to 4.50; p<.001). The most common body sites of injuries requiring surgery were the knee (46.0%), head/face/mouth (10.5%), and shoulder (9.2%). Girls sustained a greater proportion of knee injuries (68.7%) than boys (36.6%) (IPR 1.88; 95% CI 1.86 to 1.89; p<.001). The most common diagnoses for injuries requiring surgery were complete ligament strain (30.6%), fracture (26.8%) and torn cartilage (10.7%). 50.5% of injuries requiring surgery resulted in medical disqualification for the season.

Conclusions Rates of patterns of injuries requiring surgery differ by sport, type of exposure and gender. Future studies should identify sport-specific risk factors to help develop and assess effective interventions to decrease the incidence and severity of high school sports-related injuries.

EPIDEMIOLOGY OF INJURIES REQUIRING SURGERY AMONG US HIGH SCHOOL ATHLETES

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Background The proportion of high school sports-related injuries requiring surgery has significantly increased during the last decade. These injuries pose significant monetary and time loss burdens to young athletes.

Objective To investigate the epidemiology of US high school athletic injuries requiring surgery and to compare the rates and patterns of these injuries by sport, type of exposure and gender.

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, 1106 injuries requiring surgery occurred during 7 740 400 athlete exposures (AE) for a rate of 1.43 injuries per 10 000 AE. Injuries requiring surgery accounted for 6.2% of all high school sports-related injuries. The rate of injuries requiring surgery was higher in competition (3.15) than practice (0.79) (RR 3.99; 95% CI 3.54)