

“Shin splints” is a term that refers to pain along the shinbone, which is below the knee and toward the front of the leg. Pain from shin splints can occur along either or both sides of the shinbone.

What causes shin splints?

Shin splints are generally caused by overload or overuse of the muscles in the lower leg, which results in pain in the connective tissues that attach the muscles to the shinbone. This overuse can come from activities such as running, dancing, tennis, aerobics, and other physical activities.

What is the treatment for shin splints?

- Rest the area by avoiding activities which cause pain or discomfort. Switch to low impact activities such as water exercise or bicycling until you're better.
- Ice the area with ice packs for 15 to 20 minutes several times per day. Make sure you wrap ice packs in a thin cloth to protect your skin.
- Elevate the affected shin above the level of your heart, especially at night, to reduce swelling.
- To alleviate pain, take an over-the-counter pain reliever such as ibuprofen (Advil, Motrin) or aspirin.
- Wear supportive shoes while you heal. Flip-flops are not considered supportive shoes.
- Arch supports or inserts for your shoes may help. Ask a health care practitioner if these may be right for you.
- Perform stretches and/or exercises that specifically target the lower legs. Some examples of these are listed below.

How can shin splints be prevented?

- Choose proper footwear for your foot. Overpronators should wear motion-control shoes. If you're not sure what type of foot you have, ask your health care practitioner.
- Consider arch supports or orthotics if you have flat arches or severely overpronate.
- Engage in activities that have less impact on some days. Examples are swimming, walking, bicycling, or water running.
- Try to do higher impact activities on soft surfaces, such as grass or dirt.
- At the first sign of shin discomfort or pain, take a break from the activity that is causing the pain. This can often prevent a case of shin splints from becoming problematic.
- Do regular stretches and exercises that target your lower legs. Some examples of these are listed below.

(Cont. on Back)



Stretches and Exercises

- Calf (gastrocnemius) stretch – Place your hands on a wall with right foot behind you. Keep right knee straight and heel touching the ground. Lean forward until you feel a stretch along your calf (you may have to move your right foot forward or back to get the proper stretch for you). Hold for 15-30 seconds, then switch legs.
- Achilles (soleus) stretch – Place your hands on a wall with your right foot behind you. Bend your right knee, and keep the right heel in contact with the ground. Lean forward until you feel a stretch along your lower calf. Hold for 15-30 seconds, then switch legs.
- Alphabet trace – Sitting in a chair, raise one foot and trace the letters of the alphabet in the air with your toes. Repeat with the second foot.
- Towel scrunches – Sitting in a chair, place a small towel on the floor in front of you. Beginning with your right foot and keeping the heel on the ground, scrunch the towel toward you with your toes. Spread the towel out again and repeat on the left. You can do this several times.
- Toe raises – Stand with one hand on the back of a chair for support. Rise up on your toes and hold for 1-2 seconds, then lower your heels to the floor. Do 2 sets of 10 repetitions.
- Toe taps – Sitting in a chair, raise your toes away from the floor and pull them back toward you while keeping your heels on the floor. Then lower the toes back down to the floor. Do 2 sets of 10 repetitions.
- Toe and heel walking – Walk around on your toes for 30 seconds, then walk normally for 30 seconds, then walk on your heels for 30 seconds. Repeat 3-4 times.

When should you see your health care practitioner?

If rest, ice, and over-the-counter medications don't alleviate your pain, you should schedule an appointment with your practitioner. Seek medical care right away if you have severe pain in your shin after a fall or accident, if your shin is hot and inflamed, if the swelling in your shin seems to be getting worse, or if your shin pain persists even during rest.

REFERENCES

- <http://www.mayoclinic.com/health/shin-splints/DS00271>
- <http://www.runnersworld.com/cda/toolscontent/0,7156,s6-241-290-291-529-0,00.html?toolName=What%20Hurts?>
- http://sportsmedicine.about.com/od/footandankleinjuries/a/ankle_rehab.htm