



**WORLD
RUGBY™**

Injury Surveillance Studies

2026 men's U20 Championship

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1 Introduction

World Rugby is committed to implementing injury surveillance studies (ISS) for all World Rugby's 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.

Data collected in World Rugby ISS are also used to address player welfare issues in a broader context.

Previous surveillance studies of the World Rugby men's U20 Championship (WRC) have reported the incidence and nature of match injuries sustained during tournaments from 2008 to 2025. The current report continues this on-going study by reporting similar information for the 2026 WRC. The 2026 WRC competition was larger than previous competitions, as the number of participating countries was increased from 12 to 16 countries and the tournament structure was modified slightly to accommodate the increased number.

The 2026 WRC provided the first international trial of World Rugby's player welfare initiative of a lower tackle height. Results from this trial are reported in a separate World Rugby Report.

2 Methods

The study was 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 WRC 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'*. Incidents where a player's absence from match play and/or training was caused by training activities, illness or other medical conditions not related to a WRC match were not included. 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'*. Specific injuries were classified using the appropriate OSICS Code (Orchard et al., 2010). Injury location, type and cause together with the event leading to the injury were also recorded.

Injury severity was determined by the number of days a player was injured. A player was deemed 'injured' until able to undertake full normal training and be available for match selection, whether or not 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 the tournament to obtain their return-to-play date. The return-to-play dates for players with injuries that remained unresolved 90 days after the final match of the competition were based on the clinical judgement and prognosis of the injured players' medical staff.

The complete lists of categories and sub-categories used for injury locations and types of injury are provided in the rugby injury consensus publication (Fuller et al., 2007).

Differences in players' anthropometric data were assessed using unpaired t-tests. Differences in the incidences, mean severities and proportions of injuries were assessed using z-tests. Differences in median severities were assessed using a Mann-Whitney U test. Trends in data values were assessed using linear regression analyses. Statistical significance was accepted at the $p < 0.05$ level, although it is recognised that this could identify some differences that occurred by chance due to the number of statistical comparisons made in the Report.

3 Data collection

Prior to the tournament taking place, the purpose of the epidemiological study was outlined to each participating team. Players' baseline anthropometric information was recorded (playing position [back, forward]; date of birth; body mass [Kg]; stature [cm]). Players joining a country's competition squad at a later date were added to the list of players and their anthropometric data recorded at the time the player joined the squad.

Medical staff prospectively recorded match injuries sustained during the tournament. A member of each team's medical staff also recorded detailed information about each injury (date of injury, date of return to play/training, location and type of injury, cause of injury, event leading to injury). The final piece of information recorded was normally an injured player's return-to-play/training date.

4 Results

Results from previous WRC tournaments (2008 to 2025) have been presented in a series of earlier reports, which are available on World Rugby's Player Welfare web pages.

The 2026 U20 WRC tournament took place in Georgia from 27 June to 18 July 2026 and involved Argentina, Australia, England, Fiji, France, Georgia, Ireland, Italy, Japan, New Zealand, Scotland, South Africa, Spain, USA, Uruguay, Wales.

Injury surveillance information for 2026 was provided by all 16 participating countries.

4.1 Players' anthropometric data

Table 1 summarises the anthropometric characteristics of players, categorised as backs, forwards and all players, competing at the 2026 WRC tournament.

Table 1: Players' anthropometric data for the 2026 WRC, as a function of playing position.

Year / Measure	Mean (Standard deviation, number of players)		
	<i>Backs</i>	<i>Forwards</i>	<i>ALL players</i>
2026 WRC tournament			
Stature, cm	180.7 (6.8, 218)	187.2 (7.4, 268)	184.3 (7.8, 486)
Body mass, Kg	86.7 (8.8, 218)	109.8 (10.0, 268)	99.6 (14.9, 486)
Age, years	19.0 (0.78, 219)	19.1 (0.68, 271)	19.1 (0.73, 490)

At the 2026 WRC, forwards were significantly heavier ($p < 0.001$) and taller ($p < 0.001$) than backs but there was no significant difference between their ages ($p = 0.129$).

The long-term trends (2008 – 2026) in the stature and body mass of backs and forwards are shown in Figures 1 and 2, respectively.

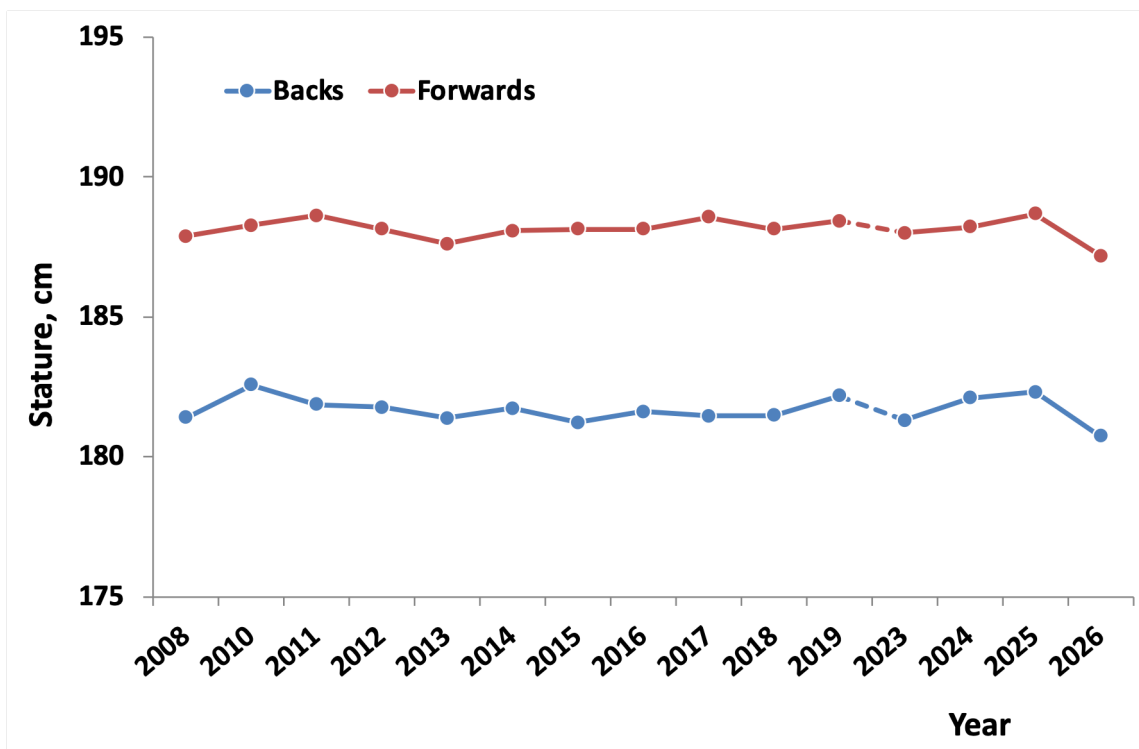


Figure 1 Trends in players' stature over the period 2008 to 2026, as a function of playing position.

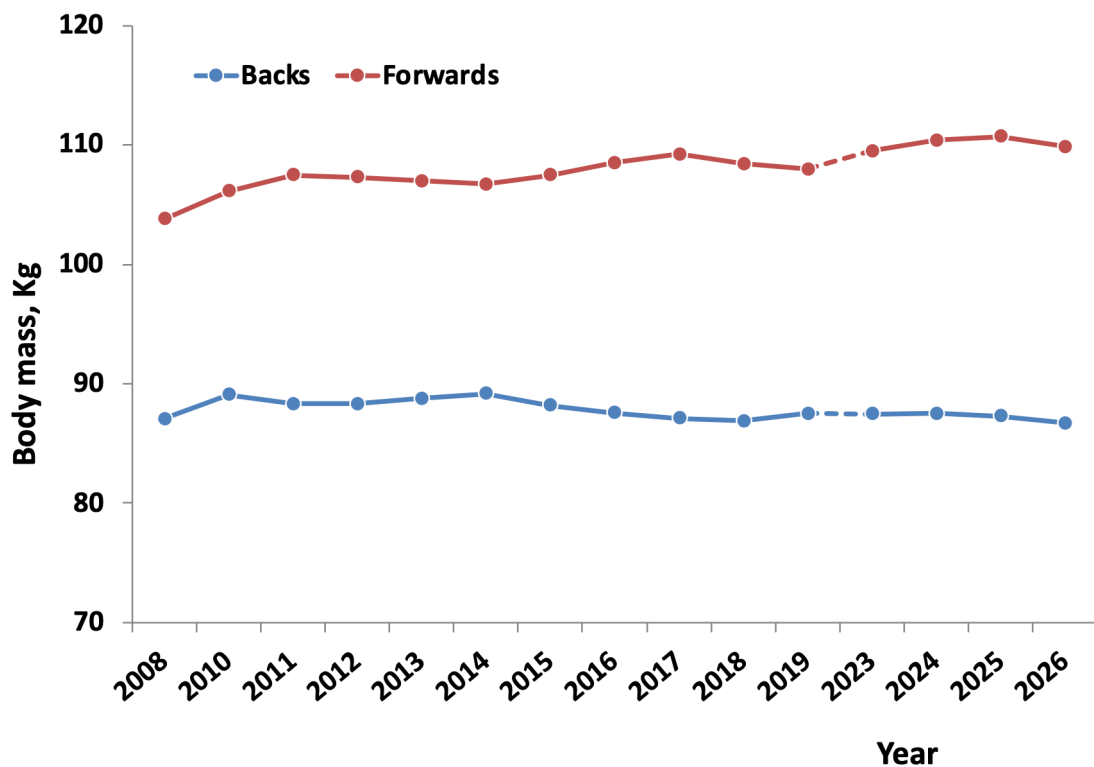


Figure 2. Trends in players' body mass over the period 2008 to 2026, as a function of playing position.

There have been no statistically significant trends in the stature of backs (slope=-0.01; $p=0.637$) or forwards (slope=-0.01; $p=0.729$) over the period 2008 to 2026. There has, however, been a statistically significant decreasing trend in body mass for backs (slope=-0.08; $p=0.026$) and a statistically significant increasing trend for forwards (slope=0.29; $p<0.001$) over this period.

4.2 Match injuries

4.2a Incidence of injury

Table 2 summarises the numbers of match injuries, match exposures and match injury incidences for backs, forwards and all players during the 2026 WRC tournament.

Two injuries (backs: adductor strain; forwards: knee-meniscal tear) sustained during the 2026 WRC were recorded as recurrences; this equates to 3.4% of all injuries sustained during the 2025 WRC.

Table 2: Number, exposure (player-match-hours) and incidence (injuries/1000 player-match-hours, 95% CI) of match injuries for the 2026 WRC, as a function of playing position.

Year / Measure	<i>Backs</i>	<i>Forwards</i>	<i>ALL players</i>
2026 WRC tournament			
Injuries	28	30	58
Exposure	746.7	853.3	1600.0
Incidence	37.5 (25.9 – 54.3)	35.2 (24.6 – 50.3)	36.3 (28.0 – 46.9)

There is no statistically significant difference between the incidences of injury recorded for backs and forwards during the 2026 WRC ($p=0.810$).

Figure 3 shows the trends in injury incidence values for backs and forwards over the period 2008 to 2026.

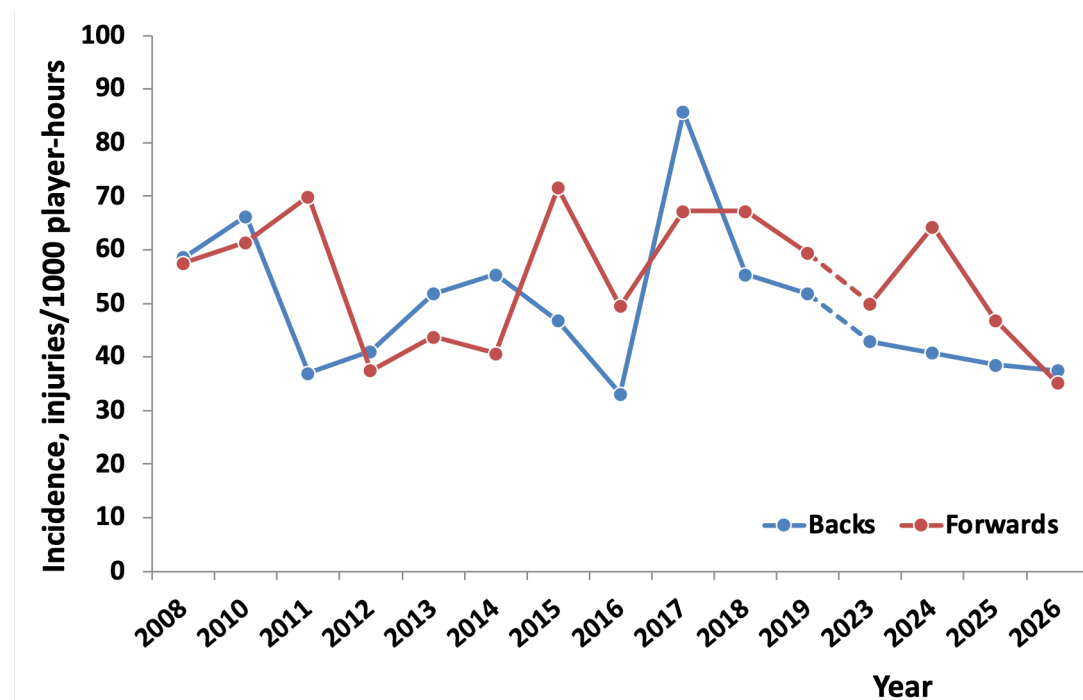


Figure 3. Trends in the incidence of injury in the period 2008 to 2026, as a function of playing position.

The long-term decreasing trends in the injury incidence values reported over the period from 2008 to 2026 are not statistically significant for either backs (slope = -0.82; $p=0.215$) or forwards (slope = -0.43; $p=0.472$).

4.2b Severity of injury

Table 3 summarises the mean and median severities of injuries sustained during the 2026 WRC tournament, as a function of playing position.

Table 3: Mean and median severity of all match injuries sustained during the 2026 WRC, as a function of playing position.

Measure	<i>Severity (95% Confidence interval), days</i>		
	<i>Backs</i>	<i>Forwards</i>	<i>ALL players</i>
2026 WRC tournament			
Mean	63.0 (29.4 – 96.7)	41.7 (16.7 – 66.6)	52.0 (31.2 – 72.7)
Median	25.5 (9.0 – 74.0)	19.5 (11.0 – 41.0)	22.0 (11.0 – 39.0)

The differences in the mean ($p=0.318$) and median ($p=0.483$) severity values for backs and forwards during the 2026 WRC are not statistically significant.

Figures 4 and 5 show the trends in mean and median injury severity values, respectively, recorded for backs and forwards over the 2008 to 2026 period. The increasing trends in mean severity values over this time period are not statistically significant for backs (slope=0.86; $p=0.176$) or forwards (slope=0.53; $p=0.257$). The increasing trends in median severity values are, however, statistically significant for both backs (slope=0.66; $p=0.033$) and forwards (slope=0.57; $p=0.015$).

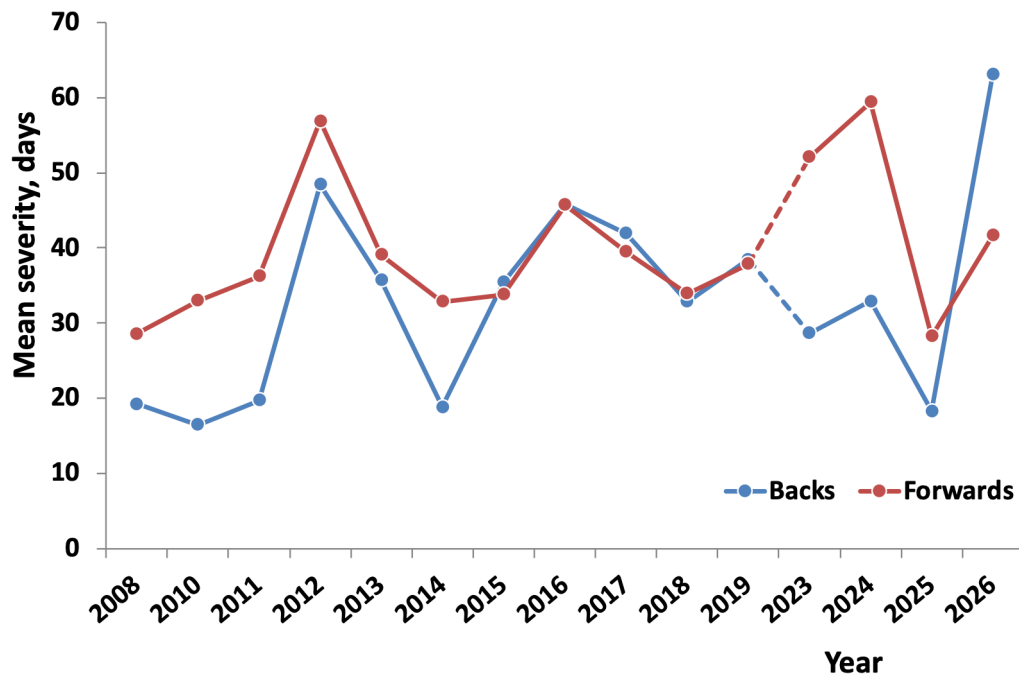


Figure 4. Trends in mean severity of injury in the period 2008 to 2026, as a function of playing position.

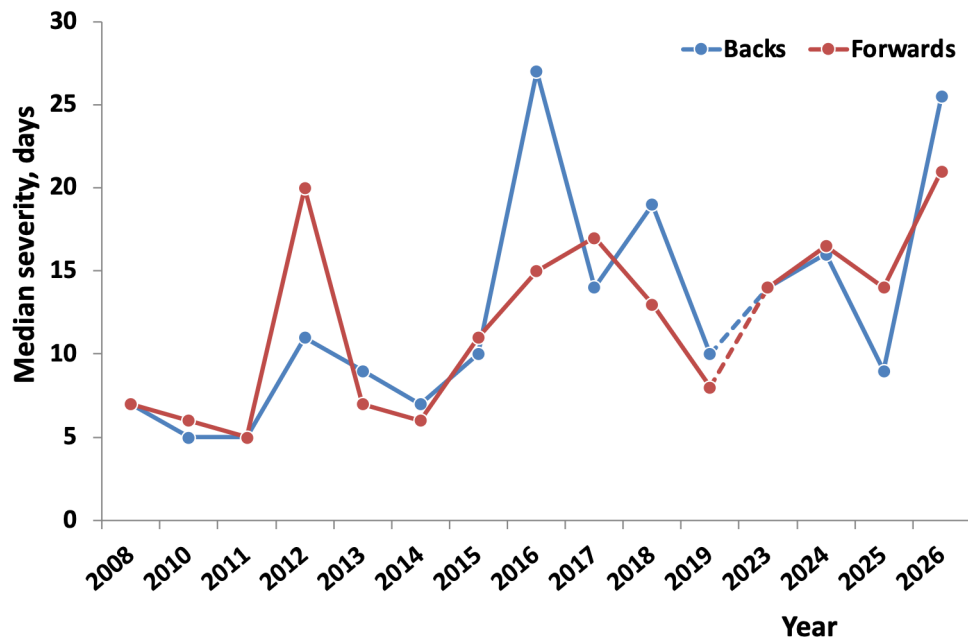


Figure 5. Trends in median severity of injury in the period 2008 to 2026, as a function of playing position.

Injury burden values (incidence x mean severity) provide an indication of the overall injury risk for players. The difference between the 2026 WRC injury burden values for backs (2,364 days-absence/1000 player-match-hours; 95% CI: 1,632 – 3,424) and forwards (1,465 days-absence/1000 player-match-hours; 95% CI: 1,024 – 2,095) does not quite reach statistical significance ($p=0.069$). Figure 6 shows the trends in injury burden values for backs and forwards over the 2008 to 2026 period.

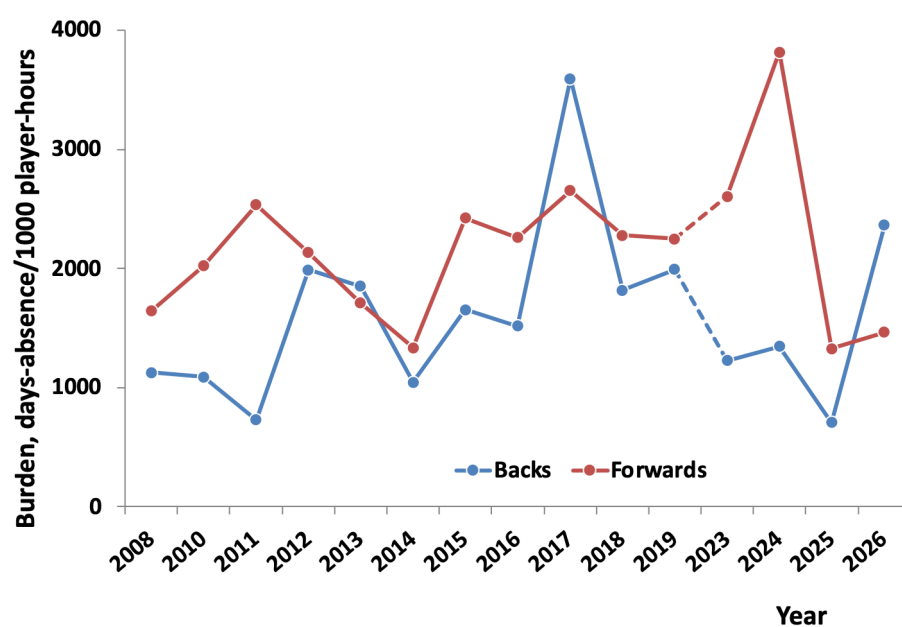


Figure 6. Trends in injury burden over the period 2008 to 2026, as a function of playing position.

There are no statistically significant trends in the injury burden values recorded over the period 2008 to 2026 for either backs (slope=18.6; p=0.608) or forwards (slope=19.4; p=0.540).

4.2c Location and type of injury

Table 4 summarises the locations of injuries sustained during the 2026 WRC tournament, as a function of playing position.

Table 4: Locations of match injuries sustained during the 2026 WRC, as a function of playing position.

Location of injury	% (95% Confidence interval)		
	<i>Backs</i>	<i>Forwards</i>	<i>ALL players</i>
2026 WRC tournament			
Head/neck	17.9 (3.7 – 32.0)	26.7 (10.8 – 42.5)	22.4 (11.7 – 33.1)
Head/face	17.9 (3.7 – 32.0)	26.7 (10.8 – 42.5)	22.4 (11.7 – 33.1)
Neck/cerv ^l spine	0.0 (-)	0.0 (-)	0.0 (-)
Upper limbs	32.1 (14.8 – 49.4)	30.0 (13.6 – 46.4)	31.0 (19.1 – 42.9)
Shoulder/clavicle	21.4 (6.2 – 36.6)	23.3 (8.2 – 38.5)	22.4 (11.7 – 33.1)
Upper arm	0.0 (-)	0.0 (-)	0.0 (-)
Elbow	0.0 (-)	0.0 (-)	0.0 (-)
Forearm	0.0 (-)	0.0 (-)	0.0 (-)
Wrist/hand	10.7 (0 – 22.2)	6.7 (0 – 15.6)	8.6 (1.4 – 15.8)
Trunk	0.0 (-)	3.3 (0 – 9.8)	1.7 (0 – 9.1)
Ribs/upper back	0.0 (-)	3.3 (0 – 9.8)	1.7 (0 – 9.1)
Abdomen	0.0 (-)	0.0 (-)	0.0 (-)
Low back	0.0 (-)	0.0 (-)	0.0 (-)
Sacrum/pelvis	0.0 (-)	0.0 (-)	0.0 (-)
Lower limbs	50.0 (31.5 – 68.5)	40.0 (22.5 – 57.5)	44.8 (32.0 – 57.6)
Hip/groin	0.0 (-)	0.0 (-)	0.0 (-)
Thigh, anterior	10.7 (0 – 22.2)	0.0 (-)	5.2 (0 – 10.9)
Thigh, posterior	10.7 (0 – 22.2)	13.3 (1.2 – 25.5)	12.1 (3.7 – 20.5)
Knee	10.7 (0 – 22.2)	10.0 (0 – 20.7)	10.3 (2.5 – 18.2)
L-leg/Achilles	0.0 (-)	3.3 (0 – 9.8)	1.7 (0 – 9.1)
Ankle	17.9 (3.7 – 32.0)	13.3 (1.2 – 25.5)	15.5 (6.2 – 24.8)
Foot/toe	0.0 (-)	0.0 (-)	0.0 (-)

Based on the 95% CI, there are no significant differences between the locations of injuries sustained by backs and forwards during the 2026 WRC.

The most common injury sub-locations sustained during the 2026 WRC, were the shoulder/clavicle (21.4%), head/face (17.9%) and ankle (17.9%) for backs and head/face (26.7%), shoulder/clavicle (23.3%), posterior thigh (13.3%) and ankle (13.3%) for forwards.

Table 5 summarises the types of injuries sustained during the 2026 WRC tournament, as a function of playing position.

Table 5: Types of match injuries sustained during the 2026 WRC, as a function of playing position.

Type of injury	% (95% Confidence interval)		
	<i>Backs</i>	<i>Forwards</i>	<i>ALL players</i>
2026 WRC tournament			
Bone	14.3 (1.3 – 27.2)	6.7 (0 – 15.6)	10.3 (2.5 – 18.2)
Fracture	14.3 (14.3 – 27.2)	6.7 (0 – 15.6)	10.3 (2.5 – 18.2)
Other bone	0.0 (-)	0.0 (-)	0.0 (-)
C/PNS	14.3 (1.3 – 27.2)	30.0 (13.6 – 46.4)	22.4 (11.7 – 33.1)
Brain/concussion	14.3 (1.3 – 27.2)	26.7 (10.8 – 42.5)	20.7 (10.3 – 31.1)
Nerve	0.0 (-)	3.3 (0 – 9.8)	1.7 (0 – 5.1)
Joint (non-bone)/lig^t	39.3 (21.2 – 57.4)	43.3 (25.6 – 61.1)	41.4 (28.7 – 54.1)
Dislocation/sublux ⁿ	3.6 (0 – 10.4)	0.0 (-)	1.7 (0 – 5.1)
Lesion meniscus	0.0 (-)	3.3 (0 – 9.8)	1.7 (0 – 5.1)
Sprain/ligament	35.7 (18.0 – 53.5)	40.0 (22.5 – 57.5)	37.9 (25.4 – 50.4)
Other	0.0 (-)	0.0 (-)	0.0 (-)
Muscle/tendon	28.6 (11.8 – 45.3)	20.0 (5.7 – 34.3)	24.1 (13.1 – 35.2)
Haematoma/etc	7.1 (0 – 16.7)	3.3 (0 – 9.8)	5.2 (0 – 10.9)
Muscle rupture/etc	21.4 (6.2 – 36.6)	16.7 (3.3 – 30.0)	19.0 (8.9 – 29.1)
Tendon injury/etc	0.0 (-)	0.0 (-)	0.0 (-)
Skin	3.6 (0 – 10.4)	0.0 (-)	1.7 (0 – 5.1)
Abrasion	0.0 (-)	0.0 (-)	0.0 (-)
Laceration	3.6 (0 – 10.4)	0.0 (-)	1.7 (0 – 5.1)
Other types	0.0 (-)	0.0 (-)	0.0 (-)

C/PNS: Central and peripheral nervous systems

Based on the 95% CI, there are no statistically significant differences between injury sub-types sustained by backs and forwards during the 2026 WRC.

The most common injury sub-types sustained during the 2026 WRC for backs were sprain/ligament (35.7%) and muscle/rupture (21.4%). For forwards, the most common injury sub-types were sprain/ligament (40.0%) and concussion (26.7%).

The most common specific injuries sustained across backs and forwards during the 2026 WRC were concussion (20.7%), acromioclavicular joint sprain (17.2%), ankle ligament sprain (12.1%) and hamstring strain (12.1%). These four injuries together accounted for 62.1% of all injuries sustained. In terms of time-loss through injury, however, knee/ligament (24.8%), hamstring muscle (14.4%), lower leg/muscle strain (12.3%) and concussion (8.7%) injuries were the four greatest and were responsible for 60.2% of all time-loss.

4.2d Nature and cause of onset of injury

Table 6 summarises the nature of injury-onset at the 2026 WRC, as a function of playing position.

Table 6: Nature of injury-onset of match injuries sustained at WRC 2026, as a function of playing position.

Nature of onset	% (95% Confidence interval)		
	<i>Backs</i>	<i>Forwards</i>	<i>ALL players</i>
2026 WRC tournament			
Acute	100.0 (-)	86.7 (74.5 – 98.8)	93.1 (86.86– 99.6)
Gradual	0.0 (-)	13.3 (1.2 – 25.5)	6.9 (0.4 – 13.4)

Forwards sustained significantly ($p=0.045$) more gradual onset injuries than backs during the 2026 WRC.

Table 7 summarises the cause of injury-onset at the 2026 WRC, as a function of playing position.

Table 7: Cause of injury-onset of match injuries sustained at WRC 2026, as a function of playing position.

Cause of onset	% (95% Confidence interval)		
	<i>Backs</i>	<i>Forwards</i>	<i>ALL players</i>
2026 WRC tournament			
Contact	85.7 (72.8 – 98.7)	90.0 (79.3 – 100)	87.9 (79.5 – 96.3)
Non-contact	14.3 (1.3 – 27.2)	10.0 (0 – 20.7)	12.1 (3.7 – 20.5)

There was no significant difference between backs and forwards for the cause of injury onset during the 2026 WRC ($p=0.617$).

4.2e Match events leading to injury

Table 8 provides a summary of the specific match events associated with injuries sustained during the 2026 WRC, as a function of playing position.

Table 8: Match events leading to injuries sustained at 2026 WRC, as a function of playing position.

Cause of onset	% (95% Confidence interval)		
	<i>Backs</i>	<i>Forwards</i>	<i>ALL players</i>
2026 WRC tournament			
Collision	10.7 (0 – 22.2)	17.9 (3.57– 32.0)	14.3 (5.1 – 23.5)
Kicking	3.6 (0 – 10.4)	0.0 (-)	1.8 (0 – 5.3)
Lineout	0.0 (-)	0.0 (-)	0.0 (-)
Maul	0.0 (-)	3.6 (0 – 10.4)	1.8 (0 – 5.3)
Ruck	3.6 (0 – 10.4)	3.6 (0 – 10.4)	3.6 (0 – 8.4)
Running	10.7 (0 – 22.2)	7.1 (0 – 16.7)	8.9 (1.5 – 16.4)
Scrum	0.0 (-)	3.6 (0 – 10.4)	1.8 (0 – 5.3)
Tackled	42.9 (24.5 – 61.2)	14.3 (1.3 – 27.2)	28.6 (16.7 – 40.4)
Tackling	28.6 (11.8 – 45.3)	50.0 (31.5 – 68.5)	39.3 (26.5 – 52.1)
Other	0.0 (-)	0.0 (-)	0.0 (-)

During the 2026 WRC tournament being-tackled (42.9%) and tackling (28.6%) were the activities most commonly associated with backs' injuries. For forwards, the most common activities associated with injury were tackling (50.0%) and collisions (17.9%).

For comparison, over the period 2008 to 2025, 28.3% (95% CI: 25.2 – 31.3) of injuries sustained were associated with players being-tackled and 25.9% (95% CI: 23.0 – 28.9) were associated with players tackling (Fuller and Taylor, 2025).

4.2f Time of injury

Table 9 provides a summary of the game-time when injury events occurred during 2026, as a function of playing position.

Table 9: Game-time when injuries occurred during 2026 WRC, as a function of playing position.

Time of injury, min	% (95% Confidence interval)		
	<i>Backs</i>	<i>Forwards</i>	<i>ALL players</i>
2026 WRC tournament			
0-20	17.9 (3.7 – 32.0)	23.3 (8.2 – 38.5)	20.7 (10.3 – 31.1)
21-40+	21.4 (6.2 – 36.6)	20.0 (5.7 – 34.3)	20.7 (10.3 – 31.1)
41-60	35.7 (18.0 – 53.5)	33.3 (16.5 – 50.2)	34.5 (22.3 – 46.7)
61-80+	25.0 (9.0 – 41.0)	23.3 (8.2 – 38.5)	24.1 (13.1 – 35.2)

During the 2026 WRC, there were no statistically significant differences in the proportion of injuries sustained in the first and second half of matches for either backs ($p=0.257$) or forwards ($p=0.465$).

4.2g Removal of injured players from the pitch

During the 2026 WRC, 44.8% (32.0 – 57.6) of all players sustaining an injury of any kind were removed from the game immediately, 34.5% (22.3 – 46.7) were removed later in the game and 20.7% (10.3 – 31.1) remained on the pitch until the end of the game.

For players sustaining a concussion, however, 83.3% (60.2 – 100) of players were removed immediately from the game, 8.3% (0 – 62.5) were removed later in the game and 8.3% (0 – 62.5) remained on the pitch until the end of the game.

5. References

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