Triathlon Ireland

MEDICAL GUIDE

FOR EVENTS

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Introduction

This document provides guidance for event organisers to ensure appropriate medical resources are available and managed effectively. It includes risk assessment strategies, duty of care responsibilities, and contingency planning.

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, Triathlon Ireland 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. 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 an event 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 incidents but there is no room for complacency.

Every organiser has a "duty of care" 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 112/999 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

Event Day Responsibilities

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

- Ensuring that the recommended 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

If medical cover is removed (e.g., an ambulance departs with a patient), the event must be stopped if the remaining cover is insufficient as per the event medical plan. Contingency plans must detail how to stop an event in progress, including communication with competitors, officials, marshals, spectators, and medical personnel.

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 is should be noted that:

1. NO event, regardless of size, should have less than a minimum of 2 PHECC FAR (First Aid Responders). 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.

The matrices below 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 vehicles 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%).

Definition of Terminology

The following definitions apply to the matrices:

Competitors' Numbers - Those who participate on the day

First Aid Post – Designated (& signed) location where basic treatment can be provided. Typically staffed by a minimum of 2 trained PHECC FAR Level (First Aid Responder Level)

Volunteer First Aider - Completed a basic first aid course but lacks valid PHECC certification.

Cardiac First Responder (CFR) Community - Certified for CPR and AED use; valid for 2 years.

First Aid Responder (FAR) - Trained to provide first aid and includes full CFR Community certification. Course duration: 3 days, valid for 2 years.
Emergency First Responder (EFR) - Includes BLS and additional emergency care skills. Course duration: 5 days.

Emergency Medical Technician (EMT) - Provides BLS; minimum clinical level for ambulance crew.

Paramedic - Provides intermediate life support.

Advanced Paramedic - Provides advanced life support with controlled drug administration. Requires a rapid response vehicle.

Mobile Basic Life Support (BLS) – can be a responder on foot, bike, motorbike or Rapid Response car or ambulance or 4x4 Jeep. Basic Life Support skills include:

- Adult, paediatric, and infant CPR
- Relief of Foreign Body Airway Obstruction (choking) for all age groups
- Safe operation of AEDs (Defibrillators)

Mobile Advances Life Support (ALS) – as per mobile BLS but provided by a Pre-Hospital Emergency Care Council (PHECC) registered Advanced Paramedic provided by a PHECC registered organisation and equipped with Advanced Paramedic Equipment and full ALS Medications including Controlled Drugs (Morphine/Ketamine etc)

Ambulance – an emergency "blue light" ambulance crewed and staffed to a Minimum of 2 PHECC Registered Emergency Medical Technicians (EMT).

Paramedic Ambulance – provide a higher level of skills and interventions to a standard ambulance, must be PHECC Registered Paramedics.

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. RRV 4x4 Jeeps may can be utilised if they have stretcher capabilities and must only be used to transfer a patient to a Medical Centre and/or Ambulance for further Transfer to Hospital.

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 Medical Controllers must be familiar with the site and undertake a site walk prior to commencement of Medical Control. All Radio messages must be call logged.

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 Aid Responder and/or Emergency First Responder to PHECC Level 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

Resuscitation Trolley - A Trolley which will be used to treat any critically ill patients.

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

Race Distance: Children's distances/ Try a Tri/ 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 (PHECC) 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 Basic Life Support, 2 FARs/CFRs with AED	Either 1			
6	Mobile Advanced Life Support, Advanced Paramedic with AED & vehicle	Optional	Optional	Optional	Minimum 1
7	Ambulances and crews	Optional	Optional	1 per 500	1 per 2500 (minimum 1)
8	Paramedics				1 per 2500 (minimum 1)
9	Doctors				1 per 2500 (minimum 1)
10	Nurses				1 per 5000 (minimum 1)
11	Event Medical Coordinator		Either	Either	Either
12	Event Medical Officer		Or	Or	Or
13	Dedicated Medical Controller				Required
14	Sweep Vehicle	Optional	Required	Required	Required
15	Beds or cots	Optional	Optional	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 PHECC 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 plus AED	Optional	Required	Required	Required
4	Covered First Aid Posts on course plus AED	Optional	Minimum 1	Minimum 1	Minimum 1
5	Mobile Basic Life Support, 2 FARs/CFRs with AED	Either 1			
6	Mobile Advanced Life Support, Advanced Paramedic with AED & vehicle	Or 1	Or 1	Or 1	Minimum 1
7	Ambulances and crews	Or 1	Or 1	1 per 500	1 per 2500 (minimum 1)
8	Paramedics				1 per 2500 (minimum 1)
9	Doctors				1 per 2500 (minimum 1)
10	Nurses				1 per 5000 (minimum 1)
11	Event Medical Coordinator	Required	Either	Either	Either
12	Event Medical Officer		Or	Or	Or
13	Dedicated Medical Control				Required
14	Sweep Vehicle	Required	Required	Required	Required
15	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 PHECC 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 1	Minimum 1	Minimum 4
5	Mobile Basic Life Support, 2 FARs/CFRs with AED				
6	Mobile Advanced Life Support, Advanced Paramedic with AED & vehicle	Or 1	Or 1	Or 1	1 per 1500 (minimum 1)
7	Ambulances and crews	Or 1	Or 1	2 per 500	1 per 1500 (minimum 1)
8	Paramedics				1 per 2500 (minimum 1)
9	Doctors				1 per 2500 (minimum 1)
10	Nurses				1 per 5000 (minimum 1)
11	Event Medical Coordinator	Required	Either	Either	Either
12	Event Medical Officer		Or	Or	Or
13	Dedicated Medical Control				Required
14	Sweep Vehicle	Required	Required	Required	Required
15	Beds or cots	Minimum 1	Minimum 2	1 per 300 (minimum 2)	1 per 1000 (minimum 4)

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 PHECC 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 1	Minimum 2	Minimum 3	Minimum 4
5	Mobile Basic Life Support, 2 FARs/CFRs with AED				
6	Mobile Advanced Life Support, Advanced Paramedic with AED & vehicle	Or 1	Or 1	Or 1	Minimum 1
7	Ambulances and crews	Or 1	Or 1	2 per 500	1 per 1500 (minimum 1)
8	Paramedics		Minimum 1	Minimum 1	1 per 2500 (minimum 1)
9	Doctors		Minimum 1	Minimum 1	1 per 2500 (minimum 1)
10	Nurses				1 per 5000 (minimum 1)
11	Event Medical Coordinator	Required	Either	Either	Either
12	Event Medical Officer		Or	Or	Or
13	Sweep Vehicle	Required	Required	Required	Required
14	Beds or cots	Minimum 2	Minimum 2	1 per 250 (minimum 2)	1 per 500 (minimum 6)

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 Accident & Emergency Department
- Competitor age and experience
- Weather & environmental conditions (temperature, wind, humidity etc)
- Unreliable communication around the whole course

Children's & Youth Events

Whilst the matrices are based on events for competitors aged over 16 on the day of the event, the matrix for try a tri/ 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 Children 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

Athletes with a disability

- Depending on the nature of their disability, there are additional medical issues that may be presented by some athletes when participating in a triathlon. Appendix 1 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 Responders/ EFRs & EMTs should always be located at or near the finish as well as on the course with appropriate equipment, AED, Wheelchairs, Carry Sheets.
- 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 and/or a trained Swift Water Rescue Technician with a minimum level of EMT training in a rescue boat. This cover should remain in place for the duration of the swim section.

Appointing a 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:

- All Medical Providers should be registered with the Pre-Hospital Emergency Care Council as a CPG (Clinical Practice Guideline) Approved Provider, PHECC Link
- Experience of sports events, specifically triathlon (consider approaching other organisers for references);
- Reliability of attendance;
- Level of clinical services provided;
- Experience in large-scale events
- Experience in drafting EMP (Event Medical Plans) submitting to REMO (Regional Emergency Management Office)

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.

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 history template that can be printed on the reverse of a race number is in Appendix 5.

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.

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);
- Cardiac Arrest;
- Head Injuries;
- Drowning/ Submersion Injuries
- Dehydration
- Astma
- Cardiac
- Medical
- Diabetic
- Spinal Injuries
- Dehydration;
- 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.

Serious injuries e.g. fractures, dislocations, head injuries	Observation, primary and secondary surveys	Paramedic/Advanced Paramedic/ SPR Doctor/ Emergency Nurse	First Aiders are not trained to perform this diagnosis
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	

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

Medical Staff

General Requirements

Medical providers should:

- Be at least 18 years old
- 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:

Event Medical Officer

A Medical Officer should be appointed to all events where there is a marked scaling up of risk

– typically due to either the number of athletes or the distances covered.

The Event Medical Officer should have experience and specialist training in accident and emergency and a background in pre-hospital care and be competent in Pre-Hospital RSI (Rapid Sequence Intubation) and familiar in Pre-Hospital Drugs with Current in-date ACLS (Advanced Cardiac Life Support) Training.

Typical responsibilities for a Medical Officer include:

The Event Medical Officer will be located at the Medical Centre and have the following primary duties:
• Coordination with the Event Medical Coordinator regarding the treatment and discharge/transfer of patients;
• Provide overall clinical care for patients;
• Cater for the immediate healthcare needs
• Act as the Event Medical Officer in the event

Doctors have Registration numbers that can be checked online to ensure registration at Medical Council Register

Event Medical Coordinator

The Event Medical Coordinator will be located mostly at the Medical Centre.

• Coordinate with the event manager;
• Liaise with the event medical officer, voluntary emergency services officer, all medical service providers and the HSE Regional Emergency Management Office;
• Ensure all licensing conditions in relation to medical provision are complied with;
• Ensure appropriate agreed levels of medical cover are in-situ and address any deficiencies in service levels;
• Ensure all staff and volunteers sign in and out of the site and operate within their scope of practice;
• Ensure regular monitoring of medical activities (number of patients seen, presentations and transfers) with updates at an agreed frequency and communicate any issues in relation to safety or emerging trend to the Event Safety Officer and/or Event Manager;

• Ensure all records are compiled, collected and retained;
• Conduct pre-event briefings with all relevant event and medical team personnel;
• Ensure reporting structures are in place at all levels;
• Ensure all relevant communications, procedures and contact details are in place and tested between the key stakeholders at the event;
• Ensure all medical facilities and ambulances are fit for purpose;
• Ensure that agreed arrangements are in-situ for a Major Emergency;
• Ensure that staff has the necessary personal protection equipment and their welfare and safety are catered for;
• Remain on site until stood down by Event Control;
• Ensure post-event debriefings are conducted and recorded;
• Prepare reports as required for the Event Promoter and attend and contribute to the end of day debrief;
• Act as the Event Medical Controller of Operations in the event of a major emergency until relieved;

Advanced Paramedics

Advanced Paramedics are highly skilled individuals who have undergone training in relation to the critically injured in a prehospital 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.
Advanced Paramedics skills are:

Advanced Airway Management (ETT, LMA, I-Gel)
Advanced Pain Relief (Morphine, Ketamine, Fentynal)
12 Lead ECG;
IV & IO Access;

Advanced Paramedics are members of the Pre-Hospital Emergency Care Counci. They have PIN numbers which can be checked online to ensure registration at PHECC.
PHECC Practitioner Register

Paramedic

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Nurse / Advanced Nurse Practitioner

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 Emergency Department, Critical Care Facility or Minor Injuries Unit (within the previous two years). Nurses must be provided with a Medical Centre to ensure they can work there clinical level which must include medications and suturing equipment and cardiac monitoring

They have PIN numbers which can be checked online to ensure registration at NMBI Register

Emergency Medical Technicians

EMTs are registered with the Pre-Hospital Emergency Care Council, EMT is the Minimum requirement for an ambulance in Ireland, EMTs can administer a range of medication from (Adrenaline, GTN, Aspirin,Paracetamol, Ibuprofen, Glucagon, Entonox, Oxygen,Glucose Gel, Penthrox, Salbutamol, Chloramphetamine, Naloxone. EMTs are also trained in 4 Lead ECG, Spinal Management, Fracture Management.

Doctor

Doctors are trained to a variety of levels,

- Junior Doctor
- SHO (Senior House Officer)
- Registrar
- Specialist Registrar
- Consultant

Doctors must provide their own Medical Indemnity and must be allowed to provide their service in a Prehospital setting, We recommend that Event Managers must only contract in the services of a SPR and/or a Consultant in Emergency Medicine only with Anesthetic Training.

Medication

EMTs, Paramedics & Advanced Paramedics can deliver a range of Medications based on their skill level. A list of Medications as per PHECC Level can be found on the link below:

Link to PHECC Medication Matrix

First Aid Responder

Accredited first aiders can gain certification from any PHECC approved training site, Occupational First Aider has now ceased to exist and has been replaced nationally with PHECC FAR (First Aid Responder)

The completion of a “Health and Safety at Work” or a four day “First Aid at Work” course does NOT 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;
- Lighting;
- Any temporary shelter should be rain and windproof 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;
- Industrial Heater should be provided;

- 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.

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.
- Medical Communication should be designed a closed channel only to be used for Medical Staff
- 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, All Medical requests must be logged and prioritised through Event Medical Control only.

Off-site Transfer

- No patient will be transported off-site by the event medical team without approval from the Event Medical Coordinator. In exceptional circumstances (where access is impossible and/or the injury is time-critical), this approval may be sought over the radio network by the attending responder. In these exceptional circumstances a pre-determined advanced medical team of doctors, nurses and practitioners will respond to the incident if required. In all other cases, the patient will attend the Medical Centre prior to transfer to the hospital.
- Adult patients who require transfer to hospital for further treatment, monitoring and/or investigation will be referred to in the first instance to the nearest appropriate Adult Emergency Department.
- Paediatric patients who require transfer to hospital for further treatment, monitoring and/or investigation will be referred to in the first instance to the nearest appropriate Paediatric Emergency Department.
- Obstetric patients who require transfer to hospital for further treatment, monitoring and/or investigation will be referred to in the first instance to the nearest appropriate Obstetric Emergency Department.
- Patients who require emergency care or acute, non-emergency care will be transferred by a suitably-equipped emergency transport ambulance, staffed by a minimum crew with 1 x Emergency Medical Team & 1 x Paramedic.
- Patients who require non-acute care or only investigation may travel to the hospital by the site transfer ambulance, staffed by a minimum crew with (1 x Emergency First Responder & 1 Emergency Medical Team) or by their own private car/taxi.
- All patients who are referred to hospital / GP by the event medical team will be accompanied by a referral letter, and a copy of their PHECC PCR where applicable, detailing their presentation and treatment on-site.

Documentation

The medical provider should maintain a record of all people seeking treatment on PHECC Patient Care Reports if Patient is being transferred and Non-Transfer Patients details should be recorded on PHECC ACRs (Ambulatory Care Reports)

All patient care report forms and details will be stored, retained, shared and destroyed in accordance with data protection policy and GDPR. A non-identifiable patient activity report will be completed
after the event and will include the following information:

- Number of Patients Treated
- Breakdown of Male v Female Patients
- Number of Patients Transferred to Hospital
- Number of Patients Treated and Discharged
- Types of Injuries

All patient-identifiable data must be treated as confidential and only shared with third parties with the patient's informed consent, in accordance with agreed information-sharing protocols or in response to a statutory request. Data collection from the source is interpreted for Medical Professionals to provide appropriate patient care.

As part of the Triathlon Ireland event sanctioning process for any event where an incident or accident occurs a Race Incident Report should be completed and retained. Any major incident or accident should be shared with Triathlon Ireland. A template for the RaceIncident Report and Major Incident Report can be downloaded from the Triathlon Ireland website (provide link).

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. The Event Medical Plan should be updated 1 week prior to the event with updated weather conditions expected and distributed to all relevant parties, (Event Medical Officer, Event Manager, Safety Officer, Regional Emergency Management Office and Local Authorities).

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.

Appendices

Appendix 1: Additional Risks for athletes with a disability

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.

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 2: 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 includes:

Fluids	Dressings etc	Various
Dextrose Saline 1000mls	Suture packs	Drinking straws
Lignocaine injs 1% 5mls	Dressing packs	Calomine lotion

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	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)	Parcetamol Elastoplast NSAID ointment KY jelly Vaseline Aspirin

Appendix 3: 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 complications 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.

Appendix 4: 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 that 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 Designated Call Sign
- Exact location of the Incident;
- The casualties race number – never give out the casualty's name or personal details over a radio;
- The nature of the incident; (EG: Cardiac Arrest, Patient Not Breathing, Patient is complaining of back pain etc)

For example:

Marshal:
Race Control from Tango 1, We have 1 Male Patient, O'Connell Bridge, Patient is not breathing.

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 5: Competitor Emergency Information on Race Numbers

RACE ENTRIES ARE NON-TRANSFERABLE

Any participant taking part without a valid paid entry registered in their own name will be disqualified.

COMPETITOR'S MEDICAL DETAILS

All competitors are required to complete the personal details on this form for use in a medical emergency. 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.

COMPETITOR'S DETAILS

Surname:	First Name:	D.O.B.
Address: 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.

NEXT OF KIN CONTACT DETAILS (FOR RACE DAY):

Surname:	First Name:	At the event	Y / N
Mobile Phone No.	Home Phone No.	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.

Finish Area Arrangements and Management

Advice on assessing demand during the peak finishing period, managing runners' collapse, interaction between marshals and the medical team, exclusion of non-essential personnel (sterile area), primary treatment areas, secondary treatment areas, timing methods, effect of hand and chip timed finishes, the primary finish area, secondary finish area, post finish area, use of public address systems, discouraging sprint finishes by less experienced runners, role of forward 'catchers', primary 'catchers', secondary 'shovers' and post-finish observers, the need for post finish refreshments and advice on personal hygiene.

Triathlon Ireland

Medical Guide for Events