



U.S. Soccer Federation

# **Soccer Players 10 Most Common Foot Injuries: Causes, Treatment & Prevention**

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## 1. Foot Blisters or Hot Spots

- Hot spot is irritated skin that is a precursor to a blister
- A blister is a fluid filled skin irritation caused by friction from a shoe
- Fluid may be clear or bloody
- Usually forms on the back of the heel

### Treatment:

- Treat hot spot as soon as it occurs to avoid blistering
- If blister occurs, avoid popping the blister if possible
- Clean with soap and water and protect with bandage
- Eliminate cause such as ill-fitting shoe

### Prevention:

- Proper fitting shoes to avoid friction

## 2. Toenail Injury

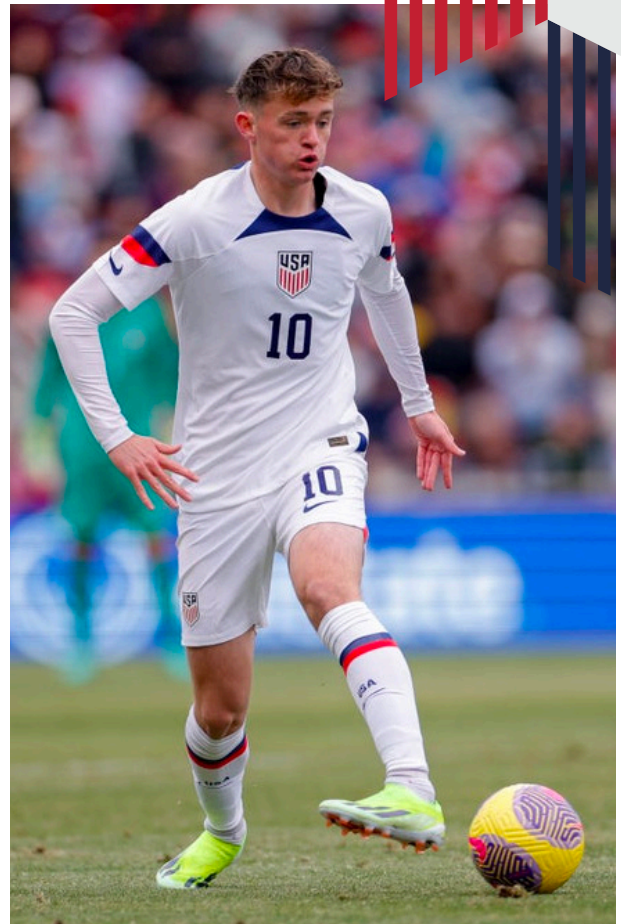
- Blood under the toenail (subungual hematoma) or loose toenail (onycholysis)
- Toenail may elevate off the nailbed, have blood beneath the nail, or even fall off
- Usually caused by shoes that are too tight or constantly jamming the big toe against the top of the shoe

### Treatment:

- Avoid poor fitting shoes
- See a Podiatrist to have toenail removed if there is blood beneath the toenail or if toenail is extremely loose
- Occasionally an antibiotic is needed if there are signs of infection

### Prevention:

- Good shoe fit with adequate room in the toe-box



## 3. Turf Toe

- A sprain of the big toe joint, usually a sudden injury
- Caused by jamming the big toe joint during a push off when running or jumping
- Other causes include hyperextending the big toe joint when tackled or if the foot gets caught on the field
- More commonly happens on turf, where cleats are likely to stick and cause jamming of the great toe joint. Injury is less likely on grass

### Treatment:

- X-ray and physical exam by doctor
- Rest of the foot and immobilization in a walking shoe or boot for 2-3 weeks. Crutches are sometimes needed
- Physical Therapy
- In severe cases, surgery is recommended

### Prevention:

- Shoes with good support or insoles to prevent excessive flexion of the great toe joint

## 4. Plantar Fasciitis

- Pain on the bottom of the heel, especially first thing in the morning or after rest
- Pain usually decreases with activity
- Tight or inflamed connective tissue (plantar fascia) on the inside of your arch that connects to the heel bone
- Caused by flat feet (overpronation), new shoe gear, or increased activity level. Usually NOT caused by a direct injury

### Treatment:

- X-ray and physical exam by doctor to rule out other problems such as fracture or tendon tear
- Stretching, foam rolling, ice, and anti-inflammatory medications
- Arch supports in shoes or better fitting shoes
- Athletic tape
- Physical therapy and massage
- Rest and Ice

### Prevention:

- Good supportive shoes and orthotics
- Daily stretching of plantar fascia and Achilles tendon (they are connected!)
- Roll out the foot and Achilles tendon before and after workout
- Avoid barefoot walking

## 5. Achilles Tendonitis

- Pain in the back of the heel or leg
- A tight Achilles tendon is caused by poor stretching, improper warmups, over-use, over-training, and/or poor shoe gear

### Treatment:

- X-ray and physical exam by doctor to rule out other problems such as fracture or tendon tear
- Stretching, foam rolling, ice, and anti-inflammatory medications
- Heel lift in the shoe and better fitting shoes
- Athletic tape
- Physical therapy and massage
- Rest and Ice
- In severe cases, immobilization with CAM walking boot
- Severe cases of Achilles tendonitis can lead to Achilles tendon rupture if not treated

### Prevention:

- Good supportive shoes and orthotics, heel lift if necessary
- Daily stretching or foam rolling of Achilles tendon and plantar fascia (they are connected!)
- Roll out the Achilles tendon after workout to avoid tightness

## 6. Calcaneal Apophysitis (“Sever’s Disease”)

- Pain in the heel bone that gets worse with activity
- Caused by inflammation of the calcaneal (heel bone) growth plate
- Only seen in adolescents or children, usually during a growth spurt
- The muscles and tendons grow at different rates than the bones, the tendons become tight and pull on the growth plate causing pain and inflammation

### Treatment:

- X-ray and physical exam by doctor to rule out other problems such as fracture or tendon tear, and to evaluate growth plate on x-ray
- Gel heel cups
- Ice and anti-inflammatory medications
- Rest from sports until pain resolves

- Compression ankle brace
- Physical Therapy
- Severe cases may require CAM boot immobilization or casting

### Prevention:

- Wear shoes that fit well and have a good heel pad
- Stretch before and after all practices and games
- Maintain a healthy weight
- Ice the heel after activity
- Use special shoe insoles

## 7. Metatarsal Fractures

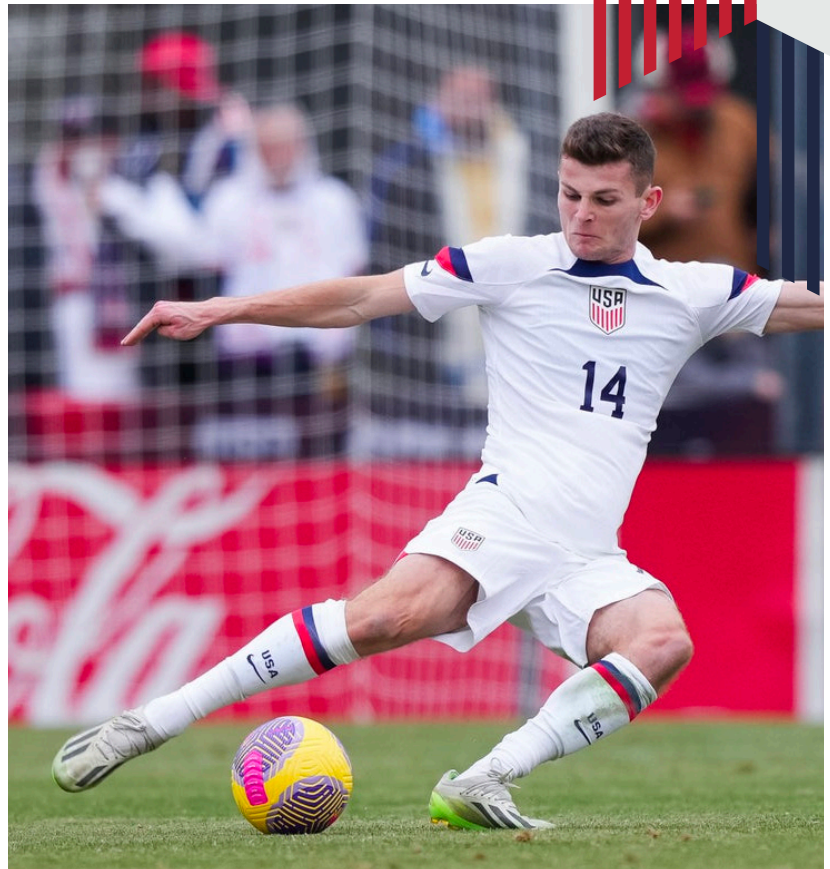
- Fractures that occur in the long bones of the foot
- Caused by direct impact or acute twisting of the foot on an uneven field or from a fall or tackle

### Treatment:

- X-ray and physical exam by doctor
- CAM boot or cast immobilization
- Usually out of sport for 2-3 months depending on severity of injury
- If fracture is displaced or if dislocation occurs, surgery may be required

### Prevention:

- Good supportive shoes that fit well
- Participate on good playing surface



## 8. Jones Fracture

- Fractures of the base of the 5th Metatarsal bone, on the outside of the foot
- Caused by putting increased pressure on the outside of the foot as the foot gets twisted, usually with the heel lifted
- Other causes include direct impact or tripping and twisting of the foot in an uneven field, or uneven landing from a jump

### Treatment:

- X-ray and physical exam by doctor
- CAM boot or cast immobilization
- Surgery is usually recommended for athletes
- Usually out of sport for 2-3 months depending on severity of injury and surgical procedure

### Prevention:

- Good supportive shoes that fit well
- Participate on good playing surface

## 9. Stress Fractures

- A hairline fracture that can occur in the foot or leg bones
- Causes include overuse, overtraining, repetitive injuries, poor training surface, insufficient nutrition, low Vitamin D, decreased bone density, and menstrual irregularity in female athletes

## Treatment:

- X-ray, Bone Scan ,or MRI, and physical exam by doctor
- CAM boot or cast immobilization
- Rest
- 6-8 weeks out of sport
- Check Vitamin D levels, especially in female athletes. Doctor to treat if Vitamin D is low

## Prevention:

- Wear proper and supportive shoes/cleats
- Allow body to recover between training sessions
- Change shoe gear for different training surfaces
- Incorporate strengthening exercises into training routine
- Balanced nutrition with sufficient calcium with vitamin D
- Maintain a healthy weight and avoid excessive weight loss
- Monitor female athletes for menstrual irregularity or amenorrhea

## 10. Ankle Sprains (see Ankle Injury from US Soccer Recognize to Recover)

- The MOST COMMON injury seen on the soccer field
- Caused by a stretching or tearing of ankle ligaments when a player is running, cutting, coming down from a jump, is tackling or tackled

## Treatment:

- Rest, Ice and Elevate (RICE)
- Compression wrap or ankle brace
- Anti-inflammatory medications
- If ankle sprain is severe, X-ray and physical exam by doctor to rule out fracture
- Physical therapy
- Occasionally CAM boot immobilization is necessary with severe ankle sprain
- If pain does not improve with time, doctor may recommend MRI study to rule out ankle ligament tear

## Prevention:

- Good supportive shoes
- Avoid uneven playing surfaces
- Dynamic warmups before practice and games

