Ankle, Feet Most Commonly Injured During High School Basketball

Study finds new gender differences in high school basketball injuries

COLUMBUS, OH, October 20, 2008 —
While rebounding in basketball is an integral part of the game, it was also associated with 25 percent of injuries in high school basketball. New research also found the most commonly injured body site was to the ankle or foot, resulting in 40 percent of injuries.

Many may perceive the knee as being a common basketball-related injury, but according to a recent study published in the online issue of the American Journal of Sports Medicine and conducted by researchers at the Center for Injury Research and Policy (CIRP) of The Research Institute at Nationwide Children's Hospital, knee injuries accounted for 15 percent of injuries, followed by the head, face or neck, (14 percent) and the arm or hand (10 percent), all far behind the number of foot and ankle injuries.

"It's not surprising that the ankle and foot are frequently injured during basketball when rebounding is associated with the most injuries," explained the study's co-author Ellen Yard, MPH, CIRP research associate at Nationwide Children's Hospital. "But, we did find some surprising findings with gender comparisons."

Females were more than two times more likely than males to experience concussions. Other gender differences were that females were 70 percent more likely to have a knee injury, while males were nearly 90 percent more likely to sustain a fracture and more than 50 percent more likely to sustain a contusion.

The guard position accounted for the most injuries at 50 percent for males and 46 percent for females. Plays associated with injuries included defending (25 percent), general play (17 percent) and handling or dribbling the ball (9 percent).

"Considering there are two guards on the court, we expected about 40 percent of injuries to be associated with that position," said study co-author Dawn Comstock, PhD, CIRP principal investigator at Nationwide Children's and a faculty member of The Ohio State University College of Medicine. "The specific mechanism that most frequently caused injury was collision with another player, which accounted for almost a quarter of all injuries."

Comstock suggested that preventative measures be focused on the commonly injured body parts. Also, the use of appropriate protective equipment can be used to prevent injuries.

Data for the study were collected from the 2005-2007 National High School Sports Injury Surveillance Study (High School RIO™) and were funded in part by the Centers for Disease Control and Prevention.

The Center for Injury Research and Policy (CIRP) works globally to reduce injury-related pediatric death and disabilities. With innovative research as its core, CIRP works to continually improve the scientific understanding of the epidemiology, biomechanics, prevention, acute treatment and rehabilitation of injuries. CIRP serves as a pioneer by translating cutting edge injury research into education, advocacy and advances in clinical care. In recognition of CIRP's valuable research, the Centers for Disease Control and Prevention (CDC) recently named the Center for Injury Research and Policy as one of only 13 centers in the United States to be designated as an Injury Control Research Center. Learn more about The Center for Injury Research and Policy at http://www.injurycenter.org.