

8 Running Injury Prevention Tips

By [Ashley Crossman](#) • For [Active.com](#)

Running injury prevention is a very important topic, especially if you are training for longer distances like a half or full marathon. There is no one reason why runners get injured, but there is a pretty consistent interaction of factors that play a role in most runner injuries. Factors commonly recognized include muscle weakness, inadequate flexibility, training errors, poor or incorrect running shoes, and poor or abnormal biomechanics.

Knowing how to train properly and safely is crucial to staying injury-free. Here are some ways you can stay injury-free.

Build Mileage Gradually

Probably the number one cause of running injuries is when runners do too much, too soon, too fast. The body needs time to adapt from training changes and jumps in mileage or intensity. Build your weekly training mileage by no more than 5 to 10 percent per week. For example, if you follow the 5 percent rule and run 10 miles the first week, do just 10.5 miles the second week, and so on. If you are recovering from an injury or are brand new to running, it is best to stay close to the 5 percent limit or you'll run the risk of injury or re-injury. More experienced runners who have no history of injuries can safely train closer to the 10 percent limit.

Listen to Your Body

Most running injuries don't erupt from nowhere and blindside you. They produce signals—aches, soreness, and persistent pain—but it's up to you to listen to them and take appropriate action. Plain and simple: If something hurts, do not run. As soon as you start to feel an injury coming on, stop running and rest for a few days. Once the pain is completely gone, you can slowly resume running.

At the first sign of an atypical pain (discomfort that worsens during a run or causes you to alter your gait), take three days off. Substitute light walking, bicycling, or another cross-training activity if you want. On the fourth day, run half your normal easy-day amount at a much slower pace than usual. If your run is pain-free, you can try running a little farther the next day. If you are still pain-free, continue easing back into your normal routine. If not, take another three days off, then repeat the process to see if it works the second time around. If not, you've got two options: Take more time off, and/or schedule an appointment with a sports medicine specialist.

Strength Training

Strength training helps to keep your body properly aligned while you are running. It is particularly important to strengthen the core and the hip muscles. When you strengthen the hips—the abductors, adductors, and gluteus maximus—you increase your leg stability all the way down to your ankles while also helping to prevent knee injuries.

You don't want to train for bulging muscles. You need just enough core, hip, and lower-leg strength training to keep your pelvis and lower-extremity joints properly positioned. If you don't have muscle balance, then you lose the symmetry, and that's when you start having problems.

Stretching

Stretching should be an important component to any runner's routine. Runners tend to be tight in predictable areas (most notably the hamstrings and calf muscles) and in turn, they get injured in and around those areas.

Do not do static stretches (holding an elongated muscle in a fixed position for 30 seconds or longer) before running. Stretching is best done after a warm-up period of 10 to 15 minutes after your muscles are warm, or at the end of your workout.

An important note about stretching after long runs (longer than 15 miles): Do not stretch immediately following your run. Your muscles have hundreds of micro-tears in them and stretching them could turn some of these into macro-tears, causing significant damage. Instead, cool down, take a shower, eat a good meal and drink plenty of fluids. Then it is okay to stretch later in the day.

There are a few rules when it comes to stretching. First, pain is never acceptable. Stretching should be comfortable and relaxing, never painful. If something hurts, you're not in the right position or you've stretched too forcefully. Back off and check your position, then try again more gently. Second, move slowly into each stretch and don't rush it. Once in position, hold steady for about 30 seconds and do not bounce. Finally, be consistent. The more consistently you stretch, the more effectively you will be in increasing your flexibility. Stretching daily initially and later three times a week for maintenance is a good rule of thumb.

RICE

RICE stands for Rest, Ice, Compression, and Elevation. When you've got muscle aches or joint pains, these four things are best for immediate treatment. These measures can relieve pain, reduce swelling, and protect damaged tissues, all of which speed healing. The only problem with RICE is that too many runners focus on the "I" while ignoring the "RCE." Ice reduces inflammation, but to ice-and-run, ice-and-run, without giving the tissues enough time to heal, is a little like dieting every day until 6 p.m. and then pigging out. Special attention should be paid to the "rest" in RICE; do not run until the injury is healed.

RICE is most effective when done immediately following an injury. If you twist your ankle or strain your hamstring, plan to take a few days off from running. Apply ice for 10 to 15 minutes at a time, several times a day. If you can, elevate the area to limit swelling. Compression can also further reduce inflammation and can provide pain relief, especially when you first return to running. An ACE bandage is the simplest way to wrap a swollen area.

Cross-Train

Use cross-training activities to supplement your running, improve your muscle balance, and keep you injury-free. Swimming, cycling, yoga, Pilates, elliptical training, and rowing will burn a lot of calories and improve your aerobic fitness, but be careful not to aggravate injury-prone areas. If you are injured, let pain be your guide on which activities are okay.

Wear Properly Fitted Shoes

Shoes are the most important piece of equipment that you need to run, so having a pair that fits you properly is crucial to your running success. There is no one shoe that is right for every runner

and there is no shoe that is guaranteed to eliminate an injury. To find the right shoe for your feet, go to a specialty running store. The best running stores will watch you run and analyze your gait and stride to put you in the proper shoe. As a general rule, shoes should be replaced every 300 to 500 miles (depending on your size, weight, foot strike, and shoe type). Keep a training log to keep track of your shoe mileage and be sure to replace them when you hit the 300 to 500 mile mark.

Run on a Level Surface

Another factor that could have a significant impact on running injuries is road camber. No doubt you always run on the left side of the road facing traffic. That's good for safety reasons. But it also gives you a functional leg-length discrepancy, since your left foot hits the road lower on the slope than your right foot. You're also placing your left foot on a slant that tends to limit healthy pronation, and your right foot in a position that encourages overpronation. And you're doing this mile after mile, day after day, week after week, which could lead to hip injuries.

If you can, try to do some of your training runs on a level surface like a bike path or dirt trail. A local track also provides a firm, essentially flat surface that's great for slow-paced running. Also consider the treadmill – it's the perfect surface for balanced running. At the very least, a treadmill provides a great surface for beginning runners, runners who are recovering from an injury, and perhaps even marathoners aiming to increase mileage without increasing their injury risk.