

● Rugby has changed dramatically in the professional era, as have the players who play it. Here are five areas in which the game has become more dangerous



Clearing out rucks

● When joining a ruck, players are required to bind with a team-mate with at least one arm. But players often "clear out" a ruck by charging at an opponent without binding. One such example was the challenge by Bakkies Botha that dislocated Adam Jones's shoulder, *left*, during the second match between the Lions and South Africa in the summer



High tackles and collisions

● A tackle should be made at or below shoulder height and with both arms wrapped around the tackler. Research has shown that neither of these requirements have been adequately enforced by referees, resulting in high tackles and collisions

93.4%

of high tackles go unpenalised in the Guinness Premiership

Words: John Westerby



Size of players

● Players have become bigger and better conditioned in the professional era. The average weight of a forward in the 1980s was 14st 11lb; now it is 17st 5lb. An average back in the 1980s weighed 12st 4lb; now he weighs 14st 2lb. And as a matter of course, attacking teams try to direct their strongest runners at the opposition's weaker tacklers



Impact substitutions

● The advent of replacements has meant fresh players emerging from the bench, raising the intensity of the game in the closing stages. Impact substitutes are often explosive players, brought on to exploit tiring, vulnerable bodies in the opposition



Double tackles

● More than half of the tackles on a ball-carrier are now made by more than one player. The second impact often strikes the ball-carrier off balance, increasing the risk of injury

Heavyweights

● If the size of rugby players were to continue increasing over the next 20 years at the same rate as in the first decade of professionalism, the average forward could weigh almost 20st and the average back about 16st

Forwards

Backs



| Year | Weight |
|--------|------------------|
| 1980s | 14st 11lb (94kg) |
| 1990s | 16st 7lb (105kg) |
| 2000s | 17st 5lb (110kg) |
| 2020s? | 19st 2lb (121kg) |

Hours lost to injury in international sport (per 1,000 playing hours)

