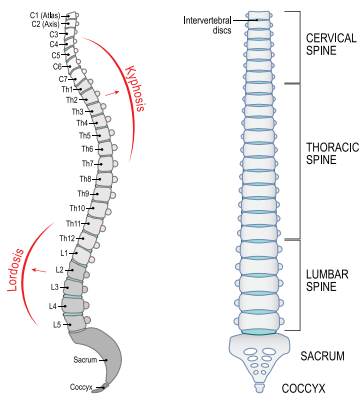


# Postural Kyphosis: The Basics

Kyphosis refers to a forward curve of the spine when it is viewed from the side. The spine naturally has some kyphosis in the thoracic region, or upper/mid back, of about 50 degrees. When there is more kyphosis than normal (greater than 50 degrees), this can lead to a rounded or “hunchback” appearance of the back, or a forward position of the head. This usually shows up during childhood or adolescence and is called “postural kyphosis”. Most often this will be noticed by a parent, the pediatrician, or at a school screening.

While some children have kyphosis that is related to the shape of the vertebral bones, the most common cause by far is not structural, and is due to poor posture. Your doctor will be able to determine this with an x-ray to look at the bones and measure the amount of kyphosis present.



## Signs and Symptoms of Postural Kyphosis

- Forward head posture
- Rounded shoulders
- Visible hump on the upper/mid back
- The upper back appears more rounded upon forward bending than expected
- Complaints of back discomfort or stiffness, especially in the upper and mid back
- The back appears rounded in standing, but the child can lay fully flat on their back
- The child is actively able to correct the back roundness when prompted to stand up straight

## What are the Common Causes Postural Kyphosis?

**Poor posture/muscular imbalance:** Poor postural alignment, such as slouching in bed, “tech neck” from using electronic devices, and hunching at a desk can all contribute to postural kyphosis. Maintaining poor posture for extended periods of time causes certain muscles to become tighter, leading to imbalance and more difficulty maintaining good alignment.

**Deconditioning:** Over time, the spine and core muscles can become weak and/or tight, also leading to muscular imbalance.

**Activities of Daily Living:** Engaging in mostly sedentary activities, as opposed to activities which require strength and balance, like sports or playing outside, can increase the risk of postural kyphosis. Prolonged sitting can cause fatigue in the back muscles and tightness in the anterior chest muscles and hamstrings.

## How is Postural Kyphosis Treated?

Most cases of postural kyphosis are easily managed with observation, exercises, and activity modification.

**Observation:** With a few postural exercises or activity modifications, generally postural kyphosis will improve or remain the same. Your spine doctor or pediatrician will be able to watch out for any significant changes, which rarely can occur in periods of rapid growth. In most cases, postural kyphosis does not worsen over time.

**Activity modification/body mechanics:** The first step is to avoid positions which promote poor posture for too long, for example slouching over a low desk, or flexing the head down to look at a cellphone (tech neck). Setting an alarm as a reminder to get up and stretch, or walk around, can do wonders for the back. Additionally, taking steps towards good body mechanics is also important. Examples include bringing tasks to up to eye level and adjusting seating or desk height.

**Home exercises and conditioning:** Exercises to address conditioning and stretching of the core, upper back, shoulders, and shoulder blades are the most important factor in treating postural kyphosis. You may be provided with a home exercise handout or be sent to physical therapy. Maintaining a home program is the best way to keep your back strong and flexible.

**Physical therapy:** A physical therapy professional can evaluate and develop a plan to treat your posture and muscular imbalances over the course of a few weeks. Therapy can be an invaluable tool to strengthen, stretch and balance your muscles. A home exercise program will be provided as well, which should help maintain your good posture.

**Additional Resources:** If you are interested in exploring more about postural kyphosis, visit the Nicklaus Children’s Center for Spinal Disorders

[nicklauschildrens.org/Spine](http://nicklauschildrens.org/Spine)



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