# Flatfoot

Most children are born with flexible flatfoot. The arch of the foot elevates in most children through normal growth and development. The arch cannot be created with special shoes, orthotics, braces or exercises. Surgery is rarely needed for flatfoot.

## What is flatfoot?

Flatfoot describes a foot shape that does not have a normal, upwardly curved arch. In a flatfoot, all or most of the sole of the foot is in contact with the ground when standing. The foot points outwards from the leg and the ankle looks like it is rolled over.

![Normal Foot](image1.png) ![Flatfoot](image2.png)

## What types of flatfoot are there?

There are 3 different types of flatfoot. Knowing which kind your child has helps you and your child’s doctor decide if your child needs treatment and, if so, which kind of treatment.

**Flexible flatfoot**

Most babies are born with flexible flatfoot. Flexible flatfoot is also called hypermobile flatfoot. When present, both feet are always affected. Arches develop in most children during the first 10 years of life, leaving more than 20% of adults with flatfoot. The foot may look like it has an arch when your child is sitting or when standing on their tiptoes, but the arch flattens when the child puts weight on the foot. This condition is not painful, causes no disability and does not need treatment. Flexible flatfoot often runs in families and is more common in certain ethnic and racial groups.

**Flexible flatfoot with a short Achilles tendon**

This type is rarely seen in young children, but accounts for 25% of flatfoot in adolescents and adults. It affects both feet and may cause pain and disability.

**Rigid flatfoot**

This is the least common type. Rigid flatfoot is not present at birth but develops after 8 years of age. It is due to a joining together of 2 bones in the foot over time, a condition known as tarsal coalition. It runs in families. About one in four people with rigid flatfoot has pain and disability. About half of the time, rigid flatfoot affects both feet.

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## To Learn More

- Orthopedics 206-987-2109
- Ask your child’s healthcare provider
- seattlechildrens.org

## Free Interpreter Services

- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.
**How is flatfoot diagnosed?**

First, we will examine your child’s feet and ankles. We look at your child’s feet while they are standing up. We may ask your child to stand on their toes or dangle their foot in the air as they sit on an exam table. We also check to make sure the joints in your child’s feet and ankles all move well. If your child’s ankle does not move much, it could mean that the Achilles tendon is shortened or tight. That may be a sign that your child has flexible flatfoot with short Achilles tendon.

If your child’s feet hurt and they have the type of flatfoot that usually is not painful, we may take X-rays to get more information about what may be causing the pain.

**How is flatfoot treated?**

If your child has normal flexible flatfoot that doesn’t hurt, no treatment is needed. Your child should wear regular shoes and be treated no differently than if the feet had arches.

If your child has aching pain in the feet or legs after activities, we recommend a simple and inexpensive over-the-counter cushioned arch support or a running shoe with a built-in arch support.

To treat flexible flatfoot with a short Achilles tendon, we may try to stretch the Achilles tendon. It is more difficult to stretch this tendon if your child has flatfoot than it is if they have an average-height arch. It requires us to rotate the foot inward to elevate the arch while the Achilles tendon is being stretched.

We suggest you avoid using hard custom-molded arch supports for flexible flatfoot with a tight Achilles tendon. These rigid arch supports, often made of hard plastic, can cause more pain than children have without them.

**Will my child need special shoes, braces or inserts?**

Probably not. Your child’s foot development will be the same whether arch supports are worn or not. If your child has foot pain, we may recommend a heel cup or an inexpensive over-the-counter shoe insert. Sometimes an insert is recommended to change the wear pattern and help your child’s shoes last longer.

**Is surgery ever needed?**

Surgery for flexible flatfoot is very rare. It would only be recommended if your child’s flatfoot was not helped by more conservative treatments and they continued to be in pain.

In almost all cases that require surgery, the child is at least 8 years old and the Achilles tendon is short. Surgery involves lengthening the short Achilles tendon as well as correcting the flatfoot deformity by cutting the heel bone and inserting a bone graft.