

If someone is responsive or conscious then you shouldn't use the AED. However, if the individual is unresponsive, unconscious and not breathing, then you should proceed with CPR and go ahead and use the AED.

The person is in a critical, life-threatening condition and there are no circumstances where the use of an AED would be the wrong course of action in this situation.

Can I get sued if I make a mistake using an AED?

Around the world, many different governments have passed legislation which protects individuals from civil liability when they attempt to save a life using an AED. This is often known as 'Good Samaritan' legislation.

We do not know of any incident where an individual has been found to be liable when using an AED in making best attempts to save a person's life.



Thank you for reading this AED Guide. If you have any questions, please contact [Event Support](#).