

Health Information

Home

GO

Medical Library

- [Drug Information Center](#)
- [Health A-Z](#)
- [Conditions Centers](#)
- [Conditions InDepth](#)
- [Procedures A-Z](#)
- [Medical Dictionary](#)

Cool Tools

- [Videos & Animations](#)
- [Health Calculators](#)
- [Anatomy Navigator](#)
- [Conditions Navigator](#)

Wellness Centers

- [Aging and Health](#)
- [Alternative Health](#)
- [Diet Center](#)
- [Disease Management](#)
- [Emotional Health](#)
- [Food and Nutrition](#)
- [Health Myths](#)
- [Healthcare Information](#)
- [Kids' and Teens' Health](#)
- [Men's Health](#)
- [Physical Fitness](#)
- [Recipes](#)
- [Sexuality and Health](#)
- [Travel and Health](#)
- [Women's Health](#)

Natural & Alternative Treatments

- [Herbs and Supplements](#)
- [Alternative Therapies](#)
- [Functional Foods](#)
- [Homeopathy](#)

Current Health Reports

Types of Foot Pain

by Ricker Polsdorfer, MD

[En Español](#)

Foot pain may occur in any part of your foot, including:




- [Toe](#)
 - Corns and calluses
 - Bursitis of the toe
 - Ingrown toenail
 - Bunions
 - Hammertoes
- [Forefoot](#)
 - Interdigital (between the toes) neuromas
 - Stress fracture
 - Sesamoiditis
 - Metatarsalgia
- [Midfoot](#)
 - Tarsal tunnel syndrome
 - Excessive pronation
- [Heel](#)
 - Plantar fasciitis
 - Heel spurs
 - Haglund's deformity (pump bump)
 - Achilles tendinopathy (tendinitis and tendinosis)
- [Arch and bottom of the foot](#)
 - Flat feet
 - Abnormally high arches

Toe Pain

[Corns and Calluses](#)

[Corns and calluses](#) are thickened layers of skin that are caused by irritation. The skin is usually cone-shaped and has a knobby core, which points inward. This core can put pressure on the underlying thin skin and cause sharp pain. Corns can develop on top of or between your toes. Soft corns develop between your toes, where they are kept pliable by the moisture from perspiration. Calluses develop on the bottom of your foot. Corns and calluses develop as a result of friction from the toes rubbing together or against the shoe.

A Corn

[Health Library Home](#)

[Toe Pain](#)

[Forefoot Pain \(Front of the Foot\)](#)

[Midfoot Pain](#)

[Heel Pain](#)

[Arch and Bottom-of-the-Foot Pain](#)

[En Español](#)

[Main Page](#)

Types of Foot Pain

[Risk Factors](#)

[Symptoms](#)

[Diagnosis](#)

[Treatment](#)

[Screening](#)

[Reducing Your Risk](#)

[Talking to Your Doctor](#)

[Living With Foot Pain](#)

[Resource Guide](#)



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Corns are a result of:

- Shoes, socks, or stockings that fit too tightly around the toes
- Pressure on the toes from high-heeled shoes
- Shoes that are too loose
- Deformed and crooked toes

Calluses are a result of:

- Poorly fitting shoes
- Walking regularly on hard surfaces
- Flat feet

Note: If you have diabetes, the presence of calluses is a strong predictor of ulceration, particularly if you have a history of foot ulcers. Contact your doctor.

[Bursitis of the Toe](#)

[Bursitis](#) is an inflammation of the fluid filled sacs that protect your toe joints, particularly the big toe. It often occurs as a result of irritation from rubbing.

[Ingrown Toenails](#)

Ingrown toenails can occur on any toe, but are most common on the big toe. They usually develop when tight-fitting or narrow shoes put too much pressure on the outside of your big toe. This forces the nail to grow into the flesh of your toe. Incorrect toenail trimming can also contribute to the risk of developing an ingrown toenail. Other conditions that can lead to ingrown toenails include:

- Fungal infections
- Injury to the toe
- Abnormalities in the structure of the foot
- Repeated impact on the toenail from the shoe during high-impact exercise

Bunions

A [bunion](#) is a painful swelling that usually occurs at the head of one of the long bones (metatarsal bones) of the big or little toe, which extend from the arch of the foot and connect to the toes. A bunion begins to form when the big or little toe is forced inward toward the rest of the toes. This causes the head of the metatarsal bone to jut out and rub against the side of your shoe. The underlying tissue becomes inflamed, and a painful swelling forms. Bone growth may occur at the site of irritation. The toe grows towards the rest of your toes at an increasing angle.



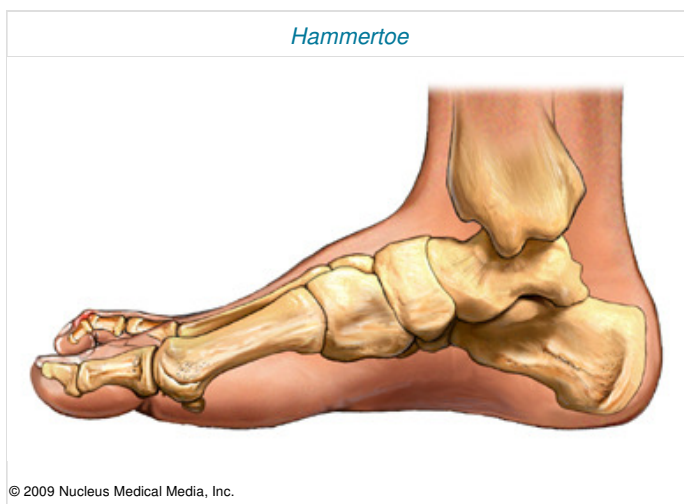
Bunions can be caused by a number of conditions:

- Narrow high-heeled shoes with pointed toes, which can put enormous pressure on the front of your foot
- Injury in the joint
- Genetics, which may play a role in 10%-15% of all bunions
- Other causes, including:
 - Flat feet
 - [Gout](#)
 - [Arthritis](#)
 - Occupations (such as ballet) that place unnatural stress on the feet

Hammertoes

A [hammertoe](#) is a permanent deformity of your toe joint. With hammertoe, your toe bends up slightly and then curls downward, resting on its tip. When forced into this position

long enough, the tendons of your toe contract and it stiffens into a hammer, or claw-like, shape.



A hammertoe is most common in the second toe. However, it may develop in any or all of your three middle toes if they are pushed forward in a shoe and do not have enough room to lie flat.

The risk of developing a hammertoe is increased if your toes are already crowded by the pressure of a bunion. Your chances also increase if you have diabetes or other diseases that affect the nerves and muscles of your feet.

Forefoot Pain (Front of the Foot)

Interdigital (Between the Toes) Neuromas

Neuromas occur when a nerve, or the tissue surrounding the nerve, becomes enlarged and inflamed. Symptoms are a burning or tingling sensation and cramping in the front of your foot. This condition can be caused by:

- Tight, poorly fitting shoes
- Injury
- Arthritis
- Abnormal bone structure

Morton's neuroma is the most common neuroma of the foot. It develops when the second and third or the third and fourth metatarsal bones (foot bones that lead to the toes) pinch the nerve that runs between them.

Stress Fracture

A stress fracture in your foot usually occurs in one of the five metatarsal bones (mostly the second or third). These fractures are caused by overuse during strenuous exercise, particularly running and high-impact aerobics.

A fracture in the first metatarsal bone, which leads to the big toe, is uncommon because of the thickness of this bone. If it occurs, however, it is more serious than a fracture in any of

the other metatarsal bones because it dramatically changes your pattern of normal walking and weight-bearing. Stress fractures do occur in other foot bones but are much less common than in the metatarsals.

[Sesamoiditis](#)

Sesamoiditis is a condition involving the sesamoid bones, which are small bones underneath the head of the first metatarsal bone (the bone that leads to the big toe). The sesamoid bones bear considerable weight, and sometimes a stress fracture occurs within the bone. Sometimes a part of the sesamoid actually dies due to high repetitive stress, and the bone may fragment. Often there is no clear-cut cause, but sesamoid injuries are common among people who participate in high-impact activities, such as ballet dancing, running, and aerobic exercise.

[Metatarsalgia](#)

When a cause cannot be determined, any pain on the ball of the foot is generally referred to as [metatarsalgia](#). It is most likely caused by improper footwear, particularly high heels, or by high-impact activities. People with a high arched foot are prone to develop metatarsalgia.

[Midfoot Pain](#) [TOP](#)

[Tarsal Tunnel Syndrome](#)

Tarsal tunnel syndrome results from compression of a nerve that runs through a narrow passage behind your inner anklebone down to your heel. It may be caused by injury to your ankle, such as a sprain or fracture, or by a growth that presses against the nerve.

[Excessive Pronation](#)

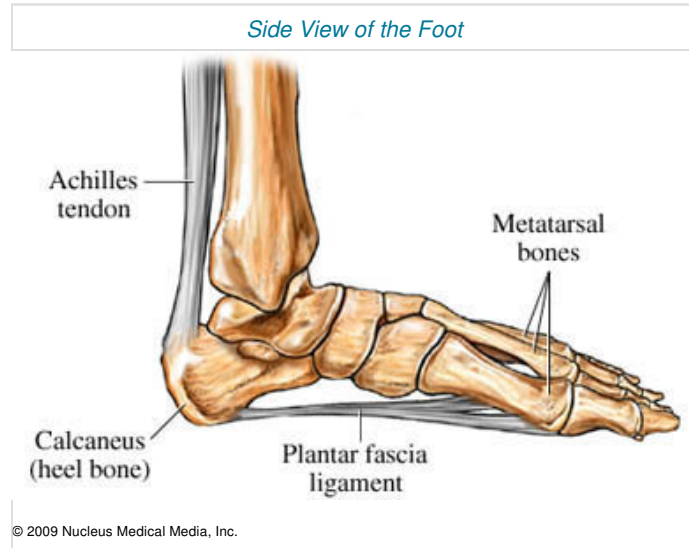
Pronation is the normal motion that allows your foot to adapt to uneven walking surfaces and to absorb shock. Excessive pronation occurs when your foot has a tendency to turn outward, flattening the longitudinal arch, and stretching and pulling the fascia. It can cause not only foot pain, but since it may affect the gait, it may cause secondary problems in the hip, knee, and lower back.

[Heel Pain](#) [TOP](#)

The heel is the largest bone in the foot. Heel pain is the most common foot problem and affects two million Americans every year. It can occur in the front, back, or bottom of the heel.

[Plantar Fasciitis](#)

[Plantar fasciitis](#) occurs from small tears and inflammation in the plantar fascia, a ligament-like structure that stretches from the heel to the ball of your foot. This band, much like the tensed string in a bow, supports the arch of your foot and helps to serve as a shock absorber.



Plantar fasciitis is usually a result of overuse during high-impact exercise and sports, especially running. Because the condition often occurs in only one foot, factors other than overuse may be responsible in some cases. Other causes of this injury include poorly fitting shoes or an uneven stride that causes a stressful impact on the foot.

Pain often occurs suddenly and mainly around the undersurface of the heel, although it often spreads to your arch. The condition can be temporary, but may become chronic if you ignore it. Resting usually provides relief, but the pain may return.

[Heel Spurs](#)

Heel spurs are bony growths that protrude from the bottom of the heel bone, and they are parallel to the ground. They are not like a needle sticking down into the foot. The spur occurs where the plantar fascia attaches, and the pain in that area is really due to the plantar fascia attachment being irritated. There is a nerve that runs very close to this area and may contribute to the pain which occurs. However, there are many people with heel spurs who have no symptoms at all.

[Haglund's Deformity \(Pump Bump\)](#)

Haglund's deformity is a bony growth on the back of the heel bone, which then irritates the bursa and the skin lying behind the heel bone. It is commonly called a "pump bump." It develops when the back of your shoe repeatedly rubs against the back of the heel, irritating the bursa and skin overlying the bone.

[Achilles Tendinopathy](#)

[Achilles tendinopathy](#) is degeneration of the tendon that connects your calf muscles to your heel bone. There are two common types of tendinopathy, tendinosis and tendinitis. Tendinitis is an inflammation of the tendon. Although the term tendinitis is used more often, tendinopathies are actually more

likely to be a tendinosis, with no inflammation. The tendon suffers excessive stress and then internal injury; a small area undergoes degeneration. Small internal tears may even develop. Achilles tendinopathy occurs primarily in those who engage in high-impact exercise, particularly running, racquetball, and tennis.

People at highest risk of this disorder are those with a shortened Achilles tendon. Such people tend to roll their feet too far inward when walking and tend to bounce when they walk. A shortened tendon can be due to an inborn structural abnormality, but is more likely to be acquired after wearing high heels regularly.

[Stress Fracture](#)

A stress fracture can occur in the heel and is caused by overuse during strenuous exercise, particularly running and high-impact aerobics. Stress fractures are common in military training.

[Arch and Bottom-of-the-Foot Pain](#) [TOP](#)

[Flat Foot](#)

Flat foot is a defect of your foot that eliminates the arch. The condition is most often inherited. Arches, however, can also “fall” in adulthood. This condition is sometimes referred to as posterior tibial tendon dysfunction (PTTD). This occurs most often in women over 50, but it can occur in anyone. Overall, normally occurring flat feet in adults do not cause many functional problems, and many great athletes have done very well with this condition.

[Abnormally High Arches](#)

An [overly high arch](#) (cavus foot) can cause problems. Army studies have found that recruits with the highest arches have the greatest tendency to lower limb injuries, while flat-footed recruits have the least. The cavus foot is much less common than the flat foot. Clawfoot is a deformity of the foot marked by very high arches and very long toes that tend to curl downwards. Clawfoot is a hereditary condition, but in rare cases can occur when muscles in your foot contract or become unbalanced due to nerve or muscle disorders.

[Previous](#) [Next](#)

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[Previous](#)|[Next](#)

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