EPIDEMIOLOGY OF DISLOCATIONS/SEPARATIONS AMONG US HIGH SCHOOL ATHLETES

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Background As participation in US high school sports increases, the number of student-athletes sustaining dislocations/separations may similarly increase. Many dislocations/separations are recurring, require surgery and have long recovery times.

Objective Investigate the epidemiology of dislocations/separations in a nationally representative sample of US high school athletes.

Methods Sports-related exposure and injury data were collected during the 2005–2009 academic years from a nationally representative sample of 100 US high schools via RIO.

Results In the nine sports studied, athletes sustained 755 dislocations/separations during 7 740 400 athlete exposures (AE) for a rate of 0.98 injuries per 10 000 AE. Dislocations/ separations represented 3.6% of all high school athletic injuries. Overall, males had a higher dislocation/separation rate (1.30) (RR 3.91, 95% CI 3.12 to 4.89, p<.001) than females (0.33). However, among sports in which both males and females participated (ie, soccer, basketball, baseball/softball), rates of dislocations/separations for males (0.39) and females (0.34) did not differ (p=.406). Body parts most commonly injured were the shoulder (54.9%), wrist/hand (16.5%) and knee (16.0%). 18.4% of dislocations/separations were recurrent; 11.8% required surgery; and 62.2% of athletes returned to play in 3 weeks or less. The majority of dislocations/separations were sustained from contact with another player (52.4%).

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Conclusions Developing effective sport-related preventive measures depends upon increasing our knowledge of dislocation/separation rates, patterns and risk factors.