

NATA Publishes Guidelines on Overuse

A new position statement by the NATA provides advice on the prevention of overuse injuries in athletes ages 6 to 18.

According to a new National Athletic Trainers' Association (NATA) position statement, overuse or repetitive trauma injuries represent approximately half of all pediatric sport-related injuries in the U.S. However, half of those may be preventable with simple approaches.

"Repetitive stress on muscles and joints without adequate and appropriate conditioning and limited rest can result in chronic or overuse injuries in athletes of any age," said Tamara McLeod, PhD, ATC, associate professor of the Athletic Training Program at A.T. Still University and lead author of the position statement. "This situation in children is complicated by the growth process, which can result in a unique set of injuries among pediatric athletes."

Among young athletes, overuse injuries can include Osgood Schlatter's disease and Sever's disease among other growth-related disorders; medial epicondylitis, commonly called little league elbow; patellofemoral pain syndrome; as well as stress fractures caused by overuse and/or repetitive stress over time.

The statement recommends the following six steps for making school athletics safer, by reducing these types of repetitive-stress injuries in children from age 6 to 18:

1. Injury surveillance: The NATA urges parents, coaches, athletic trainers and others in charge of the welfare of young athletes to *be vigilant in the surveillance and reporting of all injuries*. In addition, pain, fatigue and decreased performance should be recognized as early warning signs of potential overuse injuries.
2. Pre-participation physical exams (PPEs): Student-athletes are urged to undergo a physical examination prior to beginning a new sport (or prior to the start of a new sports season), in order to screen for potential risk factors, including injury history, stature, maturity, joint stability, strength and flexibility.
3. Identification of physical risk factors: Health care professionals, parents and coaches should also learn to recognize the anatomical factors that may predispose an athlete to overuse injuries, including bowed legs, knock knees, pelvic rotation and joints that that easily move beyond their normally expected range (i.e., hypermobility).
4. Sport alterations: *Emerging evidence indicates that the sheer volume of sports activity, whether measured as number of throwing repetitions or the amount of time participating, is the most consistent predictor of overuse injury*. Efforts should be made to limit the total amount of repetitive sports activity engaged in by pediatric athletes so as to prevent/reduce overuse injuries. Alterations to the existing rules for adult sports

may help prevent overuse injuries in younger athletes and should be considered by coaches and administrators for sports where specific youth rules are lacking.

5. Training and conditioning programs: The NATA's position statement advocates incorporating a pre-season or in-season preventative program that focuses on neuromuscular control, balance, coordination, flexibility and strengthening to reduce the risk of overuse injuries, especially among pediatric athletes with a previous history of injury. In addition, young athletes should only participate in one team of the same sport per season. Training intensity, load, time and distance should only increase by 10 percent each week, in order to allow the child's body to adapt and avoid overloading muscles and joints.

6. **Delayed sports specialization**: *Youth athletes are **encouraged to participate in multiple sports and recreational activities throughout the year**, to enhance general fitness and aid in motor development. They should also take time off between sports seasons and take two to three non-consecutive months away from a **specific** sport, if they participate in a single sport year-round.*

More information about the NATA is at: www.nata.org