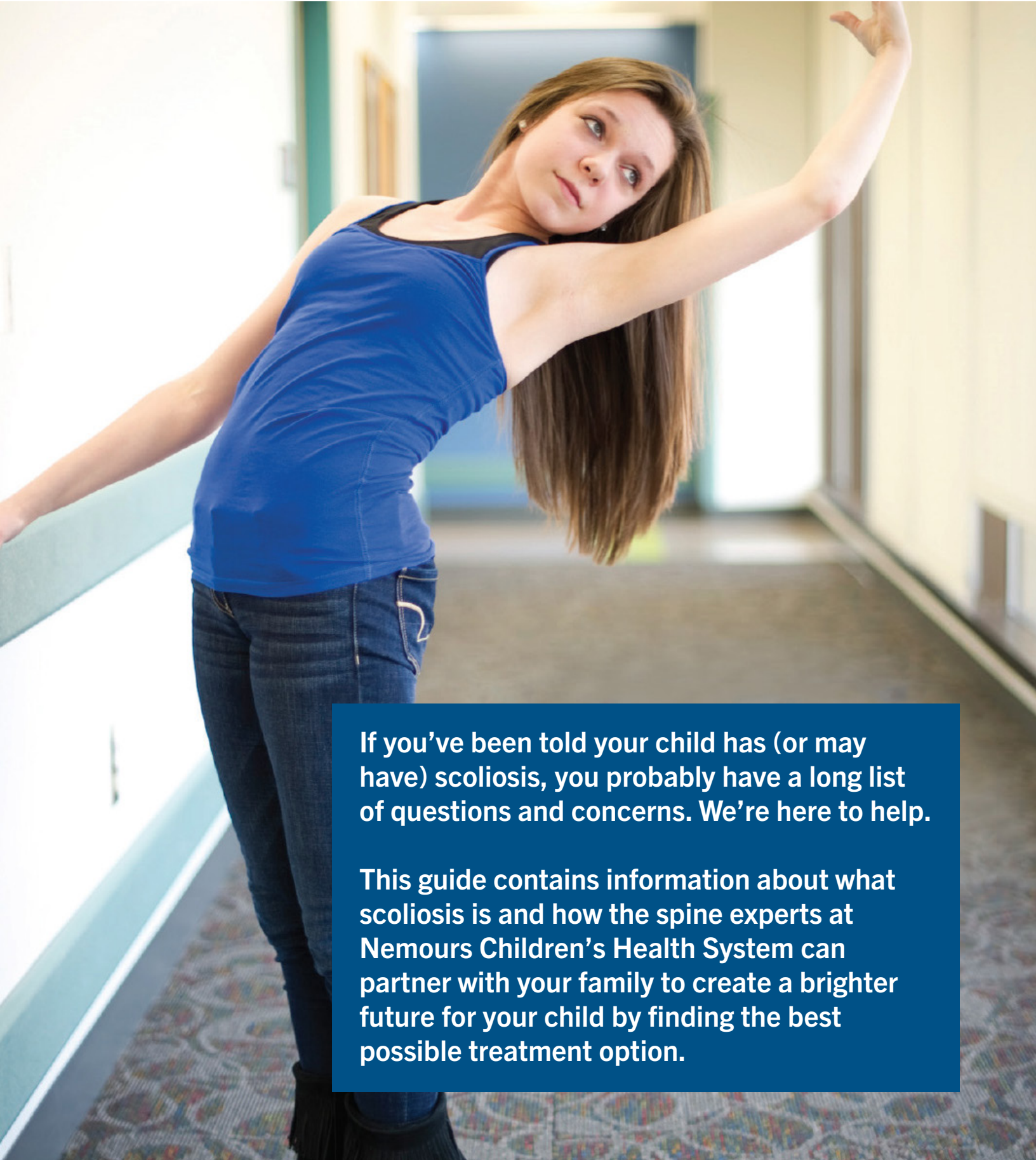




Understanding Scoliosis

In this Guide:

- What Is Scoliosis?
- Signs and Symptoms
- Treating Scoliosis
- Long-Term Outlook



If you've been told your child has (or may have) scoliosis, you probably have a long list of questions and concerns. We're here to help.

This guide contains information about what scoliosis is and how the spine experts at Nemours Children's Health System can partner with your family to create a brighter future for your child by finding the best possible treatment option.

What Is Scoliosis?

The spine is made up of 24 small bones known as vertebrae. Usually, vertebrae stack on top of each other in a relatively straight column.

In some people, however, vertebrae form a sideways curve rather than a straight line, leading to a condition known as scoliosis.

Scoliosis affects 2-3 percent of the U. S. population and is most commonly diagnosed in children and teens aged 10-15 years. Although scoliosis occurs in both boys and girls, spinal curves increase more often in girls than in boys.

One form of scoliosis, **congenital scoliosis**, occurs when a baby is born with abnormally shaped vertebral bones. As the baby grows, a curve may emerge. Congenital scoliosis is typically diagnosed during a growth spurt, either around age 2 or between ages 8 and 13.

Two main types of scoliosis develop in kids and teens:

- **Idiopathic scoliosis**, which means “cause unknown,” occurs in otherwise healthy kids and has a genetic component. About 80 percent of scoliosis is idiopathic.
- **Neuromuscular scoliosis** happens as a result of long-term muscular or neurological disease. In these cases, the provider will decide if further evaluation is needed.

Researchers feel confident that scoliosis isn't caused by anything kids do, such as carrying heavy backpacks, playing sports or spending too much time on the computer.

Signs and Symptoms

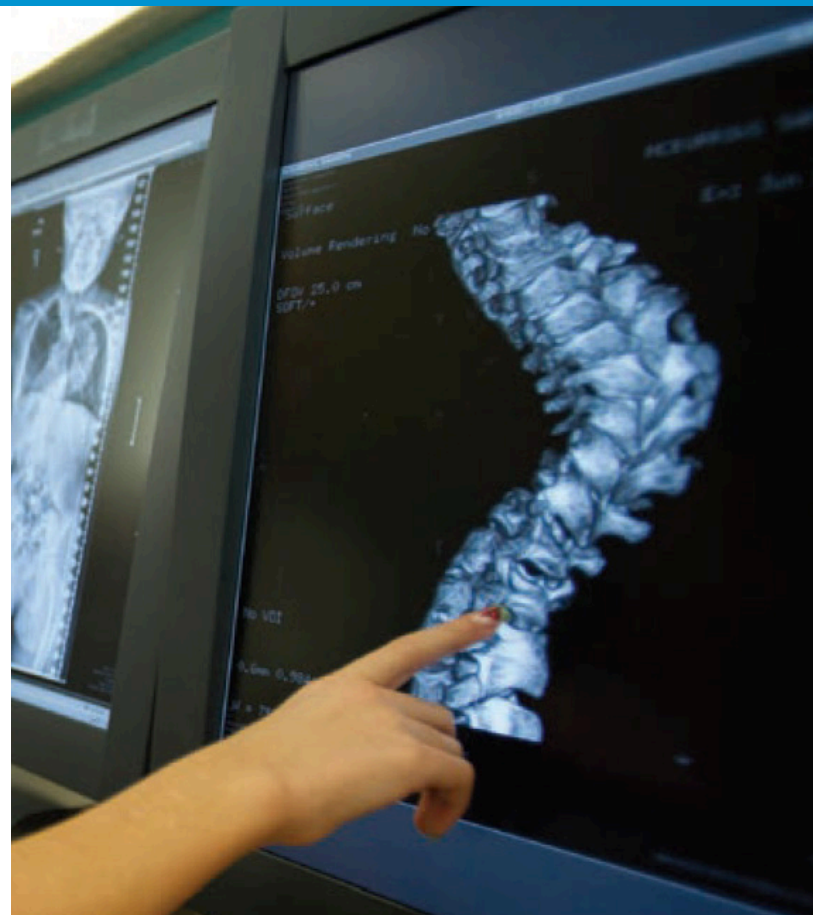
Scoliosis usually doesn't cause pain or discomfort in kids or teens. Often, it's not obvious at all, unless a parent, healthcare provider or school nurse notices the following:

- One shoulder blade is more prominent than the other.
- One shoulder is higher than the other.
- The ribcage seems to shift to one side.
- Your child's waist seems uneven.

If you or someone else suspects scoliosis, make an appointment with your child's healthcare provider. During that appointment, the provider will examine your child and ask if anyone else in your family has scoliosis.

Your child may be referred to a spine specialist for further evaluation. This evaluation consists of a review of your child's medical and family history and a thorough physical examination. In addition, ultra low-dose X-rays will be taken. The specialist will then develop a customized scoliosis treatment plan.

Don't ignore signs of scoliosis, because early diagnosis and treatment can help prevent your child's condition from getting worse. Call Nemours Spine and Scoliosis Center today at 850-848-5547 to schedule an appointment.





Why Choose Nemours Children's Health System?

A diagnosis of scoliosis may sound scary. But here at Nemours, we're experts at treating the full range of scoliosis in children and teens, including congenital scoliosis in infants and toddlers.

Nemours is a national leader in the non-operative management of scoliosis, and our pediatric orthopedic spine surgeons are highly skilled in several innovative bracing techniques. We individualize the use of night only bracing and other advanced techniques to give each patient the best chance for curve control without surgery. Our team also provides specialized Mehta casting for early-onset scoliosis.

Scoliosis surgery may be necessary in children and teens with severe curves. Our surgeons have decades of experience in managing scoliosis in children, and we perform scoliosis surgery in three of our Florida locations.

Treating Scoliosis

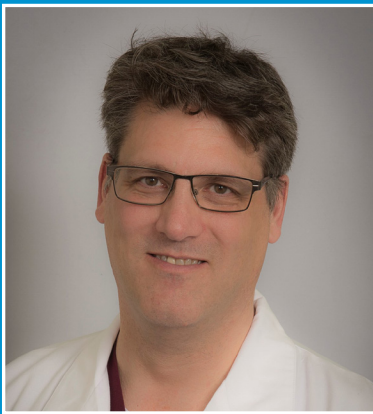
The type of treatment depends on the size of the curve, the amount of growth remaining and the type of scoliosis. Treatment options include:

- **Observation:** Most mild scoliosis curves don't require treatment. However, your child's provider might want to keep an eye on it, because curves sometimes worsen as a child grows.
- **Bracing:** Bracing keeps a moderate curve from getting larger while a child is growing. Nemours offers custom braces including the Wilmington brace and the Rigo-Cheneau brace. Braces are made of lightweight plastic and worn under clothes.
- **Casting:** Mehta casting is a noninvasive treatment regimen for otherwise healthy children with early-onset (infantile) scoliosis. When utilized before age 2, it offers the child a good chance for scoliosis correction and the freedom of movement to play freely. In cases where Mehta casting is not curative, it can defer the need for surgery until the child is older and at a much lower risk of surgical complications.
- **Surgery:** Surgery may be recommended if a provider feels that a child's curve will get worse throughout his or her life. Surgery is performed to prevent increasing pain and disability in adulthood. Depending upon your child's curve and the amount of growth remaining, different surgical options may be offered. The most common types of surgeries include spinal fusion, vertebral body tethering (VBT) and the insertion of magnetically controlled growing rods (MCGR or MAGEC™).
- **Schroth physical therapy:** This form of physical therapy may be used to correct muscle asymmetries and reduce trunk shift or rotation, thus improving body appearance. This is frequently used in combination with a brace.

Long-Term Outlook

After receiving proper treatment, children and teens with scoliosis have an excellent prognosis, going on to live full, active lives and continuing ALL of the activities they enjoy and more.

Our Spine Experts



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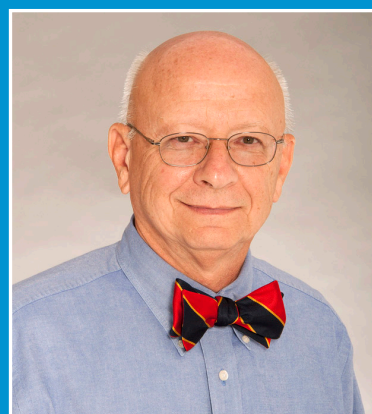
Kevin M. Neal, MD



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Robert P. Stanton, MD

I "Curve Alert: What You Should Know About Scoliosis." PDF, page 1.

II "Scoliosis." American Association of Neurological Surgeons. <https://www.aans.org/Patients/Neurosurgical-Conditions-and-Treatments/Scoliosis>.