Playing It Safe With High School Sports

Each year, more than seven million high school students participate in interscholastic sports in the United States, and there are approximately 1.4 million sports injuries, according to a 2006 national sports injury survey.

The good news is that injury rates have dropped by half in the last decade as sports medicine techniques have improved, along with a growing awareness of the importance of preventing and treating injuries, said Dawn Comstock, an assistant professor at the Ohio State University College of Medicine. She administers the survey, which tracks sports-related injuries at 100 high schools throughout the country.

But the injuries being reported today are more serious. "There are more fractures, severe knee injuries, and the proportion of injuries requiring surgery is higher," she said.

This could be due to a jump in chronic overuse problems -- more young athletes are playing one sport year-round, using the same muscle groups over and over. But the increase could also be due to improved sports medicine techniques, which means earlier diagnosis and treatment of many injuries before they become serious, leaving the more serious ones for the statistics charts, Comstock said.

Whatever the reasons, the emerging data and new research into sports injuries among high school athletes is bringing needed attention to what athletic professionals say has been a long neglected area.

"There are 1.2 million high school football athletes, compared to 38,000 college and 1,700 professional football players," Broglio said. "At the high school level, where there are the greatest number of injuries, there is the least amount of medical attention -- one athletic trainer for 300 to 500 children, compared to three or four for one college football team of 120."

Tight school budgets are part of the reason, said Jon Almquist, the athletic training program administrator for the Fairfax County (Va.) Public Schools. Schools necessarily focus on educational priorities rather than athletics.

But a second reason for the lack of attention, according to Comstock, has been the wrong assumption that high school sports injuries are inevitable. "There's a general perception that sports injuries are just the price you have to pay for playing, which isn't true," she said.

At a meeting of the National Athletic Trainers Association (NATA) last week in St. Louis, Broglio presented the results of a study that measured the varying speeds at which high school football players took hits to their heads, and where on the head the hits occurred. The findings will not only help researchers pinpoint how and when concussions are most likely to occur, they should help coaches retool a player's on-field technique to avoid unnecessarily risky moves.

Also at the meeting, certified athletic trainer Erin O'Donoghue reported that high school coaches in a survey she conducted scored an average of 80 out of 100 points on questions testing them on their expertise in recognizing concussions. Those who had attended workshops about concussions (approximately one-fifth of the coaches) or had a U.S. Centers for Disease Control and Prevention published kit about concussions were the most informed.

"Our educational efforts have been effective," she said.

To further improve safety for young athletes, NATA has published a summary statement with 11 strategies for anyone -- coaches, athletic directors, parents -- interested in providing comprehensive medical care to high school athletes.
Among the recommendations

- Organizations that sponsor high school athletics should put in place a health-care team to ensure timely and appropriate care for all athletes;
- Those same organizations need to develop an emergency action plan to ensure that injuries and illnesses are treated promptly;
- Students participating in sports should have a physical exam to detect any health problems that might be aggravated by physical activity.

"Our hope is that the summary statement and strategies will together provide an opportunity for all high school athletes to get appropriate medical treatment whenever and wherever they play sports," said Almquist, who chaired the task force and is lead author of the statement.

More information

The NATA consensus statement outlines how to set up a safe environment for high school athletes.