

# shin splints

## what are shin splints?

Shin splints can be defined as a pain response between the knee and ankle on the inside of the tibia (shinbone). The pain is a result of a stress overload on the tibia and the connective tissue that attach your muscles to the bone during repetitive activities.

## who is at risk?

- Children/adolescents who are participating in running sports (especially downhill or slanted surface), start/stop sports and jumping activities (i.e. volleyball, football, basketball, soccer, track, hockey, gymnastics, dance, etc.).
- Children/adolescents who have had improper training techniques and/or improper shoes or equipment.
- Children/adolescents who have flat feet.

## what are the symptoms?

- The child/adolescent will complain of tenderness, soreness or pain along the inner, front part of the lower leg/calf.
- The child/adolescent might have mild swelling in the front of the lower leg/calf.
- The child/adolescent could have limited knee range of motion because of pain.

## when to seek medical advice?

It is recommended to consult your doctor if your child/adolescent is in severe pain in their shinbone after a fall/accident, the leg is hot to touch, has more than mild swelling and/or the pain is intense at rest (non-weight bearing).

## what are the treatment options?

### Conservative/non-surgical treatment:

- Rest from aggravating activities or “relative” rest.
- Ice the area after activity and when painful for 10 to 20 minutes up to once a hour. Elevation and compression of the ankle will assist with decreasing swelling/edema.
- Muscle stretching to improve flexibility.
  - Stretching should be done both before and after activity.
  - Concentrate on the gastrocnemius/soleus (calf) stretching, anterior tibialis (front of calf) and active movement of the ankle in all directions.
- If the condition does not improve, a referral to physical therapy to address pain, swelling, range of motion, flexibility, strength, gait, bracing and a return to sport training program will usually improve symptoms.
- Shin splint bracing can help alleviate the pain during activities.

### Surgical treatment:

Surgery is not needed.

## what is the time frame for returning to activity/sport?

Relative rest for four to six weeks may be needed if the patient’s symptoms persist.



Front of Leg