Background There is increasing drive to assess injury risk in youth sports, given the potential health risks associated with participation. However, many studies focus upon a single sport and comparison between studies is often difficult due to varied injury definitions and methodologies.

Objective To investigate overall injury risk in youth collegiate sports at a single site using consistent data collection methods and injury definitions, and to compare between sports.


Setting One elite sports college in England.

Participants Under-17 to under-19-year-old athletes enrolled in seven college teams [male American football, basketball, football, rugby league, rugby union; female football and rugby union].

Main outcome measures Injuries (>24-hour time loss) and match exposure were recorded on a standardised report form by college medical staff. Descriptive statistics [percentages, median, range, 95% confidence-intervals (95% CI)] and injury incidence (per 1000 player-match-hours) are reported.

Results In total, 322 injuries were sustained by 240 athletes in 10,273 days of match exposure. Overall injury incidence was 31.3/1000h (95% CI 28–35) with a median severity of 23 days lost (1–427). Lower limb (52%) injuries were most common, followed by head/neck (26%), whilst 60% of injuries resulted from player contact. American football had the greatest injury incidence (85.9/1000h; 95% CI 61–120). Female rugby union (53.4/1000h; 95% CI 37–76), male rugby union (51.2/1000h; 95% CI 43–61) and basketball (42.9/1000h; 95% CI 25–72) had a substantially greater injury incidence than male football (15.9/1000h; 95% CI 13–20) and female football (21.3/1000h; 95% CI 14–33), but not rugby league (23.7/1000h; 95% CI 12–46).

Conclusions Common injury characteristics were identified across all sports. Despite being non-contact, basketball had higher injury risk than three other sports, which warrants further investigation. This study highlights the benefits of consistent data collection methods and injury definitions across sports, particularly in youth settings.