

■ Bowlegs and Knock-Knees ■

You may notice that your child's knees are pointed outward (bowlegs) or inward (knock-knees). Babies and young children often look bowlegged or knock-kneed. However, this is usually normal, and the child outgrows it.

What are bowlegs and knock-knees?

Bowlegs (*genu varum*) means simply that the legs bow outward, and knock-knees (*genu valgum*) that they are turned inward at the knees. Parents are often concerned that their toddler looks bowlegged as he or she is learning to walk. Later in childhood, children may develop a knock-kneed appearance. Both of these are normal stages of development that children usually outgrow.

Rarely, bowlegs is a sign of the disease rickets (usually vitamin D deficiency) or other medical problems requiring treatment. Serious medical problems causing knock-knees are even less common.

What do they look like?

Bowlegs. When your child is standing or walking, the knees are far apart and the legs bow outward and then turn inward at the foot. This is normal in babies and toddlers, up to about 2 years old.

Knock-knees. The knees are close together and the lower legs are farther apart when your child is standing or walking. This is normal at around 3 or 4 years of age. It usually resolves by about age 7.

What causes bowlegs and knock-knees?

Bowlegs and knock-knees are most often normal stages in your child's skeletal development. In most children, the legs, knees, and feet are normally aligned by school age or soon after.

Sometimes, the angle of bowlegs or knock-knees is more severe, or the problem doesn't go away as the child grows.

- *Bowlegs* may result from some other conditions that need treatment:

- *Rickets* is a disease usually caused by inadequate levels of vitamin D, which bones need to grow normally. Although not as common as it once was, rickets can still occur. It is a special risk for breast-fed babies who do not receive vitamin D, usually in the form of vitamin supplements.
- *Blount's disease* is a condition in which the top of the lower leg bone does not develop normally. The cause is unknown, but if your child has this disease, the problem of bowlegs may get worse as he or she grows.
- *Knock-knees* are less commonly caused by conditions requiring treatment, unless they are related to a serious injury (such as a broken leg) or cerebral palsy.

How are bowlegs and knock-knees treated?

For most children, bowlegs and knock-knees are a normal part of their development and do not need treatment. Bowlegs are common up to about age 2, and knock-knees until around ages 5 to 8.

- If your child has bowlegs caused by rickets, he or she will require vitamin D treatment and sometimes other treatment. Bowlegs and other bone problems will improve with treatment.
- If your child has Blount's disease, he or she will be referred to an orthopedic doctor (a specialist in bone-related problems) for further evaluation and treatment.

When should I call your office?

Call our office if you are concerned that your child may have bowlegs or knock-knees, especially if:

- The legs look severely affected.
- The condition continues past the normal age for bowlegs (about 2 to 3 years) or knock-knees (about 7 years), or if it is severe.
- The condition interferes with your child's walking, playing, or other activities.
- Your child develops any symptoms, such as pain or aching after activity.