**Injury Prevention Series** 

Track & Field



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### Common track & field / cross country injuries

### Overtraining leads to injuries

Who can run the fastest? Who can jump the highest? Who can throw the farthest?

These are the questions at the heart of track and field, a sport with broad appeal to athletes of all ages. For kids, track and field is a terrific gateway to competition and better health. From cross country and the long jump to sprints and the shot put, there's an activity that matches the physical make-up and athletic skill of every young person. Track and field combines the challenge of meeting individual goals with the fun of being part of a team.

Track and field is not a contact sport, but kids and teens may get hurt, especially if they over-train, lack the necessary strength and flexibility to compete or use improper form. Sprains, strains and muscle tears are common ailments, so track and field athletes must be careful to get plenty of rest between workouts and meets. Serious, long-term injuries are possible if aches and pains are not allowed to heal.



Common accidents, serious injuries

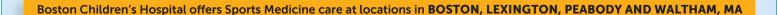
Stress fractures Because runners' feet repeatedly hit the ground, cross country and distance runners may sustain a small crack in the bone, known as a stress fracture.

Muscle strains Long jumpers, hurdlers and runners frequently pull or tear muscles.

Achilles tendinitis Pain in the back of the leg near the heel may be a sign of Achilles tendinitis. Common to runners and jumpers. Achilles tendinitis is marked by swelling in the tendon.

### Shoulder pain

The repetitive, overhead motions required in the throwing events (shot-put, javelin and discus) may lead to shoulder problems.



# Overuse injuries: when too much is too much

Overuse injuries account for about half of the injuries diagnosed in middle school and high school athletes.

### Am I hurt or just sore?

It can be hard to detect an overuse injury. Unlike broken bones or concussions, overuse injuries don't happen because of a sudden blow or a nasty fall. They develop slowly over time. In track and field, too much running, jumping, throwing or lifting puts repetitive stress on tendons, muscles, bones or joints and may cause strains, tendinitis and pain that just won't go away.

Many times, overuse injuries are dismissed by young athletes as mere soreness or fatigue, but these symptoms should not be ignored. When aches and pains persist, athletes should try rest or stretching.

#### How to prevent overuse injuries

The more athletes, coaches and parents know about overuse injuries, the more they can be prevented.

- When the intensity, length or frequency of training increases, watch for overuse symptoms. Pain and soreness are common at the start of a season, when athletes are rounding into shape and may be pushing too hard, but that should go away with time and conditioning—unless you're over-training
- Poor mechanics and improper technique can place too much pressure on tendons, bones and joints. When young athletes continue to train or perform the wrong way, overuse injuries may develop and cause long-term trouble.
- Be aware of the physical maturity level of athletes.
  Young kids who are still growing are more susceptible to the dangers of overtraining than older, more mature kids, teens and young adults.
- **Mix it up by cross-training.** By playing other sports throughout the year, young athletes can build a solid foundation of strength and avoid the repetitive stress that can lead to overuse problems.
- Take time off. It's recommended that kids participate in a sport no more than five days a week. In addition, it's a good idea to let young athletes take two or three months off from a sport during the year. This lets the body heal and it fights the mental fatigue and burnout that can cause kids to dislike athletics or even give up on physical fitness entirely.
- Food is fuel. Inadequate diet with increased activity can be detrimental to health when athletes exert themselves greater than their nutritional intake. Symptoms can present as general stomach issues, constant fatigue or a sense of running out of gas mid-performance, also known as "bonking." Athletes should be adequately hydrated and nourished to aid with overall health and maximizing performance.

## If the Shoe Fits

One of the benefits of track and field is that there's not a lot of equipment.

- If you're training and competing regularly—say, at least three days a week—buy a sport-specific shoe.
   Don't wear a distance running shoe if you're a high jumper or a basketball shoe if you're a pole vaulter.
- Buy shoes from a store where the salespeople understand your sport and can talk to you knowledgably about your options.
- All companies measure shoes differently, so trying them on prior to purchase is very important:
  - The front and the back soles should have adequate flexibility.
  - Put the shoe on, tap the nose of the shoe to the floor, then put a whole finger behind the heel. If the finger fits, the shoe is too big.
    - Walk around with the shoes on to make sure they're comfortable; any discomfort will be exaggerated while running
      - Make sure your heel doesn't slip.
      - Wear socks that draw moisture away from the skin ("wicking") to add comfort and prevent blisters.



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This piece is part of an informational series on sports injury prevention produced by the Orthopedic Center/Sports Medicine Division at Boston Children's Hospital. For materials on preventing injuries in other sports, call 617-355-3501 or visit bostonchildrens.org/sportsmed.

