

Stress fracture

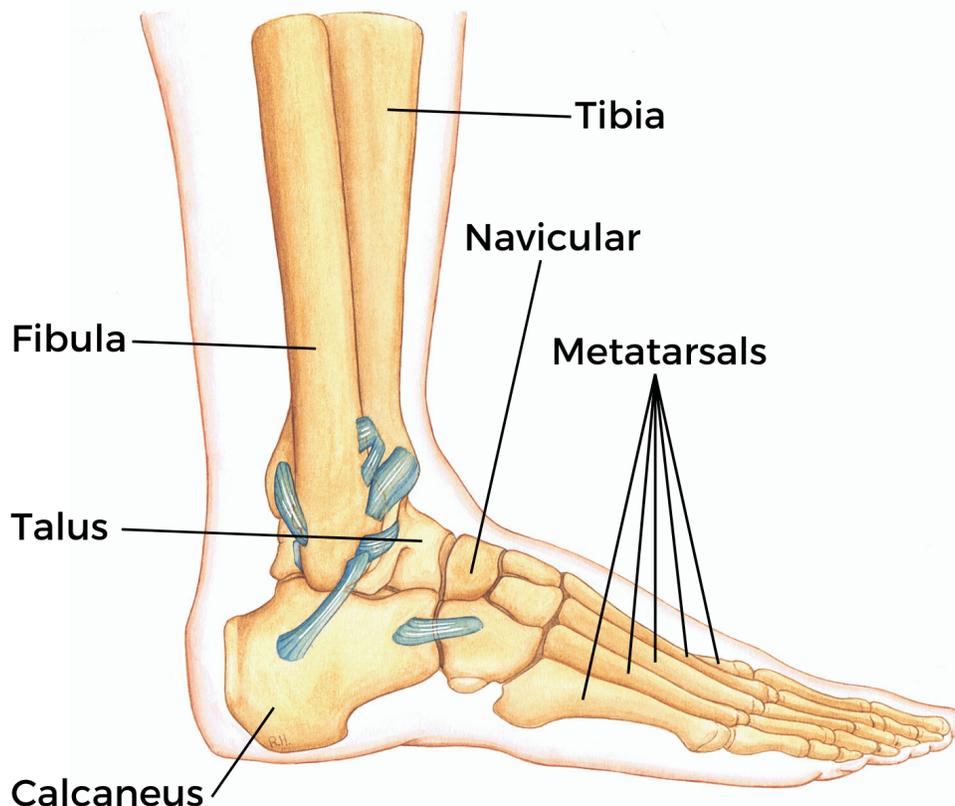
A stress fracture is an overuse injury. This type of fracture is defined by a tiny crack in the bone, mainly caused by repetitive forces over time.

This condition affects mainly people that are involved in activities such as walking, running or jumping, where the lower body must absorb the bodyweight. Stress fractures can also develop from the normal use of a bone that's weakened by a condition such as osteoporosis.

Generally, this injury happens when training intensity and/or volume is increased too quickly with inadequate recovery. Starting a new activity, modifying the training surface and quickly transitioning to a new type of inadequate training shoes are among the risk factors.

Structures involved

A stress fracture is most commonly seen in the weight-bearing bones of the lower leg and foot. **Metatarsals**, which are five long bones between the center of the foot and the toes, are the most affected. Stress fractures are also common in the **calcaneus**, the **talus**, the **navicular**, the **tibia** and the **fibula**. The stress fracture generally occurs at the base or center of the bone.



Signs & Symptoms that you may experience

Everyone will react differently after an injury and recovery will depend on the severity. A stress fracture can cause but is not limited to, pain and difficulty in weight-bearing activities and localized swelling.

Recovery

Your rehabilitation plan, your health status, your fitness level and your nutrition affect recovery time. Generally, you can expect to fully recover from a stress fracture. Typically, this type of fracture heals within four to eight weeks.

► WHAT TO DO

Early-stage

Relative rest is a good way to protect your bone against further damage. Initially, limiting pain-provoking activities is necessary. Then, progressive return to weight-bearing during your activities of daily living, non-painful light cardiovascular exercises and therapeutic exercises will allow better recovery.

In the presence of a stress fracture, it's important that physical activities, such as training, for example, are performed below the pain threshold.

Rehabilitation

Follow your practitioner's advice. It will help you manage the different phases of the recovery process and will increase the likelihood of successful rehabilitation. Your practitioner will assist you during your rehabilitation program in order to regain your normal range of motion, strength and endurance, balance and pre-fracture functional status.

As per the principles of rehabilitation for stress fractures, reducing impacts is one of the main elements of functional recovery. In most cases, temporarily modifying training to focus on non-weight-bearing activities such as biking or swimming can help maintain your training level while allowing optimal bone recovery.

► WHAT TO AVOID

Avoid returning too quickly to running or activities that caused the fracture. A stress fracture can lead to a more important fracture if pain signals are ignored. People that reduce the volume of high-impact activities typically recover faster.
