Tips for runners of all levels.

Whether taking a leisurely jog or sprint to the finish line in a marathon, running is great exercise. In fact, running is one of the easiest and most popular sports among non-professional athletes, with more than 25 million Americans putting on their sneakers and heading out to local streets, parks and gyms.

Running offers many benefits, including improved cardiovascular and respiratory function, weight loss, reduced cholesterol and increased muscle and bone strength, as well as a healthier mental outlook. But with any sport or activity comes the risk of injury.

“Runners of all levels are at risk for significant injuries to their hips, knees, legs, ankles and feet,” said Mylan N. Lam, M.D., clinical chief of Spinal Cord Injury Services, “But one of the best ways to prevent injury is to avoid injury. By taking simple precautions and watching for signs of potential problems, individuals can prevent or minimize many injuries.”

The majority of injuries are caused by excess–running too far, too fast or too often. In addition to strains and sprains, blisters and cramps, some of the more common injuries include:

• Hip and thigh injuries–bursitis, stress fractures, and hamstring pulls or tears are typically caused by inflammation and strain from overexertion or improper running techniques.

• Knee injuries–Patellofemoral syndrome, more commonly called “runner’s knee” is characterized by a dull ache or sharp pain under or around the kneecap and is often accompanied by a grinding sensation when the knee is bent then straightened. Iliotibial Band (ITB) Syndrome can also produce inflammation and pain in and around the knee.

• Leg injuries–Shin splints or medial tibial stress syndrome is a cumulative but painful condition resulting from too much force being placed on the shinbone (tibia) and surrounding tissues.

• Ankle injuries–Sprains vary in severity but typically result in pain, swelling and bruising. Achilles tendonitis is a painful inflammation in the back of the ankle, which if left untreated, can lead to a ruptured tendon.

• Foot injuries–Plantar fasciitis, which can cause sharp pain or a dull ache in the bottom of the foot near the heel or in the arch, is typically caused by poor foot structure, inadequate running shoes or a sudden increase in the distance run. Improper shoes and downhill running can also cause painful runner’s toe.

The good news is that these injuries are treatable, but more importantly can be prevented or minimized by following some basic training guidelines and running techniques.

Kessler Institute for Rehabilitation offers the following tips:

• Invest in a good pair of running shoes. Running in worn out shoes is a prime cause of many injuries. Make sure to replace them after logging about 500 miles.

• Stretch regularly before and after a run to avoid tightening of muscles. Be sure to include stretches for the hips, thigh, hamstring, calf and ankle, as well as the back.

• Perform warm up exercises such as light jogging or sprinting prior to engaging in a full run.

• Include cross training in your overall exercise regimen to help strengthen a wide range of muscles. Consider activities such as weight-training, swimming, calisthenics or those exercises that use muscles in slightly different ways.

• Avoid overtraining–and over-exertion. Doing too much, too soon and too quickly can lead to injuries.

A good approach for beginners may be to start with a run/walk technique, alternating 30

seconds of running with 30 seconds of walking for about 20 to 30 minutes, three times a week. Gradually, increase the length of running segments while keeping them at a manageable pace.

- Stay hydrated especially in warmer weather. Drink at least 12 ounces of water 10-15 minutes before running and every 20 minutes during.
- Run on smooth, even and softer surfaces whenever possible. For example, asphalt roads are a better choice than concrete sidewalks.
- Watch for the warning signs of injury. If experiencing pain or swelling, stop running and seek medical attention. Depending on the type and extent of injury, treatment may include RICE–Rest, Ice, Compression and Elevation; taking anti-inflammatory medication (aspirin or ibuprofen); and taking time off from running.