The Irish Rugby Injury Surveillance Project

School Senior Cup Rugby

2024 - 2025

Season Report

IRFU

UNIVERSITY OF LIMERICK
OLLSCOIL LUIMNIGH

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Irish Rugby Football Union Foreword

The Irish Rugby Football Union welcome the latest injury surveillance report from the Irish Rugby Injury Surveillance (IRIS) Project. We are encouraged to see continued support across the school's game, now in its fifth season of data collection. The ongoing commitment from schools allows us to inform player welfare policies across all levels of the game.

We are one of few Unions participating in the World Rugby Global Tackle Height Trial with the ability to accurately compare injury trends before the legal tackle height was lowered to now, two years following the law change. This is particularly important in our young players as we look for opportunities to address the influence of tackle technique and player robustness on injury trends. Alongside this trial, the IRFU ENGAGE Readiness and Robustness programme continues to be rolled out across the country, with particular focus on coach engagement and education. Injury surveillance is important in helping shape the game from both a safety and performance perspective. Based on the injury trends the IRFU will be focusing on tackle technique and robustness for our young players.

We commend the IRIS Project on their continued success engaging with the schools' game and welcome this season's comprehensive report. To each and every school, data collector, volunteer, player and researcher that is part of this project – Thank You. Your continued support is a fundamental component of how we support player health and wellbeing across all levels of play.

Medical Director, IRFU
Dr Rod McLoughlin

Irish Rugby Injury Surveillance Foreword

The IRIS project has involved the research, design and implementation of an online injury recording platform, IRISweb, enabling the collection and reporting of both seasonal and now long-term injury trends in amateur and schoolboy Rugby. Comprehensive injury surveillance systems in amateur Rugby Union are needed to enhance player welfare and this innovative project to date has provided essential and accurate data for all those involved in the game to help inform training, recovery, and game policy. Collection has now been completed of a fifth season's data and this 2024-2025 season report documents our collaborative work with the IRFU, and also with 13 School Senior Cup teams.

This season represents 183 matches, 445 players, and support from dedicated data injury recorders, coaches, doctors, physiotherapists, managers, and ancillary staff within schools: thank you. The IRIS project includes the addition of amateur club game surveillance for men and women (reported separately). Crucially the underage schoolboy game in Ireland in 2023/24 and 2024/25 has been involved, like the adult game, in the World Rugby Global Tackle Height Trial, and IRIS' and IRFU's long term injury surveillance programme will provide accurate pre-trial and trial data on how lowering the legal tackle height impacts injury prevalence and characteristics at the schoolboy level.

IRIS involves research stemming from ongoing injury reduction and sports performance work by University of Limerick academics across a range of sports, as well as our specific expertise in Rugby Union. It has effectively brought together academics with expert practitioner experience from the fields of biomechanics, medicine, biomedical engineering, mathematics and statistics, physiotherapy, physiology, sport psychology, and strength and conditioning as well as post-doctoral and doctoral researchers. The holistic approach to injury surveillance and prevention is central to the project.

IRIS Principal Investigators
Professor Tom Comyns, PhD
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1.0 Executive Summary

1.1 Match Injury

Commencing in September 2024, the Irish Rugby Injury Surveillance (IRIS) project collected one full season of injury data across 183 matches from 13 School Senior Cup teams. The matches consisted of friendlies, league games and Cup games.

- There were 13 School Senior Cup teams involved in the IRIS Project for the 2024-2025 season.
- There was a total of 445 School Senior Cup players registered in the IRIS project this season.
- The overall match time-loss injury incidence rate for School Senior Cup players was 41.4/1,000 player hours.
- This is higher than the overall match time-loss injury incidence rate reported for the Schools Senior Cup during the 2023-2024 season (34.7/1,000 player hours).
- A single Senior Cup player would have to play, on average, 21 matches to sustain one injury.

1.2 Training Injury

There was a total of 48 training injuries reported in the School Senior Cup across the season.

1.3 Most Frequent Injury

The shoulder was the most frequently injured body region across the season accounting for 26% of all injuries (an increase from 18% in the 2023-2024 season), while injuries to the knee joint continue to represent the most severe (average 89.5 days absence per injury). Shoulder injuries were also the most burdensome (433 days lost per 1,000 player hours) injury in terms of days absent from play. In the 2023-2024 season, knee injuries were most severe (average 116 days absence per injury) and most burdensome (591 days lost per 1,000 player hours).

The most commonly reported match injury diagnoses for the School Senior Cup were concussions (23%) followed by ankle sprains (14%) and shoulder sprains (13%). Reported concussion incidence includes suspected concussions as per IRFU 'Recognise and Remove' protocol. The Graduated Return to Play (GRTP) protocol requires a minimum of 23 days absence from play for players under 20 years of age.

Concussions resulted in an average of 26 days absence from Rugby match or training activities, while ankle sprains resulted in an average of 32 days absence and shoulder sprains resulted in an average of 27 days absence per injury.

1.4 Injury Event

Seventy five percent of all match injuries occurred during the tackle event. The proportion of injury to the tackler (51%) was similar to the ball carrier (49%). During the 2023-2024 School Senior Cup season, a slightly lower rate (70%) of injuries occurred during the tackle. The most common mechanism of training injury was non-contact mechanisms (25%), followed by tackling (21%) and being tackled (17%). This was similar to the 2023-2024 season, where non-contact mechanisms (29%), tackling (22%) and being tackled (18%) were most frequent.

1.5 Playing Position

Of all match injuries recorded in the Senior Cup across the season, 61% were to the forwards (position no. 1-8), while 39% were to the backs (position no. 9-15). Blindside flankers (no. 6) and loose-head props (no. 1) had the highest proportion of match injuries at 12% respectively, followed by the outhalf (no. 10) (11%). In the 2023-2024 season, forwards and backs reported a similar proportion of match injuries (62% and 38%, respectively) and openside flankers (no. 7) and loose-head props (no. 1) had the highest proportion of match injuries at 16% and 12% respectively.

1.6 Injury Burden

The burden of an injury assesses the incidence of an injury in relation to the severity of the injury (measured as the number of days absent). Concussions carried the highest cumulative match injury burden (252 days lost per 1,000 player hours) and resulted in an average of 26 days absence from Rugby match or training. Knee sprains and shoulder dislocation/subluxations accounted for 234- and 222-days absence per 1,000 player hours respectively. In the 2023-2024 season, concussions also carried the highest cumulative match injury burden (291 days lost per 1,000 player hours) and resulted in an average of 39 days absence from Rugby match or training.

2.0 Introduction

2.1 The IRIS Project

The Irish Rugby Injury Surveillance (IRIS) Project developed and implemented a Rugby Union specific injury surveillance system in 2017. This was adapted for schools and implemented in 2018 and is the first long-term surveillance system within amateur Rugby Union in Ireland. This system monitors the incidence, type, nature and severity of both match and training injuries occurring across the amateur game in Ireland. By monitoring this information, injury trends may emerge which will aid in the continued development and implementation of evidence-based injury reduction strategies in order to minimise injury risk and enhance player welfare.

IRIS Aims:

- To develop and implement an injury surveillance system for underage and amateur Rugby Union in Ireland.
- To monitor the incidence and type of injuries occurring and identify any possible injury risk factors.
- To enhance the health and welfare of Rugby Union players by using this information to assist the IRFU policy regarding injury reduction strategies.

2.2 Injury Definitions

The IRIS project follows the guidelines from the World Rugby 'Consensus statement on injury definitions and data collection procedures for studies of injuries in Rugby Union' [1] and the International Olympic Committee (IOC) consensus statement: methods for recording and reporting of epidemiological data on illness and injury in sport 2020 (including STROBE Extension for Sport Injury and Illness Surveillance (STROBE-SIIS)) [2].

An injury is defined as "*Any physical complaint, which was caused by a transfer of energy that exceeded the body's ability to maintain its structural and/or functional integrity that was sustained by a player during a Rugby match or Rugby training, irrespective of the need for medical attention or time-loss from Rugby activities*."

A recurrent injury is one of the same site and same type as the original injury and occurs within two months of the player returning to match play following the original injury.

A dual injury is one of multiple diagnoses resulting from one injury event. Dual injuries were analysed as one injury event for the purposes of calculating overall incidence and injury severity. However, when analysing injury location and nature dual injuries were separated as per international best practice [1, 2].

Both time-loss and medical attention injuries have been monitored and analysed separately. Medical attention injuries are any injury that resulted in 0-1 days absent from Rugby match or training activities (i.e. slight injuries). Any injury that results in greater than 1 days' absence from match or training activities is classed as a time-loss injury and categorised according to injury severity. Only time-loss injuries were included in injury incidence calculations [1, 2].

Injury severity is calculated as the number of days that elapsed from the date of injury to the date of the player's return to full participation in training and availability for match selection.

Injury severity is classified as; slight (0-1 days), minimal (2-3 days), mild (4-7 days), moderate (8-28 days) and severe (>28 days).

Match injury data are presented as the number of injuries per 1,000 player hours of match exposure. In order to calculate match injury incidence rates, for a team, the following calculation was used:

School Senior Cup Teams match injury incidence rate (IR): [1]

$$IR = \frac{\text{number of injuries}}{\text{number of matches x number of players (15) x match duration (1.17)}} \times 1{,}000$$

Injury definitions are listed in Section 6.0 Glossary of Terms, page 30.

2.3 Recruitment

In the 2024-2025 season, 15 Senior Cup teams were recruited into IRIS. The IRIS project had over 86.7% compliance for the School Senior Cup. Two Senior Cup school teams were excluded from data analysis due to poor compliance.

13 teams and 445 Senior Cup players were included in analysis.

Table 1: The IRIS Schools 2023-2024

Division	Number of Schools	Number of Players
School Senior Cup	13	445

Each school nominated an 'injury recorder', who was trained on use of the web-based IRIS system prior to the commencement of each season. Physiotherapists, school nurses or coaches adopted the role of injury recorder. In the majority of schools (77%), coaches acted as injury recorders however 98% of match and training injuries were initially diagnosed by a medical doctor or physiotherapist. Each injury recorder was given a secure and confidential login to their own school team's home-page on the IRIS system. Each team registered all players involved with the Senior Cup teams onto the IRIS system. Beginning with the pre-competitive season (each September), the injury recorder documented all injuries occurring to the Senior Cup team players. Injury specific data such as mechanism, nature, body location, occurrence, diagnosis and return to play date were recoded. Injury severity was calculated using the number of days absent from play.

3.0 Match Injury

3.1 Overall Time-loss Match Injury

Across the season, data from 13 Senior Cup teams across 183 matches were collected. A total of 133 match time-loss injuries (any injury resulting in more than 1 day's absence from Rugby match or training activities) were recorded. Any injuries resulting in 0-1 days' absence from Rugby match or training activities (slight injuries) were considered to be 'medical attention injuries' and are discussed separately in section 3.10. The overall team match time-loss injury incidence rates:

- School Senior Cup – 41.4/1,000 hours.
- This is approximately 2 injuries for every 3 school games.
- A Senior Cup School player would have to play on average 21 matches to sustain one injury.

Table 2 shows the overall team match time-loss injury incidence rate for the School Senior Cup teams.

Table 2: Match time-loss injuries (excluding 'slight' injuries)

Division	No. teams	No. players	No. matches	Exposure hours	No. injuries	IR*
School Senior Cup	13	445	183	3212	133	41.4

*IR – Incidence rate per 1,000 player hours

- 17% of all Senior Cup injuries resulted in a player being sent to the accident and emergency department for imaging and/or management.
- 15% of Senior Cup injuries required at least 1 day's absence from school.

3.2 Match Injury Classification

The injury diagnosis refers to the specific body location alongside the nature of the injury.
The most common injury diagnoses for the School Senior Cup were concussion (23%), followed by ankle sprains (14%) and shoulder sprains (13%). In the School Senior Cup, there were seven match injuries which had a 'dual' or multiple diagnosis.

Table 3 demonstrates the three most common specific match time-loss injury diagnoses for School Senior Cup teams for the current season (2024-2025) and for comparative seasons (2023-2024, 2022-2023, 2019-2020 and 2018-2019)*.

Table 3: Overall most common injury diagnoses for the School Senior Cup; (IR/1,000 player hours, % of injuries)

Schools Senior Cup				
2024-2025	2023-2024	2022-2023	2019-2020	2018 - 2019
Concussion 9.7 (23%)	Concussion 7.5 (22%)	Concussion 7.5 (19%)	Concussion 9.6 (23%)	Ankle Sprain 11.4 (17%)
Ankle Sprain 5.9 (14%)	Ankle Sprain 3.8 (11%)	Ankle Sprain 3.6 (9%)	Ankle Sprain 4.1 (10%)	Shoulder Dislocation/ Subluxation 7.2 (11%)
Shoulder Sprain 5.3 (13%)	Shoulder Sprain 2.4 (7%)	Shoulder Dislocation/ Subluxation 2.7 (7%)	ACJ Sprain 3.2 (7%)	Concussion 6.6 (10%)

* IRIS did not collect full season data during 2020-2021 and 2021-2022 due to training and match curtailment as a result of the COVID-19 pandemic

The shoulder, followed by the head, were the most commonly injured body locations in the School Senior Cup, accounting for 26% and 23% of all injuries respectively in this season. Shoulder sprains were the most common injury diagnosis for the shoulder, while concussion was the most common diagnosis for the head.

This is higher than the 2023-2024 School Senior Cup season where the shoulder accounted for 18%, although the proportion of head injuries is similar (22%). In the 2022-2023 season, the head accounted for 21% and the shoulder 16% of all injuries. In the 2019-2020 season, the head accounted for 24% and the shoulder accounted for 17% of all injuries. In the 2018-2019 season, the shoulder followed by the ankle were the most commonly injured body locations, accounting for 26% and 17% of all injuries respectively.

Table 4 shows the most common injury diagnoses for frequently injured body regions.

Table 4: School Senior Cup: Most common injury diagnoses with regards body location. (IR/1,000 player hours, % of injuries)

School Senior Cup 2024-2025	
Location	**Diagnosis**
Shoulder 10.6 (26%)	Sprain 5.3
	Dislocation/Subluxation 3.7
	Bursa/Labrum/Cartilage 0.9
Head 9.7 (23%)	Concussion 9.7
Ankle 5.9 (14%)	Sprain 5.9
	Fracture 0.6
Knee 4.0 (10%)	Bursa/Labrum/Cartilage 1.3
	Sprain 1.3
	Dislocation/Subluxation 0.6
	Fracture 0.6

* Incidence rates are rounded to the nearest one decimal place.
** Injuries with two categorical types are reported in isolation, therefore aggregation of diagnostic IRs may exceed the location IR.

3.3 Timing of Match Injury

The highest percentages of injuries for the Senior Cup occurred in the third quarter (38%).

A greater incidence of injuries occurred in the third quarter compared to the previous two seasons (2023-2024 and 2022-2023), while the incidence of injuries in the fourth quarter was similar to previous seasons.

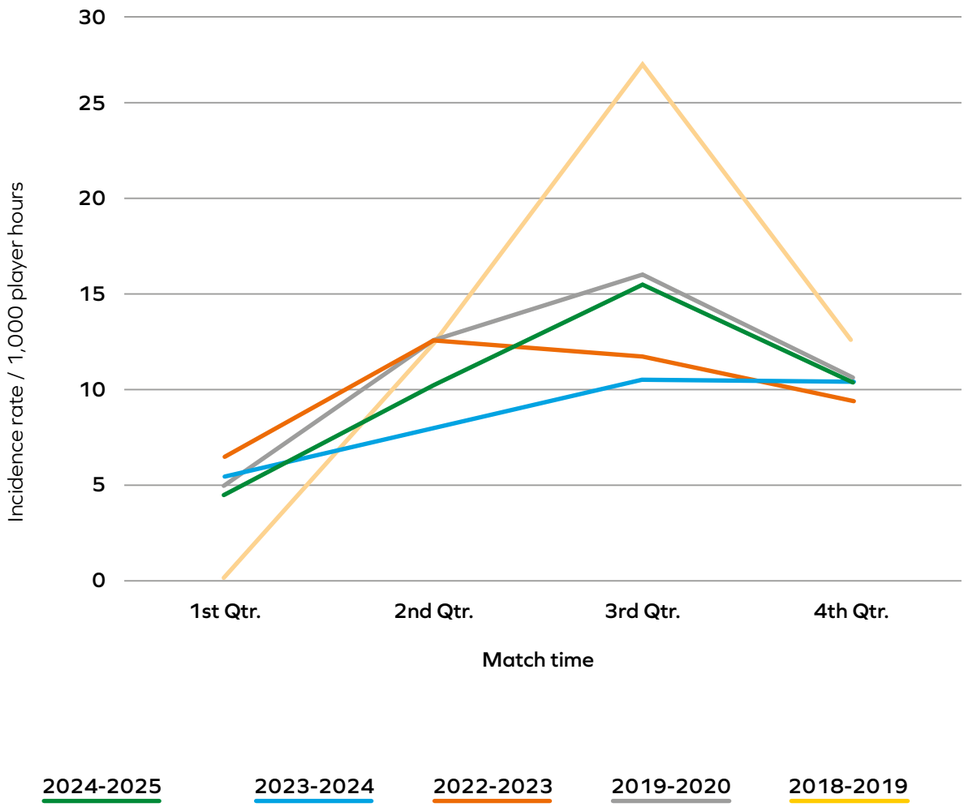

Figure 1: Timing of injury during match play for School Senior Cup teams (IR/1,000 player hours)

3.4 Match Injury Event

Figure 2 shows the event surrounding the occurrence of an injury. The tackle event (75%) accounted for the most common injury event in the School Senior Cup (tackler: 51%, ball carrier: 49%). This is higher than what was recorded in the 2023-2024 season (70%), however the proportional breakdown has leveled out compared to last season (tackler: 62%, ball-carrier: 38%). The 2022-2023 season, 2019-2020 season and 2018- 2019 season also varied year on year, with the tackle event contributing 67%, 74% and 57% of match injuries in each season respectively.

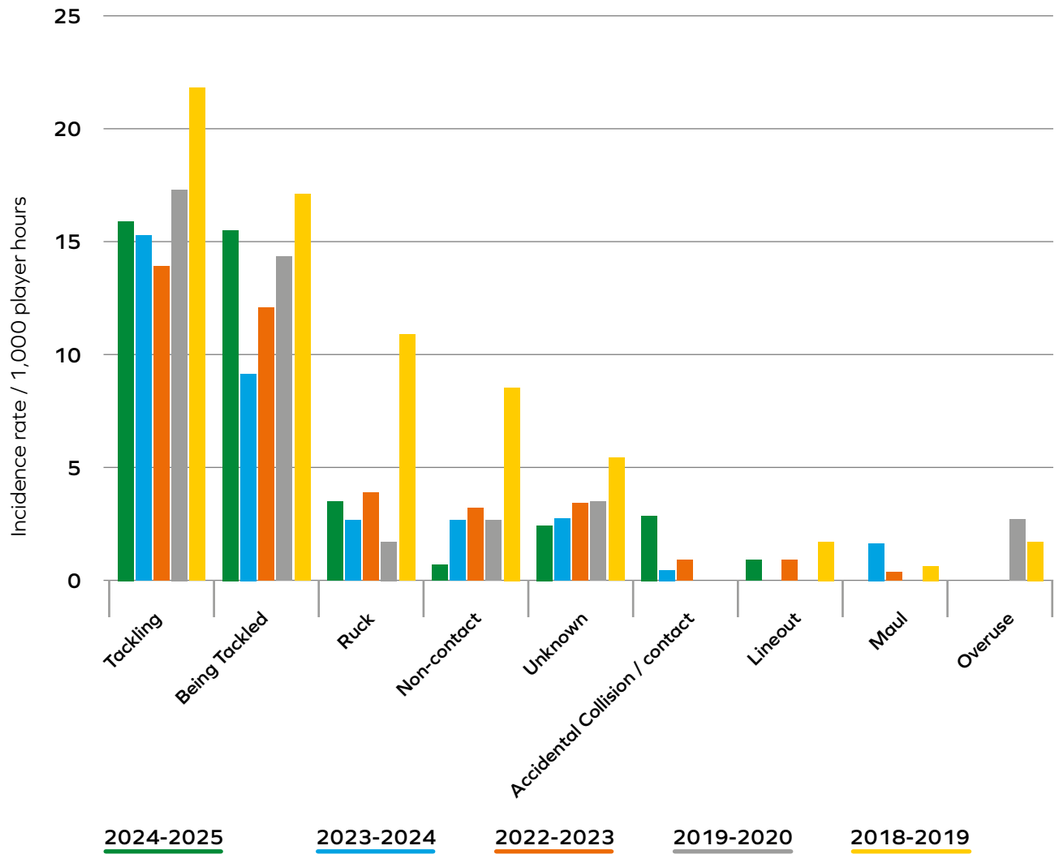

Figure 2: Match injury event (IR/1,000 player hours)

3.5 Nature of Match Injury

The nature of injury refers to the type of injury occurring.

Ligament sprains (36%) followed by concussions were the most common injury type for the School Senior Cup teams.

In the 2023-2024, 2022-2023 and 2019-2020 seasons, ligament sprains and concussions were also the most common injury type for School Senior Cup teams; however, in the 2018-2019 season, ligament sprains, haematoma/contusions and muscle strains were most common.

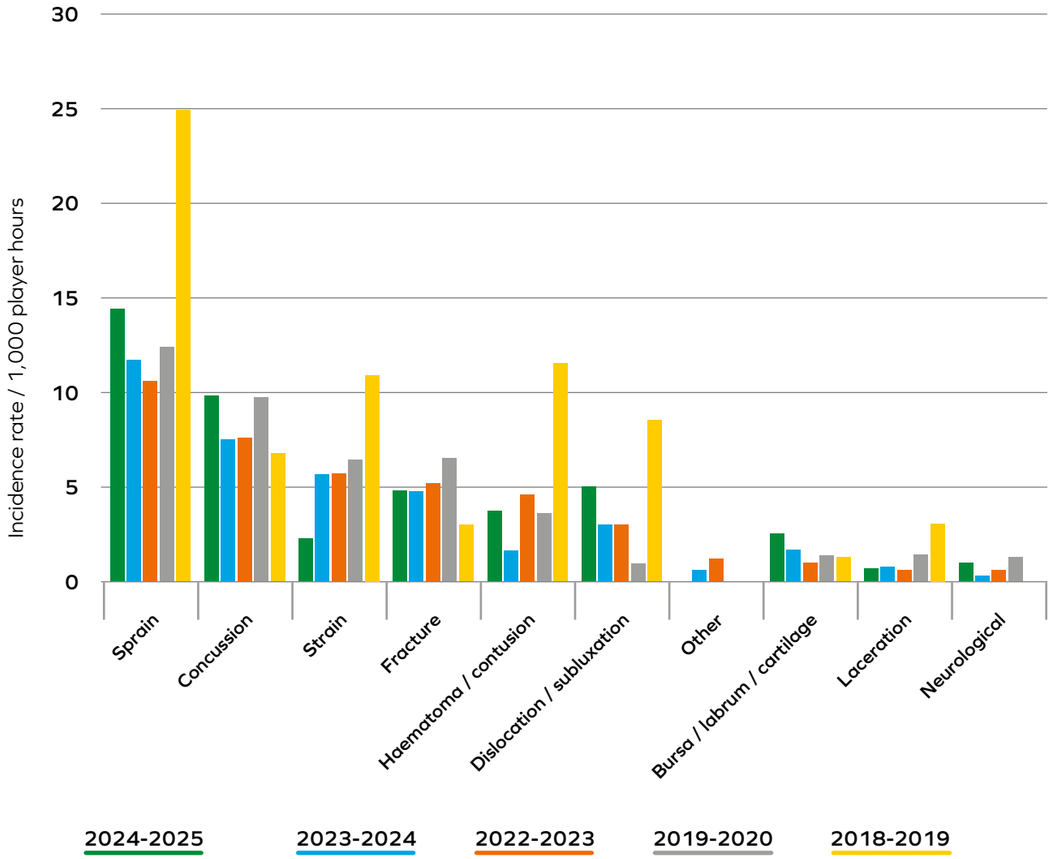

Figure 3: Nature of match injuries (IR/1,000 player hours)

3.6 Body Location of Match Injury

The shoulder was the most commonly injured body region in School Senior Cup games accounting for 26% (10.6/1,000 player hours) of all injuries. The incidence of shoulder injury increased from the 2023-2024 season (18%, 6.2/1,000 player hours). In the 2022-2023 season shoulder injuries accounted for 16% of all injuries (6.3/1,000 player hours), and in the 2019-2020 season it accounted for 17% of all injuries (7.3/1,000 player hours). This incidence of shoulder injuries in this current season is comparable to the 2018-2019 season where the shoulder accounted for 26% of all injuries (17.4/1,000 player hours).

The most common lower limb location of injury this season was the ankle (14%; 5.9/1,000 player hours) – which is an increase on the 2023-2024 season where it accounted for 12% of all injuries (4/1,000 hours) and the 2022-2023, 2019-2020 and 2018-2019 seasons where it accounted for 10% (3.9/1,000 hours), 11% (4.6/1,000 hours) and 12% (7.8/1,000 hours) respectively.

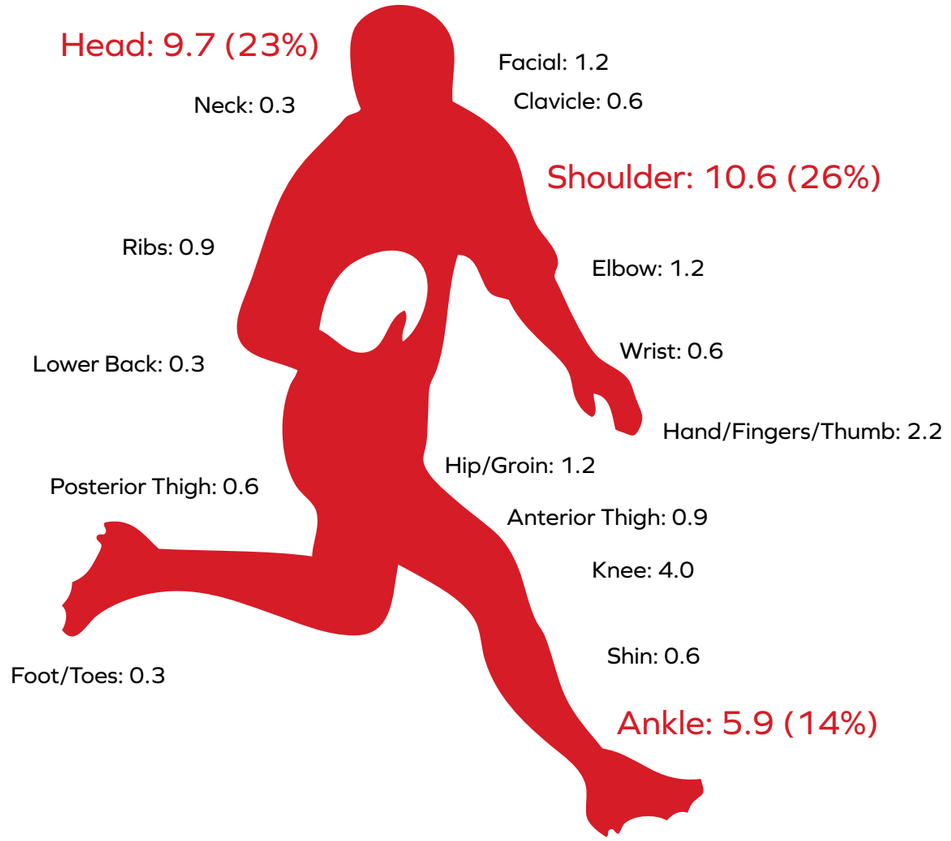

Figure 4: Location of match injury for the School Senior Cup (IR/1,000 player hours)

3.7 Playing Position of Match Injury

Rugby player positions are split into 'forwards' (position no. 1-8) and 'backs' (position no. 9-15). Forwards sustained more injuries with 61%, versus 39% occurring in the backs.

Blindside flankers (no. 6) and loose-head props (no. 1) reported the most match injuries at 12% respectively, followed by the outhalf (no. 10) (11%).

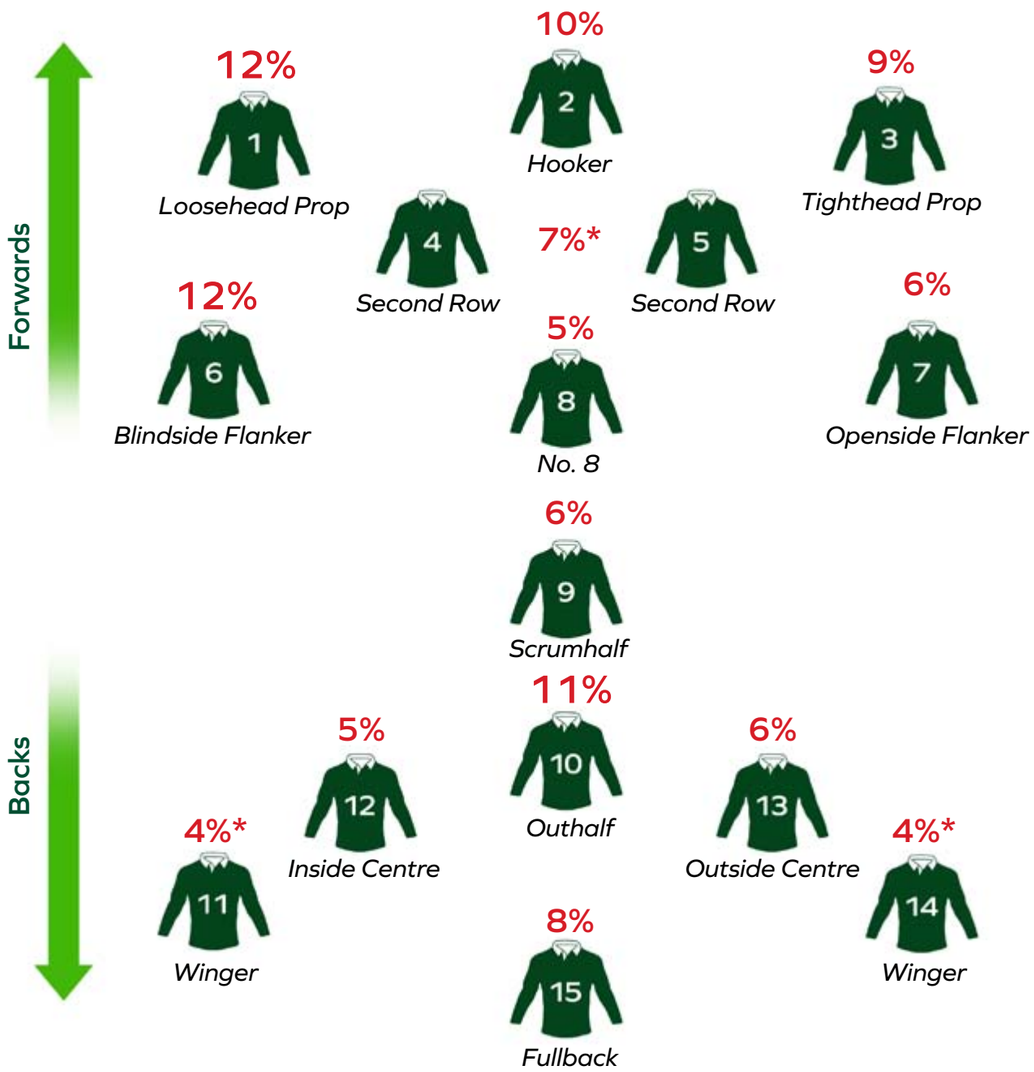

Figure 5: Percentage of injuries occurring per playing position in the School Senior Cup.

* Second Row and Winger positions denote respective combined percentages for both players in these positions as no differentiation between these positions was applied. The winger % is displayed twice in this graph for illustration purposes but is included once in overall figures. Mathematical rounding applied for illustration purposes.

3.8 Match Injury Severity

Injury severity was calculated as total number of days absent from Rugby match or training and classified according to the World Rugby Consensus guidelines.[1] The majority of injuries were moderate or severe (resulting in eight days or more absence), as shown in Figure 6.

Slight injuries (0-1 days absence) were considered as 'medical attention injuries' and were not included in analysis of time-loss injuries.[1] Slight injuries are discussed in more detail in sub-section 3.10.

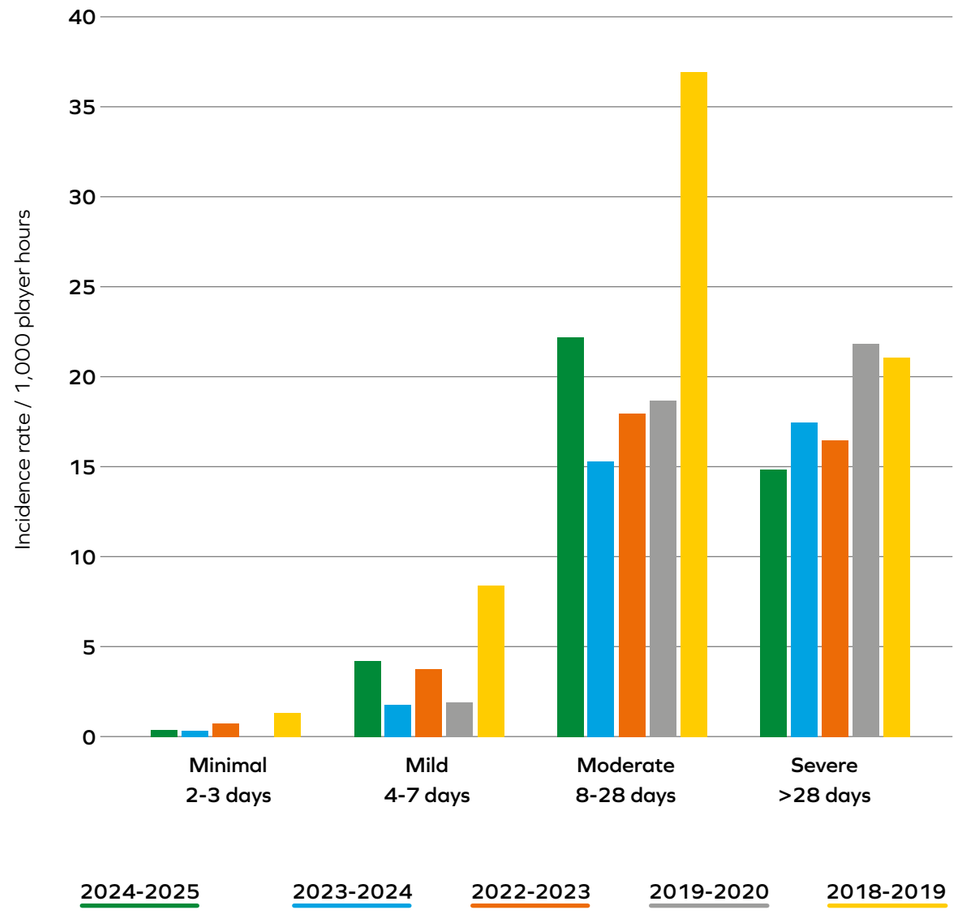

Figure 6: Injury severity of time-loss injuries (IR/1,000 player hours).

3.9 Match Injury Burden

The burden of an injury assesses the incidence rate of an injury in relation to the average severity of the injury ([IR] x [average number of days' absence]).

Concussions carried the highest injury burden in the School Senior Cup with 252 days lost per 1,000 player hours.

Ankle sprains accounted for 19% of all severe match injuries (>28 days absence) and severe ankle sprains resulted in an average of 54 days absence from Rugby match or training activities.

Table 5: Injury diagnoses, injury burden (days absence/1,000 player hours), average TDO (total days off).

	Diagnoses	Injury Burden	Average Total Days Off
Senior Cup	Concussion	252	26
	Knee sprain*	234	180
	Shoulder dislocation/subluxation	222	60
	Ankle sprain	189	32
	Shoulder sprain	143	27

* Knee sprain is inclusive of one ACL tear.

3.10 Medical Attention Match Injury (slight injury)

Any injuries resulting in 0-1 days absence from Rugby match or training are considered as 'slight' or 'medical attention' injuries and therefore were excluded from the analysis of time-loss injuries, as per international best practice. [1-3]

During the 2024-2025 School season, no medical attention injuries were recorded in the Senior Cup.

3.11 Other Match-related Injury

One injury occurred during the warm-up in the Senior Cup competitions, and this was not included in the analysis of the time-loss match injury incidence as only injuries occurring during the match play counted as match injuries.

This injury was a hip muscle strain, sustained during a non-contact component of the warm-up, that resulted in 19 days' absence from Rugby activities.

4.0 Training Injury

4.1 Overall Time-loss Training Injury

For the 2024-2025 school season, training injury data are presented below. For operational reasons, as the frequency and duration of training sessions were not recorded for this season, training injury incidence rates were not available. Therefore, the total number of training injuries that occurred is reported.

Any injuries resulting in 0-1 day absence from Rugby match or training activities were considered to be medical attention injuries and were not included in the analysis of time-loss injuries, as per international best practice. [1-3]

The overall number of training injuries for the School Senior Cup teams across the season was 48.

Table 6: Training injuries in the School Senior Cup

	No. Teams	No. Players	No. Injuries
2024-2025	13	445	48
2023-2024	15	481	51
2022-2023	14	481	46
2019-2020	10	270	28
2018-2019	11	305	21

4.2 Training Injury Classification

The injury diagnosis refers to the specific body location and nature of the injury.

The most common injury diagnosis for the School Senior Cup teams was ankle sprains accounting for 19% of all training time-loss injuries, followed by calf strains accounting for 13% of all training time-loss injuries. Ankle sprains were also frequent in the 2022-2023, 2019-2020 and 2018-2019 seasons.

Table 7 shows the most common specific training time-loss injury diagnoses for the School Senior Cup teams across the season.

Table 7: Overall most common injury diagnoses for the School Senior Cup teams (% frequency).

	School Senior Cup			
2024-2025	2023-2024	2022-2023	2019-2020	2018-2019
Ankle Sprain (19%)	Ankle Sprain (20%)	Hamstring Strain (15%)	Ankle Sprain (21%)	Hamstring Strain (19%)
Calf strain (13%)	Hamstring Strain (16%)	Ankle Sprain (13%)	Hamstring Strain (14%)	Ankle Sprain (14%)
Knee Sprain (8%) Shoulder Dislocation/ Subluxation (8%)	Concussion (14%)	Shoulder Sprain (13%)	ACJ Sprain (11%)	Knee Ligament Sprain (10%) Head Laceration (10%) Calf Strain (10%)

4.3 Body Location of Training Injury

Overall, the shoulder was the most commonly injured site in the School Senior Cup training sessions, accounting for 23% of all training time loss injuries.

Figure 7 shows the incidences of injury according to body location for the School Senior Cup teams.

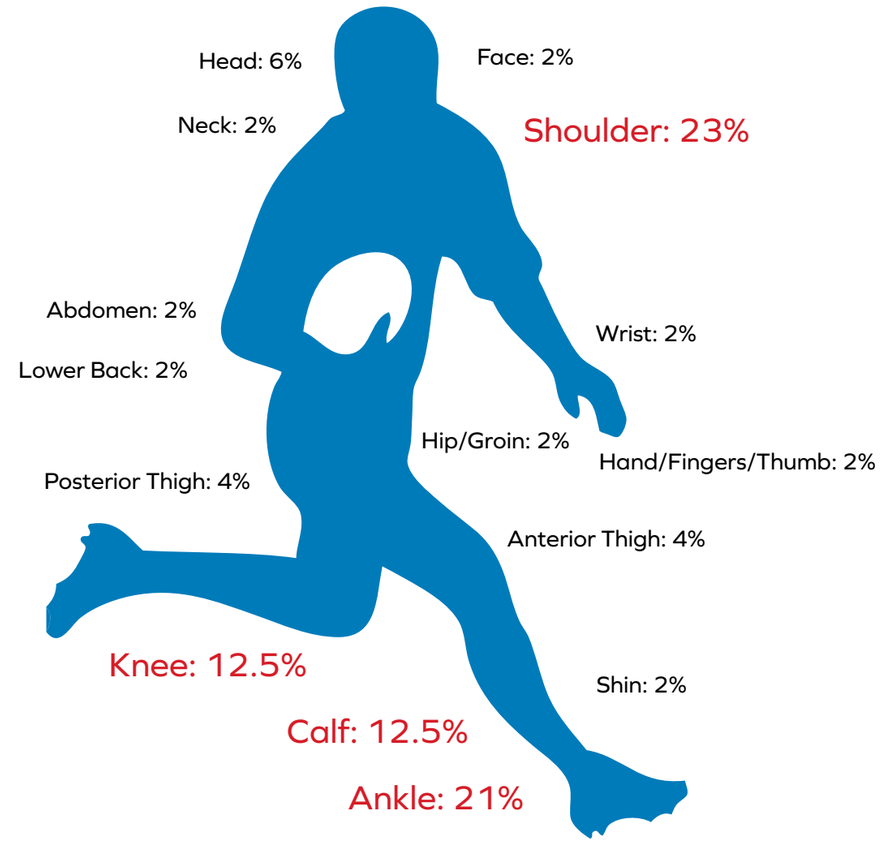

Figure 7: Location of training injuries for the School Senior Cup (% frequency).

* Mathematical rounding applied to one decimal place

4.4 Nature of Training Injury

The nature of injuries refers to the type of injury occurring.

Sprains (referring to ligament injuries) and strains (referring to muscle or tendon injuries) were the most common injury type in the Senior Cup teams across the season.

Figure 8 shows the nature of time loss training injuries for the School Senior Cup teams.

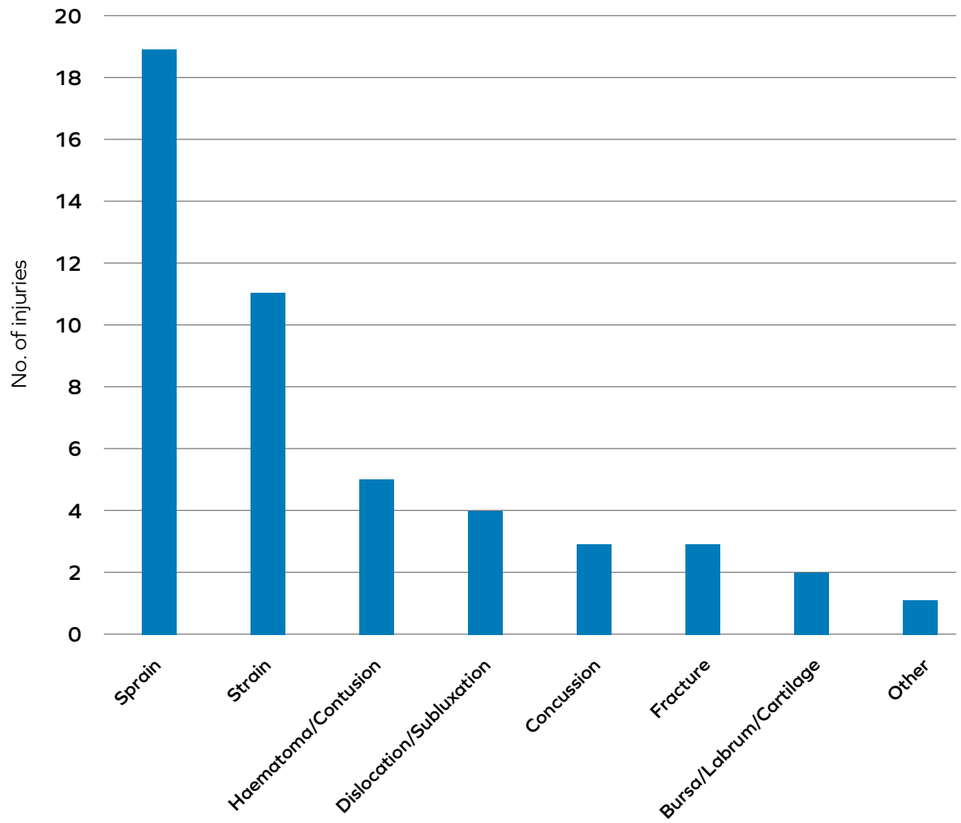

Figure 8: Nature of training injury (number of injuries)

4.5 Training Injury Event

Figure 9 shows the mechanism of injury for the Schools Senior Cup across the season.

Non-contact mechanisms of injury were most frequent (27%), followed by tackling (21%) and being tackled (17%).

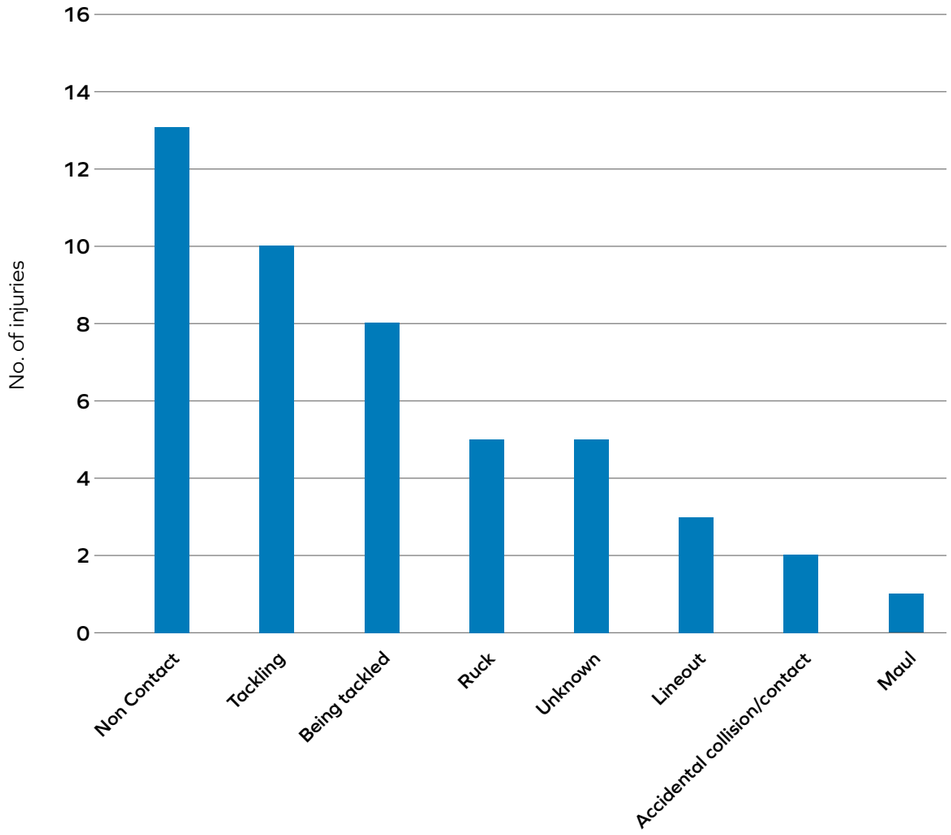

Figure 9: Training injury event (number of injuries)

4.6 Training Injury Severity

Injury severity was calculated as total number of days absent from Rugby match or training and classified according to the World Rugby Consensus guidelines. 54% of training injuries were severe (>28 days absence) as shown in Figure 10.

Slight injuries (0-1 days absence) were considered as 'medical attention injuries' and were not included in analysis of time-loss injuries, as per international best practice. [1-3] Slight injuries are discussed in more detail in sub-section 4.7.

The severity of training injuries for the School Senior Cup grade differed from the 2023-2024 season where the majority of time-loss training injuries were moderate (8-28 days) in terms of time loss from Rugby training or matches.

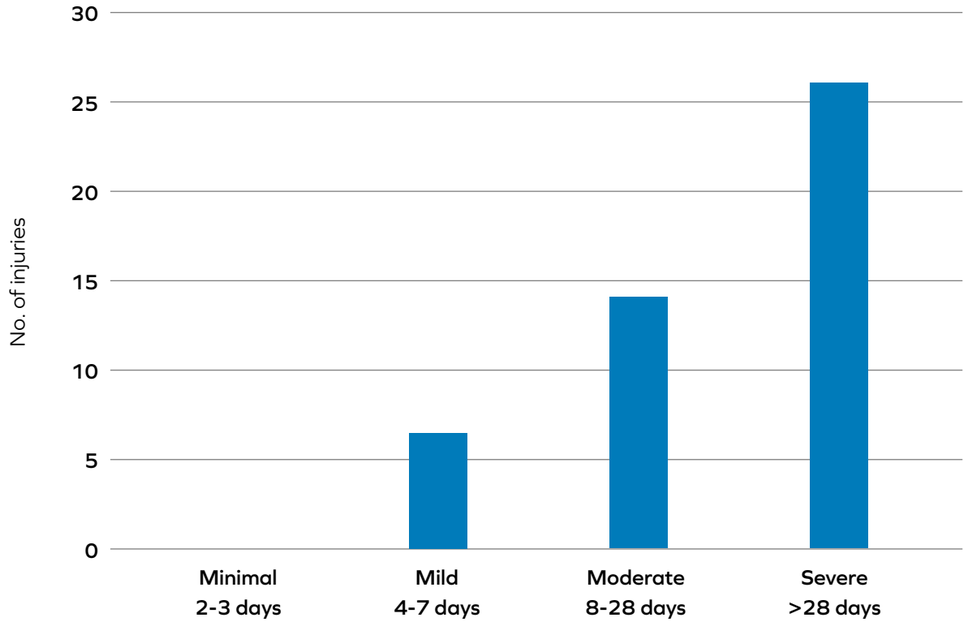

Figure 10: Training injury severity (number of injuries)

The burden of an injury assesses the frequency of an injury in relation to the severity of the injury (measured as the number of days absence). Exposure was not measured in relation to training injuries, therefore 'days lost per 1,000 hours' could not be calculated. However, frequency of training injuries along with average total days off are reported in Table 8. Ankle sprains (19%) and calf strains (12.5%) resulted in an average of 31- and 34- days absence from Rugby match and training activities across the season respectively.

Table 8: Frequency of training injuries along with average total days off (TDO)

	Diagnosis	Number of injuries	Average Total Days Off
School Senior Cup	Ankle sprain	9	31
	Calf Strain	6	34
	Knee Sprain*	4	179
	Shoulder Dislocation/Subluxation	4	106

* Knee Sprain is inclusive of two anterior cruciate ligament (ACL) tears.

4.7 Medical Attention Training Injury (slight injury)

Any injury resulting in 0-1 days absent from Rugby match or training is considered a slight, or 'medical attention' injury and therefore were excluded from the analysis of time-loss injuries, as per best international practice. [1-3]

During the season there were zero medical attention training injuries reported in the School Senior Cup training sessions.

5.0 Future Directions of the IRIS Project

Following four successful seasons of the IRISweb system in school's rugby, the IRIS project continued and completed its fifth season of data collection during the 2024-2025 campaign. Participation amongst schools remained stable after a successful increase in numbers following COVID-19. The Irish Rugby Football Union opted in to the World Rugby Global Tackle Height Law Trial that has run for two years across adult amateur and also age-grade (schools) Rugby, and will be reported on separately. The IRIS Project data has been essential for the IRFU to assess the effectiveness of the Tackle Height Law Trial on injuries. The IRIS Project is also exploring stakeholder feedback on the implications of the IRFU Tackle Behaviours Trial.

The IRIS Project began a study in the senior amateur club 2021-2022 season measuring injury epidemiology and programme adherence for an intervention programme called ENGAGE. ENGAGE is a bespoke Rugby readiness and robustness programme which aims to improve overall player performance and reduce injury risk. Through a structured and progressive 3-phase programme, ENGAGE prepares players for the immediate training ahead and duration of the competitive matches across the season. The programme was found to be appropriate, highly acceptable, and feasible among the clubs adopting it, and the feasibility study resulted in moderate injuries, severe injuries, and concussion falling by 24%, 32%, and 40% respectively. IRIS has explored this programme in the underage school's and club game, with a heightened focus on coach support for programme delivery.

The IRIS project has also commenced surveillance into contact-related breast injuries and exercise-induced breast pain in adult female players in Ireland and internationally. This information will help inform all involved in the women's game regarding the prevalence of breast pain and injury and raise knowledge and awareness.

Relative Energy Deficiency (REDs) in the women's and men's populations is also now being explored, examining awareness, prevalence, and education.

In 2024 IRIS also commenced a collaboration with UPMC Ireland (University of Pittsburgh Medical Centre) to further explore concussion symptoms, recovery duration and treatment. This collaborative project aligns to the work of IRIS and will over the coming years enhance our understanding of concussion treatments within the Irish amateur Rugby context.

6.0 Glossary of Terms

Ankle sprains are ligament tears (sprains) of any ligament in the ankle joint, inclusive of lateral (outside of joint), medial (inside of joint) and syndesmosis sprains (also called high ankle sprains). ATFL sprain (anterior talo-fibular ligament sprain) refers to a tear of the ligament located on the outside of the ankle joint. It is also called an inversion sprain or lateral ligament sprain.

Anterior cruciate ligament (ACL) tears refer to disruption of one of the four ligaments of the knee joint.

Fracture refers to a partial of complete break in the continuity of bone.

AC sprain refers to a tear of the ligaments around acromioclavicular joint of the shoulder.

Haematoma/contusion refers to bruising located anywhere in the body.

Hamstring strain refers to a tear in the muscle group located on the posterior aspect (back) of the thigh.

Laceration refers to a cut or tear in the skin.

Shoulder dislocation/subluxation refers to either partial or complete separation of the humerus (upper arm bone) from the glenoid fossa (shoulder socket).

Shoulder sprain refers to a tear in one of the ligaments in the glenohumeral (shoulder) joint.

7.0 Publications and Conferences

7.1 Journal Publications

Guilfoyle L., Leahy T.M., Kenny I.C., O'Sullivan K. and Comyns T.M. (2025) The Incidence, Burden and Impact of Tackle Injuries in Schoolboy Rugby Union. Journal of Science and Medicine in Sport. Xx(xx), xxxx-xxxx [in press]

Bibby K., Kenny I.C., Cahalan R., Guilfoyle, L. and Comyns T.M. (2025). Breast Health Knowledge and Awareness among Stakeholders in Women's Rugby. International Journal of Sports Science & Coaching. 20(2), 529-539. https://doi.org/10.1177/17479541251314186

Guilfoyle L., O'Sullivan K., Comyns T.M. and Kenny I.C. (2025) What do coaches want? Exploring the preferences of youth Rugby Union coaches for education in the implementation of injury prevention programmes. Physical Therapy in Sport. 72, 1-8. https://doi.org/10.1016/j.ptsp.2024.12.002

Bibby K., Comyns T.M., Cahalan R., Purtill H. and Kenny I.C. (2024). How are female rugby players affected by contact breast injuries and exercise induced breast pain – an international survey. Research in Sports Medicine. 33(2), 146-155. https://doi.org/10.1080/15438627.2024.2431824

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7.2 Conference Communications

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Power, L.C., Kenny, I.C., Mulvihill, J.J.E., Kontos, A.P., Collins, M.W. and Comyns, T.M. (2025) Comparison of sport-related concussion and time-loss in male and female amateur Rugby Union players across a 2-year time period. Accepted for presentation at the World Federation of Athletic Training and Therapy (WFATT) - 13th World Congress, Maynooth, Ireland.

Billingham T., Comyns T.M., Norton C., Warrington G.D., Sweeney G., McArdle S., Purtill H., Kenny I.C. (2025) Prevalence of Relative Energy Deficiency in Sport (REDs) and Low Energy Availability (LEA) in Elite Adult Female Team Ball Sport Athletes. Accepted for presentation at the Women in Sport and Exercise Conference 2025, 24-25 June 2025, Leeds, UK.

Bibby K., Comyns T.C., Cahalan R., Purtill H. and Kenny I.C. (2025) How much do they know? Perspectives of players and coaches on breast health issues in women's Rugby. Accepted for presentation at the Women in Sport and Exercise Conference 2025, 24-25 June 2025, Leeds, UK.

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Comyns, T.M. (2024) ENGAGE: Development and implementation of the ENGAGE injury prevention programme with Irish amateur and schoolboy rugby players. Invited talk. Proceedings of the UK Collaborating Centre on Injury and Illness Prevention in Sport (UKCCIIS) International Conference 2024, 8-9 July 2024, Edinburgh, Scotland.

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Bibby, K., Kenny, I.C., Cahalan, R, and Comyns T.M. (2023) An investigation into existing injury surveillance systems in Rugby Union and their capability to report and monitor breast injuries. Proceedings of the 2023 All Ireland Postgraduate Conference in Sport Science, Physical Activity and Physical Education, 26 May 2023, Cork, Ireland.

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Li Y. and Kenny I.C. (2022) Comparison of injury for non-contact sports (track) versus contact sports (rugby). Proceedings of the 69th ACSM American College of Sports Medicine Conference 2022, 31 May - 4 June 2022, San Diego, USA.

Kenny, I.C. & Comyns T.M. Invited plenary speakers. (2021) 'Irish amateur community Rugby women's and men's comparative injury surveillance'. Proceedings of the 2021 University of Bath Female Rugby Union Research Symposium. 2 December 2021, Bath, UK.

Yeomans, C., Comyns, T.M., Cahalan, R., Warrington, G.D., Harrison, A.J., Purtill, H., Lyons, M., Campbell, M.J., Glynn, L.G. and Kenny, I.C. (2021) A Comparison of Injuries between Male and Female Amateur Rugby Union Players. International Olympic Committee (IOC) World Conference on Prevention of Injury & Illness in Sport, 25-27 November 2021, Monaco.

Dolan P., Comyns T.M., Glynn L.G., Yeomans C. and Kenny I.C. (2021) A 3 Year Investigation of Match Injuries in Amateur Rugby Union. Proceedings of the European College of Sport Science Conference 2020, 8-10 September 2021, Cologne, Germany.

Griffin, A., Kenny, I.C., Comyns, T.M. and Lyons, M. (2021). Training load monitoring in team sports: a practical approach to addressing missing data. Proceedings of the European College of Sport Science Conference 2020, 8-10 September 2021, Cologne, Germany. [Shortlisted for Young Investigator Award]

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Leahy T.M., Kenny I.C., Campbell M.J., Warrington G.D., Cahalan R., Harrison A.J., Lyons M., Glynn L.G., and Comyns T.M. (2019) Injury Surveillance in School Rugby Union in Ireland. Proceedings of the SASMA South African Sports Medicine Association BRICSCESS BRICS Council of Exercise and Sports Science 2019 Congress. 10-13 October 2019, Cape Town, South Africa.

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9.0 Appendix

Appendix Table 1: Seasonal summary of Senior Cup Schoolboy incidence rate per 1000 player hours, number of teams and players participating and overall compliance*

Schools Senior Cup					
	2024-2025	2023-2024	2022-2023	2019-2020	2018-2019
No. of teams	13	15	14	10	11
No. of players	445	481	481	270	305
Match injury rate	41.4	34.7	38.5	42.4	67.8
Overall compliance	87%	93%	93%	90%	90%

* IRIS did not collect full season data during the 2020-2021 and 2021-2022 seasons due to training and match curtailment as a result of the COVID-19 pandemic.

Appendix Table 2: Overall most common match injury diagnoses for the Senior Cup Schoolboy; (IR/1,000 player hours, % of injuries)*

Schools Senior Cup				
2024-2025	2023-2024	2022-2023	2019-2020	2018-2019
Concussion 9.7 (23%)	Concussion 7.5 (22%)	Concussion 7.5 (19%)	Concussion 9.6 (23%)	Ankle Sprain 11.4 (17%)
Ankle Sprain 5.9 (14%)	Ankle Sprain 3.8 (11%)	Ankle Sprain 3.6 (9%)	Ankle Sprain 4.1 (10%)	Shoulder Dislocation/ Subluxation 7.2 (11%)
Shoulder Sprain 5.3 (13%)	Shoulder Sprain 2.4 (7%)	Shoulder Dislocation/ Subluxation 2.7 (7%)	ACJ Sprain 3.2 (7%)	Concussion 6.6 (10%)

* IRIS did not collect full season data during the 2020-2021 and 2021-2022 seasons due to training and match curtailment as a result of the COVID-19 pandemic.

Appendix Table 3: Overall most common training injury diagnoses for the Senior Cup Schoolboy teams (% of injuries)*

Schools Senior Cup				
2024-2025	2023-2024	2022-2023	2019-2020	2018-2019
Ankle Sprain (19%)	Ankle Sprain (20%)	Hamstring Strain (15%)	Ankle Sprain (21%)	Hamstring Strain (19%)
Calf Strain (13%)	Hamstring Strain (16%)	Ankle Sprain (13%)	Hamstring Strain (14%)	Ankle Sprain (14%)
Knee Sprain (8%) Shoulder Dislocation/ Subluxation (8%)	Concussion (14%)	Shoulder Sprain (13%)	ACJ Sprain (11%)	Knee Ligament Sprain (10%) Head Laceration (10%) Calf Strain (10%)

* IRIS did not collect full season data during the 2020-2021 and 2021-2022 seasons due to training and match curtailment as a result of the COVID-19 pandemic.

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