

CHAPTER 5

Mountain Bike Racing



**RULE
BOOK**

5. MOUNTAIN BIKE RACING

5A. Common Procedures

5A1. Races for Junior 17-18, U23, or Elite riders that are National Championships or used to select riders for national teams or international competition shall use UCI rules. In all other events, USA Cycling rules apply.

5A2. All riders must attend the pre-race briefing (riders' meeting) normally held at the staging area prior to the start.

5A3. Racers shall complete the entire event (or individual stage) on the same bicycle upon which the event was begun, with the exception of 24-Hour races as explained in section 5D.

5A4. Except as noted in section 5C, all repairs during an event will be performed by the individual racer. No outside support is permitted. Riders whose bicycles are not functional will be allowed to continue to the finish line, where they may be asked to withdraw from the race by the Chief Referee.

5A5. Except as noted in section 5C, all spare parts and tools shall be carried by the individual racer, to be used only by that racer; cannibalizing other bikes is not permitted. A racer can only use spare parts or tools that the racer started with at the beginning of the race.

5A6. The responsibility of keeping on the prescribed course rests with the rider. A rider is required to stay on the designated trail that is marked and or specified as the race course. A rider may not leave the prescribed course unless ordered to do so by public authorities or a race official.

5A7. Laws and ordinances of appropriate jurisdictions shall be observed during participation in any event.

5A8. Only riders officially entered in the event may practice or compete on the designated race course, and they must wear their number plates and numbers while practicing. No rider previewing the course may interfere with a race in progress.

5A9. Riders should be given the opportunity to walk the course and participate in practice runs whenever practical.

5A10. Intentionally removing obstacles deemed by officials to be part of the character of the race course is prohibited.

5B. Course Markings

In the interest of consistency in mountain biking, the following course markings are used universally by USA Cycling, UCI, and other national governing bodies.

5B1. Arrows mark the entire length of the official course. The arrows will be of a contrasting color on a white background, on signs measuring a minimum of 1' x

2' (30 cm by 60 cm). The signs indicate the course to follow, curves, intersections and warn of situations which are challenging for the competitors. Signs are posted along the course at regular intervals to indicate to competitors that they are on course.

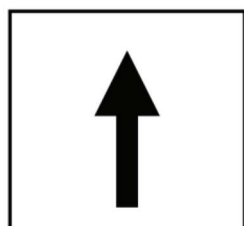
5B2. An arrow placed 30 meters before the intersection should mark each intersection. Another arrow is placed at the intersection. The direction of travel is then confirmed by another arrow located 30 meters further in the new direction.

5B3. In all hazardous situations, two or three arrows placed upside down must be located 30 meters before any obstacle on a circuit. A hazard on the circuit may be an obstacle, quality of the surface, or angle of the track, or any other condition not specifically addressed.

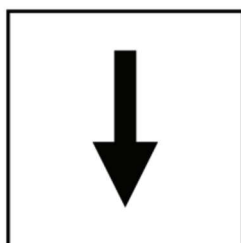
5B4. Directional arrows should always be placed on the right and at racing eye level, about three feet from the ground.

5B5. The course should also be marked every half-mile or 1 kilometer with signs indicating kilometers yet to be raced. There may be a sign indicating 1 kilometer to go.

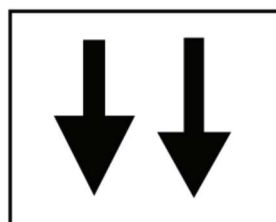
5B6. The signs that are to be used on a mountain bike circuit are shown below:



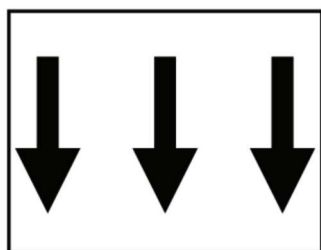
Straight ahead



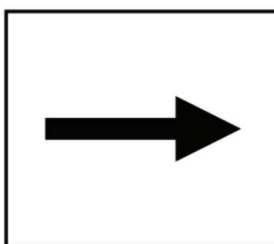
Slow, danger



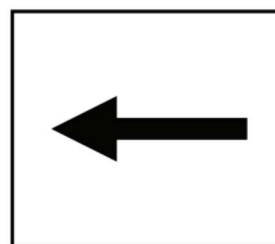
Slower, danger



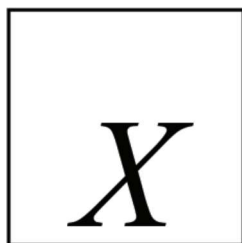
Slower, very
Dangerous



Course turns
Right



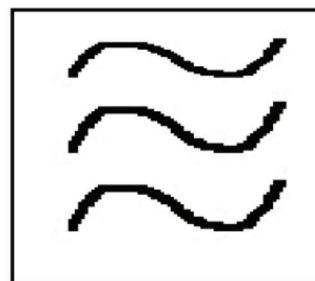
Course turns
Left



Wrong way



Bridge ahead



Water crossing

5C. Feeding and Technical Assistance

5C1. Feed/Technical Assistance Zones are permitted in the following events:

- (i) Ultra-Endurance Events (Marathon, 6-Hour, 12-Hour, 24-Hour events)
- (ii) UCI Cross Country (XCO) events (UCI classes only)
- (iii) Cross Country National Championships for the collegiate and UCI classes

(Pro men, Pro women, Junior 17-18 men, and Junior 17-18 women). Note that when Category 1 Junior 15-16 riders are on the course at the same time as the Category 1 Junior 17-18 riders, they will also have access to Technical Assistance Zones.

5C2. Authorized technical assistance during a race consists of repairs to or the replacement of any part of the bicycle other than the frame and fork. Bike changes are not permitted and the rider must cross the finishing line with the same handle-bar number plate that the rider had at the start.

5C3. Technical assistance and feeding shall normally only be given in the feed/technical assistance zones. Physical contact between the feeders/mechanics may only take place in these zones. However, technical assistance may be given between teammates competing in the same race outside of the technical assistance zones subject to the limitations of 5C2 above.

5C4. Each feed/technical assistance zone should be located on flat or uphill sections which are slow and wide enough for the purpose. The zones should be long enough and reasonably spaced around the course. Double feed/technical assistance zones are recommended.

5C5. For Olympic format cross-country events (XCO) 2 zones will be set up. For marathon format cross country events (XCM) at least 3 zones or opportunities for feeding/service will be set up.

5C6. Team staff working in the feed/technical assistance zones must wear team clothing identifiably similar to the clothing of the riders.

5C7. No rider may ride backwards on the course to reach a feeding/technical assistance zone.

5D. Endurance Events

5D1. Cross Country (XC)

A massed-start competition that is held on a circuit course comprising forest roads, forest or field trails, and unpaved dirt or gravel roads.

(a) Water shall be available only in designated feed zone(s) as outlined by the Race Director. The Race Director will provide a neutral water zone with water for any race exceeding 90 minutes in length. Official water zones must be accessible and publicized before each race. Feeding (food handouts) may only be done in a designated feed zone. A hand up to one rider must not cause other riders to slow

down or veer off course.

(b) Racers riding bicycles have the right-of-way over racers pushing bicycles. When practical, racers pushing should stay on the least rideable portion of the path when being passed. A racer pushing or carrying *their* bicycle can overtake a racer riding *their* bicycle provided the racer pushing or carrying does not interfere with the rider's progress. Lapped riders may be asked to withdraw at the Finish Line.

(c) Lapped riders must yield the course to overtaking riders from the same class and category as quickly and efficiently as possible. Overtaking riders shall announce themselves sufficiently in advance of attempting to pass. Both overtaking and lapped riders shall be jointly responsible for a safe pass.

(d) In the event two riders are vying for position, the leading rider does not have to yield *their* position to the challenging rider. However, a rider may not bodily interfere with the intent to impede another rider's progress. Traditional rules of racing apply: the leading rider owns the track.

5D2. Short Track Cross Country (STXC)

A shortened cross-country style race, designed to be spectator-friendly and easily televised. The course is 100 percent rideable regardless of terrain and weather conditions. It is a multiple lap race with lap times not less than 2 minutes for the fastest riders. Race duration is 25-30 minutes at the Pro/Elite level. Spectator viewing and access are key.

5D3. Time Trial (TT)

A time trial competition involves individuals or teams who race against the clock.

(a) A start list shall be published no less than one hour before the start of the race. The order of start may be determined in various ways:

- (i) Bib number sequence
- (ii) Random start determined by the Race Director and/or Chief Referee
- (iii) Seeding

(b) The Technical Guide shall specify the number of riders for a team time trial and the rider upon which the timing is determined.

(c) The Adult/Junior Time Trial is a two-person time trial where one rider must be a Junior (18 and under) and one must be an adult (19 and over). The timing shall be taken on the second rider to finish.

5D4. Multi-Stage Races (XCS)

A stage race is a series of cross-country races in which teams and individual riders may take part. Riders must complete each stage according to the specific procedures for the event in order to be eligible for the next stage. A technical manual must be produced that delineates the timing or scoring (Omnium) procedures for each stage.

- (a) Teams are composed of at least two and a maximum of 6 riders.
- (b) Stage races are run over multiple days, with a maximum of nine days.
- (c) A variety of types of endurance events, with the exception of cross-country eliminator (XCE), may be used for the stages. When a stage finishes on a circuit, times are taken on completion of the laps on the finish line.
- (d) The individual men's and women's general classification on time or points are obligatory. The individual general classification is based on an individual competitor's cumulative time/points for each stage.
- (e) Where two or more riders make the same time/points in the general individual classification, the fractions of a second registered during individual time trials (including the prologue) are added back into the total time to decide the order. If the result is still tied or if there are no individual time trial stages the classifications obtained in each stage are added and, as a last resort, the place obtained in the last stage ridden decides the finish.
- (f) Other general classifications for men and women, such as points general classification, mountains general classification, and the men's and women's team general classifications are optional.
- (g) Both the men and women's team general classification is established by adding the times/points of the two best riders in each stage.
- (h) Bonuses are shown only in individual general classifications. No bonuses are awarded for individual time trial events.
- (i) Vehicle transfers should be kept to a minimum.
- (j) The organizer should provide a leader's jersey for the leader of the individual men and women's general classification.

5D5. Marathon and Ultramarathon Cross Country (MT)

- (a) Any event between 37 and 62 miles (60-100 km) is classified as a Marathon. An event over 62 miles (100 km) is an ultramarathon.
- (b) All USA Cycling Cross Country rules will apply.
- (c) For National Championships, a Marathon course must be either a point to point, or a circuit disputed over one or two laps.
- (d) The Race Director, under the supervision of USA Cycling or the Chief Referee, shall prepare a complete set of race regulations (the technical guide) that specify how each marathon or ultramarathon competition will be conducted.

5D6. Hill Climb

A Hill Climb is a competition of sustained climbing for which the finish line is located at a higher altitude than the start line. A Hill Climb may be a massed-start or an individual start event.

5D7. 24-Hour Racing

(a) The Race Director, under the supervision of a USA Cycling Representative and/or the Chief Referee, shall prepare a complete set of race regulations (the technical guide) that specify how each 24-hour competition will be conducted.

(b) Each team will designate a team captain. Team captains will represent the team in all official correspondence and communications before, during and after the event. Only team captains may file protests. The team captain must attend the pre-race meeting.

(c) Any rider who has entered the course in support of another may bring equipment and tools and may even swap bikes with the rider in need of support. The cannibalizing of bikes is permitted in 24-hour racing.

(d) Water and food (hand ups) may be supplied to a racer, by anyone, anywhere on the course. Both the racer and persons providing a hand up must stay well clear of the course during the hand up, so as not to impede another racer.

(e) Any racer found intentionally littering the course will be disqualified.

(f) Batons, if used, will be handed out upon log-in. Starting racers must have their bikes pre-positioned in the Start/Finish area. The event may use a Le-Mans style start. Racers must display their official bike handlebar number plate whenever on course. In the case of a bike swap, racers must swap the bike number to the new bike prior to continuing the race

(g) Batons: The 24-hour National Championships may utilize a “baton” hand off between laps. The end of the first racer’s lap automatically becomes the start of the next racer’s lap regardless of whether or not there is a racer ready to start.

(h) A racer may ride consecutive laps.

(i) Loss of the baton, if used by the race, penalties will be set by the race director before the start of the event and included in the pre-race instructions to riders.

(j) Drafting other vehicles or a non-registered rider is prohibited.

(k) Lighting: Racers entering the course two hours before sunset and up to one-half hour before sunrise must have both primary and secondary light sources installed and in good working order.

(l) Once on course, a racer is expected to complete the lap. However, the team has the option of canceling a racer’s lap and restarting the lap from the start/finish line with a substitute, should the first racer be unable to complete the lap for any reason, including injury. Any team member can cancel a racer’s lap by notifying the timers/official. If a team cancels a racer’s lap and is restarting with a new racer, a new baton maybe issued without penalty. However, the team’s original baton must be returned to the registrar. The new racer inherits the start time of the canceled racer’s lap. Once a cancellation has been made, it cannot be rescinded.

The canceled lap does not count as a completed lap.

(m) Every team member must complete at least one lap except in the case of a report of occurrence (confirmation of an injury).

(n) Each team's final placing will be determined by the number of laps the team has completed and the sequential order of finish within the team's last lap. The last racer's lap for each team must be completed before the end of the 24th hour in order for the lap to be counted.

(o) In the case of catastrophic failure due to weather or another extenuating circumstance that prevents the ongoing scoring of the event or creates a racing environment that is deemed too dangerous for the participants, the race may be called as of a certain time. Final results will be calculated in one of two ways as determined by the Chief Referee in consult with the Race Director:

- 1) The race will be considered over at the point it was called and the results will be taken from the last completed lap.
- 2) The riders will be allowed to finish their current lap after the point the race is called and those results will be taken as final.

In the case that the race is stopped and restarted, the combined results of both parts of the race will be used.

(p) In the event that a racer stops to assist in the care of a seriously injured fellow racer which requires an EMS response, Ghost Rider procedures will be implemented. The EMS personnel will radio to the Log Tent the name and number of the assisting racer. Race staff will then inform the team of the assisting racer to prepare the next rider on their team. That rider will be allowed to start *their* lap based on the assisting racer's "ghost rider" lap time which will be based on the fastest of either the assisting rider's average lap time or the team's average lap time.

5D8. Team Relay (TR)

(a) The Team Relay is a race among teams of a number of riders determined by the Race Director and/or the Chief Referee. It is held on a circuit, with each team member riding one lap of the course. The riders on the course will pass an item (generally a baton or wristband) to the next rider to take the course. The first team to have all of its members complete the course is the winner.

(b) General Cross-Country regulations apply to this event.

(c) The Race Director, under the supervision of a USA Cycling Representative or the Chief Referee, shall prepare a complete set of race regulations (the technical guide) that specify how each Team Relay event will be conducted.

5D9. Cross-Country Eliminator (XCE)

(a) The course should be completely rideable and avoid singletrack sections to allow competitors opportunities for overtaking another rider.

- (b)** Following a qualification round, riders race against each other in an elimination format (heats) to determine a winner.
- (c)** The start and finish area should be separated.
- (d)** The qualifying Round should have at least 12 riders entered to have a competition. The qualifying round takes the form of an individual timed run of one or two laps of the course. See Appendix **B2** for seeding.
- (e)** Riders who are DNF, DSQ or DNS in the semifinals may not enter the final for third and fourth.
- (f)** The starting area shall have the following characteristics:
 - (i) A start grid must be drawn on the ground and extend for 10m.
 - (ii) The initial straight should be a minimum of 20m before the first significant turn.
 - (iii) The riders must be lined up next to each other on one line.
 - (iv) The riders in each heat may choose their starting position in order of their qualifying time.
- (g)** The riders may start with one foot on the ground or be held, consistent throughout the event.

5E. Gravity Events

5E1. Downhill

A downhill competition consists of riders racing one at a time, against the clock. The rider with the fastest time wins or advances to the next round. Racers will start at regular, predetermined start times and compete against others in their class and category.

- (a)** There shall be practice on courses for competitors.
- (b)** A start list shall be published no less than one hour before start of race. Order of start may be determined in various ways:
 - (i) Fastest time from seeding run.
 - (ii) Bib number sequence.
 - (iii) Random start determined by the Race Director and/or Chief Referee.
- (c)** Regular start intervals of 1 minute or 30 seconds are recommended.
- (d)** Each rider shall report to the starter at least three minutes before their scheduled starting time and shall start at the scheduled time. A rider starting early shall receive a time penalty, as determined by the Chief Referee. If a rider appears later than the appointed starting time, the start will be allowed only if it does not interfere with the riders starting on schedule. If it does interfere, the rider may be further delayed. In case of a late start, the appointed start time shall be used in computing the results unless the rider has been granted a new start time as provided elsewhere in these race regulations or in the technical guide for the event.

The rider's bicycle must be stationary at the moment of the start.

(e) A passing rider has the obligation to pass safely.

(f) If a rider leaves the course *for any reason*, the rider must re-enter the course *between the same two course markers* where the rider exited the course.

(g) In the event that a rider experiences an unavoidable delay, the rider must report immediately to the Chief Referee or designated official to request a re-run. The Chief Referee will make the determination if a re-run is granted.

(h) A rider missing a start time may or may not be given a new start time at the discretion of the Chief Referee or an official designee. At the pre-race meeting, the Chief Referee will give the re-start procedure if any is applicable.

(i) If a course hold is issued, any rider that was stopped or who missed their scheduled start time must report immediately to the Chief Referee or official designee. The Chief Referee will then determine a re-run order and new start times if applicable. Riders must request the re-run or new start time within 15 minutes of the announcement of the course hold.

(j) The course must be marked with directional arrows or course tape to notify rider of course direction or hazards. The course must be appropriately marked before the first training session.

(k) Any rider whose time being 100% slower of that of the first established time is listed in the results as DNF (did not finish). This rule is applied for qualifying round and finals. Under exceptional circumstances; the maximum allowed time limit for finishing may be altered during the race. This decision is made by the Chief Referee after consultation with the race director.

5E2. Dual Slalom

These are dual slalom guidelines; there are other options for conducting a dual slalom. Consult the race entry form and attend the mandatory riders meeting for more information.

(a) Everyone will have at least one run for qualifying.

(i) A rider who has a DNS, DNF, or DSQ for infractions in 8G4 in the qualifying round will be eliminated from the competition.

(b) The fastest qualifier will be seeded against the slowest, the next fastest with the next slowest. See Appendix **B1** for dual slalom seeding.

(i) In the event of a tie on total qualifying times, ties shall be broken at random for the higher seeded position. [coin flip, drawing lots]

(c) Timing. After qualification, in the final bracket heats, the differential between the two riders shall be recorded. The losing rider in each ride shall receive the time differential recorded between the two riders. A losing rider may receive a *maximum differential of 1.5 seconds applied* to slow runs or penalties resulting

from jump-starts, missed gates or other infractions. *The maximum differential may be modified to account for course length but it must be listed in the event's special regulations.*

(d) Racers will race head-to-head on each course. The winner of the two rides shall advance to the next heat.

(e) The winner of each heat shall be determined as follows:

- (i) the rider who wins twice, or
- (ii) after the second ride, the rider with the smallest recorded differential between the two rides, or
- (iii) the rider who finishes or completes the greater distance in the second ride if both riders miss gates, crash or cannot finish.

(f) Ties in recorded differentials between the riders shall be broken in one of the following ways:

- (i) If overall times are recorded, the tie is broken by comparing the overall times on the course that both riders completed.
- (ii) If only differential times are recorded the winner of the last run is the overall winner.

(g) Starts. The rider's bicycle must be stationary and contacting the gate (if used) at the moment of the start. Failure to comply will be considered a false start.

(h) Runs. Alternating left and right, racers must ride around (not over) each gate, with both tire tracks passing on the outside of the gate. *In the event a rider becomes airborne, both tires must pass on the outside of the imaginary vertical plane of the gate.* Failure to clear a gate shall be determined by gate ate judges located along the course, whose decision is final.

(i) The final classification of the competition is drawn up in groups from each bracket round, in the following order:

- (i) all riders competing in the big final.
- (ii) all riders competing in the small final.
- (iii) the classification of the other riders is determined by the bracket round reached, then by their qualification time.
- (iv) Within each of the above-mentioned groups, DNF riders are classified before DNS. In case of multiple DNF or DNS, the tiebreaker shall be their qualification time.
- (v) Riders who fail to qualify, but completed qualification runs, will be ranked in order of qualification times. Riders who DNS, DNF or DSQ in the qualification round shall be listed as such.

(j) Riders disqualified from the competition for disciplinary penalties, *as listed in 8G Mountain Bike Penalties*, shall not appear in the final classification. *In this*

case, all riders below the disqualified rider(s) shall be advanced one position in place.

5E3. Four Cross (4X)

These are guidelines; there are other options for conducting a *Four Cross (4X)* competition.

(a) Riders will have one qualifying run to advance to the final bracket. Ties on time will require a second run among the tied riders.

(b) Start Procedure

- (i) All riders will be required to start at the same point, as designated by the Starter. The rider's bicycle must be stationary and contacting the gate (if used) at the moment of the start. Failure to comply will be considered a false start.
- (ii) The riders in each group may choose their starting position in order of their qualifying times. The fastest rider gets the first choice of lane.
- (iii) Once the Starter begins the cadence, the race is considered underway and the cadence may not be discontinued.
- (iv) If two riders fall before the apex of the first obstacle, the heat will be restarted.

(c) The lead rider may take any line available on the track. This also relates to any rider ahead of any other rider. Intentionally moving to initiate malicious contact with another rider, or force a rider off the track is prohibited.

(d) During the course of a race, should a rider leave the track as a direct result of contact with another rider, that rider must re-enter the track at the closest place to the exit point that is safe to all riders. The exited riders shall not advance position or miss any gates. A rider re-entering the track in an improved position may delay him/herself to the last position and then continue racing from there and pass through any missed gates.

(e) Should a rider leave the track purely on *their* own accord that rider must make sure no obstacles or gates have been missed before returning to the track safely. (Hay bales, cones, chalk lines or other markers signifying the inside turn are also considered obstacles. These markers on a straightaway including the finish area are not obstacles but only guidelines.)

(f) The riders are required to pass through each gate without straddling it, the wheels of the bicycle must follow a path within the course.

(g) Competition protests regarding qualifying runs must be initiated immediately after the run to the designated official. Once the next round is seeded, no further protests will be accepted.

(h) The fastest qualifier will be seeded against the slowest and bracketed accordingly. Please see Appendix B2 for seeding.

(k) The Chief Referee may alter the starting grids when necessary to arrive at heats with approximately equal numbers of participants in each one.

(l) Riders will race head to head with the first two riders from each heat advancing to the next round.

5E4. Enduro

(a) Mountain Bike Enduro events are extended timed descents or multiple timed descents in single or multiple stages over one or more days.

(b) When multiple timed descents are used in a given day, the timed sections will be connected by transition sections that are not timed. Riders can ride, shuttle, or take a chair lift to the start of the next section as determined by the Race Director and described in the technical manual for the event.

(c) While transition sections are not timed, penalties will be assessed if riders miss their start times at the beginning of the next timed section.

(d) A technical manual should be produced that defines how the event will be scored, either by time or omnium. All stages must be completed to be eligible for a placing.

5F. Observed Trials

Observed Trials events are conducted over an obstacle course, consisting of any number of sections that include such natural or man-made obstacles as mud, rocks, water, logs, walls, pallets, spools, etc. The riders attempt to negotiate each section without putting down a foot or hand (dab).

The regulations for Observed Trials can be found on the USA Cycling Website.

5G. High School Racing

5G1. Introduction

(a) High school & middle school mountain bike racing is an individual sport with a team aspect. Riders will compete for individual competitions while earning points for their teams, based on their finish places. Teams are divided into four categories:

High school male

High school female

Middle school male

Middle school female

(b) USA Cycling rules and regulations apply for high school/middle school mountain bike racing, unless otherwise specified in the race information.

5G2. Course Length and Difficulty

The ideal high school team cross-country course should be short enough to require multiple loops and composed of terrain that can be completed by beginner riders. The length should be based on the ability of riders to complete the course within specific time frames. For high school riders, the time should be between 45 and