

PEDIATRIC OVERUSE INJURIES

- An estimated 50% of overuse injuries in physically active children and adolescents may be preventable.
- Athletes, parents, and coaches should all have knowledge of general signs and symptoms of overuse. These include:
 - a gradual onset of pain
 - pain presenting as an ache
 - no history of direct injury
 - stiffness or aching after or during training or competition
 - increasing periods of time for pain to resolve
 - point tenderness
 - visible swelling
 - missed training sessions as a result of pain or injury
 - a problem that persists

These signs and symptoms should not be ignored as “growing pains” but should be taken seriously by the athlete, parent, and coach.

- Arm pain, fatigue, and decreased throwing performance should be recognized by athletes and parents as early warning signs of potential overuse injuries in pediatric throwers.
- Certain anatomic factors may predispose the athlete to overuse injury, including [leg-length discrepancies](#), [genu valgus](#), [genu varus](#), pelvic rotation, and generalized joint hypermobility (some or all of a person's joints have an unusually large range of movement).
- Sport Participation
 - It is recommended that pediatric athletes begin participating in a general fitness program that emphasizes endurance, flexibility, and strengthening, at least 2 months before the sport season starts.
 - It is encouraged that they participate in multiple sports and recreational activities throughout the year to enhance general fitness and aid in motor development.
 - Evidence indicates that sheer volume of sports activity is the most consistent predictor of overuse injury.
 - Efforts should be made to limit the total amount of repetitive sport activity engaged in by pediatric athletes to prevent or reduce overuse injuries.
 - It is theorized that participation in only 1 sport can result in increased risk for repetitive microtrauma and overuse.
 - It is recommended that pediatric athletes play only 1 overhead throwing sport at a time and avoid playing that sport year-round.
 - They should also only participate on 1 team of the same sport per season when participation of 2 or more teams of the same sport would involve practices or games (or both) more than 5 days/week.
 - Pediatric athletes should take time off between sport seasons and 2-3 nonconsecutive months away from a specific sport if they participate in that sport year-round.

- It is theorized that multisport athletes who do not obtain adequate rest between daily activities or between seasons are at higher risk for overuse injuries than those in multiple sports with different emphases.
- It is also theorized that those who participate in 2 or more sports that emphasize the same body part are at higher risk for overuse injuries than those in multiple sports with different emphases.

National Athletic Trainers' Association. (2011). *National Athletic Trainers' Association Position Statement: Prevention of Pediatric Overuse Injuries*. Valovich McLeod, T. C., Loud, K. J., & Sandrey, M. A.