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Association of Paediatric  
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## Intoeing Gait



The Chartered Society of Physiotherapy is the professional, educational and trade union body for the UK's 50,000 chartered physiotherapists, physiotherapy students and associates.

Association of Paediatric Chartered Physiotherapists

[www.apcp.org.uk](http://www.apcp.org.uk)

Published: June 2011

Review: June 2014



Some children's feet turn in when they walk. This is called intoeing or 'pigeon toe' and is very common in young children. It is one of the most common normal variants in children and is usually seen in both feet but may be seen in just one foot.

### What problems may occur?

Children who intoe may appear to trip more often at first but this soon resolves. They can be just as good at sport and are no more likely to suffer back or hip problems or arthritis than anyone else. It will not get worse and should improve over time. Falling is not caused by intoeing but is part of learning to walk.



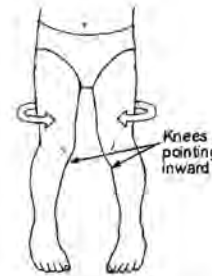
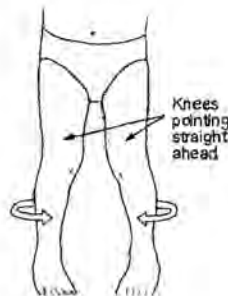
### What causes it?

There are four main causes for intoeing gait in a healthy child:



**Metatarsus Adductus:** this is when the foot curves in and often results from cramped space in the womb and is evident from birth. Most will resolve spontaneously but in severe cases where the foot is stiff, stretches or advice on footwear may be necessary.

**Tibial Torsion:** this occurs when the shin bone is twisted causing the foot to turn in even though the kneecaps point forwards. This will normally correct by age 4-5 years as the bones grow, the walking pattern matures and the knees straighten. Splints or special shoes are not necessary.



**Femoral anteversion:** this is where the femur (thigh bone) turns inwards causing the whole leg to turn in and is the most common cause of intoeing. It is most evident between the ages of 2-4 years and will usually resolve spontaneously by the age of 10 years. This is twice as common in girls as boys and can run in families

**Tight Hamstring Muscles:** the hamstrings are the muscles at the back of the thigh and tightness in these muscles can also cause intoeing. Following a growth spurt, tightness may cause intoeing to worsen. A programme of stretches may help improve this.

### What can I do to help?

- Intoeing will not affect your child's ability to walk, run or jump in the long term.
- Intoeing may be more obvious if your child has flexible joints.
- Intoeing may be more obvious if your child is tired.
- There is no evidence to suggest splints or special shoes produce any benefit but good quality, well-fitting shoes are recommended.
- Encourage your child not to 'W sit' but to cross leg sit instead to stretch the hips in the opposite direction, if it is comfortable for them to do so.



W- sitting



Cross leg sitting

- Out-toed activities such as ballet may help an intoeing gait.
- As your child gets older practising out-toed walking (penguin walking) may help strengthen the muscles or walking along a straight line, keeping feet straight.