



TECHNICAL REGULATIONS

August 2018

CONTENTS

1.	Introduction	Page 3
2.	Course Requirements	Page 4
	- Course Maps	Page 4
	- Marshals	Page 4
	- Course Marking & Safety	Page 5
	- XCO Specific	Page 5
	- DHI Specific	Page 12
	- ENDURO Specific	Page 15
	- MARATHON Specific	Page 15
3.	Protective Clothing	Page 16
4.	First Aid	Page 21

1 INTRODUCTION

1.1 PURPOSE OF THIS GUIDE

The aim of this document is to share event objectives and to provide guidance, information and outline minimum standards and requirements for hosts of sanctioned MTB events in New Zealand.

A majority of these guidelines are taken from the UCI Regulations. We strongly recommend you read more information on the full UCI MTB Regulations here http://www.uci.ch/mm/Document/News/Rulesandregulation/17/29/73/4MTB-E-1.01.2016_English.pdf

Sanctioned events should be delivered at a level that sets it above all other MTB events in New Zealand.

This document is supported with information and details in the Event Certification Program, Event Organisers Toolkit.

MTBNZ reserve the right to change the guidelines as and when required and welcome feedback to improve this document further. Please read through them carefully and do not hesitate to ask for any clarification you may need.

Key Notes:

Where it states REQUIRED – this is a compulsory requirement.

Where it states RECOMMENDED – although not compulsory to ensure best practice due consideration should be given to implement if cost and resources are available.

Where it states MINIMUM – this is the minimum standard required.

2. COURSE REQUIREMENTS

It is **required** that all event courses are to be totally separate from that of all other events organised on the same site. If this is totally unavoidable, the training and race timetable must be drawn up so that the courses cannot be used simultaneously and this will need to be approved by the attending Commissaires prior to the event.

There must not be any obstacles which might cause a crash or a collision in the start and finish zones.

2.1 COURSE MAPS

A course map should clearly show the route, elevation, event village location, feed zones and first aid points. It should also be available in an enlarged, colour and laminated copy and displayed at registration. A secondary map is **required** to be produced that shows all marshal points, medical points and suitable extraction points. This secondary map is to be provided to all commissaires, marshals, first aid and event staff.

2.2 MARSHALS

In order for the event to be run in a safe and efficient manner, a suitable number of marshals are **required** to be on course during all times during official practice and race day for Downhill, and on race day for Cross Country. It is recommended a smaller number of marshals are available for Cross Country practice day.

Marshals at the event are one of the key roles. They play a key role in ensuring safety of the riders and spectators. It is a **requirement** that all marshals will be at least 18 years of age and be able to direct 'with authority' both riders and spectators where there is a potential hazard.

They are **required** to be fully briefed prior to the event and are required to be supplied with a whistle, flags, Hi Viz vest, radio and a marked course map with a simple reference point for advising of location accidents and a list of contact mobile numbers.

In areas of high risk/danger, careful consideration should be given to the selection of marshals for these locations. It is recommended that the marshals in these areas will be experienced in

marshalling at events, and be assertive enough to control spectators and riders should the need arise. It is also ideal for these locations to have an assistant marshal to help as required.

The attending Commissaire will assist with placement recommendations.

Course Marshals should be willing to assist in the case of incident but should not be responsible for the provision of first aid.

2.3 COURSE MARKING AND SAFETY

The organiser is responsible for the supplying and installing all of the Course Marking and Safety Signage/material and Crowd Control measures.

Emphasis must be given to potentially hazardous sections on course (especially in Down Hill courses because of the higher speeds involved).

There should be no doubt as to the course direction. Markers/tape indicate the route to be followed, showing changes of course direction, intersections and all potentially dangerous situations. Markers must be placed at frequent intervals along the course to confirm to the rider that they are following the correct course.

The courses must be fully marked out (excluding tape) prior to the event starting.

Rope is not to be used as a form of course marking or spectator barrier as can burn riders if hit at speed.

PADDING, FENCING

In possible dangerous areas, (e.g. walls, tree stumps, or tree trunks on the course, steep drops or sharp rocks) hay bales or suitable padding is **required** to be used to protect the riders. These must be clearly identified as danger areas but should not restrict the 'rideability' of the course. Any wooden bridges or ramps must be covered with carpet or special anti-slip paint. Chicken wire is NOT suitable as it is highly abrasive if a rider should fall on it.

If in doubt, pad it.

Any netting used for catch fencing **must** have a mesh size of 5mm or less. If the mesh is any larger than 5mm riders may catch their clothing, fingers or bike parts in the netting, resulting in potential injury.

Plastic poles made from PVC conduit (CAPPED), MUST be used on all high-speed downhill sections to support banners, catch netting or tape. **Wooden/Steel stakes and/or warratahs must not be used.** Poles must protrude from the ground by more than 1.8m. The top of the poles should be spray painted in red or bright yellow so they can be seen easily.

CROWD CONTROL

The organiser should prepare for added spectator presence at extreme sections when marking the course out before practice day. It is recommended to designate and promote a specific area that additional security and safety equipment can be added. Rider and Spectator safety is paramount. A security zone may be required between the course itself and the spectators to provide a safe 'run-off' area for rider. Clearly taped off spectator areas are essential so riders must not be concerned about injuring spectators. An experienced marshal is required to be positioned at any popular crowd viewing area to manage the environment.

Example:



2.4 XCO SPECIFIC

START & FINISH AREA

It is important that the flow of riders through the start-finish of the cross-country is controlled so that rider's numbers may be recorded as they cross the line.

The timing tent should be placed adjacent to the start-finish line with a clear line of sight to the finishing straight.

A solid gantry arch structure is **recommended** to be erected at the finish line. The start and/or finish banners must be placed immediately above the start and finish lines at least 2.5 metres above ground level and cover the whole width of the course.

The start zone must be at least 6 metres wide for at least 50m in the lead up to the start line; – be at least 6m wide for at least 100 metres after the start line; For all events the start must be on a flat or uphill section of the course.

The first narrowing after the start must allow riders to pass through together easily.

The finish line must be at least 4 metres wide for at least 50 metres of straight before the finish line. It must be at least 4 metres wide for at least 20 metres after the finish line; and be on a flat or uphill section of the course.

Barriers are **recommended** to be in place on both sides of the course for a minimum of 100 metres before and 50 metres after the start and finish line(s).

The actual 'finish line' shall comprise a white strip 20cm deep with a 4cm black line through the middle (thus leaving 8 cm on each side of the black line).

Commissaires are a useful resource to use when considering and finalising start/finish design. They should be engaged early in the planning process to give the organiser confidence that the course is appropriate.

LAP LENGTH & COURSE

For the event, the optimum lap time is around 16 to 18 minutes for the Elite men's category to complete a lap. This is to allow easy variation of lap numbers for the different classes, to make the race more enjoyable for spectators and easy to film for television coverage. The optimal winning time for an Elite male is between 1.30h and 1.45h.

The course must be 100% rideable regardless of the terrain and weather conditions. The course should include, where possible, forest roads and tracks, fields and earth or gravel paths. Paved or tar sealed roads and footpaths must not exceed 15% of the total course.

The duration of cross-country Olympic format races in the different race classifications in the table below must lie within the following ranges or as close as possible to the race length (in

hours and minutes). The lap length should be between 4.0km – 4.5km. The Commissaire will confirm the number of laps prior to racing (taking into account weather conditions as well).

CATEGORY	RACE TIME (Min/Max)
ELITE	1.30h – 1.45h
U23	1.15h – 1.30h
JUNIOR	1.00h – 1.15h
Masters Men 1 – 2	1.15h -1.30h
Master Men 3	1.00h – 1.15h
Master Women	1.00h – 1.15h
Sport (non elite)	1.00h – 1.15h
U15, U17	50m – 1.00h
U13	40m – 50m

The recommended course for an Olympic format cross-country event should use an attractive lay-out ideally in a cloverleaf design, to encourage easy viewing for spectators and any television coverage. Double feed/technical assistance zones are strongly recommended. The course must be marked every kilometre by a sign indicating the distance remaining to the finish line.

When courses are being designed consideration must be given to improving the flow of the course to eliminate bottlenecks.

Extended single track sections must have periodic passing sections.

Provision should be provided for crossing points for spectators. The crossings must be marshalled on each side where large amount of spectators are expected. In the absence of a marshal, 'Crossing' signs are required to be erected (with a warning to watch for Riders)

MARSHALS

It is recommended that wherever possible each marshal is located in direct line of sight of the next. They should signal the arrival of riders with a short, loud blast on a whistle. All marshals

working on potentially hazardous sections of the course must carry a yellow flag which is waved in the event of a crash in order to warn other riders.

TRAINING

It is **required** that the EDP make the courses available and fully marked for training at least 24 hours before the start of the first race (48 hours recommended). These training times should be communicated to the riders in pre event information. Riders must display their handlebar numbers during official training sessions. Only registered riders are allowed access during these official training times.

FEED ZONE

The location of the feed and technical zone is very important. Each feed zone must be located on a flat or uphill section that is slow and open enough to facilitate feeding. The feeders stand on the RIGHT HAND SIDE. The track must be free of obstacles and have a clear line of sight. This enables riders and feeders to see each other with plenty of time to get into position for feeding. The ideal feed zone is 5m wide and 50m long. This allows passing of riders not wanting to feed without interfering with those taking a feed.

The feed zone must be clearly marked, fenced off from the public and strictly controlled by a marshal. A sign indicating the start and finish of the feed zone must be clearly displayed.

Riders should have access to at least two feed zones each lap. Either two single zones or one double (accessible from two parts of the course). Please also ensure there is shelter for those operating the feed zone – Ezi-up' tent should suffice.

Tables should be placed at the end of the feed zone for the placement of neutral food and drink bottles (all neutral drink is **required** to be in a sealed bottle). There should be a supply of clean fresh water and a rubbish bin.

The Commissaire will determine the final layout and set-up of the feed zone during the course walk.

Example:

Feed/Technical Assistance zone

DIAGRAM 1 : FEED/TECHNICAL ASSISTANCE ZONE ONE SIDE



DIAGRAM 2 : FEED/TECHNICAL ASSISTANCE ZONE OPPOSITE SIDES

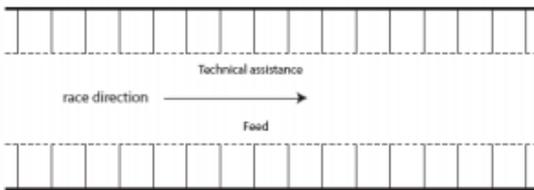
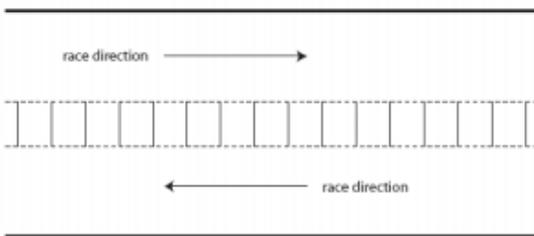


DIAGRAM 3 : DOUBLE FEED/TECHNICAL ASSISTANCE ZONE



DIRECTIONAL SIGNAGE

The complete course must be marked and indicated according to the following system:

Direction arrows (black arrows on white or yellow panels) indicate the route to be followed showing changes of course, intersections, and all potentially dangerous sections.

The minimum dimensions of direction arrows must be 40 cm by 20 cm and they must not be sited more than 1.5m above ground level.

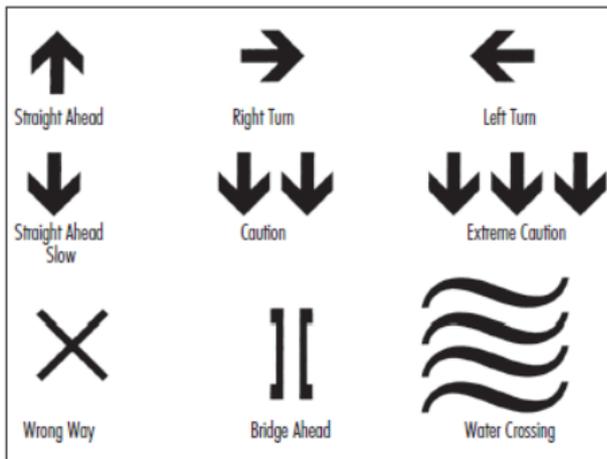
The arrows must be on the right-hand side of the course except for right turns in which case arrows before and at the turn must be on the left-hand side of the course.

An arrow must be located 10m before each junction, at the junction and 10m after the junction to confirm that the correct route has been followed. A clearly visible "X" sign is used to mark wrong directions.

In a potentially dangerous situation, one or more arrows pointing downwards are placed 10m to 20m before the obstacle or potential danger, and also where the obstacle or potential danger is. Two arrows pointing downwards are used for a more dangerous situation.

A serious hazard requiring great caution must be marked with three arrows pointing downwards

Example:



In very fast sections of the course, if the COMMISSAIRE deems it appropriate, small banners as per the diagram below can be used to mark off the course. The tape must be positioned on the ski gates/piping at a height which does not interfere with television shots (usually at 50cm from the ground). "Zone A" sections must be at least 2m wide.



Where course sections involve obstacles such as walls, tree stumps or tree trunks, hay bales or suitable padding must be used to protect the riders. Such protective measures must not restrict the rideability of the course. In appropriate areas, such as along the edge of steep drops, catch nets which comply with safety standards must be used. Nets or mesh fencing with openings greater than 5cm x 5cm may not be used, unless covered. Any wooden bridges or ramps must

be covered with non-slip surface (carpet, special anti-slip paint – Chicken wire is not acceptable).

Wherever possible, identified hazards should be highlighted in biodegradable fluorescent paint. This can occur during the Course check /walk with the Commissaire.

2.5 DHI SPECIFIC

START AND FINISH AREA

The start area must be at least 1m and no more than 2m wide. A suitable handrail must be installed, the floor must be covered with a non-slip surface and the start area must be covered. The start area should be taped so that waiting riders will not interfere with the timing beam

At the finish, the riders exit must be designed in that way that the speed is kept to a minimum. This area must be free of obstacles.

The finish area of the downhill must be double taped to keep the finish track clear of spectators. The area must be double taped for at least 35m into a keyhole shape or bigger where possible after the finish line to allow riders a safe stopping area. It is strongly recommended that solid barriers are used for defining the keyhole to avoid any problems with flow of riders and spectator interference. Portable plastic barriers (available from most hire companies) are the preferred method. These also provide a branding opportunity for sponsors.

It is recommended that some sort of shelter from sun or rain for waiting riders be provided.

The timing tent must be placed beside the finish line with a clear line of sight up the track and in a SAFE position.

The Commissaire is a useful resource to use when considering and finalizing start/finish design. They should be engaged early in the planning process to give the organiser confidence that the course is appropriate.

COURSE

The course for a downhill must follow a descending route.

The course can comprises varied terrain sections: narrow and broad tracks, woodland roads and paths, field paths and rocky tracks. There normally are a mixture of fast and technical sections. The emphasis of the course is to test the riders' technical skills and their physical ability.

Riders should be able to coast down the majority of the course, with no significant uphill sections. The course length should be between 2 and 5 minutes long.

The maximum length for all course is 3500m being 5mins in duration.

The minimum length for all course is 2mins in duration.

The course should contain mainly technical sections to test the rider's bike handling skills. This also helps to keep maximum speeds down, minimising injuries. Flat out, full noise, 'firebreak' style courses are not acceptable. These courses are not only dangerous but are untypical of World Cup and international type courses, and fail to adequately challenge the riders. When building the course, weather (especially wet weather) needs to be taken into account and viable contingency/secondary options available.

While the aim is to create challenging courses, the first consideration must be rider safety- in some cases this is building a table top rather than a gap for instance.

Where there is an extreme section an optional route must be offered, however this optional route must be easier and slower.

It is recommended you enlist local riders of varying levels to test the course.

TRAINING

Unregistered riders (rider's not taking part or intending to race the event) are not permitted to ride on the race course during practice or race days and are not to be allowed on the organised transport.

All registered riders must have attached their race plate to their bike to be given access to the course during training periods.

MARSHALS

Where possible, marshals should be located in direct line of sight of the next. They signal the arrival of riders with a short, loud blast on a whistle. The marshals must be provided with flags so that the safety system below can be used.

During official training every marshal must carry a yellow flag which must be waved in the event of a crash to warn other riders who must slow down.

Some marshals specifically appointed must carry a red flag and have a radio link on the same frequency as those of the Commissaires, Organiser and the event's Chief First Aider. They must be stationed at strategic points on the course such that they are in direct line of sight with their two closest colleagues earlier and later on the course.

The red flags are used in training and racing. Red flag marshals who see a serious accident must immediately notify the organiser by radio, who must as soon as possible initiate an approach response and also notify the Commissaire.

Red flag holders must immediately assess the situation of the crashed rider and continue reporting by radio to the organiser. Red flag marshals who are not directly affected by an accident must follow the relevant radio transmissions. If they note that one of their colleagues further down the course is waving their red flag, they must immediately do the same. This information is **required** to be part of the marshal briefing.

TRANSPORT

Vehicles are **required** to be provided to transport riders up to the start of the course from the Event Village and/or the Finish line.

Purpose built bike shuttle trailers are **required** for transporting bikes and should be towed by a comfortable and safe multi-seated van or small bus. All riders must be seated and have access to seat belts during the transport.

The minimum recommendation is to be able to shift 150-200 riders per hour. This is to ensure that the day runs smoothly and riders are not left waiting for long periods. Vehicles must be available for the official practice day and the race day. Calculate transport requirements based on turnaround time and the number of bikes and riders being carried per vehicle.

If the Transport system is working well the day will run smoothly.

Access to the top of the course must be by a route separate to the course. The course must have adequate access to allow a 4WD or ambulance to get to an injured rider.

No riders are to use any transport other than the official transport supplied by the race organisers for official downhill practice or race day(s).

DIRECTIONAL SIGNAGE

The entire downhill course must be marked and protected using non-metallic, preferably PVC, stakes (slalom stakes) 1.5m to 2m meters high and where appropriate marking tape.

In very fast and dangerous sections, where the rider's line is close to the course boundary, security zones must be installed as per diagram:



The use of hay bales to mark off the course is not permitted.

2.6 ENDURO SPECIFIC

Please see the UCI rules and regulations at this time.

2.7 MARATHON SPECIFIC

Please see the UCI rules and regulations at this time.

3. PROTECTIVE EQUIPMENT

3.1 DHI SPECIFIC

MTBNZ (Cycling New Zealand Mountain Bike) have introduced a rule for competitors riding in all MTBNZ and Cycling New Zealand endorsed, national and championship events which sets the minimum level of protective equipment including body armour and clothing to compete in this discipline in events run under the auspicious of MTBNZ. This document is to explain to riders what minimum level of protection is expected. It should be noted that this is not a finite or definitive list of what is acceptable as protective equipment for downhill racing is evolving all the time. It is, however, a minimum level of protective equipment prescribed by MTBNZ in an attempt to reduce the frequency and severity of injuries resulting from riders crashing while competing in this discipline. MTBNZ recommends affiliated MTB Clubs also adopt these Guidelines for their own activities.

When UCI calendar Downhill events take place in New Zealand these guidelines supersede those guidelines contained in the UCI regulations and therefore must be complied with by all riders.

JUNIOR - U15/17 (INCLUDES U13, U14, U15, U17 SCHOOL GRADES)

Guiding Principle: Knee and elbow protection required with short and long sleeve jerseys and pants. All equipment used should have been designed and sold with the express purpose of being used as protective sports clothing.

Compulsory

1. Full Face Helmet

Requirements:

- Any 1 or 2-Piece helmet with approved Safety Certification (see below) is permitted
- 'Enduro Style' 2 Piece helmets with removable Chin-bar are permitted if they meet the approved Safety Certification below. Examples of current helmets that meet this certification are the Giro Switchblade, Lazer Revolution FF and the newly released Bell Super DH. Note the Chin-bar must be attached any time the rider is on course
- Approved Safety Certification standards are: ASTM-F1952 (ASTM for DH), UN/ECE Reg No. 22, AS 1698, NZ5430, British standard BS 6658 or Japanese standard T8133
- Other 2 piece helmets such as the Bell Super 2r and 3r are not permitted in Downhill events as they do not meet these Safety certifications and the chin bar has not been designed to replicate the level of protection offered by a traditional full-face helmet.

- If you are unsure whether your particular helmet meets the required standard, please consult your helmet manufacturer's information.
2. **Neck Brace** – Leatt (leatt.com) or similar to work in conjunction with the Full Face Helmet.

3. **Elbows/Forearms**

Requirements:

- Elbow protectors with the following properties:
 - Self-fastening – does not require auxiliary fastening devices to secure to the body
 - Can be standalone elbow protectors or as part of a protective suit e.g. full body, half body or vest.
 - Can be elbow only or combined elbow/forearm protection.

4. **Knee/Shin**

Requirements:

- Knee protectors with the following properties:
 - Self-fastening – does not require auxiliary fastening devices to secure to the body.
 - Can be standalone leg protectors or part of a protective suit e.g. full body, half body or vest.
 - Can be one piece knee/shin protectors or separate knee and shin padding.

Highly Recommended

1. **Spinal**

Requirements

- Self-fastening – does not require auxiliary fastening devices to secure to the body
- Cover full length of back (spine) from between shoulder blades to tail bone
- Can be fully, partially or non-articulated in design
- Can be standalone back protectors or part of a protective suit e.g. full body, half body or vest.

Not Recommended

- Motocross style “roost guards” unless with a specific back protector, not just a rear roost deflector.

2. **Shoulder**

Requirements

- Self-fastening – does not require auxiliary fastening devices to secure to the body
- Outer shell should be constructed of a solid material e.g. Hard Shell Plastic
- Can be standalone shoulder protectors or part of a protective suit e.g. full body, half body or vest.

3. **Full Finger Gloves**

SENIORS - U19, ELITE, MASTERS (INCLUDES U20 SCHOOL GRADES)

Guiding Principle: Flexibility to mix and match:

- Knee and elbow protection not required with long sleeve jerseys and/or pants
- Knee and elbow protection required with short sleeve jerseys and/or pants

All equipment used should have been designed and sold with the express purpose of being used as protective sports clothing.

Compulsory

1. **Full Face Helmet**

Requirements

- Any 1 or 2-Piece helmet with approved Safety Certification (see below) is permitted
- 'Enduro Style' 2 Piece helmets with removable Chin-bar are permitted if they meet the approved Safety Certification below. Examples of current helmets that meet this certification are the Giro Switchblade, Lazer Revolution FF and the newly released Bell Super DH. Note the Chin-bar must be attached any time the rider is on course
- Approved Safety Certification standards are: ASTM-F1952 (ASTM for DH), UN/ECE Reg No. 22, AS 1698, NZ5430, British standard BS 6658 or Japanese standard T8133
- Other 2 piece helmets such as the Bell Super 2r and 3r are not permitted in Downhill events as they do not meet these Safety certifications and the chin bar has not been designed to replicate the level of protection offered by a traditional full-face helmet.
- If you are unsure whether your particular helmet meets the required standard, please consult your helmet manufacturer's information.

2. **Elbows/Forearms**

Requirements

- Long sleeve jersey giving at least $\frac{3}{4}$ arm cover, preferably to the wrist, OR:
- Short sleeve jerseys worn with elbow protectors with the following properties
 - Self-fastening – does not require auxiliary fastening devices to secure to the body
 - Can be standalone elbow protectors or as part of a protective suit e.g. full body, half body or vest
 - Can be elbow only or combined elbow/forearm protection

Not permitted

- Short sleeved jerseys (elbow and above), when worn without elbow protection.

3. **Knee/Shin**

Requirements

- Long leg pants giving full cover to the ankle, OR:
- Short leg pants worn with knee protectors with the following properties:
 - Self-fastening – does not require auxiliary fastening devices to secure to the body
 - Can be standalone leg protectors or part of a protective suit e.g. full body, half body or vest
 - Can be one piece knee/shin protectors or separate knee and shin padding

Not permitted

- Short leg pants (above ankle), when worn without knee protectors

Highly Recommended

1. **Spinal**

Requirements:

- Self-fastening – does not require auxiliary fastening devices to secure to the body
- Cover full length of back (spine) from between shoulder blades to tail bone
- Can be fully, partially or non-articulated in design
- Can be standalone back protectors or part of a protective suit e.g. full body, half body or vest

Not permitted:

- Motocross style “roost guards” unless with a specific back protectors, not just a rear roost deflector

2. **Shoulder**

Requirements:

- Self-fastening – does not require auxiliary fastening devices to secure to the body
- Outer shell should be constructed of a solid material e.g. Hard Shell Plastic
- Can be standalone shoulder protectors or part of a protective suit e.g. full body, half body or vest

3. **Neck Brace**

Requirements:

- Self-fastening – does not require auxiliary fastening devices to secure to the body
- Leatt (leatt.com) Brace style construction or similar

4. **Full Finger Gloves**

4. FIRST AID

A key requirement is for the organiser to source and pay for competent and appropriate first aid cover. It is the organisers' responsibility to determine the minimal requirements. Safety is of prime importance when planning an event. When contracting a first aid supplier for the event, the key factor to consider is how able the provider is in specific response to the type of activity that is occurring and their ability to cope with a difficult extraction scenario. Mobility and injured rider extraction ability should be the prime concerns. The recommended minimum requirements set out below reflect the normal qualification levels which will provide this capability.

It is **required** that all Marshals and First Aid personnel are familiar with the course and the evacuation procedures for removing injured riders from it. A map of the course with marshal locations and first aid access points must be provided to all first aid personnel, marshals and officials on both practice and race days.

Non-medical personnel must not move injured riders.

The appointed Chief First Aider is responsible for all first aid responses.

A manned first aid base must be set up in the Event Village and be accessible at all times the event is in progress (including training times) to any riders, spectators and officials. This must be clearly signposted.

The Chief First Aider is **recommended** to contact the local ambulance, police and hospital prior to the event to advise them of the event, maps, times, access points and contact details.

It is the Commissaire (or his/her assigned delegate) who makes the decision to cease or pause competition in the event of serious injury. For this reason, all First Aid personnel must be in radio contact with each other, the Commissaire and Organiser. There must be unbroken radio contact with the critical marshal points on the course.

4.2 FIRST AID SITE PLAN

A detailed map of the course, scale 1:25,000 or better, must be provided with details of marshal positions (which must be individually numbered), first aid positions and evacuation access routes to brief first aid personnel, marshals and officials. First Aid personnel must be placed at key

locations on the course that will be in use for each day of competition. They should be able to respond to an emergency in 2-3 minutes. There must be a first aid crew in place for both practice and race days.

All First Aid personnel must be easily identifiable with an appropriate uniform - this should be unique. It is critical that all First Aid staff are physically able to negotiate the conditions they may encounter during a mountain-biking First Aid emergency. Motorcycles or quad bikes are ideal for quick access to awkward areas. Where possible, first aid personnel should be able to ride as pillion passengers. When seeking First Aid assistants, advise them of the nature of the event and the expectations the event has of them (minimum requirements as above). They should be there for the entire day, only leaving when the last spectators have departed. They must also be easily contactable.