Injury Surveillance Studies

2025 Sevens Challenger Series

Men's and Women's Tournaments

Final Report

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Contents

1 Introduction

World Rugby is committed to implementing injury surveillance studies (ISS) for all World Rugby major competitions and to disseminate the results within the Rugby community.

The aims of these studies are:

- to record and analyse injuries and illnesses sustained by male and female players at individual Tournaments,
- to identify changing patterns of injury, and
- to bring injury-related areas of concern to the attention of World Rugby's Chief Medical Officer.

World Rugby's 2024/25 men's and women's Rugby Sevens competitions consisted of two connected competitions. The top-tier men's and women's competitions, known as the SVNS, consisted of 12 countries competing in six tournaments followed by men's and women's Grand Final tournaments, involving the top eight placed men's and women's SVNS teams. The second-tier competition, known as the Challenger Series, consisted of twelve teams competing in two tournaments followed by one tournament involving the top eight teams and a Play-off tournament involving the top four teams from the Challenger Series of tournaments and the 9th to 12th placed teams from the SVNS Series.

The men's and women's injury surveillance results presented in this Report relate to the teams taking part in the three men's and three women's Challenger Series tournaments and the men's and women's Challenger Series Play-off tournaments.

The injury surveillance Report relating to the men's and women's SVNS tournaments and the men's and women's SVNS Grand Final tournaments are presented in a separate Report.

2 Methods

The men's and women's Challenger Series ISS were conducted in accordance with the definitions and protocols described in the World Rugby approved consensus statement on definitions and procedures for ISS in Rugby (Fuller et al., 2007).

The definition of injury was: *'Any injury sustained during a scheduled 2025 Challenger Series or Challenger Play-off match that prevents a player from taking a full part in all normal training activities and/or match play for more than one day following the day of injury'*. A recurrent injury was defined as: *'An injury (as defined above) of the same type and at the same site as an index injury and which occurs after a player's return to full participation from the index injury'.*

Injuries not related directly to Challenger Series and Play-off tournament matches are not included.

Specific injuries were classified using the Orchard coding system (Orchard, 2010). Injury location, type and cause together with the events leading to the injuries were also recorded. The complete lists of categories and sub-categories used for categorising injury locations and injury types are provided in the rugby injury consensus publication (Fuller et al., 2007).

Injury severity was determined by the number of days a player was injured: a player was deemed to be 'injured' until he/she could undertake full, normal training and be available for match selection, whether or not he/she was actually selected. Medical staff were required to make an informed clinical judgement about a player's fitness to train/play on those days when players were not scheduled to train or play. Injured players were followed up after individual tournaments to obtain their actual return to play dates. The return to play dates for players with injuries that remained unresolved 3 months after the final games in the 2025 Challenger Series and Play-off tournaments were estimated on the basis of a clinical judgement and prognosis provided by the injured players' medical staff.

Where appropriate, differences in players' anthropometric data were assessed using unpaired t-tests; differences in the incidences, mean severity and proportions of injuries were assessed using z-tests and differences in median severity using a Mann-Whitney U test. Differences in injury numbers were assessed using the chi-squared test. Where applicable, statistical significance was accepted at the $p \leq 0.05$ level, although it is recognised that this could identify some differences that occurred by chance, due to the number of statistical comparisons being made in the studies. For some parameters, potential differences were assessed for significance by comparing the 95% confidence intervals associated with the parameters.

3 Data collection

The 2025 men's and women's Challenger Series tournaments took place in Cape Town (1 – 2 March 2025), Cape Town (7 - 8 March 2025) and Krakow (11 – 12 April 2025); the men's and women's Play-off tournaments took place in Los Angeles (3 – 4 May 2025).

Medical staff were asked to explain the purpose of the injury surveillance studies to their squad of players. Players' baseline anthropometric information (playing position [back, forward]; date of birth; body mass [Kg]; stature [cm]) was recorded before the start of the competitions.

Medical staff were asked to record match injuries sustained during each tournament using the World Rugby online Injury Surveillance Web App. A member of the team's medical staff recorded detailed information about each injury sustained (date of injury, date of return to play, location and type of injury, cause of injury, event leading to injury). Information entered on the Web App was checked and followed up with team medical staff, if required.

4 Results

Results are presented separately for the women's and men's competitions. When assessing the results presented in this report, it is essential to take account of the overall match exposure levels and the numbers of injuries sustained during the competitions.

4.1 Women's Challenger Series

The 12 countries taking part in the two 2025 women's Challenger Series tournaments in Cape Town were: Argentina, Belgium, Colombia, Czechia, Hong Kong China, Kenya, Mexico, Poland, Samoa, South Africa, Thailand, Uganda.

The 8 countries taking part in the 2025 women's Challenger Series tournament in Krakow were: Argentina, Belgium, Colombia, Czechia, Kenya, Poland, South Africa, Thailand.

The 8 countries taking part in the 2025 women's Los Angeles Challenger Play-off tournament were: Argentina, Brazil, China, Colombia, Ireland, Kenya, South Africa, Spain.

Poland did not provide players' anthropometric or injury data for the three Challenger tournaments they were involved in and, therefore, not included in the information presented in this Report. The anthropometric data presented in the Report relates to the remaining 11 Challenger teams and the injury data relates to injuries sustained by these 11 Challenger Series teams and the 8 teams taking part in the Challenger Play-off tournament.

4.1.1 Players' anthropometric data

Table 1 summarises the numbers and anthropometric data for players competing in the Challenger tournaments categorised as backs, forwards and all players.

Table 1: Players' anthropometric data.

Measure	**Mean** (*Standard deviation, number of players*)		
	Backs	***Forwards***	***All players***
Stature, cm	164.8 (6.2, 88)	167.6 (6.6, 63)	166.0 (6.5, 151)
Body mass, Kg	62.0 (6.6, 88)	69.5 (9.8, 63)	65.1 (8.9, 151)
Age, years	24.9 (4.3, 88)	25.0 (5.0, 63)	24.9 (4.6. 152)

Forwards were significantly taller ($p<0.001$) and heavier ($p<0.001$) than backs but there was no statistically significant difference between their ages ($p=0.497$).

4.1.2 Injuries

4.1.2a Incidence of injuries

Table 2 summarises the number of match injuries, exposures and incidences of injuries for players categorised as backs, forwards and all players.

Table 2: Injury numbers, exposures (player-match-hours) and incidences (injuries/1000 player-match-hours, 95% confidence interval) of match injuries.

Measure	*Backs*	*Forwards*	*All players*
Injuries	17	15	32
Exposure	144.7	108.5	253.2
Incidence	118 (73 – 189)	138 (83 – 229)	126 (89 – 179)

One of the 32 injuries (3.1%) was reported, by a back, as a recurrence.

There is no significant difference (p=0.646) between the injury incidences for backs and forwards.

The average number of match injuries sustained/team-game at each of the 2025 Challenger tournaments is shown in Figure 1.

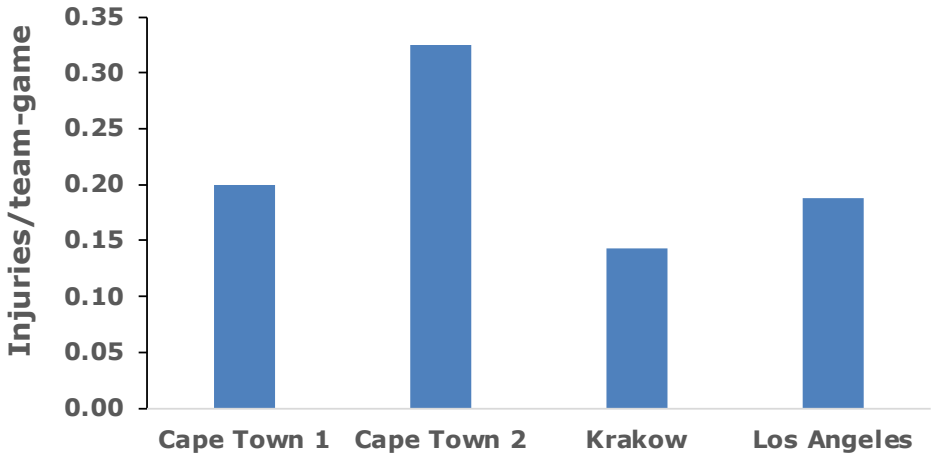

Figure 1 Average number of injuries/team-game

4.1.2b Severity of injury

A total of 2,711 player-days were lost through injury during the 2025 women's Challenger Series (backs: 1,669; forwards: 1,042). Table 3 summarises the mean and median severities of injuries sustained by players categorised as backs, forwards and all players.

Table 3: Mean and median severities of injuries.

Injury severity	***Severity (95% Confidence interval)**, days*		
	Backs	***Forwards***	***All players***
Mean	98.2 (43.4 – 152.9)	69.5 (27.0 – 112.0)	84.7 (49.7 – 119.8)
Median	43.0 (15.0 – 212)	36.0 (17.0 – 91.0)	39.5 (20.0 – 91.0)

There were no statistically significant differences between backs and forwards for either the mean (p=0.418) or median (p=0.734) severity values.

The mean and median severity values are high for backs and forwards, which reflects the nature of the injuries sustained during the tournaments; see the information presented in section 4.1.2c below.

The high mean severity of injuries sustained by both backs and forwards lead to high injury burden values for players in the women's 2025 Challenger Series (backs: 11,537 days-absence/1000 player-match-hours, 95% CI: 7,172 – 18,558; forwards: 9,604 days-absence/1000 player-match-hours, 95% CI: 5,790 – 15,930; all players: 10,708 days-absence/1000 player-match-hours, 95% CI: 7,573 – 15,143). There is no significant difference between the values for backs and forwards (p=0.603).

4.1.2c Location and type of injury

Tables 4 and 5, respectively, present the injury locations and types of injuries sustained by backs, forwards and all players during the 2025 Challenger Series.

The total number of injuries sustained during one Challenger Series is relatively small while the numbers of sub-location and sub-type categories are high; this is reflected in the wide 95% CI values reported for individual injury locations and injury types. For this reason, the results presented in Tables 4 and 5 should be interpreted carefully.

Table 4: Main and sub-locations of injuries.

Location of injury	*Proportion, % (95% Confidence interval)*		
	Backs	***Forwards***	***All players***
Head/neck	**52.9 (29.2 – 76.7)**	**33.3 (9.5 – 57.2)**	**43.8 (26.6 – 60.9)**
Head/face	52.9 (29.2 – 76.7)	33.3 (9.5 – 57.2)	43.8 (26.6 – 60.9)
Upper limbs	**0.0 (-)**	**13.3 (0 – 30.5)**	**6.3 (0 – 14.6)**
Shoulder/clavicle	0.0 (-)	6.7 (0 – 19.3)	3.1 (0 – 9.2)
Wrist/hand	0.0 (-)	13.3 (0 – 30.5)	6.3 (0 – 14.6)
Trunk	**0.0 (-)**	**6.7 (0 – 19.3)**	**3.1 (0 – 9.2)**
Sternum/ribs	0.0 (-)	6.7 (0 – 19.3)	3.1 (0 – 9.2)
Lower limbs	**47.1 (23.3 – 70.8)**	**46.7 (21.4 – 71.9)**	**46.9 (29.6 – 64.2)**
Hip/groin	0.0 (-)	6.7 (0 – 19.3)	3.1 (0 – 9.2)
Anterior thigh	5.9 (0 – 17.1)	0.0 (-)	3.1 (0 – 9.2)
Posterior thigh	0.0 (-)	0.0 (-)	0.0 (-)
Knee	35.3 (12.6 – 58.0)	26.7 (4.3 – 49.0)	31.3 (15.2 – 47.3)
Ankle	5.9 (0 – 17.1)	13.3 (0 – 30.5)	9.4 (9 – 19.5)
Foot/toe	0.0 (-)	0.0 (-)	0.0 (-)

Based on the 95% CIs, there are no statistically significant differences between the locations of injury sustained by backs and forwards. The most common injury

locations for backs were the head/face (52.9%) and knee (35.3%) and for forwards the head/face (33.3%) and knee (26.7%).

Table 5: Main and sub-types of injuries.

Type of injury	***Proportion, % (95% Confidence interval)***		
	Backs	***Forwards***	***All players***
Bone	**5.9 (0 – 17.1)**	**6.7 (0 – 19.3)**	**6.3 (0 – 14.6)**
Fracture	5.9 (0 – 17.1)	6.7 (0 – 19.3)	6.3 (0 – 14.6)
C/PNS	**47.1 (23.3 – 70.8)**	**20.0 (0 – 40.2)**	**34.4 (17.9 – 50.8)**
Brain/concussion	47.1 (23.3 – 70.8)	20.0 (0 – 40.2)	34.4 (17.9 – 50.8)
Joint, non-bone/lig[t]	**41.2 (17.8 – 64.6)**	**46.7 (21.4 – 71.9)**	**43.8)26.6 – 60.9)**
Dislocation/sublux[n]	0.0 (-)	13.3 (0 – 30.5)	6.3 (0 – 14.6)
Lesion meniscus	11.8 (0 – 27.1)	0.0 (-)	6.3 (0 – 14.6)
Sprain/ligament	29.4 (7.8 – 51.1)	26.7 (4.3 – 49.0)	28.1 (12.5 – 43.7)
Other	0.0 (-)	6.7 (0 – 19.3)	3.1 (0 – 9.2)
Muscle/tendon	**5.9 (0 – 17.1)**	**13.3 (0 – 30.5)**	**9.4 (0 – 19.5)**
Haematoma, etc	5.9 (0 – 17.1)	6.7 (0 – 19.3)	6.3 (0 – 14.6)
Muscle strain	0.0 (-)	6.7 (0 – 19.3)	3.1 (0 – 9.2)
Tendon injury	0.0 (-)	0.0 (-)	0.0 (-)
Skin	**0.0 (-)**	**6.7 (0 – 19.3)**	**3.1 (0 – 9.2)**
Laceration	0.0 (-)	6.7 (0 – 19.3)	3.1 (0 – 9.2)
Other injuries	**0.0 (-)**	**6.7 (0 – 19.3)**	**3.1 (0 – 9.2)**

C/PNS: Central and peripheral nervous systems

Based on the 95% CIs, there are no statistically significant differences between the types of injury sustained by backs and forwards. The most common types of injury sustained by backs were concussion (47.1%) and ligament sprains (29.4%) and for forwards ligament sprains (26.7%) and concussion (20.0%).

The high mean injury severity and injury burden values for backs and forwards, reported above, are mainly a consequence of 7 (backs: 3; forwards: 4) high severity knee ligament injuries.

4.1.2d Nature and cause of onset of injury

Table 6 summarises the nature of onset of injuries sustained by backs, forwards and all players during the women's 2025 Challenger Series.

Table 6: Nature of onset of injury.

Nature of injury	***Proportion, % (95% Confidence interval)***		
	Backs	***Forwards***	***All players***
Acute	64.7 (42.0 – 87.4)	86.7 (69.5 – 100)	75.0 (60.0 – 90.0
Gradual onset	35.3 (12.6 – 58.0)	13.3 (0 – 30.5)	25.0 (10.0 – 40.0)

Seventy-five per cent of all injuries sustained were acute in nature. Despite forwards sustaining a higher proportion of acute injuries than backs, the difference is not statistically significant (p=0.153).

Table 7 summarises the cause of onset of injuries sustained by backs, forwards and all players during the women's 2025 Challenger Series.

Table 7: Cause of onset of injury.

Cause of injury	*Proportion, % (95% Confidence interval)*		
	Backs	***Forwards***	***All players***
Contact	88.2 (72.9 – 100)	86.7 (69.5 – 100)	87.5 (76.0 – 99.0)
Non-contact	11.8 (0 – 27.1)	13.3 (0 – 30.5)	12.5 (1.0 – 24.0)

Over eighty-five per cent of all injuries sustained were a consequence of contact match events. There is no significant difference between the results for backs and forwards (p=0.897). The range of activities associated with the injuries sustained is shown in Table 8.

Table 8: Match activities associated with injury events.

Measure	*Backs*	*Forwards*	*All players*
Collision	12.5 (0 – 28.7)	15.4 (0 – 35.0)	13.8 (1.2 – 26.3)
Maul	0.0 (-)	7.7 (0 – 22.2)	3.4 (0 – 10.1)
Ruck	6.3 (0 – 18.1)	7.7 (0 – 22.2)	6.9 (0 – 16.1)
Running	6.3 (0 – 18.1)	7.7 (0 – 22.2)	6.9 (0 – 16.1)
Tackled	37.5 (13.8 – 61.2)	53.8 (26.7 – 80.9)	44.8 (26.7 – 62.9)
Tackling	37.5 (13.8 – 61.2)	0.0 (-)	20.7 (5.9 – 35.4)
Other	0.0 (-)	7.7 (0 – 22.2)	3.4 (0 – 10.1)

Backs were equally likely to be injured when tackling or being tackled. Forwards, however, were significantly more likely to be injured when being tackled.

4.1.2e Match period of injury

Table 9 provides a summary of the periods during matches when injuries were sustained by backs, forwards and all players.

Table 9: Period of match when injuries were sustained.

Period of match	*Proportion, % (95% Confidence interval)*		
	Backs	***Forwards***	***All players***
First half	47.1 (23.3 – 70.8)	40.0 (15.2 – 64.8)	43.8 (26.6 – 60.9)
Second half	52.9 (29.2 – 76.7)	60.0 (35.2 – 84.8)	56.3 (39.1 – 73.4)

Although players were more likely to sustain an injury in the second half of matches, the difference between first and second half is not statistically significant (p=0.689).

4.1.2(f) Removal of injured players from pitch

During the 2025 Challenger Series, 56.3% (95% CI: 39.1 – 73.4)) of all injured players were removed from play immediately, 18.8% (95% CI: 5.2 – 32.3) were removed later in the game and 25.0% (95% CI: 10.0 – 40.0) remained on the pitch until the end of the game.

Of the 11 players sustaining brain/concussion injuries, 7 (63.6%) were removed from play immediately, 2 (18.2%) were removed later in the game and 2 (18.2%) remained on the pitch until the end of the game.

4.2 Men's Challenger Series

The 12 countries taking part in the two 2025 men's Challenger Series tournaments in Cape Town were: Brazil, Canada, Chile, Georgia, Germany, Hong Kong-China, Japan, Madagascar, Portugal, Samoa, Tonga, Uganda.

The 8 countries taking part in the 2025 men's Challenger Series tournament in Krakow were: Canada, Chile, Germany, Japan, Madagascar, Portugal, Samoa, Tonga.

The 8 countries taking part in the men's Los Angeles Challenger Play-off tournament were: Canada, Germany, Ireland, Kenya, Portugal, Samoa, Uruguay, USA.

Brazil and Tonga did not provide players' anthropometric or injury data for any of the Challenger tournaments and are therefore not included in the information presented in this Report. The anthropometric and injury data presented in this Report relate to the remaining 10 Challenger teams and the 8 teams taking part in the Challenger Play-off tournament.

4.2.1 Players' anthropometric data

Table 10 summarises the numbers and anthropometric data for players competing in the Challenger tournaments categorised as backs, forwards and all players.

Table 10: Players' anthropometric data.

Tournament/ measure	**Mean** (*Standard deviation, number of players*)		
	Backs	***Forwards***	***All players***
Stature, cm	179.4 (6.7, 80)	184.0 (6.4, 55)	181.2 (6.9, 135)
Body mass, Kg	83.5 (8.6, 80)	89.9 (8.7, 55)	86.1 (9.2, 135)
Age, years	23.6 (3.7, 80)	25.0 (3.5, 55)	23.9 (3.7, 143)

Forwards were significantly taller ($p<0.001$), heavier ($p<0.001$) and older ($p=0.027$) than backs.

4.2.2 Injuries

4.2.2a Incidence of injuries

Table 11 summarises the number of match injuries, exposures and incidences of injuries for players categorised as backs, forwards and all players.

Table 11: Injury numbers, exposures (player-match-hours) and incidences (injuries/1000 player-match-hours, 95% confidence interval) of match injuries.

Tournament	***Backs***	***Forwards***	***All players***
Injuries	14	7	21
Exposure	137.2	102.9	240.1
Incidence	102 (60 – 172)	68 (32 – 143)	87.5 (57 – 134)

One of the 21 injuries (4.8%) was reported, by a back, as a recurrence.

There is no significant difference (p=0.379) between the injury incidences for backs and forwards.

The average number of match injuries sustained/team-game at each of the 2025 Challenger tournaments is shown in Figure 2.

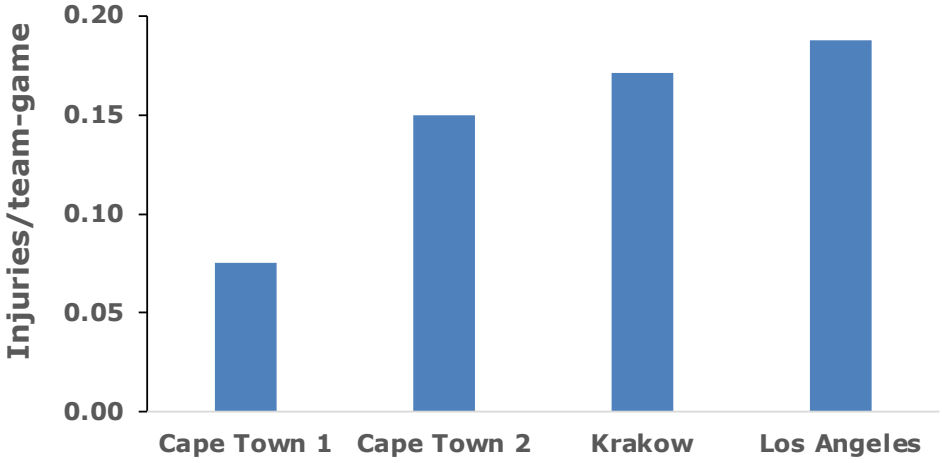

Figure 2 Average number of injuries/team-game

4.2.2b Severity of injury

A total of 621 player-days were lost through injury during the 2025 men's Challenger Series (backs: 403; forwards: 218). Table 12 summarises the mean and median severities of injuries sustained by players categorised as backs, forwards and all players.

Table 12: Mean and median severities of injuries.

	***Severity (95% Confidence interval)**, days*		
Injury severity	***Backs***	***Forwards***	***All players***
Mean	28.8 (22.5 – 35.1)	31.1 (14.7 – 47.5)	29.6 (23.0 – 36.2)
Median	27.5 (16.0 – 43.0)	20.0 (8.0 – 68.0)	27.0 (16.0 – 42.0)

There were no statistically significant differences between backs and forwards for either the mean (p=0.795) or median (p=0.881) severity values.

The lower than usual incidences and severities of injury experienced, during the 2025 Challenger Series, means lower than usual injury burden values for backs (2,939 days-absence/1000 player-match-hours; 95% CI: 1,741 – 4,962), forwards (2,116 days-absence/1000 player-match-hours; 95% CI: 1,009 – 4,438 and all players (2,589 days-absence/1000 player-match-hours; 95% CI: 1,688 – 3,970). There was no significant difference between the injury burden experienced by backs and forwards (p=0.478).

4.2.2c Location and type of injury

Tables 13 and 14, respectively, present the injury locations and types of injuries sustained by backs, forwards and all players. The total number of injuries sustained during one Challenger Series is relatively small while the numbers of sub-location and sub-type categories are high; this situation is reflected in the 95% CI values reported for individual injury locations and injury types. For this reason, the results presented in Tables 13 and 14 should be interpreted carefully.

Table 13: Main and sub-locations of injuries.

Location of injury	*Proportion, % (95% Confidence interval)*		
	Backs	***Forwards***	***All players***
Head/neck	**7.1 (0 – 20.6)**	**28.6 (0 – 62.0)**	**14.3 (0 – 29.3)**
Head/face	7.1 (0 – 20.6)	28.6 (0 – 62.0)	14.3 (0 – 29.3)
Neck/cervical spine	0.0 (-)	0.0 (-)	0.0 (-)
Upper limbs	**14.3 (0 – 32.6)**	**14.3 (0 – 40.2)**	**14.3 (0 – 29.3)**
Shoulder/clavicle	0.0 (-)	14.3 (0 – 40.2)	4.8 (0 – 13.9)
Wrist/hand	14.3 (0 – 32.6)	0.0 (-)	9.5 (0 – 22.1)
Trunk	**0.0 (-)**	**0.0 (-)**	**0.0 (-)**
Lower limbs	**78.6 (57.1 – 100)**	**57.1 (20.5 – 93.8)**	**71.4 (52.1 – 90.8)**
Anterior thigh	14.3 (0 – 32.6)	0.0 (-)	9.5 (0 – 22.1)
Posterior thigh	7.1 (0 – 20.6)	0.0 (-)	4.8 (0 – 13.9)
Knee	21.4 (0 – 42.9)	42.9 (6.2 – 79.5)	28.6 (9.2 – 47.9)
Lower leg	7.1 (0 – 20.6)	0.0 (-)	4.8 (0 – 13.9)
Ankle	21.4 (0 – 42.9)	14.3 (0 – 40.2)	19.0 (2.3 – 35.8)
Foot/toe	7.1 (0 – 20.6)	0.0 (-)	4.8 (0 – 13.9)

Table 14: Main and sub-types of injuries.

Type of injury	*Proportion, % (95% Confidence interval)*		
	Backs	***Forwards***	***All players***
Bone	**14.3 (0 – 32.6)**	**14.3 (0 – 40.2)**	**14.3 (0 – 29.3)**
Fracture	14.3 (0 – 32.6)	14.3 (0 – 40.2)	14.3 (0 – 29.3)
C/PNS	**7.1 (0 – 20.6)**	**28.6 (0 – 62.0)**	**14.3 (0 – 29.3)**
Brain/concussion	7.1 (0 – 20.6)	28.6 (0 – 62.0)	14.3 (0 – 29.3)
Joint, non-bone/lig[t]	**42.9 (16.9 – 68.8)**	**57.1 (20.5 – 93.8)**	**47.6 (26.3 – 59.0)**
Sprain/ligament	42.9 (16.9 – 68.8)	57.1 (20.5 – 93.8)	47.6 (26.3 – 59.0)
Muscle/tendon	**28.6 (4.9 – 52.2)**	**0.0 (-)**	**19.0 (2.3 – 35.8)**
Muscle strain	28.6 (4.9 – 52.2)	0.0 (-)	19.0 (2.3 – 35.8)
Skin	**0.0 (-)**	**0.0 (-)**	**0.0 (-)**
Other injuries	**7.1 (0 – 20.6)**	**0.0 (-)**	**4.8 (0 – 13.9)**

C/PNS: Central and peripheral nervous systems

Based on the 95% CIs, there were no statistically significant differences between the locations of injury sustained by backs. However, backs sustained significantly more muscle strains than forwards.

The most common injury locations for backs were the knee (21.4%) and ankle (21.4%) and for forwards the knee (42.9%) and head/face (28.6%). The most common types of injury sustained by backs were ligament sprains (42.9%) and muscle strains (28.6%) and for forwards ligament sprains (57.1%) and concussion (28.6%).

4.2.2d Nature and cause of onset of injury

Table 15 summarises the nature of onset of injuries sustained by backs, forwards and all players during the men's 2025 Challenger Series.

Table 15: Nature of onset of injury.

Nature of injury	*Proportion, % (95% Confidence interval)*		
	Backs	***Forwards***	***All players***
Acute	92.9 (79.4 – 100)	71.4 (38.0 – 100)	85.7 (70.7 – 100)
Gradual onset	7.1 (0 – 20.6)	28.6 (0 – 62.0)	14.30 – 29.3)

Eighty-five per cent of all injuries sustained were acute in nature. There is no statistically significant difference between the values for backs and forwards (p=0.187).

Table 16 summarises the cause of onset of injuries sustained by backs, forwards and all players during the men's 2025 Challenger Series.

Table 16: Cause of onset of injury.

Cause of injury	*Proportion, % (95% Confidence interval)*		
	Backs	***Forwards***	***All players***
Contact	85.7 (57.4 – 100)	85.7 (59.8 – 100)	85.7 (70.7 – 100)
Non-contact	14.3 (0 – 32.6)	14.3 (0 – 40.2)	14.3 (0 – 29.3)

Eighty-five per cent of all injuries sustained were due to contact events. There is no statistically significant difference in the values for backs and forwards (p=1.000).

The match activities associated with the injuries sustained in the 2025 Challenger Series are shown in Table 17.

Table 17: Match activities associated with injury events.

Measure	*Backs*	*Forwards*	*All players*
Collision	14.3 (0 – 32.6)	0.0 (-)	9.5 (0 – 22.1)
Ruck	0.0 (-)	14.3(0 – 40.2)	4.8 (0 – 13.9)
Running	14.3 (0 – 32.6)	14.3(0 – 40.2)	14.3 (0 – 29.3)
Tackled	35.7 (10.6 – 60.8)	42.9 (6.2 – 79.5)	38.1 (17.3 – 58.9)
Tackling	28.6 (4.9 – 52.2)	28.6 (0 – 62.0)	28.6 (9.2 – 47.9)
Other	7.1 (0 – 20.6)	0.0 (-)	4.8 (0 – 13.9)

Backs and forwards were both most likely to be injured when being tackled (backs: 35.7%; forwards: 42.9%) and when tackling (backs: 28.6%; forwards: 28.6%).

4.2.2e Match period of injury

Table 18 provides a summary of the periods during matches when injuries were sustained.

Table 18: Period of match when injuries were sustained.

Period of match	*Proportion, % (95% Confidence interval)*		
	Backs	*Forwards*	*All players*
First half	50.0 (23.8 – 76.2)	42.9 (6.2 – 79.5)	47.6 (26.3 – 69.0)
Second half	50.0 (23.8 – 76.2)	57.1 (20.5 – 93.8)	52.4 (31.0 – 73.7)

There was little difference in the match time when players sustained their injuries and there is no statistically significant difference in the results for backs and forwards (p=0.757).

4.1.2(f) Removal of injured players from pitch

During the 2025 Challenger Series, 47.6% (95% CI: 26.3 – 69.0) of all injured players were removed from play immediately, 23.8% (95% CI: 5.6 – 42.0) were removed later in the game and 28.6% (95% CI: 9.2 – 47.9) remained on the pitch until the end of the game.

Of the 3 players sustaining brain/concussion injuries, 2 (66.7%) were removed from play immediately and 1 (33.3%) remained on the pitch until the end of the game.

5. References

Fuller CW, Molloy MG, Bagate C, et al. Consensus statement on injury definitions and data collection procedures for studies of injuries in rugby union. *Br J Sports Med* 2007;**41**;328-331.

Fuller CW, Taylor A. Ten-season epidemiological study of match injuries in men's international rugby sevens. *J Sports Sciences* 2020;38:1595-1604

Fuller CW, Taylor A. Eight season epidemiological study of match injuries in women's international rugby sevens. *J Sports Sciences* 2021;39:865-874.

Orchard J, Rae K, et al., Revision, uptake and coding issues related to the open access Orchard Sports Injury Classification System (OSICS) versions 8, 9 and 10.1. *Open Access Journal of Sports Medicine* 2010: 1; 207-214.

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Canada	-	Andrew McMillian
Chile	-	Juan Pizzulic
Colombia	Brahyan Valencia Tamayo	-
Czechia	Adela Benesova	-
Georgia	-	Saba Iomidze
Germany	-	Bjorn Burgler
Hong Kong-China	Callum Chia	Olivia Withers
Japan	-	Kazuya Kishima, Masahiro Furudate, Tomio Kubota
Kenya	Leyvce Kitui	-
Madagascar	-	Fanirintsoa Andrianavalona Rabearitoa
Mexico	Priscilla Joseline Mendoza Serrano	-
Portugal	-	Rodrigo Pais
Samoa	Majdah Bardien	Apollos Paramore
South Africa	Reagan Cele	-
Thailand	Pathaveena Kaewjaeng	-
Uganda	Mayeku Nelson	Rwakijuma Samuel Asiimwe