



## OrthoInfo Basics

# Scoliosis in Children

**Scoliosis is a common condition that affects many children and adolescents. Simply defined, scoliosis is a sideways curve of the spine.**

Instead of a straight line down the middle of the back, a spine with scoliosis curves, sometimes looking like a letter "S" or "C."

Scoliosis often shows up in children when they reach puberty. In many cases, the curves are slight and do not require treatment. Children with more severe curves may need bracing or surgery.

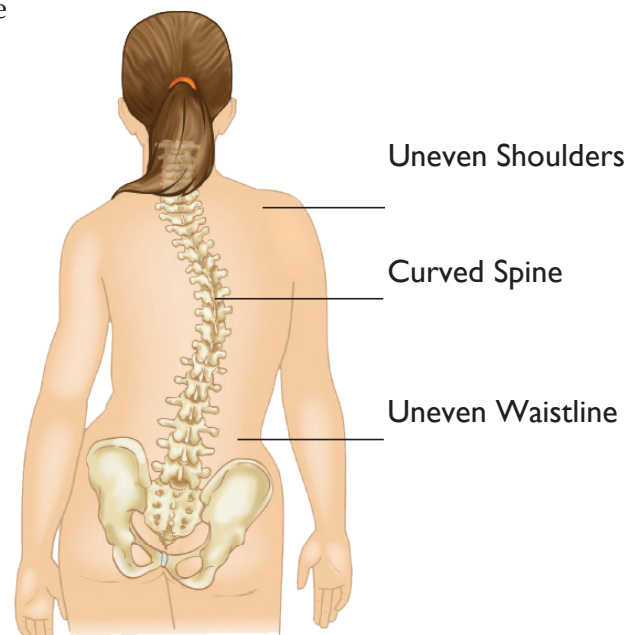
## What is scoliosis?

Scoliosis is a sideways curve of the spine.

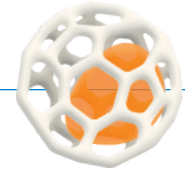
**Types of scoliosis.** There are several different types of scoliosis that affect children. Sometimes, problems in the spine develop before a baby is born. Scoliosis can also accompany a neuromuscular condition, such as muscular dystrophy or cerebral palsy.

By far, the most common type of scoliosis is "idiopathic," which means the exact cause is not known. Idiopathic scoliosis occurs in toddlers and young children, but the majority of cases occur from age 10 to the time a child is fully grown.

**How it develops.** Boys are just as likely as girls to have slight scoliosis curves during adolescence. But girls are most often the ones who develop larger curves that require treatment. Severe curves that are not treated can worsen and collapse space in the chest, which can cause lung problems.



Rather than a straight line, scoliosis can make the spine look more like the letters "C" or "S."



## How is scoliosis diagnosed?

Small curves often go unnoticed until a child hits a growth spurt during puberty.

Because scoliosis is rarely painful, children and their parents may not discover it until there are more obvious signs, such as:

- Tilted, uneven shoulders, with one shoulder blade protruding more than the other
- Uneven waistline
- One hip higher than the other
- Overall appearance of leaning to the side

Scoliosis is often first detected during a school screening or at a regular check-up with the pediatrician.

**X-rays.** Your doctor will order an x-ray image of your child's spine to make a firm diagnosis of scoliosis. The x-ray will also show your doctor how severe the curve is.

**Degree of curve.** To determine the right treatment for your child, your doctor will measure the degree of the curve. In general, curves measuring 25° to 45° are considered serious and will require treatment. Curves greater than 45° will likely need surgery to restore normal posture.

## How is scoliosis treated?

Your doctor will consider several things when planning your child's treatment.

Your doctor will take into account how severe your child's curve is and where it occurs in the spine. Your child's age is also an important factor – if your child's spine is still growing, it will affect treatment choices. Your doctor will determine how likely it is that the curve will get worse, and then suggest treatment options to meet your child's specific needs.

**Observation.** Children who have mild curves (less than 20°) or who are full-grown, will be monitored to make sure the curve is not getting worse. Your doctor will re-check your child

every 6 months, and schedule follow-up x-rays about once a year.

**Bracing.** If your child has a more serious curve (25° to 45°) and is still growing, your doctor may recommend wearing a brace. Although bracing does not straighten scoliosis curves, it usually prevents curves from getting worse.

Most braces are the underarm type and are worn under your child's clothes. Your doctor will decide the type of brace that is best for your child and how long each day your child should wear it. Your child can take off the brace for sports activities.

*(continued on page 3)*

*(Treatment – continued from page 2)*

As your child grows, your doctor will check how well the brace fits and whether it is effective. Once your child is full-grown, the brace will no longer be needed.

**Surgery.** Children who have very severe curves (45° and higher) may need surgery to lessen the curve and prevent it from getting worse.

The operation for scoliosis is a spinal fusion. This is essentially a “welding” process. The basic

idea is to realign and fuse together the curved vertebrae so that they heal into a single, solid bone. Screws, rods, hooks, or wires will keep the bones in place while the fusion heals.

In general, children can return to most sporting activities 6 months after surgery. Your doctor will talk with you about your child’s return to everyday activities.

## What are some FAQs about scoliosis?

Children with scoliosis have lots of questions about it.

**Does scoliosis hurt?** Not usually. Children with scoliosis are no more likely than kids without scoliosis to have back pain.

**Why do I have it?** Doctors are not sure what causes the most common type of scoliosis, called “idiopathic.” Because several members of a family often have scoliosis, it is likely that genetics plays a role.

**What will it be like to wear a brace?** Your brace will be custom-made by a specialist to fit your body comfortably. It may take some

practice to get used to putting on your brace, but soon you will become an expert at it. Clothes in loose-fitting styles will easily cover your brace.

**Can I still do gymnastics with my scoliosis?** Yes. You should be able to continue with all your activities, including most sports and other hobbies.

**Will surgery fix my scoliosis?** How completely your curve can be corrected will depend on several things, especially how severe the curve is to start with. Your doctor will talk to you about what you can expect from surgery.



### For more information

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For more information about scoliosis and its treatment, visit *OrthoInfo* at [www.orthoinfo.org](http://www.orthoinfo.org) or the Scoliosis Research Society at [www.srs.org](http://www.srs.org).

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