

## GUIDELINES FOR INJURY PREVENTION

1. **BEGIN SLOWLY:** Start with a basic program that you are comfortable with. Consider distance, time and intensity.
2. **PROPER SHOES:** Purchase a good pair of supportive walking or running shoes that are designed for your foot and body type. Seek out a knowledgeable sales representative at a specialty retailer. It will be well worth the effort.
3. **PROGRESS GRADUALLY:** Progressively increase your walking or running program in a gradual manner. This means monitoring increases in pace, time and/or distance, and surface. Make advancements in 10% increments each week.
4. **LISTEN TO YOUR BODY:** Do not try to train through a present or potential injury. Making it hurt worse *does not* help it get better.
5. **TERRAIN:** Be aware of the trail or surface you are walking or running on. Watch for uneven surfaces, holes, rocks, steep slope, etc.
6. **WARM UP AND COOL DOWN:** Properly warm up and stretch your muscles before beginning to walk or run each day. Then stretch again after your walk/run. Proper stretching is key!
7. **STRETCH:** Focus on your hamstrings, 2 muscles in your calf, quadriceps, and inner thighs.
8. **CLOTHING:** Dress appropriately for changing weather conditions – hot / cold / rain. Dress as though it is 10 degrees cooler than it actually is.
9. **HYDRATE:** Properly hydrate your body before, during and after you exercise. Carry water with you if possible.

## SYMPTOMS OF A PENDING INJURY

- Increased pain (localized or general). Pain with palpation (rubbing) of the area.
- Redness, warmth and/or swelling
- Decreased tolerance to activity with a potential impact on activities of daily living.

## TREATMENT

- **ICE:** Apply ice or a cold pack to the area for 10-15 minutes. (Cover the skin with a thin towel to prevent an ice burn).
- **BACK OFF:** Reduce the duration/distance and intensity of your workout to a sub-painful level.
- **REST:** Take a couple of days off if needed to rest the area.
- **STRETCH:** Gently stretch the area, but not to the point of pain.
- **DOCTOR:** Seek medical attention if the problem persists.
- **SHOES:** Check your shoes for proper fit or wearing. Specialty retailers can often help.

## COMMON INJURIES TO WATCH FOR:

**GENERAL MUSCLE SORENESS** – Frequently, after starting an exercise program, a person will experience general body aches and muscle soreness. This is due to the usage of muscles in a not-so-familiar manner. This discomfort is often referred to as Delayed Onset Muscle Soreness (DOMS). This pain is usually a generalized ache associated with movement. Exercise soreness should resolve itself as exercise continues and the body adapts to the increased stresses. Be cautious not to continually increase the level of intensity without rest. Give the body time to catch up. Pain that is sharp and localized in its nature could be associated with the onset of an injury. Pain that is associated with an injury will usually increase in intensity with activity. Consult a physician if injury pain does not resolve in a timely manner.

**SHIN SPLINTS** – This is an inflammation of the muscles that attach to the front of the shin. Pain is usually felt along a general area approximately 6 inches long on the inside or sometimes outside portion of the shin. Stretching the calf muscles and getting support in the arch to prevent pronation are usually helpful. If the area of pain is more of a localized point tender area, consider the possibility of a stress fracture.

**PAIN AROUND THE KNEE** – Pain around the knee is most commonly associated with dysfunction of the knee cap (patella). Pain around the outside of the knee can be caused by rubbing of the Iliotibial band over the bottom of the femur (thigh bone). Many of these conditions are caused by muscular strength and flexibility imbalances. Poor foot positioning and inadequate arch support can also be associated with these conditions. Proper stretching of the major lower-extremity muscle groups (quads/hamstrings/calves) as well as the Iliotibial band can be helpful. It may be necessary to acquire orthotic inserts to help adequately support the foot and prevent excessive pronation during walking and running activities.

**ACHILLES TENDONITIS** – Inflammation of the lower calf region near the muscle's insertion into the heel. This is commonly caused by tight calf muscles and an excessively accelerated program. Placing a heel lift in your shoe helps take tension off of the tissues. Use Ice and gentle stretching.

**PLANTAR FASCIITIS** – Inflammation of the plantar fascia that lies on the bottom of the foot. Pain usually runs along the bottom of the foot. It is often most noticeable upon waking in the morning and taking the first several steps. Usually will feel better when using shoes with good arch supports. Pump your ankles before getting out of bed to help as well.

**BLISTERS** – Tenderness and fluid build up under the skin resulting from friction, usually between due to shoes and socks rubbing against your skin. Causes include poor-fitting shoes/socks, faster pace, foot abnormalities (bunions, heel spurs, hammertoes, etc.) Use a sterile needle to pop and drain a large blister. Gently drain fluid near the hole with clean hands and bandage to keep bacteria out. Correct the cause of the rubbing. Try new socks (blister-free) or shoes, or apply lubricating cream or Second Skin.

Check our First Strides Resource Book for more information about these ailments, or contact:  
Dr. Edward Schwartz, D.P.M. at Coordinated Health Services, Phone 610-861-8080  
Dr. Laura Dunne, M.D. at OAA Orthopaedic Specialists, Phone 610-973-6200