

# What Is Scoliosis?

*Fast Facts: An Easy-to-Read Series of Publications for the Public*

Scoliosis (sko-lee-O-sis) is a disorder in which there is a sideways curve of the spine, or backbone. Curves are often S-shaped or C-shaped. In most people, there is no known cause for this curve. This is known as idiopathic (id-ee-o-PATH-ik) scoliosis.

People with milder curves may only need to visit their doctor for periodic exams. Some people who have scoliosis need treatment.

## Who Has Scoliosis?

People of all ages can have scoliosis. The most common type is idiopathic scoliosis in children age 10 to 12 and in their early teens. This is the time when children are growing fast. Girls are more likely than boys to have this type of scoliosis.

Scoliosis can run in families. A child who has a parent, brother, or sister with idiopathic scoliosis should have regular checkups by the family doctor.

## What Causes Scoliosis?

In most people with scoliosis, the cause is not known. In some cases, there is a known cause.

Doctors classify curves as:

- Nonstructural, which is when the spine is structurally normal and the curve is temporary. In these cases, the doctor will try to find and correct the cause.
- Structural, which is when the spine has a fixed curve. The cause could be a disease, injury, infection, or birth defect.

## How Is Scoliosis Diagnosed?

Doctors use a medical and family history, physical exam, and tests when checking a person for scoliosis. An x ray of the spine can help the doctor decide if a person has scoliosis. The x ray lets the doctor measure the curve in degrees (such as 25 degrees) and see its location, shape, and pattern.

## How Is Scoliosis Treated?

Treatment for scoliosis is based on:

- The person's age
- How much more he or she is likely to grow

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- The degree and pattern of the curve
- The type of scoliosis.

The doctor may recommend observation, bracing, or surgery.

Observation:

The doctor will check every 4 to 6 months to see if the curve is getting better or worse. Observation is used for those who have a curve of less than 25 degrees and are still growing.

Bracing:

Doctors may advise wearing a brace to stop a curve from getting worse. Bracing may be used when:

- The person is still growing and has a curve of more than 25 to 30 degrees.
- The person is still growing and has a curve between 20 and 29 degrees that is getting worse.
- The person has at least 2 years of growth remaining and has a curve that is between 20 and 29 degrees. If a girl, she should not have started having her monthly periods yet.

Surgery:

Doctors use surgery to correct a curve or stop it from getting worse when the person is still growing, the curve is more than 45 degrees, and the curve is getting worse. Surgery often involves fusing together two or more bones in the spine. The doctor may also put in a metal rod or other device. These devices are called implants. They stay in the body and help keep the spine straight after surgery.

### Can Exercise Help?

Exercise programs have **not** been shown to keep scoliosis from getting worse. But it is important for all people, including those with scoliosis, to exercise and remain physically fit. Weight-bearing exercise, such as walking, running, soccer, and gymnastics, helps keep bones strong. For both boys and girls, exercising and playing sports improves their sense of well-being.

### About Other Treatments for Scoliosis

So far, the following treatments have not been shown to keep curves from getting worse in scoliosis:

- Chiropractic treatment
- Electrical stimulation
- Nutritional supplements
- Exercise.

### **What Research Is Being Done on Scoliosis?**

Researchers are looking for the causes of idiopathic scoliosis. They have studied genetics, growth, and changes in the spine, muscles, and nerves. They are studying how different treatments can help to straighten the spine or keep curves from getting worse. They are also studying the long-term effects of surgery and of untreated scoliosis.

### **For More Information About Scoliosis and Other Related Conditions:**

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The information in this publication was summarized in easy-to-read format from information in a more detailed NIAMS publication. To order the *Scoliosis in Children and Adolescents Q&A* full-text version, please contact NIAMS using the contact information above. To view the complete text or to order online, visit <http://www.niams.nih.gov>.