



## Navicular Stress Fracture

**HEALTHY  
FOOT**



Navicular



Cuneiforms

Navicular

Cuboid

Calcaneus

Talus



Stress  
fracture

### Overview

This condition is an injury to the navicular, one of the tarsal bones of the midfoot. This type of injury is common in athletes, particularly those who participate in high-impact sports that require jumping, sprinting and sudden directional changes. Track and field athletes are particularly susceptible.

### Causes

Navicular stress fracture is caused by repetitive stress on the navicular. Stress fracture can develop because of structural abnormalities of the foot, low bone density, improper athletic conditioning, and as a result of using athletic equipment that is worn out or fits poorly.

### Symptoms

Symptoms include an aching pain in the midfoot that increases with activity and resolves with rest, tenderness when the navicular is pressed during an exam, and mild swelling of the midfoot. Diagnosis of a navicular stress fracture typically requires CT and MRI scans, but in some cases it can be seen with an x-ray.

### Treatment

The treatment for this type of fracture is a short leg cast and crutches for six to eight weeks. In some cases, surgery may be needed to stabilize the navicular with a screw. A bone stimulation device may also be used to help the fracture heal.