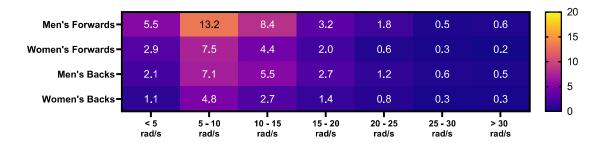
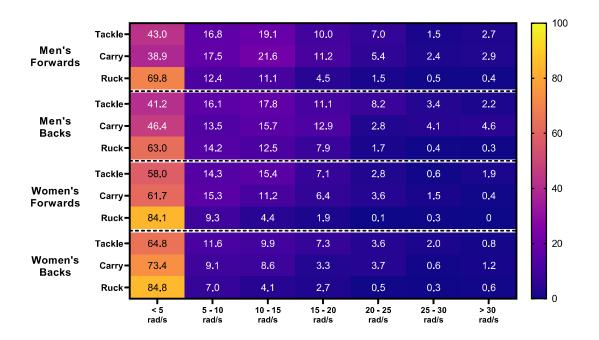


Supplementary Figure 1. The incidence of HAEs and the propensity of tackles, carries and rucks to result in at least one HAE exceeding a given threshold presented across ΔPAV thresholds (5 to 30 rad/s) for men's and women's players. Shaded regions indicate 95% CI. The number of players available to calculate each curve is shown as *n*. Text labels are added at intervals along the curve. ΔPAV was calculated by zeroing x, y, and z components of angular velocity to the trigger point and the peak value was taken from a recalculated resultant curve from the zeroed components.



Supplementary Figure 2. Incidence values between ΔPAV thresholds.



Supplementary Figure 3. Propensity values between Δ PAV thresholds.

Median (IQR)

Men's Forwards	20.97 (8.25 – 28.33)
Men's Backs	12.87 (9.00 – 16.69)
Women's Forwards	10.59 (8.57 – 15.00)
Women's Backs	6.08 (3.56 – 9.90)

Supplementary Table 1. Incidence values presented as median (25th to 75th percentile) as per King et al., 2016²¹.