[Rugby Europe Championship (Women) – 2022/23]

Injury Surveillance Report

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Introduction

Understanding the incidence and nature of the injuries during the 2023 Women Rugby European Championship, and through previous Surveillance Studies[1–4] implemented in World Rugby Competitions of how, where and when injuries happen, we try to implement the same philosophy in Rugby Europe competitions, with the following aims:

- To record and analyze injuries sustained by men and women at the men's and women's Rugby Europe Championships.
- To identify injury trends.
- To bring injury-related areas of concern to the attention of Rugby Europe's Chief Medical Officer and when appropriate to World Rugby's Chief Medical Officer.

This report continues the on-going study of Rugby Europe competitions by reporting injuries sustained during the women's Rugby Europe Championship.

Results

Netherlands, Spain, and Sweden were involved in the Women's Rugby Europe Championship 2023.

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.

Players' anthropometric data

The total sample for the study was 78 players, 33 backs and 45 forwards. The mean age was 25,1 years, being 23,0 years for backs and 26,7 years for forwards. We could not obtain the stature data and body mass data of the players.

The forward's mean age was divided in front row (27,1 years), second row (25,6 years) and third row (26,9 years). The back's mean age was divided in halves (22,3 years), inside backs (22,2 years) and outside backs (24,0 years).

Match injuries

Injury incidence

The total number of injuries sustained was 4 (backs: 4; forwards: 0) and the total match exposure was 120,0 player-hours (backs: 56; forwards: 64). The overall match incidence was 33,3 injuries/1000 match hours (backs: 71,4 forwards: 0,0).

Injury severity

The mean severity of the study was 151,5 days missed. Only backs suffered injuries so was the same mean severity. Moderate severity (8-28 days) and major (> 91 days) injuries were the most common representing 50,0% of injuries each type. 8 and 15 days were the missed days for the moderate injuries and 188 and 395 days were for the major injuries.

Injury burden

The total days-absence resulting from match injuries sustained during the WREC 2023 was 606 days-absence (backs: 606; forwards: 0).

Injury burden, which is equal to injury incidence x mean severity, is an important ISS output measure, as it provides an overall indication of the risk of injury[5,6].

The injury burden in the WREC 2023 was 5050 days lost/1000 player-hours (backs: 10817; forwards: 0 days lost).

Injury location

The injury location was distributed by head/neck (25,0%), upper limb (25,0%), trunk (25,0%) and lower limb (25,0%). The sub-location of these injuries was neck/cervical spine (25,0%), shoulder/clavicle (25,0%), ribs/upper back (25,0%) and knee (25,0%) respectively.

Injury type

Muscle/tendon and joint/ligament acquired 50,0% of injuries each, being divided in haematoma/contusion/bruise (25,0%), sprain/ligament injury (25,0%), muscle tear (25,0%) and dislocation/subluxation (25,0%).

Most common and highest risk injuries

The most common and highest risk injuries produced in the 2023 WREC were chest wall soft tissue bruising/haematoma (25,0%), ACL rupture (25,0%), neck muscle and/or tendon strain/spasm/trigger point (25,0%) and Acromio-clavicular joint dislocation grade 4-6 (25,0%).

Injury onset

The acute onset was the only cause of injury with 100,0% of injuries.

Cause of injury onset

Contact mechanism presents 100,0% of all injuries for backs.

Match events leading to injury

The most common match event leading to injury is distributed between tackled and being tackled with the 50,0% both injury mechanism. All the injuries happened during the tackle.

Time of injury

First and second half are distributed at 50,0% the total of injuries (4 injuries). The first quarter is the most common time when injuries happen (50,0%), followed by the third (25,0%) and fourth (25,0%).

Acknowledgements

World Rugby and Rugby Europe would like to thank all competition organisers and participants for kindly sharing data for this report to take place.

The authors acknowledge the valuable support provided by many team physicians and physiotherapists during the collection of the data analysed in this report. The authors would therefore like to apologise if anyone who provided data for the study is not included in the list of acknowledgements below (sorted alphabetically):

Floor Kappelhoff, Ignacio San Andrés, Jacobo Salvat, Sofie Blume and Yael Nillissen.

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