



## Toe Walking

### What is toe walking?

It is common for children to walk up on their toes while taking their first steps between ages 10 to 18 months. Sometimes children will toe walk up to the age of two or three. However, if toe walking continues, the child should be evaluated by a doctor.

### What causes toe walking?

There are many reasons for children to walk on their toes. The most common include:

- Tight heel cords can cause decreased range of motion of the ankle, causing the child to be more comfortable on his or her toes.
- Increased tone (spasticity) can lead to tight muscles over time and cause children to walk on toes. Tone may be increased due to a neuromuscular disorder or other medical conditions, such as cerebral palsy.
- A dysfunctional vestibular system may cause children to walk on their toes. This is a common problem in autism and with some balance disorders. The vestibular system gives the brain feedback about the body – its motion and its position in space. A visual-vestibular problem can also cause toe walking. Some children with poor integration of sensory input from their vision or vestibular systems feel more “secure” when they are up on toes.
- When the child does not display any of the above muscular, neuromuscular or sensory reasons for walking on toes, it is said to be idiopathic in nature.

### Why is my child being referred for physical therapy?

At Kenny Kids Rehabilitation Program, a pediatric physical therapist will evaluate your child according to the physician's orders. The evaluation will consist of range of motion measurements, strength testing and gross motor assessments. The evaluation may consist of a screening for sensory integration dysfunction.

Your child's physical therapist may recommend direct physical therapy services. The physical therapist can help by stretching if your child has tight muscles or help strengthen weak muscles. The therapist can also teach you gentle stretching exercises and strengthening activities for you to do at home.

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### Kenny Kids™ Pediatric Rehabilitation Program Locations

#### Kenny Kids – Buffalo

*Across the street from  
Buffalo Hospital*  
300 Catlin St., Suite 101  
Buffalo, MN 55313  
763-684-3888

#### Kenny Kids – Coon Rapids

3111 124th Ave. NW  
Coon Rapids, MN 55433  
763-236-7337

#### Kenny Kids – Owatonna

Owatonna Hospital  
2250 NW 26th St.  
Owatonna, MN 55060  
507-977-2150



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## *Toe walking (cont'd)*

### **What can I do at home?**

It is important for you and your child to follow through with home program activities. Consistency with stretching is important for making gains in range of motion.

Trying to get your child not to walk on his/her toes will require some encouragement from you and others involved with your child. Be kind when encouraging by offering gentle reminders for walking heel-toe.

### **What are some other interventions available?**

If your child has not responded to stretching and strengthening exercises, your physician may recommend one or more of the following:

- **Serial casting** – This procedure involves wearing a cast on involved leg(s) to help stretch out tight muscles. Serial casts are usually left on for one or two weeks. When the cast comes off, the child's ankle motion is measured and the physical therapist determines if the child needs more casting. The casts are usually applied for two to eight weeks.
- **Splinting** – A splint is applied to the child's leg, usually during sleeping hours, to help stretch the muscles of the leg. A brace, or AFO (ankle-foot-orthosis), may also be recommended. This brace is worn during the day to help discourage your child from walking on toes and may also be worn as a night splint to help with stretching.
- **Botox injections** – Botox is a strain of the botulinum toxin that is injected into tight muscles to cause temporary weakness. This weakness usually lasts about three months. During this time, your child may receive intense physical therapy to stretch the tight muscles and strengthen the weak muscles.
- **Surgery** to lengthen their calf muscles may be necessary if your child has not responded to other forms of treatment or interventions.