

## **Injuries: How to identify, treat, and prevent**

Participating in a marathon is a long and grueling that puts the body under great physical stress. Runners must be aware of the injuries they may encounter, how to prevent them and how to treat them. Some of the most common injuries experienced by long distance runners include shin splints, "Runner's Knee", and stress fractures.

Shin splints are a condition that results in soreness of the front or medial part of the shin caused by overstraining the area. Shin splints are often due to overtraining and are common in beginner runners, as their bodies haven't had time to adjust to the increased physical stress from running. If shin splints occur, training load should be decreased; swimming can be used to maintain fitness.

Stress fractures are similar to shin splints but they occur in the bone from repeated impact, causing tiny cracks. Stress fractures can be diagnosed by X-ray, but pain is a good indicator that a problem has occurred. Should a fracture occur, discontinue training immediately; the goal is reduce as many weight-bearing activities as possible. Further treatment of the fracture is dependent on its severity.

Runner's knee is associated with pain felt near the kneecap, usually around the inner part of the knee and below it, as the cartilage around the knee hardens and the kneecap starts to track off center. This condition can be found in people with weak quadriceps muscles, tight hamstrings or calves and also in those with knock knees, or women with very wide hips. To treat Runner's knee, training load should be decreased, and exercises should be focused on strengthening of the quadriceps muscles. Runners need to be in tune with their bodies and should cease activity at any sign of abnormal pain and have it diagnosed; the earlier an injury is detected the easier it is to treat.

