

## Shin Splints (Medial Tibial Stress Syndrome)

### Background

- Medial Tibial Stress Syndrome (MTSS) is commonly referred to as shin splints
- It is a chronic musculoskeletal condition that affects the lower leg
- Most individuals notice it as pain in the lower leg after running and jumping

### Cause

Shin splints comprises multiple lower leg injuries that are located in the lower leg compartment and are caused by:

- Repeated impacts from running and jumping
- Flat feet with weak intrinsic foot muscles
- Feet with excessively high arches
- Improper footwear and hard running surfaces
- Rapid changes in physical activity frequency

### Susceptible Populations

Shin splints commonly occur in the populations listed below:

- Individuals in year-round sports
- Participants in high-impact activities (cross-country, basketball, soccer, and track)
- Individuals with an increased body mass index (BMI)

### Signs and Symptoms

Common symptoms of shin splints include:

- Pain originating in the front shin during or after physical activity
- Pain during the touch-down phase of running or jumping
- Tenderness of the inner or outer musculature of the lower leg

### Prevention and Rehabilitation

Treatment options for shin splints involve:

- Temporary rest and application of ice to control symptoms of pain
- Custom orthotics to support the arches of the affected feet
- Physical therapy to strengthen the intrinsic muscles of the foot
- Gradual exposure to activities and maintaining proper work-rest ratios

### Consulting a Physician

Pain associated with shin splints is similar to the pain felt with stress fractures of the tibia, so an individual experiencing these symptoms may want to consult an orthopedic physician to rule out this possibility.



Contact MarinHealth  
Orthopedic Physician  
Dr. Eric Bava to schedule  
an appointment.

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