

FIS - Injury Surveillance & Prevention Program (ISPP) Questionnaire on Key Injury Risk Factors and Countermeasures

Introduction

Injuries have become a critical problem for alpine ski racing. The FIS Council has therefore newly established a long-term project working group on "alpine injury prevention", organized by the FIS Injury Surveillance & Prevention Program (ISPP). The working group participants consist of alpine experts from different nations and areas of expertise. The working group and ISPP will report on its work directly to the FIS professionals, and relevant FIS committees.

As sports practitioners, you have valuable insight into the complicated issues of injury causes and possible prevention strategies. Therefore, as a first step, a questionnaire is being sent to a large number of alpine stakeholders with the purpose to hear and understand your perspective on key risk factors and potential countermeasures. Questionnaire responses will be summarized and used to help guide further directions of the FIS athlete health protection efforts.

Questionnaire Objective

The aim of this online questionnaire is to rank 32 previously reported key injury risk factors, to identify additionally perceived risk factors and to collect and structure prevention ideas with respect to those injury risk factors.

The expert groups being invited to answer the questionnaire include:

- Athletes
- Coaches
- Team Medical Staff
- Ski Racing Suppliers (SRS) / Industry
- FIS Group

The gathered information will serve in two ways:

1. In the short-term, to support next steps concerning directly implementable prevention suggestions and potential decisions in May 2021
2. In the long-term, to help identify and prioritize focus areas for the continuing work of the FIS working group on areas with lacking knowledge

Collected Data Information

The subsequent questionnaire should be thoroughly answered for precise evaluation. Please note that the questionnaire is graphically optimized for filling out by computer, not smartphone. Your anonymised questionnaire answers will only be available to members of the working group and ISPP. Overall reports and summarized suggestions will be presented to FIS professionals, relevant FIS committees, Ski Racing Suppliers (SRS), national ski associations, athletes' representatives and coaches working groups and will be publicly available to all interested alpine stakeholders.

Your voice matters!

On behalf of the FIS ISPP working group, we thank you for your active participation, which is highly appreciated.

1. Personal Information

Which of the following description fits best for you?

- Athlete
 Coach
 Team Medical Staff
 SRS / Industry
 FIS Group

Year of birth

(e.g. 1995)

Nation

(e.g. FRA, ITA, GER ...)

Your Gender

- female
 male

On which level do you compete?

- WC level
 EC level
 FIS level
 Other

Please, specify

Nation

(e.g. FRA, ITA, GER ...)

Of which gender is your team?

- female
 male

On which level are your athletes?

- WC level
 EC level
 FIS level
 Other

Please, specify

Nation

(e.g. AUT, SUI, NOR, ...)

I am a

- Doctor
 Physiotherapist
 Other

Please, specify

My professional background

- Service Men
 R&D and Management
 Other

Please, specify

My professional background

- FIS Staff for alpine competitions
 Committee Member
 Other
-

Please, specify

2. Rating of Risk Factors and Suggesting Potential Prevention Measures

In the following sub-questions Q1-Q5 you are asked to name your top 5 key injury risk factors from the list below and to suggest corresponding countermeasures. If you would like to name additionally perceived risk factors not included in the list, you can do this under point 3 below, after answering Q1-Q5.

Q1

What do you, personally, consider to be the most important perceived injury risk factor?

(Potential key risk factors assigned in alphabetic order within four basic domains athlete, equipment, course and snow.)

ATHLETE

- Aspects of body temperature
 Athlete's adaptability
 Athlete's crash behaviour
 Athlete's individual responsibility
 Athlete's race preparation
 Fatigue
 Genetics and Anthropometry
 Physical aspects
 Psychological aspects
 Pre-injury aspects
 Skiing technique and tactics

EQUIPMENT

- Binding / plate
 Gates (panels and poles)
 Protectors and helmets
 Racing suits
 Ski
 Ski boot
 System ski, plate, binding, boot

COURSE

- Bad visibility
 Course maintenance during race
 Course setting in general
 Jumps
 Level of course difficulty
 Safety net position and spill zone
 Speed and course setting aspects
 Speed and topographic aspects
 Speed in general
 Topography in general

SNOW

- Aggressive snow conditions
 Changing snow conditions
 Smooth snow surface
 Techniques of snow preparation

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
 yes
-

If yes, please specify here:

Q2

What do you, personally, consider to be the second most important perceived injury risk factor?

(Potential key risk factors assigned in alphabetic order within four basic domains athlete, equipment, course and snow.)

- ATHLETE**
- Aspects of body temperature
- Athlete's adaptability
- Athlete's crash behaviour
- Athlete's individual responsibility
- Athlete's race preparation
- Fatigue
- Genetics and Anthropometry
- Physical aspects
- Psychological aspects
- Pre-injury aspects
- Skiing technique and tactics
- EQUIPMENT**
- Binding / plate
- Gates (panels and poles)
- Protectors and helmets
- Racing suits
- Ski
- Ski boot
- System ski, plate, binding, boot
- COURSE**
- Bad visibility
- Course maintenance during race
- Course setting in general
- Jumps
- Level of course difficulty
- Safety net position and spill zone
- Speed and course setting aspects
- Speed and topographic aspects
- Speed in general
- Topography in general
- SNOW**
- Aggressive snow conditions
- Changing snow conditions
- Smooth snow surface
- Techniques of snow preparation

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
- yes

If yes, please specify here:

Q3

What do you, personally, consider to be the third most important perceived injury risk factor?

(Potential key risk factors assigned in alphabetic order within four basic domains athlete, equipment, course and snow.)

- ATHLETE**
- Aspects of body temperature
- Athlete's adaptability
- Athlete's crash behaviour
- Athlete's individual responsibility
- Athlete's race preparation
- Fatigue
- Genetics and Anthropometry
- Physical aspects
- Psychological aspects
- Pre-injury aspects
- Skiing technique and tactics
- EQUIPMENT**
- Binding / plate
- Gates (panels and poles)
- Protectors and helmets
- Racing suits
- Ski
- Ski boot
- System ski, plate, binding, boot
- COURSE**
- Bad visibility
- Course maintenance during race
- Course setting in general
- Jumps
- Level of course difficulty
- Safety net position and spill zone
- Speed and course setting aspects
- Speed and topographic aspects
- Speed in general
- Topography in general
- SNOW**
- Aggressive snow conditions
- Changing snow conditions
- Smooth snow surface
- Techniques of snow preparation

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
- yes

If yes, please specify here:

Q4

What do you, personally, consider to be the fourth most important perceived injury risk factor?

(Potential key risk factors assigned in alphabetic order within four basic domains athlete, equipment, course and snow.)

- ATHLETE**
- Aspects of body temperature
- Athlete's adaptability
- Athlete's crash behaviour
- Athlete's individual responsibility
- Athlete's race preparation
- Fatigue
- Genetics and Anthropometry
- Physical aspects
- Psychological aspects
- Pre-injury aspects
- Skiing technique and tactics
- EQUIPMENT**
- Binding / plate
- Gates (panels and poles)
- Protectors and helmets
- Racing suits
- Ski
- Ski boot
- System ski, plate, binding, boot
- COURSE**
- Bad visibility
- Course maintenance during race
- Course setting in general
- Jumps
- Level of course difficulty
- Safety net position and spill zone
- Speed and course setting aspects
- Speed and topographic aspects
- Speed in general
- Topography in general
- SNOW**
- Aggressive snow conditions
- Changing snow conditions
- Smooth snow surface
- Techniques of snow preparation

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
- yes

If yes, please specify here:

Q5

What do you, personally, consider to be the fifth most important perceived injury risk factor?

(Potential key risk factors assigned in alphabetic order within four basic domains athlete, equipment, course and snow.)

- ATHLETE**
- Aspects of body temperature
- Athlete's adaptability
- Athlete's crash behaviour
- Athlete's individual responsibility
- Athlete's race preparation
- Fatigue
- Genetics and Anthropometry
- Physical aspects
- Psychological aspects
- Pre-injury aspects
- Skiing technique and tactics
- EQUIPMENT**
- Binding / plate
- Gates (panels and poles)
- Protectors and helmets
- Racing suits
- Ski
- Ski boot
- System ski, plate, binding, boot
- COURSE**
- Bad visibility
- Course maintenance during race
- Course setting in general
- Jumps
- Level of course difficulty
- Safety net position and spill zone
- Speed and course setting aspects
- Speed and topographic aspects
- Speed in general
- Topography in general
- SNOW**
- Aggressive snow conditions
- Changing snow conditions
- Smooth snow surface
- Techniques of snow preparation

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
- yes

If yes, please specify here:

3. Additional Key Injury Risk Factors

Do you perceive additional key injury risk factors not included in the aforementioned list?

- no
- yes

How many additional factors?

- 1
- 2
- 3
- 4
- 5

Additional risk factor 1; please specify here:

In your opinion, how important is this factor regarding its potential impact on injury risk? Please select:

- Minor importance
 Moderate importance
 High importance

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
 yes

If yes, please specify here:

Additional risk factor 2; please specify here:

In your opinion, how important is this factor regarding its potential impact on injury risk? Please select:

- Minor importance
 Moderate importance
 High importance

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
 yes

If yes, please specify here:

Additional risk factor 3; please specify here:

In your opinion, how important is this factor regarding its potential impact on injury risk? Please select:

- Minor importance
 Moderate importance
 High importance

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
 yes

If yes, please specify here:

Additional risk factor 4; please specify here:

In your opinion, how important is this factor regarding its potential impact on injury risk? Please select:

- Minor importance
 Moderate importance
 High importance

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
 yes

If yes, please specify here:

Additional risk factor 5; please specify here:

In your opinion, how important is this factor regarding its potential impact on injury risk? Please select:

- Minor importance
 Moderate importance
 High importance

Do you have a personal suggestion for a concrete prevention measure on this risk factor?

- no
 yes

If yes, please specify here:

4. Additional Personal Comments

Do you want to add additional comments directed to the members of FIS ISPP steering committee and/or the FIS working group "alpine injury prevention"?

- no
 yes

If yes, please specify here:

5. Finalize and Submit