

Injury Surveillance Studies

2023 & 2024 Rugby Europe XV Competitions

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1. INTRODUCTION

Understanding the incidence and nature of the injuries sustained during the practice of rugby is key in order to clarify the risks posed to players. Several Injury Surveillance Studies have been implemented previously in 15-a-side World Rugby Competitions^[1–4].

Rugby Europe is committed to implementing injury surveillance studies at all major Rugby Europe tournaments and to disseminate the results within the Rugby community.

This report continues the on-going study of Rugby Europe competitions by reporting injuries sustained during the 2023 and 2024 Rugby Europe XV Competitions.

This study was conducted in accordance with the definitions and protocols described in the World Rugby approved consensus statement on definitions and procedures for injury surveillance studies in Rugby^[5]. Specific injuries were classified using the OSICS 10 coding system^[6].

Team medical staffs prospectively recorded injuries sustained during each match. Detailed information about each injury (date of injury, date of return to play, location and type of injury, cause of injury, event leading to injury) was also recorded by team medical staff. Injuries were understood to be resolved when an injured players returned to play/training.





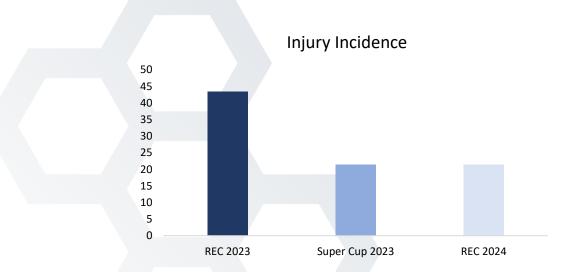
2. RESULTS

All participating teams reported data in accordance with the definitions and protocols described in the World Rugby approved consensus statement on definitions and procedures for injury surveillance studies in Rugby^[5].

2.1. Match injuries

Across the five tournaments analyzed, the incidence and severity of injuries varied. In the men's competitions, REC 2023 had the highest incidence rate (77.5 injuries per-1000 match hours), compared to the Super Cup 2023 with 35.0 injuries per-1000 match hours and REC 2024 with 56.3 injuries per-1000 match hours. In all three tournaments, forwards had a higher injury incidence than backs.

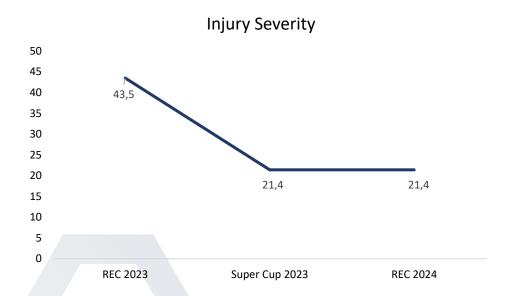
For the women's competitions, both WREC 2023 and WREC 2024 recorded similar numbers of injuries, with 4 and 5 injuries, respectively. However, the incidence in WREC 2023 was higher (33.3 injuries per 1000 match hours), as the lower injury count in 2024 was influenced by the addition of one more team.





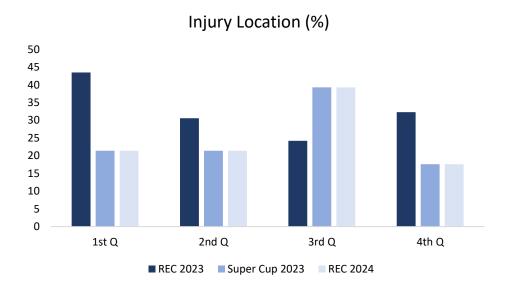
In terms of severity, REC 2024 had the highest severity in the men's tournaments, with an average of 47.0 days missed per injury, compared to 43.0 days in the Super Cup 2023 and 36.4 days in REC 2023. For the women, WREC 2023 had 151.0 days missed, while WREC 2024 had 86.0 days missed.

Regarding injury burden, REC 2023 had the highest in the men's tournaments, with 2821 days lost per-1000 match hours, compared to 1505 in the Super Cup 2023 and 2646 in REC 2024. In the women's tournaments, WREC 2023 had the highest burden, with 5050 days lost per-1000 match hours.

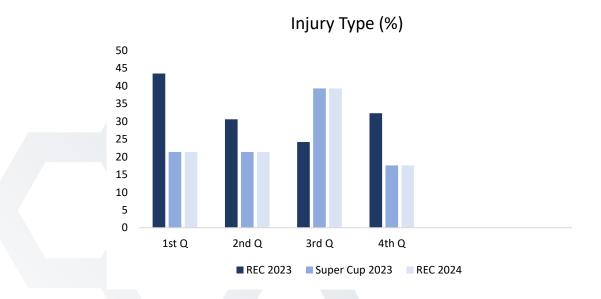


The most affected anatomical location was quite similar in all tournaments. In the men's tournaments (REC 2023, SCUP 2023 and REC 2024) they are split between head/face and lower limb. Both RECs had more head/face injuries (22.6% and 40% respectively), while SCUP had more lower limb injuries (42.9%). In women, there is a change in trend. In 2023, 25% of lesions were distributed between head/neck, upper limb, trunk and lower limb, while in 2024 the lower limb exposed 66.7% of them.

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The type of injury was divided between muscle/tendon and joint/ligament. Muscle/tendon prevailed in REC 2023 (35.5%), while joint/ligament prevailed in REC 2024 (33.3%) and WREC 2024 (60%). WREC 2023 and SCUP 2023 share percentages between the two types with 50% and 32.1% respectively.



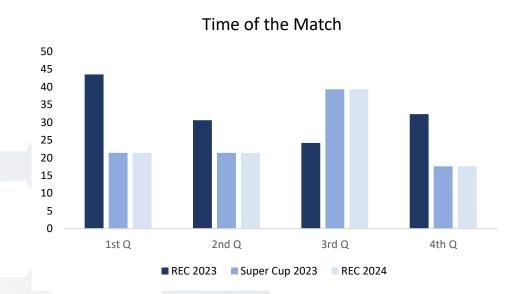
Concussion was the most common injury in REC 2023 (16.1%) and REC 2024 (26.6%), while quadriceps haematoma/strain was the most common injury in SCUP 2023 (10.7%).



The injury onset and cause of injury was fairly homogeneous. Acute injuries were the most common in all tournaments with percentages ranging from 91.1% to 100%. On the other hand, contact injuries were also the most prevalent with percentages between 60% and 100%.

While the trend in the first two tournaments of 2023 (REC and WREC) was a higher number of injuries by tackling with 30.6% and 50% respectively, in SCUP 2023 and REC 2024 tackling accounted for a higher number of injuries with 35.7% and 33.3% respectively. In addition, backs had a higher number of tackling injuries in REC 2023 (50%), while in the next two tournaments (Scup 2023 and REC 2024) they had a higher number of tackling injuries (54.5% and 30% respectively). Forwards had more tackling injuries than tackling, as well as during the ruck. In the WREC it was split 50/50 between tackling and being tackled.

The second halves marked the games. In all men's tournaments more injuries occurred in the second half at around 57% (REC 2023 56.5%; SCUP 2023 57.1%; REC 2024 57.1%), with the third quarters being the protagonists in the latter two (39.3% respectively).



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