

First of its kind study compares high school knee injuries by sport and gender

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Knee injuries, among the most economically costly sports injuries, are the leading cause of high school sports-related surgeries according to a study conducted at the Center for Injury Research and Policy (CIRP) of the Research Institute at Nationwide Children's Hospital and published in the June issue of The American Journal of Sports Medicine.

The researchers utilized data from the High School RIOTM online injury surveillance system which collects injury reports for nine high school sports from certified athletic trainers at 100 U.S. high schools selected to achieve a nationally representative sample. Data are collected for boys' football, soccer, basketball, baseball and wrestling and girls' soccer, volleyball, basketball and softball.

The knee was the second most frequently injured body site overall, with boys' football and wrestling and girls' soccer and basketball recording the highest rates of knee injury. The most common knee injuries were incomplete ligament tears, contusions, complete ligament tears, torn cartilage, fractures/dislocations and muscle tears.

"Knee injuries in high school athletes are a significant area for concern," said Dawn Comstock, PhD, CIRP principal investigator, faculty member at The Ohio State University College of Medicine and one of the study authors. "Knee injuries accounted for nearly 45 percent of all sports injury-related surgeries in our study. Knee surgeries are often costly procedures that can require extensive and expensive post-surgery rehabilitation and can increase risk for early onset osteoarthritis. Without



effective interventions, the burden of knee surgeries and rehabilitation will continue to escalate as the number of high school athletes continues to grow."

Researchers also found several interesting gender patterns. For example, while boys had a higher overall rate of knee injury, girls' knee injuries were more severe. Girls were more likely to miss > 3 weeks of sports activity (as opposed to

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