

You can prevent sports overuse injuries

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"Move it or lose it" the saying goes, but too much [exercise](#) or playing sports can lead to overuse injuries.

These injuries include damage to bones, ligaments, tendons and muscles due to repetitive actions, such [running](#), throwing, biking, [lifting](#) and swimming, to name a few.

An overuse injury can be the result of poor training techniques such as doing too much too fast; not warming up or cooling down; failing to take enough time to recover after exercise; or not doing the proper cross training to support the activity.

Shoulder impingement

Shoulder impingement is an overuse injury in the rotator cuff—the muscles and tendons that surround the shoulder joint. It is caused by "repetitive overhead activities while the [shoulder joint](#) is in a forward rotated position," said [Jessica Moyer](#), owner of Viva Stretch in Jacksonville, Fla., and a sport rehabilitation specialist for nearly 20 years.

According to the Hospital for Special Surgery in New York City, pain is usually felt when lifting overhead, and is most common in active adults in their 30s and 40s. In a hospital release, [Dr. Lawrence Gulotta](#), head of the shoulder and elbow division at the hospital's Sports Medicine Institute, says this type of injury often stems from poor technique and rushing when lifting weights.

How to prevent it: Moyer recommends strengthening the scapular, or shoulder blade, muscles. "This is important to keep the shoulder in the proper position to prevent injury," she said.

It's also important to "maintain a full range of motion in the shoulder," Moyer added. To stay flexible, be sure to warm up and be consistent with stretching.

IT Band Syndrome

The iliotibial band or "ITB" is a band of connective tissue that runs from the hip to just below the knee on the outside of the leg. When the load on that tissue exceeds its strength, the band tightens and pulls on the side of the knee, Moyer explained.

This overuse [injury](#) is common in runners and cyclists, but can also be found in other athletes. It starts with pain on the outside of the knee that builds during repetitive activity. It can be accompanied by clicking, popping or snapping sensations.

How to prevent it: Moyer offers this advice: "Focus on hip and core strengthening while also maintaining flexibility of the hip flexor, piriformis (a pear-shaped [muscle](#) located in the gluteal region of the hip/proximal thigh) and hamstring muscles."

Runner's knee

Runner's knee occurs when "the kneecap is pulled in the wrong direction by [muscle tightness](#), causing the kneecap to rub over the bone behind it," Moyer said. The pulling is often caused by tight hip flexors, hamstring or ITB muscles, she said.

It brings dull pain around the front of the knee and sometimes is accompanied by weakness in the knee cap, according to Johns Hopkins Medicine. Rubbing, grinding or clicking in the knee cap may also be experienced.

How to prevent it: Proper warmup and stretching of the hip flexor muscles, ITB and hamstring muscles before and after repetitive activities such as running and biking is a must. Moyer noted that strengthening the

quadricep muscles will help keep the kneecap in proper alignment during repetitive exercise.

Shin splints

Medial tibial stress syndrome, commonly known as "shin splints," is an [overuse injury](#) with symptoms in the tibia, the large bone in the lower leg. It is aggravated "by tightness in the calf muscles, which pull on the shins when running or jumping," Moyer said. It is common among runners and dancers.

Shin splints cause pain and tenderness on the shin bone. More severe cases will be accompanied by swelling and can lead to stress fractures if left untreated, according to the Mayo Clinic.

How to prevent it: Stretching is key, Moyer said. Stretch the calves—"both the gastrocnemius muscle with the knee straight and the soleus muscle with the [knee](#) bent"—before and after strenuous activities such as running and jumping, she recommended.

In addition, the Mayo Clinic says proper footwear is important as are training techniques such as slowly increasing in frequency and intensity of activity.

Plantar fasciitis

Like shin splints, plantar fasciitis results from tightness in the calf muscles, Moyer said. "It can also be a result of improper footwear, limitations in the mobility of the big toe, and weaknesses in the ankles, knees and hips," she added.

The plantar fascia connects the heel bone to the toes and supports the

arch of the foot. Overuse can lead to inflammation and pain in the heel, according to Johns Hopkins Medicine.

How to prevent it: It's important to maintain flexibility in the foot and the ability to fully extend the big toe at the joint, Moyer advised. Proper footwear and proper training techniques are also important.

How to avoid overuse injuries

Moyer offered these tips:

- Warm up properly before exercise and cool down properly after—and be consistent about it.
- Allow the body time to recover after an intense workout.
- Make cross training a part of a workout routine.
- Gradually ramp up on exercise frequency and intensity.
- Stay hydrated by drinking plenty of water.
- Always listen to your body.

Overuse injuries come in many forms and can be very painful. They can also hinder performance. Fortunately, they can easily be prevented with proper care and good form.

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