



## Out-toeing / In-toeing

Out-toeing and in-toeing are common in children and are usually part of normal development.

**Out-toeing** refers to feet that are turned outward during standing or walking. It is nearly always part of normal growth and development and rarely requires treatment.

**In-toeing** refers to feet that are turned inward during standing or walking. It may originate from the foot, the shin bone or the thigh bone.

- **Foot (Metatarsus Adductus)**

Metatarsus Adductus is the most common cause of in-toeing from birth to 18 months of age. The foot is curved inward, similar in shape to a kidney bean. If the foot is flexible and can be gently pulled into a straight position, treatment is usually not necessary. If the foot is more rigid, your doctor may recommend stretching, special shoes or casting.

- **Shin bone (Tibial Torsion)**

Tibial Torsion is the most common cause of in-toeing in toddlers and young children (18 to 36 months). The shin bone (tibia) is twisted or rotated causing the foot to turn inward.

- **Thigh bone (Femoral Anteversion)**

Femoral Anteversion is the most common cause of in-toeing in children between the ages of three and seven. This is a slight rotation of the top of the thigh bone (femur) and occurs more often in girls. Sitting “W” style does not worsen the condition.

### Treatment

Medical treatment is rarely necessary. Many years ago it was believed that bracing, exercises or special shoes helped correct out-toeing and in-toeing. However, years of study have demonstrated that they are **not** effective. While out-toeing and in-toeing usually improve with time, they do not always completely resolve. It is important to remember that some in-toeing or out-toeing is still within the range of “normal.” Out-toeing or in-toeing is not associated with any long-term problems in adults.

### Facts about out-toeing / in-toeing

- Out-toeing and in-toeing are a common part of normal development in children.
- Out-toeing and in-toeing will not affect your child’s ability to walk, run or play.
- Falling is a part of learning to walk and run and is not exclusively caused by in-toeing, although it may seem more common or severe in children with in-toeing.