Main Outcome Measurements An observation form was developed and evaluated containing five categories: (I) general match and player information, (II) localisation of the injury on the pitch, (III) game situation and player/opponent behaviour, (IV) injury mechanism and (V) injured body location.

Results Of the 857 moderate and severe match injuries, 345 (40.3%) were clearly identified in the video footage and included to the analysis. Of these, almost half were contact injuries (49.3%), 23.2% non-contact injuries and the remaining 27.5% indirect-contact injuries. Most contact injuries were caused by collisions with the opponent (46.5%); non-contact injuries were commonly caused by structural overexertion (71.3%). Finally, nine recurrent comprehensive injury patterns were identified and described.

Conclusions Future preventive approaches should prepare players for the identified recurrent injury situations to reduce injury burden in professional football. One of the main findings was that own tackles are football-specific actions with a high risk for injuries, particularly for knee injuries. Thus, player behaviour and technique skills might present areas with considerable preventive potential. The resulting video database can be used in coaching education to demonstrate recurrent match situations with a high risk for injuries.

007 PREVALENCE OF HIP AND GROIN PAIN AND CHANGES IN HIP AND GROIN OUTCOME SCORE OVER A SEASON IN ELITE GAELIC ATHLETIC ASSOCIATION PLAYERS

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Background Athletic hip and groin pain is common in the Gaelic Athletic Association (GAA) but its prevalence at elite level is unknown. The changes in Hip and Groin Outcome Score (HAGOS) over a season in and the ability of HAGOS to identify those athletes who will go onto develop hip and groin symptoms has not been reported previously.

Objective The aim of this study was to report the prevalence of hip and groin symptoms and the changes in HAGOS score across a season in elite GAA players and examine the relationship between pre-season HAGOS scores and self-reported groin pain during that season.

Design Retrospective cohort study.

Participants There were 1241 elite intercounty GAA players who participated at the start of the 2017 and 2018 seasons.

Interventions (or Assessment of Risk Factors) Online Questionnaire.

Main Outcome Measurements The HAGOS questionnaire and self reported incidence of groin pain in previous season.

Results There was a high prevalence of hip and groin pain reported in elite GAA athletes over the course of a season (36%). There was no change on average across all the HAGOS subscales apart from Physical Activity which had a medium effect size change ($d = 0.44$) with 12 to 22% of athletes showing a decrease greater than minimal detectable change across HAGOS subscales over the course of a season and 15–34% showing an increase. There was poor ability to predict the incidence of hip and groin pain using pre-season HAGOS (AUC = 0.57 to 0.67).

Conclusions There is a high prevalence of hip and groin pain in elite GAA athletes with group HAGOS masking individual changes across cohort. There is poor ability of pre-season HAGOS to predict incidence of hip and groin pain in elite GAA athletes in the subsequent season.

008 EPIDEMIOLOGY OF INJURY IN ENGLISH SCHOOLBOY RUGBY UNION

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Background There is a perceived high risk of injury within youth rugby, but the available evidence in this population is limited. Understanding injury rates and patterns can inform injury reduction strategies.

Objective To describe the incidence and severity of schoolboy rugby injuries and determine whether there are differences between age groups.

Design A two-season (2017–19) prospective cohort study.

Setting English secondary schools.

Participants Schoolboy teams in the under-13 (U13), under-15 (U15) and under-18 (U18) age groups.

Assessment of Risk Factors Match exposure and the severity (days lost), type and event associated with 24-hour time-loss injuries.

Main Outcome Measures Injury incidence (injuries/1000h) and burden (days lost/1000h).

Results 11,706 player-hours and 379 match injuries from 66 teams were collected. The U18 age group had a significantly higher injury incidence (37.2 injuries/1000h, 95% CI: 33.1 to 41.8) than the U15's (24.7, 95% CI: 19.8 to 30.8) and U13's (20.8, 95% CI: 13.6 to 31.9) ($P < 0.01$), which were not significantly different ($P = 0.24$). The mean severity was 29 days lost (95% CI: 26 to 33) for U18, 31 (95% CI: 25 to 39) for U15 and 20 (95% CI: 13 to 31) for U13. Injury burden differed significantly between all groups (U18, 1085 days/1000h, 95% CI: 965 to 1220; U15, 767, 95% CI: 615 to 956; U13, 423, 95% CI: 276 to 648; $P < 0.01$). Contact events accounted for 86% of all injuries, with the tackle accounting for 56%. This was the most common event associated with injury at U18 (22.2 injuries/1000h), U15 (11.4/1000h) and U13 (10.4/1000h). The most common injury type was concussion at U18 (9.0 injuries/1000h) and U15 (5.1/1000h) and bruising/haematoma (5.2/1000h) at U13.

Conclusions The U18 age group had the highest injury incidence and burden. The tackle was the most common injury event and should be the focus of further investigation or intervention.

009 A COMPARISON OF INJURIES BETWEEN MALE AND FEMALE AMATEUR RUGBY UNION PLAYERS

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