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INTRODUCTION

- Rugby-7s is an international collision sport that is gaining popularity across the U.S., including the collegiate population¹
 - Rugby has increased currently to greater than 900 campuses out of ~2000 university/colleges.²
- As a full-contact sport, increased participation leads to increased injury risk for this collegiate population.
- To date, there has been limited focus on injury incidence in the US collegiate men's rugby-7s population.
- Identifying collegiate injury risk is critical for establishing population-specific injury prevention guidelines.

RESEARCH OBJECTIVE

The objective was to determine injury incidence rate (injuries/1000 playing hours [ph]), causes, and types of match injuries in US men's university rugby-7s.

METHODOLOGY

- Prospective epidemiological study (2011-2016) of **3411** Rugby-7s athletes (mean age = 21.4) at USA Rugby 7-a-side sanctioned events and USA Rugby-7s collegiate championships.
- Tournament match injury data were collected with the Rugby Injury Survey and Evaluation (RISE) report³, an injury surveillance tool following the rugby international consensus statement.⁴

Relevant definitions:

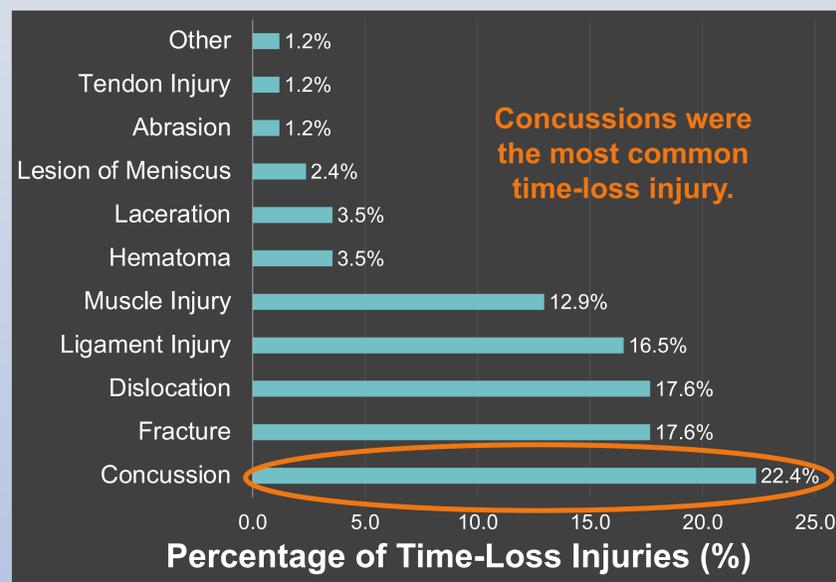
- Medical Attention: An injury that resulted in a player receiving any medical attention
- Time-loss: An injury that resulted in a player being unable to take full part in future rugby match play

REFERENCES

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- Lopez et al. Profile of an American Amateur Rugby Union Sevens Series AJSM 2012.
- Fuller et al. Consensus statement on injury definitions and data collection procedures for studies of injuries in rugby union. BJSM 2007.

RESULTS

- Overall injuries were found at **96.0/1000ph** (n=236)
 - Time-loss=34.6/1000ph (n=85); Medical attention=52.9/1000ph (n=130); **P<0.01**
 - New (**71.2%**) > recurrent (**24.6%**); **P<0.01**



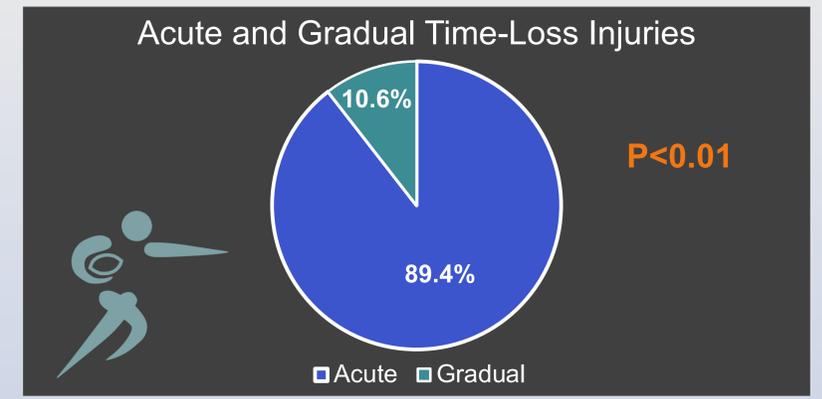
- Most common injury types were **sprain/ligament injuries** (25.8%) and muscle injuries (13.6%)
 - Time-loss: **concussions** (22.4%), fractures (17.6%) and dislocations (17.6%)
 - Recurrent: **sprain/ligament injuries** (29.3%) and joint dislocations (20.7%)

CONCLUSIONS

- Concussions were highest proportion of time-loss injuries
- Ligament injuries were highest proportion of recurrent injuries
- Focus needed to mitigate time-loss concussions and recurrent ligament injuries
 - Tackle execution** and post-tackle **break-fall** techniques should be emphasized in this population, which may help decrease the frequency of head impacts
 - Proprioceptive and agility training** in addition to proper adherence to return-to-play protocols to decrease the frequency of recurrent sprain and ligament injuries
- The high percentages of severe injuries, such as dislocations and fractures, may benefit from evaluations of player-to-player and player-to-ground impacts

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- Time-loss injuries were found at 34.6/1000ph
 - Backs=33.5/1000ph; Forwards=23.7/1000ph; P=0.16
 - Acute (**89.4%**) > gradual onset (**10.6%**); **P<0.01**
 - Immediate removal from play (**47.1%**) > delayed removal (**18.8%**); **P<0.01**
- The **tackle** was the phase of play most frequently involved in injury (65.7%, n=155), followed by open play/running (19.1%, n=45)

