

# BRITISH TRIATHLON MEDICAL GUIDANCE DOCUMENT



# **British Triathlon Guide to Medical Cover at Permitted Events**

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# INTRODUCTION

## Background

As the governing body for triathlon (and related multi-sport events) British Triathlon is responsible through its respective Home Nation Associations of Triathlon England, Triathlon Scotland and Welsh Triathlon for the management and administration of the event permitting process.

Every governing body of sport has a legal duty to insist that the arrangements at events held under its auspices ensure proper access to medical support (Case Law: Michael Watson vs British Boxing Board of Control 1999). Furthermore, the Home Office “Good Practice Safety Guide” (2006) states that “medical/First Aid requirements should be provided in conjunction with the rules and/or guidelines of the sports organisation and/or the First Aid provider...”

## Aim

The aim of the medical cover should be to provide timely and optimal management of medical problems and provide intervention in the case of time-critical emergencies that are life-threatening. A reasonable level of expertise and resources should be available to manage the anticipated number and type of injuries based on experience gained either from previous or similar events.

This guidance document is designed to support event organisers to:

- identify appropriate levels of trained and/or equipped medical resources at their events
- ensure that suitable arrangements are in place to manage those resources

Although every care has been taken in its development, British Triathlon cannot accept responsibility for any loss or negligence arising out of its use.

It advocates an approach based on adherence to minimum recommended levels of medical cover supplemented by a robust event-specific risk assessment which may lead to a deviation from those levels.

## STEP 1

Identify minimum recommended level of medical cover based on event distance and anticipated number of competitors.

## STEP 2

Undertake risk assessments, including:

- I. For controllable hazards - foreseeable hazards to which the event organiser is able to apply control measures to mitigate the risk
- II. For uncontrollable hazards - hazards to which the event organiser cannot apply control measures to mitigate the risks

### STEP 3

Amend the levels of medical cover if appropriate based on the results of the risk assessments.

### STEP 4

Develop a medical plan to manage the required medical resources.

### STEP 5

Undertake a post-event medical review to assess the medical response and to identify any amendments that may be required for the next time the event is run.

## Event Organiser's Duty of Care

The vast majority of events take place without serious incident but there is no room for complacency.

Every organiser has a "duty of care" under UK Common Law to take reasonable care to ensure the safety of everyone involved in or directly affected by their event. This includes competitors, spectators and event staff/volunteers.

In terms of medical provision this duty means that the support:

- is sufficient to respond to foreseeable medical risks that might be reasonably anticipated
- is provided by suitably qualified individuals
- is available in a timely fashion for those who require it

The event should not place an undue burden on healthcare provision for the local population and in all cases sole reliance on the 999 emergency service response WILL NOT meet the duty of care of an event organiser.

It is also important to note:

- This document provides guidance for the provision of medical support during an event. Every organiser should also have basic First Aid provision/arrangements in place for the event staff during the event build and breakdown
- the event medical cover also has a duty of care to the general public and as such may be required to attend an emergency call e.g. from local residents if they are the nearest available resource. Although unlikely, if this were to happen and it compromised medical provision at the event a contingency plan such as postponement or cancellation be need to be implemented.

## Informed Consent

An event organiser cannot avoid or transfer the duty of care to competitors e.g. through the completion of a disclaimer. There is a level of inherent risk in all activities - for example, competing in endurance events puts considerable stress on athletes and can increase their risk of injury or illness. Each competitor must make a judgement on their suitability to participate BUT this judgement can only be made on the basis of a clear understanding of the risks. It is the event organiser's responsibility to highlight those risks and the competitor's responsibility to ensure that they are adequately prepared and also that they bring any known medical conditions to the attention of the organiser. A competitor responsibility statement can be used as an alternative to a disclaimer. (See Appendix 1 for an example)

## Event Day Responsibilities

Event Organiser responsibilities for the provision of medical cover during an event include:

- Ensuring that the agreed level of medical cover is present and in place prior to starting the event
- Ensuring that there are sufficient marshals located around the course with an appropriate means of communication to promptly identify and report casualties and confirm when the course is clear of competitors
- Ensuring that the event team is able to undertake basic assessment (and reporting) of injuries
- Provision of mobile medical support on the course
- Provision of resources to transport casualties back to the event base and/or hospital

NOTE: The event organiser is also responsible for ensuring that there is a basic level of medical provision and a plan of what to do in the event of an accident/incident during the event build and dismantle to protect the event team.

## MINIMUM RECOMMENDED LEVELS OF COVER

Whilst it is not possible to provide a definitive model for medical cover it should be noted that:

1. **NO** event, regardless of size, should have less than two first aiders. This applies to both events for adults and events for children.
2. Standard distance triathlon and duathlon events with more than 1000 competitors **OR** events of greater than standard distance (i.e. middle and long distance events) regardless of the number of competitors, represent a marked scaling up of potential risk\*.

\*Comprehensive data from Australia and the USA indicates that 1 - 10% of athletes at standard distance and 10 - 25% at middle distance and above require medical intervention. Initial evidence from the UK indicates 2 - 5% of competitors at standard distance and 5 - 10% at middle distance and above require medical intervention

The matrices below, which follow a similar format to those contained within the UKA Road Race Medical Services Good Practice Guide, can be used to identify minimum recommended levels of cover based on the anticipated number of competitors and the distance for the event. It is important to note the following:

- The minimum recommendations are based on “standard” conditions where the event is established, it consists of single lap courses which have no restrictions on the access for emergency vehicle and there is a mix of both experienced and novice athletes all over 16 years of age. As part of the risk assessment process, the cover levels may need to be adapted to suit the event profile (see below) and should not be considered as an absolute guide to medical requirements.
- A more cautious approach should be applied to new events or where significant changes have been made to the course or competitor profile.
- Where there are multiple races at the same event the recommended cover for the highest standard should be applied.
- The number of competitors refers to the number of starters not the number of entries. Organisers should factor in a natural dropout rate (likely to be 10 - 20%)

## Definition of Terminology

The following definitions apply to the matrices:

CQC - Care Quality Commission

BLS - Basic Life Support

ALS - Advanced Life Support

AED - Automated External Defibrillator

First Aid Post - Designated (& signed) location where basic treatment can be provided. Typically staffed by a minimum of 2 trained First Aiders

Mobile BLS - can be a responder on foot, bike, motorbike or ambulance car or ambulance

Mobile ALS - as per mobile BLS but provided by a registered healthcare professional with appropriate skills and competency

Ambulance - an emergency “blue light” ambulance crewed and staffed to a standard specified by the local NHS ambulance service (N.B. Off Road Ambulance - can be used for terrain inaccessible to conventional ambulances. Paramedic Ambulance - provide a higher level of skills and interventions to a standard ambulance). Rapid Response Vehicles (RRVs), can be used to deliver Advanced Life Support practitioner(s) to an incident but they should not be considered as an ambulance as they cannot be used to transport patients

Dedicated Medical Control - facility used by medical command to coordinate the medical response. May be part of an overall event control that includes other emergency services to ensure a coordinated response to incidents

Sweep Vehicle - a vehicle used to pick up competitors who drop out (tired, injury, mechanical failure) and return them to the finish. Typically includes a First Aider to manage minor medical issues

Bed or Cot - an examination couch, folded stretcher or bed space where non-life threatening conditions can be assessed and treated. Often supplemented by additional holding beds or chairs for observation of casualties

NOTE: Definitions of the medical staff are covered later in the document.

## Race Distance: Super Sprint/Sprint

		Competitor Numbers (Starters)			
	Medical Cover	Under 150	150-500	501 - 1000	1001 - 5000
1	Qualified event team volunteer First Aiders	Either 2			
2	First Aiders from Care Quality Commission (CQC) registered medical provider	Or 2	1 per 100 (minimum 4)	1 per 150 (minimum 6)	1 per 350 (minimum 8)
3	Covered First Aid Post at finish	Optional	Required	Required	Required
4	Covered First Aid Posts on course	Optional	Optional	Minimum 1	Minimum 1
5	Mobile BLS (smaller races only)	Either 1			
6	Mobile BLS plus AED	Or 1	Either 1	Either 1	
7	Mobile ALS	Or 1	Or 1	Or 1	Minimum 1
8	Ambulances and crews	Or 1	Or 1	1 per 500	1 per 2500 (minimum 1)
9	Paramedics				1 per 2500 (minimum 1)
10	Doctors				1 per 2500 (minimum 1)
11	Nurses				1 per 5000 (minimum 1)
12	First Aid or Medical Manager		Either	Either	Either
13	Medical Director		Or	Or	Or
14	Dedicated Medical Control				Required
15	Sweep Vehicle		Required	Required	Required
16	Beds or cots		Minimum 1	1 per 500 (minimum 1)	1 per 1500 (minimum 1)

## Race Distance: Standard

		Competitor Numbers (Starters)			
	Medical Cover	Under 150	150-500	501 - 1000	1001 - 5000
1	Qualified event team volunteer First Aiders	Either 2			
2	First Aiders from CQC registered medical provider	Or 2	2 per 150 (minimum 4)	1 per 125 (minimum 6)	1 per 300 (minimum 8)
3	Covered First Aid Post at finish	Optional	Required	Required	Required
4	Covered First Aid Posts on course	Optional	Minimum 1	Minimum 1	Minimum 1
5	Mobile BLS (smaller races only)	Either 1			
6	Mobile BLS plus AED	Or 1	Either 1	Either 1	
7	Mobile ALS	Or 1	Or 1	Or 1	Minimum 1
8	Ambulances and crews	Or 1	Or 1	1 per 500	1 per 2500 (minimum 1)
9	Paramedics				1 per 2500 (minimum 1)
10	Doctors				1 per 2500 (minimum 1)
11	Nurses				1 per 5000 (minimum 1)
12	First Aid or Medical Manager	Required	Either	Either	Either
13	Medical Director		Or	Or	Or
14	Dedicated Medical Control				Required
15	Sweep Vehicle	Required	Required	Required	Required
16	Beds or cots	Minimum 1	Minimum 2	1 per 300 (minimum 2)	1 per 1250 (minimum 3)

## Race Distance: Middle

		Competitor Numbers (Starters)			
Medical Cover	Under 150	150-500	501 - 1000	1001 - 5000	
1	Qualified event team volunteer First Aiders				
2	First Aiders from CQC registered medical provider	Minimum 4	2 per 125 (minimum 4)	2 per 150 (minimum 8)	1 per 200 (minimum 12)
3	Covered First Aid Post at finish	Required	Required	Required	Required
4	Covered First Aid Posts on course	Minimum 1	Minimum 2	Minimum 3	Minimum 4
5	Mobile BLS (smaller races only)				
6	Mobile BLS plus AED	Either 1	Either 1	Either 1	
7	Mobile ALS	Or 1	Or 1	Or 1	1 per 1500 (minimum 1)
8	Ambulances and crews	Or 1	Or 1	2 per 500	1 per 1500 (minimum 1)
9	Paramedics		Minimum 1	Minimum 1	1 per 2500 (minimum 1)
10	Doctors		Minimum 1	Minimum 1	1 per 2500 (minimum 1)
11	Nurses				1 per 5000 (minimum 1)
12	First Aid or Medical Manager	Required	Either	Either	Either
13	Medical Director		Or	Or	Or
14	Dedicated Medical Control				Required
15	Sweep Vehicle	Required	Required	Required	Required
16	Beds or cots	Minimum 2	Minimum 2	1 per 250 (minimum 4)	1 per 500 (minimum 6)

## Race Distance: Long

		Competitor Numbers (Starters)			
Medical Cover		Under 150	150-500	501 - 1000	1001 - 5000
1	Qualified event team volunteer First Aiders				
2	First Aiders from CQC registered medical provider	Minimum 4	2 per 100 (minimum 4)	1 per 100 (minimum 10)	6 per 1000 (minimum 20)
3	Covered First Aid Post at finish	Required	Required	Required	Required
4	Covered First Aid Posts on course	Minimum 4	Minimum 1	Minimum 1	Minimum 1
5	Mobile BLS (smaller races only)				
6	Mobile BLS plus AED	Either 1	Either 1	Either 1	
7	Mobile ALS	Or 1	Or 1	Or 1	Minimum 1
8	Ambulances and crews	Or 1	Or 1	2 per 500	1 per 1500 (minimum 1)
9	Paramedics				1 per 2500 (minimum 1)
10	Doctors				1 per 2500 (minimum 1)
11	Nurses				1 per 5000 (minimum 1)
12	First Aid or Medical Manager	Required	Either	Either	Either
13	Medical Director		Or	Or	Or
14	Dedicated Medical Control				Required
15	Sweep Vehicle	Required	Required	Required	Required
16	Beds or cots	Minimum 1	Minimum 2	1 per 300 (minimum 2)	1 per 1000 (minimum 4)

## Event Profile

There are a number of **critical factors** which can affect the medical requirements of an event. The minimum recommendations need to be modified to accommodate any variables that will affect the 'standard' conditions. These factors include, but are not limited to:

- Remoteness of location
- Terrain
- Time of year and time of day
- Out and back courses
- Courses with multiple laps
- Courses where sections are inaccessible to medical vehicles
- Proximity to nearest NHS Accident & Emergency Department
- Competitor age and experience
- Weather & environmental conditions (temperature, wind, humidity etc)
- Unreliable communication around the whole course

## TriStar & Youth Events

Whilst the matrices are based on events for competitors aged over 16 on the day of the event, the matrix for sprint events should still be the starting point for identifying an appropriate level of medical cover with an absolute minimum of two qualified First Aiders being present.

There is a higher duty of care for TriStar and Youth events that necessitates additional requirements:

- Medical staff should ideally have training & experience in paediatric care
- Parental/Guardian consent will be required prior to treatment
- Parental/Guardian attendance during treatment

## Paratriathletes

Depending on the nature of their disability there are additional medical issues that may be presented by some paratriathletes when participating in a triathlon. **Appendix 2** describes some of the more common issues and considerations during treatment.

## Other Considerations

- The level of cover should be increased if the anticipated number of spectators exceeds 500.
- First Aid should always be provided at or near the finish as well as on the course.
- For events where there is an open water swim there should always be medical cover at the point where any rescued swimmers are taken to. This cover should remain in place for the duration of the swim section.

- It is strongly recommended that the medical cover and water safety team identify/rehearse how an unconscious casualty will be transferred from the safety craft to the medical support to ensure a coordinated response and an increased likelihood of a successful outcome.  
Further details about medical cover at open water swims can be found in British Triathlon's Organised Open Water Swimming guidance document.
- Medical staff and vehicles can only perform a single role at any point in time e.g. an ambulance cannot be both a mobile response and a static First Aid Post. It is however, possible to relocate resources once they are no longer required to cover a specific location

## Appointing a Medical Provider

The matrices are designed in such a way that they can be applied to an event by someone without medical knowledge so that they have an understanding of what is a reasonable minimum level of cover. This knowledge can then be used for budgeting and approaching potential providers. However, it is strongly advised that any deviation from the identified levels (informed by the subsequent medical risk assessment) is discussed and agreed with the appointed medical provider.

It is recommended that a medical provider is appointed at an early stage in the planning process. There can be a wide variation in costs and levels of experience so it is worth approaching several potential providers.

Things to consider include:

- whether they are registered with the Care Quality Commission;
- the services and skills offered;
- experience of sports events, specifically triathlon (consider approaching other organisers for references);
- reliability of attendance.

There is a benefit to deploying the same medical provider annually as they will become familiar with the event. However, consideration should be given to reviewing this every 2-3 years to ensure that the provider is still the most suitable for your requirements.

Note: Any post-event medical review should include input from the medical provider.

## RISK ASSESSMENT

Every organiser must “*make suitable and sufficient assessment of the risks*” to the health and safety of people connected both directly and indirectly with the event.

A risk assessment is a way of identifying hazards and putting control measures in place to reduce the risk of those hazards causing harm.

A risk assessment has to identify:

- Each perceived hazard
- Who is at risk from the hazard
- The likelihood and potential severity
- Control measures that can be put in place to eliminate or reduce risk to an acceptable level and anything more that can be done to reduce the risk further (if the level of risk cannot be reduced to an acceptable level the hazard/activity should be avoided)

The risk assessment should be recorded and should be completed by a **competent person**. Only significant risks need to be recorded.

On this basis British Triathlon recommends that the medical risk assessment, and subsequent identification of the levels and positioning of medical cover, incorporates the input of the event organiser (or their nominated representative) and the medical provider. For this reason it is advisable to engage a medical provider early in the planning process and arrange a meeting, ideally at the event site, at the earliest opportunity to discuss the risk assessment and the subsequent medical plans.

Medical risk assessments for triathlons need to take into account the underlying risk of injury or illness inherent within participation that cannot be entirely removed. Therefore it may be helpful to consider the assessment in two parts:

### 1. Controllable Hazards:

These are foreseeable hazards which an event organiser is able to eliminate or reduce to an acceptable level by applying control measures. These may include:

- advising competitors before the event on the effects of exertion on any pre-existing conditions;
- ensuring that they are prepared for adverse weather conditions, such as providing foil blankets and shelter if the weather is cold/wet or ensuring that there is plenty of water available if it is warm and sunny;
- checking that competitors are competing at an appropriate distance for their age;
- ensuring the course is free from traffic, where possible;
- removing tripping and slipping hazards.

### 2. Uncontrollable Hazards:

These may also be foreseeable but the level of risk cannot be eliminated or reduced by an event organiser implementing control measures.

For example, a competitor suffering an injury or illness due to the aggravation of a pre-existing undiagnosed condition which may become apparent due to the exertion of participating.

It is important to recognise that uncontrollable hazards are inherent within events and that although control measures cannot be put in place to overcome them procedures can be identified to help manage them should they occur. Competitor information and education and an awareness of the typical conditions that can arise at triathlons play a part in this process.

A similar awareness within the event team and some basic information on action to take is also important.

## Competitor Information & Education

Even athletes in regular training may not understand the risks associated with participating in multi-sport endurance events or know when to withdraw from competition.

There are a number of steps organisers can take to:

- Help athletes make an informed decision about whether they are sufficiently fit and/or prepared to undertake the rigours of the event;
- Help athletes to decide when to seek medical opinion about entering or withdrawing from an event;
- Help the medical providers by collecting information about any pre-existing medical conditions athletes may have and by providing a medical history template for athletes to complete on the reverse of race numbers.

An example of a medical information sheet that can be downloaded from an event website or sent out with race information packs is attached in **Appendix 4**. Another useful resource to signpost competitors to is [www.runnersmedicalresource.com](http://www.runnersmedicalresource.com). Whilst this website is written for running events the advice it contains is equally applicable to triathlon.

An example of a medical history template that can be printed on the reverse of a race number is attached in **Appendix 6**.

The competitors' race information should also reference the location of medical facilities and the nature of the medical cover provided.

## Event Team Briefing

Whilst the event team are not required to administer First Aid they are usually the first point of contact for the reporting (or witnessing) of incidents and as such it is recommended that the event team has a basic knowledge of what action to take in the event of having to deal with a casualty. **Appendix 5** is an example of a briefing sheet for marshals that can be adapted.

## Typical Conditions

The medical risk assessment may need to consider the following typical conditions to a greater or lesser extent. The medical cover should be prepared to evaluate and treat on site or stabilise and transport/transfer:

- thermal injuries (hypo/hyperthermia);
- dehydration;
- acute asthma;
- myocardial infarction/acute coronary syndrome;
- allergic reactions/anaphylaxis;
- serious injuries e.g. fractures, dislocations, head injuries;
- minor injuries e.g. blisters, abrasions, contusions;
- muscle and ligament strains;
- hypoglycaemia.

The table below provides further information about who is able to treat the above:

Condition	Diagnosis	Who Can Perform	Comment
Thermal injuries (hypo/hyperthermia)	Core body temperature recording	Emergency medical technician/nurse, paramedic, doctor	First Aiders are not trained to perform this diagnosis
Dehydration	Blood glucose test	Emergency medical technician/nurse, paramedic, doctor	First Aiders are not trained to perform this diagnosis
Acute Asthma	Peak flow test	Emergency medical technician/nurse, paramedic, doctor	First Aiders are not trained to perform this diagnosis but can assist if the individual has their own medication e.g. inhaler. They are not qualified to prescribe or administer drugs.
Myocardial Infarction, Acute Coronary Syndrome	12-lead ECG	Emergency medical technician/nurse, paramedic, doctor	First Aiders are not trained to perform this diagnosis
Allergic Reactions/Anaphylaxis	Peak flow test & visual observation	Emergency medical technician/nurse, paramedic, doctor	First Aiders are not trained to perform this diagnosis
Serious injuries e.g. fractures, dislocations, head injuries	Observation, primary and secondary surveys	Can be performed by a First Aider but treated by an Emergency medical technician/nurse, paramedic, doctor	
Hypoglycaemia	Blood glucose test	Emergency medical technician/nurse, paramedic, doctor	First Aiders are not trained to perform this diagnosis
Minor Injuries e.g. blisters, abrasions, contusions		Can be treated by a First Aider trained to the appropriate level	
Muscle and ligament strains		Can be treated by a First Aider trained to the appropriate level	

**Appendix 3** is an unabridged list of desirable equipment but the equipment selected by the medical provider will need to be chosen according to the anticipated event demands and the medical risk assessment.

## PLANNING AND DELIVERY OF MEDICAL SERVICES

Once the medical risk assessment has been completed and an appropriate level of medical resources identified, an event medical plan should be developed. This details the operational delivery plan for the medical resources. Typically this should include:

- the names, responsibilities, location and contact details for all key medical and event staff;
- maps of the venue and the courses;
- details of and locations for first aid and medical resources;
- details of the nearest accident and emergency unit;
- a communication plan and command structures, including informing first aiders that the event has started and finished;
- reporting structures for communicating incidents that have occurred on the course, and supporting documentation and forms;
- services and equipment provided by the event organiser/first aid provider;
- treatment protocols for likely incidents;
- arrangements for recording and reporting casualties, including informing families/next of kin; and
- fatality protocols and media relations.

The information contained in this section of the document provides background information to inform and support the development of a medical plan.

### Medical Staff

#### General Requirements

Medical providers should:

- Be at least 16 years old and not over 65 years old. First Aiders under 18 years of age **MUST NOT** work unsupervised;
- Have no other duties or responsibilities at the event;
- Have identification;
- Have protective clothing;
- Have relevant experience or knowledge of requirements for first aid at sporting events;
- Be physically and psychologically equipped to carry out the assigned roles.

There are different types of medical providers that can be included within the event medical team. These include:

## Medical Director

A Medical Director should be appointed to all events where there is a marked scaling up of risk - typically due to the either the number of athletes or the distances covered.

The Medical Director should have relevant accident and emergency experience and a background in pre-hospital care (e.g. for doctors, a diploma in pre-hospital care).

Typical responsibilities for a Medical Director include:

1. Ensuring that appropriately qualified and experienced medical and paramedic support staff are recruited.
2. Organising medical personnel and facilities and overseeing safety issues.
3. Liaising with the event organiser and ideally be part of the planning committee or equivalent.
4. Giving professional advice on the level of medical cover required, including the number and type of staff (including a medical risk assessment and medical plan).
5. Working with the event organiser to ensure that all reasonable and practical steps are undertaken to promote injury prevention.
6. Directing and coordinating the medical team response to incidents.
7. Compiling a post-event report including the number and type of medical problems dealt with and highlighting potential areas for improvement in terms of organisation, equipment and personnel.
8. Providing expert opinion on the need to cancel or alter/shorten an event on medical grounds.
9. Providing the final opinion on an athlete's fitness to compete and retaining the right to withdraw an athlete from an event.

Doctors have PIN numbers that can be checked online to ensure registration at [www.gmc-uk.org/doctors/register/LRMP.asp](http://www.gmc-uk.org/doctors/register/LRMP.asp)

## Paramedic Personnel

Paramedics are highly skilled individuals who have undergone training in relation to the critically injured in a pre-hospital setting and who use their skills in basic and advanced life support on a regular basis often in less than optimal conditions. They are ideally suited to deal with traumatic and medical emergencies at triathlon events.

Paramedics are members of, and registered with, the Health Care Professions Council (HCPC). They have PIN numbers which can be checked online to ensure registration at [www.hpc-uk.org](http://www.hpc-uk.org)

## Nursing Staff

A qualified nurse is a nurse whose name is entered in the relevant part of the professional register maintained by the Nursing and Midwifery Council.

Nursing staff employed at an event should ideally have experience in working in an NHS Emergency Department, Critical Care Facility or Minor Injuries Unit (within the previous two years).

They have PIN numbers which can be checked online to ensure registration at [www.nmc-uk.org/Search-the-register/](http://www.nmc-uk.org/Search-the-register/)

## Emergency Medical/Ambulance Technician

EMTs should hold qualifications from the Institute of Health Care and Development (IHCD). They are not currently regulated under a professional body or the Care Quality Commission (CQC) but their training is recognised by the ambulance service.

## Ambulance Care Assistant

Ambulance care assistants are known in the ambulance service as emergency care assistants. They hold a first aid certificate and a certificate in manual handling. They should always be crewed with an emergency ambulance technician (EMT).

They are not currently regulated under a professional body or the CQC.

## Accredited First Aider

In January 2013 First Aid regulations changed, including the HSE approval process of training providers and qualifications for first aiders, following the Löfstedt review.

Accredited first aiders can gain certification from any approved and registered Ofsted training organisation.

**NOTE:** The completion of a “Health and Safety at Work” or a four day “First Aid at Work” course does NOT necessarily qualify a person as competent to administer first aid to members of the public, especially at sports events where injuries will be less common to the workplace and more sport specific.

## Spotters and Assistants

At some events spotters and assistants might be employed e.g. to assist in retrieving athletes from the finish line and on the course. **They should not assist in moving injured or unconscious athletes.**

Spotters and assistants require close supervision from either paramedical or medical staff and should NOT be left alone with injured athletes awaiting evacuation or athletes with altered levels of consciousness. They may be required to physically support and lift athletes and therefore should be in good health.

## Pre-Event Briefing

All medical staff should have a pre-event briefing, regardless of the size of the event and this should be led by the lead medic.

The briefing should include details about the site layout and courses highlighting potential areas of concern, the likely nature of injuries/conditions that may be presented and the communication plan.

For open water triathlon events consideration should be given to rehearsing the transfer of a swim casualty from a safety boat to the land-based medical support. This will require coordination between the medical provider and the water safety cover during the event planning phase. It will also require adequate time for the rehearsal to take place before the event commences.

## Medical Facilities

The medical facility should be clearly marked by a medical sign/symbol.



Access to the area should be restricted to casualties, medical staff and appropriately accredited event officials only. It should be adequate in size for the anticipated number of casualties.

If there is more than one medical facility one should be designated as the main medical facility. If the facility is temporary and flexible on location it should be sited close/adjacent to the finish area with unrestricted access from the finish line. Temporary structures should be supplied with appropriate flooring.

Toilet facilities, ideally dedicated to the medical facility, should be located nearby. Where possible there should be a supply of running hot and cold water but if this is not possible adequate fresh clean water should be supplied in containers.

Consideration should be given to the following:

- Power supply
- Any temporary shelter should be rain and wind proof and have opaque sides for confidentiality
- Sufficient size to hold number of beds. Additional beds/chairs for observation of casualties (pre/post treatment)
- Blankets, and thermal space blankets
- Ice
- Provision of suitable, sterile routes for the exclusive use of emergency vehicles. Where this is not possible a protocol for creating and maintaining a suitable route in the event of an emergency should be developed
- Identification of a suitable landing site for an air ambulance, either at the event venue or nearby, in the event of a requirement to airlift a casualty to the closest appropriate hospital.

**NOTE:** Only in exceptional circumstances should ambulance/medical vehicles be permitted to move from their designated position to enter the course (“field of play”) or spectator areas and only when directed to do so by their control (and with appropriate warning signals).

## Communications

All events require effective and efficient methods of communication which might include two-way radios and/or mobile telephones. The selected communication method(s) should be tested to ensure there is appropriate coverage across the whole event site and course. Where radios are used consideration should be given to a separate medical channel.

A communication plan should be devised which allows communication between the medical provider, first aid providers around the course, event organiser/safety officer/event control.

## Off-site Transfer

Clear protocols must be established for the evacuation of injured athletes including the location of the nearest emergency department.

In the event of an athlete being evacuated from the course the senior medic or first aider present must be informed and they should take responsibility to pre-warn the emergency department of an incoming casualty and the nature of their injuries.

The medical plan should factor in sufficient levels of cover/resources to ensure appropriate levels are maintained in the event of a casualty being transferred to hospital.

## Documentation

The medical provider should maintain a record of all people seeking treatment. The record should include details such as name, address, telephone number, age, gender, presenting complaint, diagnosis, treatment given, the onward destination of the casualty (e.g. home, hospital, own GP) and the name/signature of the person responsible for the treatment.

The only people who may have access to the records are those that are involved in the treatment or those that have lawful authority.

**NOTE:** Event logs, report forms and records completed at an event may be required at a later date to assist in the reporting of accidents and injury under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995 or for subsequent legal proceedings *if the injury was due to defective equipment or failings in the organisation and management of the event*

The post-event medical report provided by the medical provider to the event organiser should include details of the number and nature of incidents that were presented at the event but all personal details should be removed so that the information is anonymous.

As part of the British Triathlon event permitting process for any event where an incident or accident occurs a Race Medical Report should be completed and retained. Any major incident or accident should be shared with British Triathlon. A template for the Race Medical Report and Major Incident Report can be downloaded from the Event Organisers System.

## Weather Plans

Planning for events usually factors in anticipated/typical weather and environmental conditions for the time of year. However, it is entirely possible that there will be a sudden or unexpected change in the weather that could adversely impact on competitors (as well as the event staff and spectators). It is important therefore to monitor the medium/long range forecast and develop hot and cold weather plans that can be implemented if required.

Things to consider might include:

### Hot Weather Plan

- Additional drinks station(s) and /or more water at the start and finish
- Cold, mist shower
- Advising competitors to keep wetsuits rolled down whilst awaiting the start, keeping in shade, keeping well hydrated, adjusting target times etc
- Providing sun block
- Modifying or reducing the course
- Postponing or cancelling the event

### Cold Weather Plan

- Providing additional shelter
- Providing space heaters
- Modifying or reducing the course
- Postponing or cancelling the event

It should be noted that extremes of weather have a greater effect the longer the competition distance.

## Injury Protocol

The procedure and responsibilities for communicating with the family and/or supporters, the media and official bodies e.g. Health & Safety Executive, British Triathlon in the event of an injury or fatality should be agreed with the medical provider prior to the event.

# Appendix 1: Example Competitor Responsibility Statement

## Competitor Responsibility Statement

“Participating in a triathlon/duathlon/aquathlon requires fitness and skill. I confirm that I have done sufficient training to ensure that I am fit enough to cope with the demands of this event and that my technical skills are adequate for the diverse requirements of the competition.

I accept that taking part in this event is by its nature hazardous and contains certain inherent risks including, but not limited to:

- Drowning during the swim section
- Suffering injury and damage arising out of a crash or collision during the cycle section
- Suffering injury due to the actions of other competitors or spectators

There are many other foreseeable risks to which I consent.

I accept that I owe a significant duty of care to all other competitors, spectators and race officials. I will exercise all reasonable care to avoid causing death, injury or loss to any such persons and will indemnify the event organisers and British Triathlon from and against any liability found against them arising out of my negligent or reckless acts.

I accept that in the event of my requiring medical attention during the event the medical personnel appointed by the event organiser take no responsibility for the treatment provided for any unreported existing condition which increases the risk of a medical emergency.

I acknowledge that the event organiser has relied on this statement (in its entirety) in accepting my entry to the event and that if I was unable or unwilling to agree to all the matters set out above in this statement of responsibility the event organiser would not allow me to compete. All statements of fact are true.”

**Signed:**

**Parent / Guardian:**

(For all competitors under 18 years of age on the day of the event)

**Dated:**

## Appendix 2: Additional Risks for Some Paratriathletes

### Athletes with spinal cord injury

Damage to the spinal cord can lead to impaired regulation of heart rate, blood pressure and body temperature, as well as loss of movement and sensation.

These athletes are unable to control body temperature efficiently, they only sweat above the level of lesion so can overheat or dehydrate more easily. They can also become chilled more easily.

### Autonomic dysreflexia

This is a serious life threatening condition that occurs in a high percentage of individuals with a lesion at or above T6 (thoracic vertebra). It occurs when there is an irritating stimulus below the level of the lesion and leads to a significant rise in blood pressure. Under normal circumstances a tetraplegic person may have a low blood pressure (e.g. 90/60mm.Hg). Rising to a “normal” level of 120/80mmHg. may represent a significant elevation.

A blocked or kinked catheter or overfull bladder can cause autonomic dysreflexia as well as accidental injury.

Prompt action is necessary to identify the cause and lower blood pressure. Medical help is essential.

#### **Symptoms:**

- Pounding headache
- Feeling of doom, anxiety & apprehension
- Profuse sweating
- Tightness in chest.

#### **Signs:**

- Flushing and/or blotching above level of cord lesion
- Hypertension and bradycardia
- Pupillary dilatation
- Cardiac dysrhythmia

#### ***Above lesion:***

- Pallor initially
- Flushing head and neck
- Sweating in area above and around the lesion

#### ***Below lesion:***

- Cold peripheries
- Pilo erection
- Contraction of bladder and bowel
- Penile erection & seminal fluid emission

**Action:**

- Immediately sit the patient up to lower BP. Remember until bladder or abdominal distention is alleviated, sitting up to 90 degrees could cause further pressure and so make symptoms worse.
- Summon medical help.
- Check catheter and tubing for kinks or empty the leg bag, check for bladder and lower bowel distension.
- Check for tight clothing, abdominal strap, leg bag strap, shoe, brace etc.
- Give medication of choice if patient normally takes this.
- may be sublingual Nifedipine 5 mg pierced, bitten or chewed. Treatment may be repeated up to four doses (40mg) over one hour.
- GTN Spray
- If possible, monitor blood pressure every five minutes during the episode.

**Athletes with increased muscle tone (spasticity)**

This may be due to spinal cord lesion, MS or cerebral palsy and will be worsened by fatigue or cold. Use of ice packs to treat soft tissue injury should be avoided.

**Athletes with leg amputation**

Skin chafing and blisters can occur when running for long distances, especially if the stump is sweaty or wet. Blisters should not be burst and the athlete should not put the prosthesis (artificial leg) back on.

## Appendix 3: Equipment

Each event will require a different profile of desirable equipment so specific numbers have deliberately been avoided. This “unabridged” list of medical equipment is therefore given in full and items will need to be chosen according to the anticipated demands of the event.

Specialist medical equipment that may be provided by a medical team:

- Automatic External Defibrillator (AED)
- Ventilation equipment

Medical equipment that will need to be sourced include:

Fluids	Dressings etc	Various
Dextrose Saline 1000mls Lignocaine inj 1% 5mls Normasol 25mls Betadine spray Opsite spray Benoxylate minims Hydrogen peroxide 200mls Flamazine Adrenaline/epinephrine - cardiac and anaphylactic doses Hydrocortisone iv/im Opiate analgestics Anti-emetics - parenteral and oral Lignocaine - cardiac and local anaesthetic dosage Verapamil, atropine, digoxin Salbutamol/terbutaline inhalers and solution for nebulising Diazepam Glucose for injection Glucagon Oral antibiotics - starter packs Amethocaine/fluoroscein Chloromycetin, or other eye antibiotic	Suture packs Dressing packs Gauze packs Eye pads Disposable bags CSSD/Rubbish Sharps bin Anchor dressings Giving sets Green venflons Various nylon sutures Jelonet Metix narrow Metix wide Steristrips 1/3+3 Crepe 15cm Crepe 7.5cm Crepe narrow Micropore 1” Microtouch boxes Surgeons gloves 7.5 Disposable scalpel Blue needles 5ml syringe Triangle bandage Disposable vomit bowls BM stix Soft collars (medium) Bed roll paper Cotton wool balls BM lancets Urine bottles (male and female) Disposable razor Disposable airways (1,2,3,4)	Drinking straws Calomine lotion Paracetamol Elastoplast NSAID ointment KY jelly Vaseline Aspirin

Medical personnel should bring:

- Stethoscope
- Sphygmomanometer
- Thermometer, normal and low reading
- Personal medical bags

The First Aid Post will require the following:

- Power supply
- Rain and wind proof
- Opaque sides for confidentiality
- Sufficient size to hold number of beds
- Blankets, and thermal space blankets
- Ice

## Appendix 4: Medical Information Sheet

An example of information that can be published in event information packs and/or on event websites.

An active lifestyle is important to maintaining good health and swimming, cycling and running are all excellent ways to exercise. However, there is no guarantee that because you are active you will definitely avoid any cardiac or other complication although you will reduce the risk.

Please read through the following information to minimise the risk of any adverse events prior to or during the event.

### CONSIDERING YOUR RACE ENTRY

**Have you trained or will you be able to train sufficiently for the event you are entering?**

Those who take part in regular physical activity or training will be less likely to have any cardiac or injury problem than those who do not.

**Are you fit to compete?**

Experience shows that some athletes who had fatal cardiac problems during or soon after exercise have had symptoms in the preceding weeks or months but failed to seek medical advice.

**Have you had any symptoms of chest pain, rapid or irregular heartbeat, undue breathlessness?**

**Have you ever passed out or fainted during exercise?**

**Do you have any medical condition that might affect your ability to take part e.g. high blood pressure?**

**Is there a strong family history of heart disease at an early age?**

If the answer is “yes” to any of the above then you should consult your doctor for further advice and, if necessary, defer your entry.

Having a medical condition does not necessarily exclude you from taking part but you should understand the potential risks and benefits. It may also influence your choice of event as the medical cover provided differs from event to event. You should consider the level of cover bearing in mind your medical history, race experience and fitness.

The medical cover provided at this event is **(enter description)**

The type of course and the distances involved will influence the effort required to compete. This event is **(enter brief description of course profile and distances)**

The time of year and likely environmental conditions will also affect the stress on your body. For example, dehydration, cramps and collapse are more common during hot, humid conditions. Slower athletes or athletes with low body fat in particular may struggle and become dangerously cold on a chilly damp day.

## **RACE DAY**

### **Still fit?**

A lot can happen between entering an event and the event itself. Entrants who are fundraising for charities often feel under pressure to take part even if they are unwell or unfit because of the money they have committed to raise.

You should never run with a fever as there is a risk of causing myocarditis (inflammation of the heart) which can be debilitating in the long term or even fatal. **DO NOT** compete if you feel unwell or have just been unwell. Most medical emergencies occur with people who are/have been unwell but who do not wish to miss the event. If you feel feverish, have been vomiting, have had severe diarrhoea or any chest pains, or otherwise feel unwell **DO NOT** compete.

Many competitors do have a past history of medical problems or will be taking medications or using inhalers. Having access to this information is invaluable to the medical support staff in the unlikely event that you collapse or are involved in an accident and lose consciousness. For example, knowing that you are a diabetic or asthmatic can speed the diagnosis and treatment of your problem. Please complete your medical detail on the reverse of your race number.

## Appendix 5: Marshals Briefing for the Assessment and Reporting of Casualties

### Protect the Casualty

From further injuries, or other athletes tripping over them. If available arrange for another marshal to divert athletes, or any vehicles, around the incident. If there is any indication of a back or neck injury do not attempt to move the casualty, otherwise look to move them to a safe location and place in the recovery position. When relocating the casualty to a safe place ensure that it is somewhere they can be easily evacuated from.

### Assess the Casualty

- Are they conscious?
- Are they responding to your questions coherently?
- Is there any obvious sign of injury such as bleeding, bruising or twisted limbs?
- If they are unconscious are they still breathing?
- If they are not breathing check their airway is not obstructed.
- Try to avoid removing the athlete's race number as this information will be required by the medical provider.

### Report the Casualty

Once you have assessed the casualty you should report the incident to your team leader immediately using the contact information provided by the event organiser.

Try and speak calmly and clearly, providing the following information:

- your own name and contact details (phone number or radio call sign);
- the time of the incident and the exact location of the casualty;
- the casualties race number - never give out the casualty's name or personal details over a radio;
- the nature of the incident; and
- the condition of the casualty, including any relevant information from the back of their race number (where applicable).

For example:

*Marshal John Smith at location 7 requesting medical support for cyclist at junction of Forest Road and Valley Road. Male competitor, race number 294 fallen off bike cornering. Unresponsive and unconscious, road rash on leg, no medical information provided.*

Make sure that your message has been received and understood but unless the casualty's condition starts to deteriorate or improve, try to avoid contacting event control again as they will be prioritising cases as they come in and directing their resources as necessary.

### Stay with the Casualty

Do not leave the casualty alone and remain with them until the medical provider arrives, monitoring their condition. Prepare a route for the medical provider to be able to reach the casualty, this could involve moving barriers or asking spectators to relocate.

Ensure that none of the spectators take photos of the casualty as this is a breach of their confidentiality. Even if the casualty is conscious and responsive you should not offer them fluids or food as this could delay further treatment if required. If available and where

possible you should provide them with shelter/shade in cold/hot weather where possible, provide them with a space blanket.

When assisting the casualty try to avoid contact with their bodily fluids (vomit, blood, urine etc) and use basic hygiene when clearing up any contamination.

## Appendix 6: Competitor Emergency Information on Race Numbers

<b>RACE ENTRIES ARE NON-TRANSFERABLE</b> Any participant taking part without a valid paid entry registered in their own name will be disqualified.			
<b>COMPETITOR'S MEDICAL DETAILS</b> All competitors are required to complete the personal details on this form <u>for use in a medical emergency</u> . Please complete all sections of the form carefully in BLOCK CAPITALS using waterproof ballpoint pen or similar. Where competitors are under 16 years this form must be completed by a parent/guardian.			
<b>COMPETITOR'S DETAILS</b>			
Surname:		First Name:	
Address:		D.O.B.	
Postcode:		Please list brief details of any relevant medical history, current medication and allergies:	
Any competitor with an existing medical condition which requires special attention, such as epilepsy, diabetes or a history of heart problems, is required to mark a large cross in black felt tip pen on the front of their race number.			
NEXT OF KIN: as a condition of entry to this event all competitors agree to their personal and medical details being released by the medical team to the event organisers to inform next of kin and statutory authorities in the event of a medical emergency.			
<b>NEXT OF KIN CONTACT DETAILS (FOR RACE DAY):</b>			
Surname:		First Name:	
Mobile Phone No.		Home Phone No.	
		At the event	
		Y / N	
		Address:	
		Postcode:	

The conditions of entry should include medical disclaimers which includes the entrant providing consent for their personal information and medical information to be released by the medical team to enable the event organiser to provide details to the next of kin and statutory authorities in the event of an emergency.

Race packs should include the requirement for competitors to provide medical and contact information before competing in the event. There should also be a reminder for this to be provided during registration on the day of the event.