

What is scoliosis in children?

Scoliosis is a deformity of the backbone (spine). It's when the spine has a side-to-side curve. The curve of the spine measures 10 degrees or more.

A normal spine appears straight when looked at from behind. But a child with scoliosis has a spine with an S or C shape. The child may look like he or she is leaning to one side. The curve can happen on the right or left side of the spine. Or it can happen on both sides in different sections. Both the middle (thoracic) and lower (lumbar) spine may be affected.

What causes scoliosis in a child?

In most cases, the cause of scoliosis is not known. A child may be born with it. Or he or she can develop it later in life. It's most often seen in children between the ages of 10 and 18. It tends to affect more girls than boys.

Possible causes of scoliosis include:

- Nervous system problems like cerebral palsy or muscular dystrophy
- Inherited conditions that tend to run in families
- Differences in leg lengths
- Injury
- Infection
- Tumors

What are the symptoms of scoliosis in a child?

These are the most common symptoms of scoliosis:

- Difference in shoulder height
- The head not centered with the rest of the body
- Difference in hip height or position
- Difference in shoulder blade height or position
- Difference in the way the arms hang beside the body when the child stands straight
- Difference in the height of the sides of the back when the child bends forward

These symptoms may seem like other back problems. Or they may be a result of an injury or infection. Make sure your child sees his or her healthcare provider for a diagnosis.

How is scoliosis diagnosed in a child?

Your child's healthcare provider can diagnose scoliosis with a complete health history of your child and a physical exam. **Your child may also need these tests:**

- **X-rays.** This test makes images of internal tissues, bones, and organs. It's the main tool for diagnosing scoliosis. It measures the degree of spinal curvature.
- **MRI.** This test uses a combination of large magnets and a computer to make detailed images of organs and structures within the body.
- **CT scan.** This test uses X-rays and a computer to make detailed images of the body.

Finding scoliosis early is important for treatment. If left untreated, scoliosis can cause problems with heart and lung function. Healthcare providers, and even some school programs, routinely look for signs of scoliosis in children.

How is scoliosis treated in a child?

Treatment will depend on your child's symptoms, age, and general health. It will also depend on how severe the condition is. The goal of treatment is to stop the curve from getting worse and prevent deformity.

Treatment may include:

- **Observation and repeated exams.** Your child will need to see his or her healthcare provider often to check on the curve of his or her spine. Whether the curve gets worse depends on the amount of skeletal growth, or how skeletally mature your child is. Curving of the spine often slows down or stops after a child reaches puberty.
- **Bracing.** If your child is still growing, he or she may need a brace for some time.
- **Surgery.** Your child may need surgery when the curve measures 45 degrees or more on an X-ray and bracing has not slowed down the progression of the curve.

Key points about scoliosis in children

- Scoliosis is a deformity of the backbone (spine). It's when the spine has a side-to-side curve.
- A child with scoliosis has a spine with an S or C shape. The child may look like he or she is leaning to one side.
- Scoliosis can cause a difference in shoulder or hip height.
- X-rays can measure the curve of a child's spine.

Next steps

Tips to help you get the most from a visit to your child's healthcare provider:

- Know the reason for the visit and what you want to happen.
- Before your visit, write down questions you want answered.
- At the visit, write down the name of a new diagnosis, and any new medicines, treatments, or tests. Also write down any new instructions your provider gives you for your child.
- Know why a new medicine or treatment is prescribed and how it will help your child. Also know what the side effects are.
- Ask if your child's condition can be treated in other ways.
- Know why a test or procedure is recommended and what the results could mean.
- Know what to expect if your child does not take the medicine or have the test or procedure.
- If your child has a follow-up appointment, write down the date, time, and purpose for that visit.
- Know how you can contact your child's provider after office hours. This is important if your child becomes ill and you have questions or need advice.

To schedule an appointment at Stanford Children's Health, please contact:

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