



Idiopathic Toe Walking

A guide for parents and caregivers

Idiopathic toe walking occurs when children walk mainly on their toes for unknown reasons. This flyer explains possible causes and treatment.

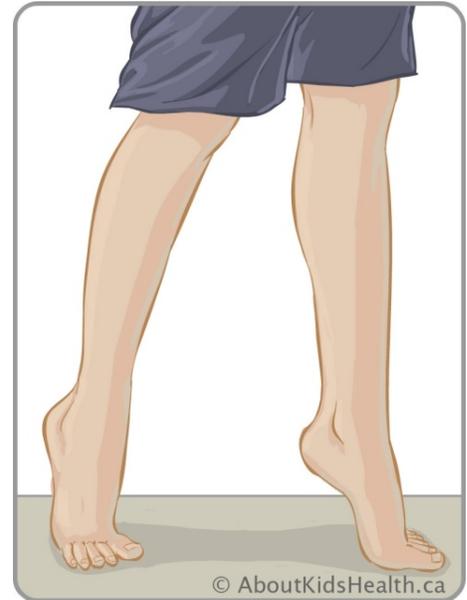
What is toe walking?

Most children begin walking at 12 to 15 months of age. Often, in the early stages of walking, children try different foot positions for walking. Walking up on their toes may be part of this. By around 24 months, they should walk with their feet flat on the ground. By 3 years of age, children should walk with a heel-toe pattern. If walking up on their toes persists, this is called toe walking.

Toe walking refers to a walking pattern in which a child walks on the balls of their feet and there is no contact between the heels and the ground. There are many medical reasons for this type of walking pattern. This handout is about a specific type of toe walking called idiopathic toe walking.

Idiopathic toe walking, sometimes referred to as habitual or behavioral, occurs when a child walks on the balls of their feet for an unknown reason. This term applies to toe walking in a child who has been evaluated by their doctor and no medical reason has been identified. Idiopathic toe walking occurs in otherwise healthy and typically developing children. It always occurs in both feet.

Some children with idiopathic toe walking are able to walk with their feet flat when asked to do so. When these children wear shoes, they might not walk on their toes. Their toe walking is often exaggerated when they walk bare-footed from one room to another or when they walk on surfaces that have increased tactile sensations (carpet, cold tile, grass). These children typically do not have tightness in their Achilles' tendons (heel cords) early on.



Can idiopathic toe walking lead to foot or leg problems?

Some children with idiopathic toe walking develop tight Achilles' tendons as they get older. This is called a contracture. When this happens, they can no longer drop their heels to the ground. This tightness can lead to problems with how their feet and legs line up and can contribute to the development of flat arches and/or outward rotated legs when the child tries to maintain heel contact with the ground.

To Learn More

- Orthopedics
206-987-2109
- Physical Therapy
206- 987-2113
- Ask your child's
healthcare provider
- seattlechildrens.org

Free Interpreter Services

- In the hospital, ask your child's 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.

What causes idiopathic toe walking?

The cause of idiopathic toe walking is unknown. Many factors may contribute to the development of toe walking in children, these include:

- Tactile processing: an increased response to touch sensations
- Altered proprioceptive processing (sensing the body's position in space)
- Vestibular processing (maintaining balance)
- Visual processing
- Flexibility of leg and foot muscles
- Overall body strength
- Family history: parents or siblings who have a history of toe walking

Can idiopathic toe walking be treated?

For young children with idiopathic toe walking **without** Achilles' tendon contractures, watching and waiting is an option. Some younger children benefit from physical therapy where they are taught how to stretch their legs, feet and toes. Night-time bracing with plastic orthotics may be helpful. In some cases, idiopathic toe walking may resolve on its own.

For preschool and older children with idiopathic toe walking **with** Achilles' tendon contractures, some of these treatment options may be needed:

- **Physical Therapy:** This involves stretching, strengthening, gait training and home exercise.
- **Occupational Therapy:** This involves helping your child learn sensory integration strategies.
- **Orthotics:** Plastic splints can be worn on the feet and ankles during the night to maintain the stretch/flexibility of the Achilles' tendons. Occasionally, they are also worn during the day.
- **Serial Casting:** This involves a series of casts to stretch your child's Achilles' tendons.
- **Orthopedic Surgery:** This involves a surgical procedure to lengthen the heel cord (Achilles' tendon). This is done only in children over the age of 4 to 5 years in whom the other treatment interventions have been unsuccessful in stretching the Achilles' tendons.

Talk with your child's healthcare provider to learn about treatment options that may be best for your child.