



**DES MOINES  
ORTHOPAEDIC SURGEONS, P.C.**

---

**DMOS – West**  
6001 Westown Parkway  
West Des Moines, IA 50266  
**515-224-1414**  
**800-245-6129**

**DMOS – East**  
Penn Medical Plaza  
1301 Pennsylvania Ave., Suite 213  
Des Moines, IA 50316  
**515-263-9696**  
**800-688-3980**

**DMOS – Carroll**  
405 S. Clark St., Suite 250  
Carroll, IA 51404  
**712-792-2093**  
**877-284-1428**

Sprains, Strains, and other Foot Injuries

R. D. Lee Evans DPM

Des Moines Orthopaedic Surgeons, PC

Anyone who watches sports on television, is familiar with commentators talking about sports injuries and speculating on the amount of time the athlete maybe be sidelined. Sprains, strains, tendon tears and fractures have different recovery times based on the anatomical location involved. A sprain by definition is a stretching or tearing of a ligament. Ligaments are structures that attach one bone to another. Common sprains in the foot and ankle include: lateral ankle sprains, midfoot sprains, and plantar fasciitis.

Lateral ankle sprain or the typical ankle sprain may keep an athlete out of action anywhere from a few minutes to a few months depending on the particular ligament involved. Certainly the most devastating of the ankle sprains is the high ankle sprain. The ligament involved is the anterior inferior tibiofibular ligament. Often times when this ligament is torn, a screw needs to be inserted to stabilize the bones and must be removed before weight bearing can begin.

Another one the more devastating sprains is the midfoot sprain. This sprain occurs at the top of the arch or the foot. The arch of the foot is stable and strong when functioning normal. However, when injured can cause significant deformity and chronic pain and arthritis if not treated properly. Midfoot sprains, when severe, require 10- 12 weeks of non-weight bearing and in some cases screws need to be inserted to stabilize the foot in the proper position while the ligament heal.

Certainly the most common of sprains is Plantar Fasciitis. The plantar fascia is a strong ligament that attaches to the bottom of the heel bone. This ligament can be damages by acute injury such as landing hard on the heel but more commonly is a condition that starts after a rapid increase in athletic activity over a relatively short period of time. The hallmark symptom of plantar fasciitis is pain in the heel upon first rising in the morning or after rest. Plantar fasciitis is treated with arch support, icing the heel, rest, anti-inflammatory medication such as ibuprofen and in some cases, cortisone injections.

Strains usually relate to tendon injuries. Tendon as an anatomical structure, attaches muscle to bone. Tendons can tear or rupture acutely or can be damages from overuse. When tendonitis occurs from

overuse, the treatment is based on the R.I.C.E principle. Rest, ice, compression, and elevation followed by slow and sensible reintroduction of the activity. Tendonitis that does not resolve with conservative therapy, or if the tendon injury is acute, should be evaluated by a physician.

The most common tendon injury in the foot is the Achilles Tendon. This tendon carries the load of the body every step and is considered the strongest tendon in the body. Injury to this tendon can be particularly debilitating and requires immediate attention and repair if ruptured. Ruptured Achilles tendon repair can remove an athlete for 6-12 months.

Certainly this article is not a complete list of all potential sprains and strains that can occur in the foot but only served to illustrate the unique nature of injuries of the foot and that not all injuries heal the same. Proper treatment of foot related injuries require first an understanding of the anatomical location and mechanism of injury. Certainly, sprains and other injuries that do not respond quickly to conservative treatment may benefit from professional evaluation to help with the healing process.

Dr. Evans is a Board Certified Podiatrist at Des Moines Orthopaedic Surgeons, 6001 Westown Parkway in West Des Moines, IA. Dr. Evans also provides satellite clinic services at Urbandale Family Physicians in Urbandale. If you have questions for Dr. Evans or wish to schedule an appointment please call 515-224-5224.