



Flat Feet

Babies are born with flat feet. Children should begin to develop an arch in the middle of their feet at approximately three years of age. The medical term for flat feet is Pes Planus, and flat feet can cause knee, hip or back pain. If your child has flat feet, you should ask your health care provider for a more detailed physical exam.

In some children, flat feet can cause some complications. Flat feet can result in the ankle bones collapsing where the arch of the foot is normally. In addition, when the ankle bones move, other bones in the leg can grow incorrectly. Besides pain, this puts a child at risk for injuries including sprained ankles or torn knee ligaments as they grow older and participate in sports.

Children with flat feet may require special inserts in their shoes. They may also benefit from physical therapy exercises to strengthen the muscles in their legs, tummy or back. A program can be specially designed to meet your child's needs.

For more information, contact:

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www.blankchildrens.org

Toe Walking and Flat Feet



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Toe Walking

Children normally experiment with walking on their tip toes between one and two years of age – after they first begin walking. Every couple steps may be on their toes or they may walk on their toes for several days, but children should outgrow this quickly.

By three years of age, children should be walking with a more normal walking pattern. This includes placing the heel of the foot first and pushing off of their toes. If your child is walking on their tip toes for long periods of time, you should ask your health care provider for a more detailed physical exam.

Toe walking can be caused by a number of factors. One cause is due to abnormal bone growth in your child's legs. Another cause of toe walking is due to weakness in your child's tummy and/or leg muscles. By walking on the toes, the child locks the ankles, knees and hips in a straight position, and reduces the amount of work the muscles do. This leads to more weakness of the tummy and leg muscles.

For some children, toe walking may be one of the first signs of cerebral palsy, muscular dystrophy or another muscular disorder. It may also be a sign of a sensory integration disorder that will need further evaluation by a pediatric occupational therapist.



Why Treat Toe Walking?

Though children may walk on their toes for a variety of reasons, it can lead to many other problems. When a child walks on their toes for a long time, it puts abnormal stress on the bones and ligaments in the knees, hips and lower back. Over time, this can cause the bones to grow incorrectly and/or overstretch the ligaments – putting children at risk for injuries and joint pain as they grow older.

Because toe walking takes a great deal of energy, children who do a lot of toe walking and/or have weak trunk and leg muscles often choose activities such as watching TV or playing video games rather than playing outdoors or with friends. Toe walking can make walking long distances very tiring. Children who walk on their toes may also have difficulty keeping up with their friends in physical education class, sports activities, or may generally be more clumsy. This can lead to problems with self-esteem.

In addition, children who walk on their toes often have a difficult time finding and wearing a pair of shoes. Some children may walk on the back of their shoes or get blisters or sores around their heel bone.



How is Toe Walking Treated?

Your health care provider should first evaluate the movement in your child's foot and ankle, and watch your child walk without shoes or socks. Your child may then be referred to a specialist to rule out any other medical conditions. A pediatric physical therapist is specially trained to work with children who toe walk.

Depending on the tightness of the child's ankle, he/she may benefit from physical therapy for stretching and strengthening exercising and/or serial casting. Serial casting involves putting a fiberglass cast on the child's leg – from the toes to just below the knee. Each week, the cast is removed to check the child's skin and ankle motion. The cast is put back on, slowly stretching the muscles each week. This may take three to six weeks. After casting, children often wear a brace with normal shoes for

approximately six months, and attend physical therapy for special activities and exercises. After 6 to 12 months, children may "graduate" from therapy and braces, though some may require shorter braces for a longer period of time.



If you have questions or concerns about your child's feet or walking pattern, please do not hesitate to talk with your health care provider or a pediatric physical therapist.