

# The Risk of Overuse Injuries

## OVERUSE INJURIES CAN BE CAUSED BY

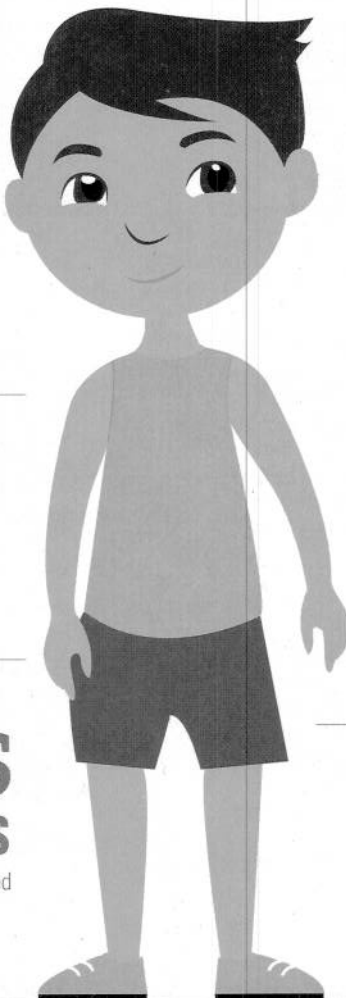
training errors, improper technique, excessive sports training, inadequate rest, muscle weakness and imbalances and early specialization.

## LONG-TERM CONSEQUENCES INCLUDE

loss of playing time, reduced function and psychological exhaustion.

## SYMPTOMS OF OVERUSE INJURIES

tend to be gradual, resulting in athletes going undiagnosed and untreated for longer periods of time.



## COMMON OVERUSE INJURIES ARE

general stress, inflammation and tendinitis.

## INJURIES TO THE GROWTH PLATE CAN RESULT

from repeated microtrauma, which is microtearing of the muscle fibers and connective tissues.

## STRESS FRACTURES

occur when shock that can't be absorbed from fatigued muscles is transferred to the bone.

### OVERUSE INJURIES ARE MORE FREQUENT IN



Rowing • baseball • volleyball • cross-country  
• track and field • other low-contact sports

APPROXIMATELY **50%** of all sports-related injuries for pediatric athletes—children ages 6 to 12 and adolescents ages 13 to 18—are due to overuse

Acute overuse injuries occur when there is too much activity, too quickly, while chronic overuse injuries result from repetitive activities over the course of several weeks or months.

### WOMEN'S SPORTS, INCLUDING



Field hockey • soccer • cross-country • volleyball

**HAVE THE MOST OVERUSE INJURIES**

## PREVENTING OVERUSE INJURIES

- Avoid specialization and repetitive sport activity at a young age. Athletes who participate in a variety of sports tend to have few injuries and play longer.
- Limit training in one sport to no more than five days a week with at least one day off from any organized physical activity.
- Take time off from one sport for two to three months each year to allow physical injuries to heal, the body to recoup and for the athlete to focus on strength training and conditioning. This is also a psychological break that can help the athlete avoid burnout and overtraining syndrome.
- Pediatric athletes should only play one overhead throwing sport at a time and should avoid playing the same sport year-round. Participation in multiple sports throughout the year provides a wider range of skills as well as rest from repetitive, single-sport activities.
- Although there aren't injury thresholds for specific sports or age ranges, data suggest limiting vigorous physical activity to 16 to 20 hours a week for pediatric athletes.
- Conduct a pre-participation physical exam on an annual basis to detect life-threatening conditions as well as factors that may predispose the athlete to overuse injuries.