WHAT CAUSES RUNNING INJURIES?

There are four periods of time when runners are most vulnerable to injury:

* During the initial 4 to 6 months of running
* Upon returning to running after an injury
* When the quantity of running is increased (distance)
* When the quality of running is increased (speed)

Most running injuries are caused by recurring factors that runners can often prevent or avoid themselves: Training errors are the most common source of injury, particularly lack of adequate stretching; rapid changes in mileage; an increase in hill training; interval training (going from slow speeds over long distances to faster over less ground); and insufficient rest between training sessions.

When selecting a running shoe, the athlete should look for a style that will fit comfortable and that will accommodate his or her particular foot anatomy. When a shoe’s mileage exceeds 500–600 miles, it should be replaced. Runners should keep also in mind potential anatomic abnormalities: Hip disorders typically manifest themselves as groin pain. Back discomfort that radiates down the leg is cause for referral to a sports medicine specialist.

The patella (kneecap) is a common site of overuse injuries that can benefit from a 20 minute ice massage, a program of stretching and strengthening of the hamstring and quadriceps muscles and a short course of an over-the-counter anti-inflammatory medication. Surgery is rarely indicated. Ankle laxity can lead to frequent ankle sprains and pain. Beneficial treatment includes muscle strengthening to increase stability, shoe modification to alter gait, and change of a running surface. Foot problems in runners are related to foot types. Nonoperative treatment such as orthotics and shoe modifications should be used if necessary. The ideal surface on which to run is flat, smooth, resilient, and reasonably soft. Avoid concrete or rough road surfaces. If possible, use community trails that have been developed specifically for jogging and running. Hills should be avoided at first because of the increased stress placed on the knee and ankle.

During warmer, humid weather, increase fluid intake; in cool weather, dress appropriately. It is often helpful to weigh yourself before and after running on a hot, humid day. One pint of water should be consumed for every pound of weight lost. Avoid running during extremely hot and cold temperatures or when the air pollution levels are high. When running at higher altitudes, the runner should gradually acclimate to the lower oxygen levels by slow, steady increases in speed and distance.

HOW ARE RUNNING INJURIES TREATED?

The basic approach to treating running injuries includes rest or modification of activity to allow healing and reduction of inflammation. A gradual return to running (10 percent increase in mileage per week) can be allowed after flexibility, strength and endurance has returned. When severe pain, swelling, loss of motion and/or other alterations in running form are present, immediate medical treatment is advised. (See reverse side for specific injuries.)

The goal of rehabilitation is to safely return the runner to the desired level of running. Remember, training errors constitute the most common cause of injuries. A well-planned program prevents injury while benefiting the athlete.