



**RCSI** SCHOOL OF  
PHYSIOTHERAPY



Player  
Information  
Leaflet

# Training Load and Injury Risk in Leinster Schoolboys' Rugby - the SCRUM Study Phase 2

2022/23



## Participant Information Leaflet

**Study title: Training load and injury risk in Schoolboys' Rugby - the SCRUM study Phase 2**

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You are being invited to take part in a research study to be carried out at secondary schools in Leinster by researchers at the Royal College of Surgeons in Ireland (RCSI).

Before you decide whether or not you wish to take part, you should read the information provided below carefully and, if you wish, discuss it with your family, friends or GP (doctor). Take time to ask questions – don't feel rushed and don't feel under pressure to make a quick decision.

You should clearly understand the risks and benefits of taking part in this study so that you can make a decision that is right for you. This process is known as 'Informed Consent'. You don't have to take part in this study. You can change your mind about taking part in the study any time you like. Even if the study has started, you can still opt out. You don't have to give us a reason.

### Why is this study being done?

Rates of injury in professional and club rugby are well documented internationally, but less attention has been focused on the schoolboys' level. During the 2019 –20 season, 17 schools involved in the Leinster Schools; Senior and Vinnie Murray Cups participated in our first phase of the SCRUM study, which recruited 501 players and captured 20 weeks of the season. We found injury incidence (or rate) of almost **20 injuries per 1000 match hours**, leading to a median time loss of 22 days. Openside flankers and inside centres experienced the most injuries during matches. Although injuries to the head and shoulder were most common, injuries to the knee and ankle resulted in more time loss from playing.

Training injury incidence was less than **1 per 1000**, with a shorter median time loss of 14 days. Across both matches and training, tackling was the match event in which most injuries happened. The most common illness recorded was respiratory tract infection. We also captured training load, to investigate to what extent it affected an individual player's injury risk, but we didn't receive enough training load data to thoroughly investigate this.

This second phase of the SCRUM study will prospectively capture the injury risk in schoolboys' rugby in all participating schools in Leinster across a full season, and additionally capture training load in the first 12 schools to volunteer (in order to support their data collection more closely), to explore this link between load and injury. Unlike SCRUM phase 1, players will now have access to a fortnightly summary of their training load throughout the season. In a recent focus group study, players told us that this would be of value to them, and likely foster better compliance with data collection. Studies such as the SCRUM study are a crucial step in the future development of injury prevention strategies, as well as optimising performance from season to season.

#### **Who is organising and funding this study?**

The SCRUM research team is made up of researchers from RCSI, in collaboration with Prof. John Quinlan (Consultant Trauma and Orthopaedic Surgeon, Tallaght University Hospital) and Mr. Cliff Beirne (Consultant Maxillofacial Surgeon, Sports Surgery Clinic, Santry). The principal investigators are Prof. Helen French and Louise Keating from the School of Physiotherapy, RCSI. Sarah Murphy is a co-investigator. Prof. Ronan Conroy (Department of Epidemiology and Public Health, RCSI) is also a member of the research team and Dr. Chris Bleakley (Ulster University) is acting as study consultant.

This study is funded by the IRFU Charitable Trust (IRFUCT).

Permission has been given for the study by the Leinster Rugby Schools Committee.

#### **Why am I being asked to take part?**

You are being invited to participate as a player on the first or second team of your school's senior rugby squad for 2022-23. Every squad member is being invited to join this study.

#### **How will the study be carried out?**

All Leinster schools involved in senior competitions will be invited to participate in the SCRUM study Phase 2 which plans to cover one full rugby season from **September 2022 to end of their season**. This study will collect injury information covering training and matches from Leinster schools during league fixtures and cup competitions (Senior Cup and Vinnie Murray Cup). This will require that players consent to their injuries being recorded only.

In 12 of participating schools, participating players will also be asked to record their weekly training load in a smartphone app. All participants will be provided with individualised training load summaries of

their training on at least a fortnightly basis. The summaries will be shared via the **Kitman Labs Athlete app**.

### What will happen to me if I agree to take part?

At the beginning of the study, we will visit your school and collect information from you such as playing position, injury history, use of personal protective equipment, age when first started playing rugby and participation in other sports. **Adobe Acrobat sign and Kitman Lab's Athlete App** and or hardcopy questionnaire forms will be used to gather this information. We will also measure your height and weight to calculate your Body Mass Index (BMI).

If you have a smartphone, you will be asked to download **Kitman Lab's Athlete App**, (which is free), from the Apple or Android app store and a personal profile will be set up in the app (after consent/assent is gained). If you do not own a smartphone, you can participate using a tablet device stored at your school. You will provide your consent to participate in the study before using the app. If you are under 18 years, we will also need your guardian's consent before you are cleared to use the app, and this can be done electronically via our study's website. Once consent has been given, you will be given access to **Kitman Lab's Athlete App**. For the duration of the study, you will then be asked to log in at least once per week to provide your rate of perceived exertion (RPE) for each session attended and answer how well you slept after training and questions about mood, stress and fatigue.

We will also be collecting information about any injuries or illnesses that affect your ability to play rugby. If you miss any training or matches during the season due to illness or injury, a dedicated person at your school such as your coach, team physio, or doctor, will send information about your absence to us using **Kitman Lab's Performance Medicine Web portal**. This will include diagnosis, severity, treatment and time loss from training and match play.

### What are the benefits?

Your participation will benefit your team as the coaching staff will have real time access to a summary of information about squad injuries, via the Kitman Lab's web-portal. If your school participates in training load capture, you will also benefit by seeing a summary of your own training load a minimum of every fortnight throughout the season. The individual training load summaries will be shared via the **Kitman labs Athlete App** messaging platform. In addition, your coach will also receive a summary of the squad's training load, as well as have access to view individual load data. This combined information should help coaches plan next season's training activities to minimise injury and illness risk and allow you to see your own individual training response during the season.

The top 3 players from each school who demonstrate the best engagement with **Kitman Lab's Athlete App** during the SCRUM study will be entered in to two prize draws for €100 voucher for Elvery's or Argos; one to be held before Christmas and the second, at the end of the season.

Once our study results are published, it will improve our understanding of the demands and injury risk of schoolboys' rugby and will assist in the design of effective injury prevention strategies.

#### **What are the risks?**

There are no known risks to you by participating in this study. Participation in this study will not affect your involvement in training and matches with your team. Involvement in this study will only make a demand on your time to provide us with weekly information about your training and well-being through **Kitman Lab's Athlete App**.

#### **What if something goes wrong when I'm taking part in this study?**

Your involvement in this study will not affect your usual care pathway for dealing with injury or illness e.g., through your team doctor, physio and / or GP. As well as your injuries being reported to us (by your school's injury data collector) as part of this study, you should continue to report any injuries or illnesses that prevent you from playing to your coach / team physio / doctor as usual, to ensure you can access usual care pathways.

You are free to withdraw from the study at any time.

#### **Will it cost anything to take part?**

There are no costs involved in participating in this study. **Kitman Lab's Athlete App** can be downloaded for free to Apple and Android phones. If you do not own a smartphone, a tablet device containing the app will be available at your school for your weekly use.

#### **Is the study confidential?**

Yes – all information recorded by you and about you during this study will remain completely confidential and the study's findings will be presented and published in summary form, ensuring no player can be identified. All of your information is stored in an encrypted and coded (pseudonymised) way on secure servers.

#### **Data Protection Notice**

##### **Personal Data that we Process**

We will collect and process the following personal data in connection with this study and **Kitman Lab's Athlete App** and / or **Kitman Lab's Performance Medicine web portal** and **Adobe Acrobat sign or hard copy questionnaire forms**:

- Personal details such as your name, date of birth and email address
- Details of your team, playing position, injury history, use of personal protective equipment, age when first started playing rugby and participation in other sports

- Your training and match details
- Sensitive personal data relating to your health including injuries and illnesses affecting your rugby participation, and general well-being i.e., stress, mood, sleep, and fatigue.
- Information that we obtain relating to you from your team's injury data collector
- Any other personal information that you have provided directly to us e.g., via **Kitman Lab's Athlete App and Adobe Acrobat sign or hard copy questionnaire forms.**

### **Purposes of Processing and Legal Basis**

Your personal data will be processed for the purposes of:

- Carrying out a research study to investigate training loads and injury risk in schoolboys' rugby in Leinster and explore if training loads are linked to injury and illness risk.
- Providing summary data to coaches and medical staff for the purposes of optimising training load and minimising injury and illness risk.

The legal basis for collecting and using personal data is your consent and falls under Article 6(1)(f) Legitimate Interests & Article 9(2)(j) Scientific Research purposes.

### **Who will our data be disclosed to?**

We may disclose personal data to:

- Kitman Labs personnel in order to manage the app data
- Third parties who Kitman Labs engage to provide services in connection with their app and web portal
- Your team's coach and medical staff (in summary form only)

### **Will my data be transferred abroad?**

Your son's data will be stored on a secure server at RCSI, 123 St. Stephen's Green, Dublin after transfer from its initial source on secure cloud servers used by Kitman Labs in Ireland and the UK. A legal agreement is in place between RCSI and Kitman Labs to ensure all data processors will comply with Irish GDPR regulations. By using Adobe Acrobat Sign to provide consent and or complete baseline questionnaire, your email address and questionnaire data will be stored in their cloud server, which is also based in the EU.

### **How long will my data be retained?**

We will retain your data in RCSI for the duration of the research study and after publication, we will electronically store it in a completely anonymous form for a further 5 years.

### **Will my data be kept secure and confidential?**

Study information will be stored electronically in an encrypted directory on RCSI's secure network without any identifying details, such as your name. Smartphone data inputted by you and your school's injury data collector, will use team codes to identify your school and a unique identification number (UIN) to identify each player. Smartphone data and the encrypted UIN code key will initially be stored on cloud servers and will be securely transferred separately to RCSI's secure network on a weekly or monthly basis. Kitman Labs has also adopted appropriate technical and organisational security measures to protect your information from unauthorised access and against unlawful processing, accidental loss,

destruction, or damage. Storage of electronic data by Kitman Labs initially and then RCSI, in a coded way, will further minimise the impact of any unexpected data breach.

### What rights do I have in relation to my data?

You have the following rights, in certain circumstances, in relation to your personal data:

- access to your personal data
- the right to request rectification and / or erasure of your personal data
- the right to restrict the use of your personal data
- the right to object to automated processing of your personal data
- the right to receive your personal data, which you provided to us, in a structured, commonly used and machine-readable format or to require us to transmit that data to another controller.

In order to exercise any of these rights or to withdraw your consent, please contact us at [SCRUMstudy@rcsi.ie](mailto:SCRUMstudy@rcsi.ie).

### Complaints

If you are not happy with the way we have used your information or addressed your rights, you have the right to make a complaint to the Irish Data Protection Commissioner by emailing [info@dataprotection.ie](mailto:info@dataprotection.ie).

<b>Where can I get further information?</b>
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If you have any further questions about the study or if you want to opt out of the study once involved, you can do so at any time.

*Please contact:*

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