

Running Safety

A GUIDE TO SIGNS, SYMPTOMS, TREATMENT AND PREVENTION



Each year, 65-80 percent of runners suffer an injury. Most of these injuries are caused by over-training or overuse, and are completely preventable.

Overuse Injuries

Over-training and overuse injuries occur when repetitive stress is placed on the body without sufficient time to repair. Most of these injuries can be prevented with proper rest and using proper technique. To prevent further injury, athletes and coaches should recognize the early signs of overuse injuries. Damage caused by repetitive stress leads to tissue inflammation, which causes pain. Symptoms of overuse injuries include pain when performing the activity or sport, intermittent swelling, and dull pain even at rest. If symptoms persist, make an appointment with a sports medicine physician. It is also important to recognize potential environmental factors that may contribute to the risk for overuse injuries. They include type of shoe and running surface, distance and intensity.

Common Overuse Injuries Include:

- **Patello-femoral pain syndrome (runner's knee)** – pain in the front (anterior) of the knee coming from the joint and supporting soft tissues which is related to a combination of factors involving alignment of the hips, knees and feet during weight-bearing activity.
- **Osteochondritis dissecans** – a defect in the knee's cartilage that can become evident over time during repetitive activity such as running. This may be associated with knee swelling and locking.
- **Iliotibial band syndrome (ITBS)** – the most common cause of pain on the outside (lateral) aspect of the knee. This overuse injury results from repetitive friction of the connective band of tissues extending from the hip to the knee, which then rubs on the outer portion of the leg.

- **Medial tibial stress syndrome** – also called shin splints, causes pain along the lower inside portion of the tibia (shin). Shin splints also sometimes cause inflammation along the lower leg.
- **Stress fracture** – stress fractures are the result of abnormal stresses on normal bone. Stress fractures occur after repetitive loading on the bone, and are most common in the lower extremity. They are seen in both highly trained athletes as well as in individuals unaccustomed to vigorous activity.

First Aid for Injuries

The recommended treatment for all areas of the body is the **PRICE** formula:

Protect the area with a sling or crutches, if necessary.

Rest the injured area.

Ice the injury for 20 minutes at a time. Do not apply the ice directly to the skin.

Compress the injured area with a wrap. Do not pull tightly, as this can cut off circulation.

Elevate the injured area above the heart, if possible

