

## Intoeing

When a child's toes point inward when they walk or run, they are intoeing. This is also known as being "pigeon-toed." Intoeing is often noticed by parents when a child starts walking.

### Causes

There are 3 main causes:

- Metatarsus adductus (the foot turns inward)
- Tibial torsion (the shinbone turns inward)
- Femoral anteversion (the thighbone turns inward)

### Metatarsus Adductus

This condition is seen in infants. It is a turning in of the front part of the foot. It is caused by the positioning of a baby in the mother's womb. It can be "flexible" or "rigid."

With **flexible** metatarsus adductus, the front of the foot can be straightened by applying pressure to the foot. It improves on its own in most children by the time they are 1 year old.

With **rigid** metatarsus adductus, the foot cannot be made straight. Rigid metatarsus adductus can only be treated with casting or surgery.

### Tibial Torsion

This refers to a twist in the shin bone. A twist of the shin inward will result in the foot pointing inward as well. Tibial torsion results from positioning of a baby in the

mother's womb. This cause of intoeing is often noticed in young children. As a child grows, the tibia can untwist and straighten. Often tibial torsion resolves on its own by the time children are school aged.

### Femoral Anteversion

This is a twist in the upper end of the thigh bone near the hip. This twist allows the hip to turn inward more than outward. Children with this condition will have knees and feet that point inward when they walk. It is often noticed when children are 5 or 6 years old. Like the other causes of intoeing, it often gets better as a child grows. In most cases, it corrects itself by the time a child is 9 or 10 years old.

### Symptoms of Intoeing

Intoeing is often noticed by parents or family members when a child is walking or running. It does not cause pain. Intoeing will not prevent a child from walking or running. Children with severe intoeing may trip or stumble more often.

### Treatment

Most children with intoeing will improve without any treatment. Special shoes, braces or therapy are not required. While most children get better on their own, some require treatment. Severe intoeing that does not resolve by the time a child is 9 or 10 years old can be treated with surgery. This is only considered if the child is tripping or struggling with their gait. Surgery involves cutting the shin or thigh bone to straighten it.