



INTERNATIONAL FEDERATION OF SPORT CLIMBING

IFSC Athlete Health Screening Policy and Procedures

Version update March 2023



INTERNATIONAL FEDERATION OF SPORT CLIMBING



Updated March 2023

Preamble

The Medical and Anti-doping Commission's mission is to provide a guiding reference on matters relating to the protection of the health of athletes. In undertaking this role the commission considers itself to have the responsibilities to supervise the provision of health care and doping control during the IFSC events, developing and promoting the adoption of ethical standards in sport science and medicine, delivering evidence-based education to athletes and their entourage.

This protocol focuses on protecting athletes from the risk of Relative Energy Deficiency in sport (REDs), as per the [IOC consensus statement updated in 2018 \(BJSM\)](#).

According to the IOC RED-S Consensus Statement, some athletes suffering from the severe health impacts of REDs are not advised to participate in high level climbing competition as it may represent a risk for the health of athletes.

The IFSC Medical and Anti-Doping Commission has been undertaking work for approximately 10 years collating Body Mass and Mass Indexing data to formulate a scientific / medical solution to identify and reduce the prevalence of REDs.

In early 2022 the IFSC Medical and Anti-Doping Commission concluded that at the current time, there is no single health parameter which is diagnostic of REDs. Thus, using the BMI/MI alone is not conducive to create eligibility rules for participation.

The International Olympic Committee (IOC) Medical Commission REDs writing group advises not to use BMI/MI measurements to draw conclusions on the prevalence of REDs nor as a screen to identify healthy participation in Sport Climbing.

The IFSC are committed to working in collaboration with the IOC on further research and implementation to protect athletes' health and to prevent injury and illness.

The IFSC have recognized that a low BMI is not the sole indicator of REDs, but is one of an array of manifestations contributing to the syndrome of REDs and the health dangers associated with it.

As a starting point for regulatory procedures monitoring and in collaboration with the progressive work and consensus of the IOC, a BMI/MI score will be used as a threshold trigger. The threshold trigger is a health parameter which if lower than $\leq 75\%$ median BMI for age and sex will trigger a medical file review to determine eligibility to compete. If an athlete falls under the IFSC designated BMI threshold of this health parameter, further medical screening and documentation will be required in order for the athlete to compete.

To improve the validity of the athlete health screening procedures, the IFSC Medical & Anti-Doping Commission will implement these procedural rules collecting and scientifically analyse collected health data using a systematic methodology.

Due to the fast-emerging nature of these updates, the IFSC reserves the right to update the procedures with the necessary communication to athletes, athlete entourage and NFs, in collaboration with them, and as best practice and operational improvements occur



1 Introduction

1.1 The Athlete Health Screening Policy and Procedures are referred to throughout this documents as such as well as reference to a critical 'marker'

1.2 The Athlete Health Screening Policy and Procedures are approved by the IFSC Executive Board in conjunction with the IFSC Medical and Anti-Doping Commission

1.3 The Athlete Health Screening Policy and Procedures form part of future IFSC Medical Commission Athlete Health and Welfare Policies

2 Application

2.1 The Athlete Health Screening Policy and Procedures apply to all Athletes who hold an IFSC International Athlete License, and participate in any event, authorised or recognised by the IFSC.

2.2 The Athlete Health Screening Policy and Procedures must be read and applied in conjunction with IFSC Rules and Regulations and all other applicable rules of the IFSC.

3. Roles and Responsibilities

3.1 It is the responsibility of the Athletes, Athlete Entourage and National Federation to familiarise themselves with all the requirements of the Athlete Health Screening Policy and Procedures.

Athlete Responsibilities

3.2. The roles and responsibilities of Athletes include, without limitation, to:

- a) being knowledgeable of and comply with all applicable policies, rules and processes established by the Athlete Health Screening Policy and Procedures;
- b) participating in medical screenings in good faith;
- c) cooperating with the IFSC concerning violations of the Athlete Health Screening Policy and Procedures; and
- d) actively participating in the process of education and raising awareness.

National Federations / Athlete Entourage Responsibilities

3.3. The roles and responsibilities of Athlete Entourage include, without limitation, to:

- a) being knowledgeable of and comply with all applicable policies, rules and processes established by the Athlete Health Screening Policy and Procedures;
- b) using their influence on Athlete values and behaviour to foster a positive and collaborative attitude and communication;
- c) cooperating with the IFSC concerning violations of the Athlete Health Screening Policy and Procedures; and
- d) actively participate in the process of education and awareness.



4. Pre-Season Athlete Declarations (IFSC Member National Federations)

- 4.1 The use of BMI/MI will be used as a ‘marker’ **only** for all athletes to compete. BMI/MI is not a sole indicator of REDs. It acts as critical ‘marker’ acts as the most accessible flag for investigation into any prevalence of risk of an athletes health
- 4.2 All National Federations as representatives of their athletes must declare, further to the commencement of the 2023 season, any athlete that falls under or are equal to the critical ‘marker’ (see below guidance).
- 4.3 If additional evidence is not submitted to and received by the IFSC then the IFSC will withdraw the athlete from competition in protection of their health and wellbeing until the documentation is presented
- 4.4 The IFSC will review the current list of screenings required for athletes in the period prior to the first event of the season to ensure consistency and provide advice to National Federations and welcomes collaboration with National Federation Medical representatives on the finalisation of these in line with the IOC REDs Consensus statement (*NB current item 6.1 and review list in Annex 1)

5. BMI/MI Observation and Critical Zone ‘marker’

5.1 Referring to the reference table of the WHO (<https://www.who.int/tools/growth-reference-data-for-5to19-years/indicators/bmi-for-age>)

and According to the scientific results of anthropometric investigation of elite climbers in 2022, the IFSC Medical Commission have set an observation zone and a critical zone for the BMI/MI.

5.2 Observation zone = zone between the 10th percentile + 0,5 percentile

- Critical zone = zone below the 10th percentile

- Female	Critical zone	Observation zone (+ 0,5) kg/m ²	
18 years and above	below 18,0 kg/m ²	18,5 kg/m ²	18,0 kg/m ²
17 / 16 years	below 17,5 kg/m ²	18,0 kg/m ²	17,5 kg/m ²
- Male	Critical zone	Observation zone (+ 0,5) kg/m ²	
18 years and above	below 18,5 kg/m ²	19,0 kg/	18,5 kg/m ²
17 / 16 years	below 18,0 kg/m ²	18.5 kg/	18,0 kg/m ²



6. Supplementary observation documentation

6.1 *If a Federation intends to send an athlete who is under or equal to the critical 'marker', they must ensure, that the IFSC office receives a complete set of medical findings in advance, before the start of the climbing season. This is to exclude a red card according to the before the season starts.

*The current set of medical findings is to include:

- Psychological attest (to exclude a psychological aspect of a REDs including eating disorders)
 - Bone mineral density: DXA (dual energy X-ray absorptiometry)
 - Females: Hormonal parameters (TSH, LH, FSH, cortisol, Mens)
 - Adipose tissues level:
 - Plicometry (preferable after Jackson Pollock 7 Equation) or
 - SAT (Subcutaneous adipose tissue with US)
- <https://pubmed.ncbi.nlm.nih.gov/26702017/>
<https://link.springer.com/article/10.1007/s40279-019-01192-9>

*NB IFSC will undertake a review of the current screening outline with NF consultation and collaboration for clarity and alignment moving forward.

7. Pre-Season Evaluation

7.1 The IFSC Anti-Doping and Medical Commission, and Athlete Screening Panel shall evaluate documentation on any athlete who is declared as under or equal to the critical 'marker' prior to the commencement of the season,

7.2 The IFSC Medical and Anti-Doping Commission, (after the evaluation of all the medical examinations as per point 6.1) may request further medical examination to better evaluate an athlete's health status. Any request will be conducted in collaboration with the athlete and their athlete entourage / National Federation

7.3 The IFSC will collaborate with the athlete / athlete entourage / NF on any future scheduling of athlete screenings and monitoring in line with the [current IOC consensus statement on REDs](#).

7.4 Pre-season declaration and supporting evidence must be received for all IFSC licensed athletes under or equal to the critical 'marker' no later than 10 days before the commencement of the first day of competition of the first IFSC World Cup Series event of the season.

7.5 Any new athlete who commences competition once the season has started who may be under or equal to the critical 'marker' should submit declaration and supporting evidence no later than 10 days before the commencement of the first day of the competition of their first IFSC event of the calendar season

7.6 It is in the best interest of the athlete / athlete entourage and NF to communicate concerns and protective measures in place for any athlete who may be under or equal to the critical marker prior to the commencement of the season to the IFSC.

7.7 Declarations of athletes under or equal to the critical 'marker' are to be sent to medical@ifsc-climbing.org for the attention of the IFSC Sport Director and IFSC Medical Commission. The submitter will then be advised on protocols for the safe submission of supporting documents in line with IFSC [Privacy Policy](#) and Item 11



8. Athlete Health Screening Policy and Procedures - During Competition

8.1 The IFSC will deliver Athlete Health Screenings during selected stages of selected disciplines at selected IFSC Events during the competition season.

8.2 Screening may be scheduled in advance based on collaborative health monitoring with an athlete's NF and the IFSC Anti-Doping and Medical Commission

8.3. The screenings will be delivered in Isolation. Screenings shall take place in a discrete location area.

8.4 The screenings shall be delivered with the tools explained in more detail in the Annex 1 (these are also subject to further review to ensure consistency throughout screenings).

8.5 The IFSC advise all athlete / athlete entourage / NFs to be prepared, where an athlete may be under, equal to, or fluctuate around the critical 'marker' to present supporting documentation as per item 6.1 on the athlete's health status (and where suitable any monitoring plan)

8.7 Failure by an athlete to submit to an in-competition screening when directed by the IFSC Athlete Screening Personnel / IFSC Medical Officer as per item 4.9 of the IFSC Rules will result in immediate disqualification

8.6 In the instance that an athlete is found to be under or equal to the critical 'marker' (or continues display alarming fluctuation) at an IFSC Athlete Health Screening during competition and no supporting evidence is in existence; the IFSC Athlete Screening Personnel / IFSC Medical Officer will report this to the IFSC Jury President and IFSC Technical Delegate, a decision in conjunction with the IFSC will be made on the athletes further participation in the event; the following may apply:

- Immediate withdrawal from the event
- Review of any pending entries to upcoming competitions
- Instruction to produce specific documentation within 7 days of the screening taking place
- Further scheduling under supervision of the IFSC and NF of specific screenings (in or out of competition)
- Instruction in partnership with the NF to commence a monitoring plan in line with the [current IOC consensus statement on REDs](#) if one is not already in existence
- If a monitoring plan is in existence and repeat screenings display concerns for an athletes health the athlete / athlete entourage and NF will be invited into consultation with the IFSC and wider medical experts within the global field of REDs on the implementation of urgent measures in protection of the athletes health.

9. Athlete Screening Personnel

9.1 The IFSC Medical and Anti Doping Commission must appoint a panel to evaluate such medical documentations.

9.2 The Athlete Health Personnel are fundamental to the effective implementation of the Athlete Health Screening Policy and Procedures. The IFSC will appoint medical representatives to undertake screenings on behalf of the IFSC and also review documentation submitted by Athletes/National Federations at the start of and in monitoring where required throughout the season.

9.4 Each representative will have medical expertise within the area of athlete health and sport physiology and a knowledge of the key fundamentals of REDs. Representatives will possess experience in the implementation and administration health screenings in a sporting context and should play a key role in, the practice of sport medicine, health organisations, the allied health professions.



9.5 The personnel shall:

- a) Conduct the Procedures in good faith and evaluate the Athlete screening figures with professionalism, objectivity and transparency;
- b) Ensure that the screenings are properly delivered during the IFSC events;

10. National Federation Protocols and Athlete Monitoring Plans

10.1 National Federations are actively encouraged to develop, collaborate and share identification and monitoring protocols with one another and with the IFSC for a collective aligned approach to the protection of athletes from the presentation of REDs

11. Use of Athlete information

11.1 The IFSC may only process screening data if such data is considered necessary to conduct the Athlete Screening Policy and Procedures.

11.2 All screening data processed by the IFSC must be accurate, complete and kept up-to-date.

11.3 By signing the IFSC Athlete License, the Athlete give the consent to use the data collected during the Athlete Screening Procedures

11.4 The IFSC must:

- a) protect screening data by applying appropriate security safeguards, including physical, organisational, technical and other measures to prevent the loss, theft or unauthorised access, destruction, use, modification or disclosure of screening data; and
- b) Take reasonable steps to ensure that any other party provided with screening data uses that screening data in a manner consistent with these Athlete Screening Policy and Procedure Rules.

11.5 The IFSC may disclose screening data to other parties only if such disclosure is in accordance with these Athlete Screening Policy and Procedure Rules and permitted by National Laws.

11.6 The IFSC must ensure that screening data is only retained for as long as it is needed for the purpose it was collected. If screening data is no longer necessary for Athlete Screening Policy and Procedure purposes, it must be deleted, destroyed or permanently anonymised.

11.7 Athletes may request from the IFSC at any time a copy of the Athlete Screening data that is held.

11.8 A request may be made by an athlete or a National Federation on an Athlete's behalf and must be complied with within a reasonable period of time.

Annex. 1

*List of all medical examinations for IFSC / NF review

Sport medical evaluation

- Height, weight and body fat (plicometry or SAT)
- Examination of the musculoskeletal system (orthopedic check)
- Clinical examination of the cardiovascular system with blood pressure, electrocardiogram (ECG) and respiratory function analysis
- Anamnesis, interview, labor

Psychological attest:

Psychological attest must includes:

- eating behaviour questions - EDE-Q / BEDA-Q / EAT-26
- including questions for REDs – LEAM-Q / LEAF-Q

Eating disorder laboratory evaluation and diagnostic testing:

- Bone mineral density: DXA (dual energy X-ray absorptiometry)
- Body composition
- Anthropometry (BMI)
- Haemoglobin, haematocrit, ferritin, iron, transferrin, transferrin saturation index
- Electrolytes: Sodium, calcium, potassium, magnesium, phosphorus
- Blood lipids: Cholesterol, triglycerides
- Proteins: Albumin, total blood protein, LFTs
- Hormone values: TSH, LH, FSH, AM testosterone
- Renal function: blood urea nitrogen (BUN), kreatinin

*Screening tools for IFSC / NF review

Mobile stadiometer with integrated level:

- Measuring range in cm: 20 – 205 cm
- Measuring range in inch: 8 – 81"
- Graduation: 1mm / 1/ 8"

Flat scale with foot pedal:

- Capacity: 200kg
- Graduation (g): 100 g < 150 kg > 200 g
- CE: CE0109, 0123