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Injury Profile Of Time-loss Injuries In Non-elite/community U.S. Rugby-7s Tournament Players

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PURPOSE: Rugby-7s is a future Olympic collision sport that is played globally with a high incidence of injury. The sport is growing exponentially in the U.S., but there is a lack of injury data on community Rugby-7s. To determine the incidence (per 1000 playing hours), severity (days absence) and mechanisms of injuries.

METHODS: A prospective epidemiology study of non-elite/community males (566) and females (222) in USA Rugby sanctioned tournaments, 2010-2013; compliant with the international consensus statement for studies in rugby union.

RESULTS: Time-loss injuries were encountered at 49.1/1000ph (n=378) (men: 23.5±5.3 years old; women: 24.6±6.0 years old). Among player positions, backs were injured more often (men, 52.6/1000ph; women 51.7/1000ph) than forwards (men 36.1/1000ph; women 38.0/1000ph) (RR: 1.1; P=0.009). The injury burden was greater in women than men (42 mean days versus 30 mean days absent; P=0.024). Most injuries were acutely (96%) encountered in the tackle (71%). Main injuries were ligament injuries (42%) to ankles (32%). Amongst men, backs were more likely to suffer a ligament injury than forwards (P=0.003). A high incidence of head/neck injuries (including concussions) in the U.S. population (overall: 10.7/1000ph, CI: 8.5-13.2; men: 11.2/1000ph; women: 9.4/1000ph) was encountered. Knee injuries had the highest injury burden out of all body parts injured (63 mean days absent, CI: 34.4-91.6).

CONCLUSION: There is a high risk of sustaining an injury while playing U.S. community-level Rugby-7s. This study has identified a profile of incidence and risk factors of injury in the sport. Further research is needed to identify the risk factors and mechanisms of injury amongst the strata of playing levels. Once obtained, this data would guide age and level focused injury prevention measures and reduce injury for this large community playing population, with global ramifications.