

AVCA Phenom Goes on the Attack Against Injuries in Youth Volleyball

Unfortunately, many of us who've watched a fair amount of youth volleyball have witnessed an athlete jump up for an attack or block, come down with their knees caved in, and suffer a catastrophic injury.

This is the worst-case scenario, the dreaded ACL tear. While ACL tears only account for less than 25% of acute knee injuries, most knee injuries share a common precursor, *dynamic knee valgus*.

About 15% of injuries in volleyball are knee-related, with another 15% relating to hip and/or back problems. Dynamic knee valgus can be caused by limitations in hip mobility and end up leading to knee and hip injuries if not addressed.

So, what exactly is dynamic knee valgus? Well, it's something anyone who's watched volleyball has probably seen: the knees of the player, on either jump or landing, cave inwards towards one another.

Biomechanically, those in the sports medicine field understand this movement fault puts unwanted stress on connective tissues in the knees, ankles, and hips. But, these experts are still learning exactly how prevalent of an issue knee valgus is within youth athletics. That question of prevalence is at the forefront of the mind of Joseph Janosky, the Director of Injury Prevention Programs for the Sports Medicine Institute at HSS (Hospital for Special Surgery, New York).

"When you're trying to prevent injuries in youth sports, it's important to first understand just how common the causes of key injuries are in a population of athletes," said Janosky. "We've created a unique screening process to help answer this question."

At the American Volleyball Coaches Association's 2021 Phenom event, injury prevention experts from the Sports Medicine Institute at HSS and PRiSM (Pediatric Research in Sports Medicine) will come together, along with the Sport Science department at VERT, to conduct one of the largest studies on dynamic knee valgus as an injury risk factor in young volleyball players.

The AVCA's Executive Director Kathy DeBoer jumped at the chance to include this study as part of the association's PHENOM program, which will take place at the AVCA Convention in Columbus, Ohio, Dec. 15–18. "Our mission is more than quantifying talent and educating players and coaches on how best to play our sport. In order for volleyball to continue to grow, teaching our young athletes how to move properly, safely, is key to allowing them to continue playing the sport we all love."

At this year's PHENOM event, hundreds of athletes are expected to complete a movement screening designed to identify the presence of dynamic knee valgus when jumping, squatting, and landing. After the event, each participant will receive a summary of their screening results along with educational materials designed to help reduce or eliminate key injury risk factors and decrease their risk of missing playing time due to injury.

These movement screenings are also taking place at select clubs around the country for volleyball athletes from ages 10 to 18.

"Upon completion of this project, we will not only have a much clearer view of the prevalence of these injury risk factors, but there will be more education in the hands of parents, players, and coaches than ever before," said Janosky. "Frankly, that's the most exciting part: we gain awareness and understanding on the issue, can work to resolve it with effective resources, and dramatically help reduce the risk of injury among young athletes."

For more information about this project, please contact Joseph Janosky at janoskyj@hss.edu.