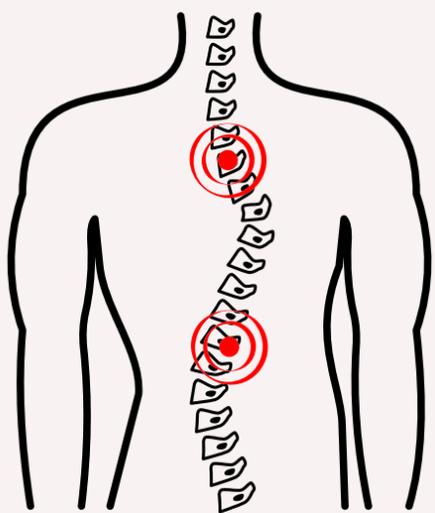


# SCOLIOSIS

**SELF-DETECTION IS KEY.**

## 1 WHAT IS SCOLIOSIS?



Scoliosis is a medical condition in which the spine is curved to one side. It can occur in a child during early adolescence, age 10-12 years for girls and age 12-14 years for boys. It may worsen during the period of rapid growth that occurs just before puberty. Once this growth spurt has stopped, the curve usually becomes stable.

Mild curves are quite common in both girls and boys, but the curves in girls are more likely to become worse during the growth spurt.

## 2 WHAT CAUSES SCOLIOSIS?



The cause is unknown. 80-90% of scoliosis cases occur in healthy adolescents, and this is called Adolescent Idiopathic Scoliosis (AIS). Females are 9 times more likely to be diagnosed with AIS than males.

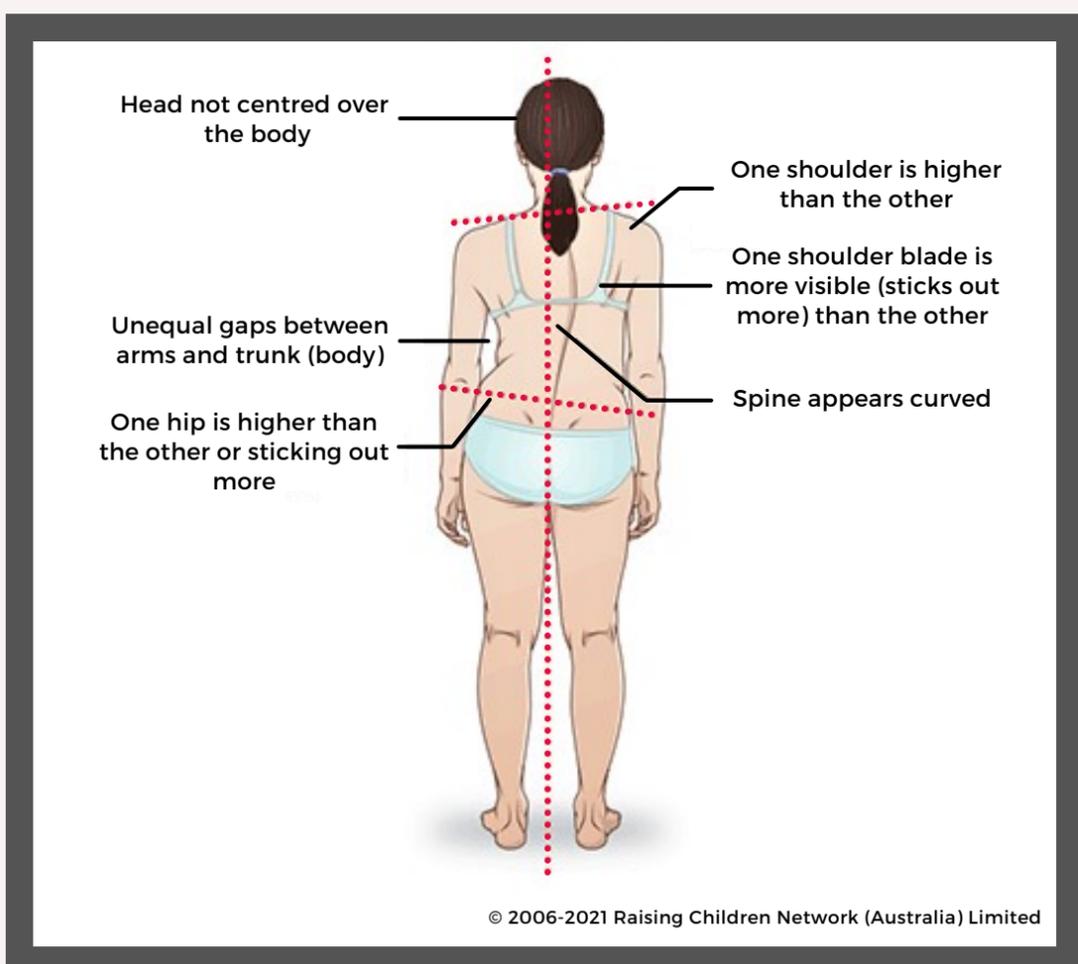
Scoliosis tends to run in families. Rarely, it may also be due to illnesses acquired before birth, or problems with the nerves, muscles or bones.

Scoliosis is **not** caused by:

- Poor dietary intake
- Carrying heavy things, for example, heavy school bag on one shoulder
- Any particular physical activity
- Poor standing or sleeping posture

## 3 HOW CAN YOU DETECT SCOLIOSIS?

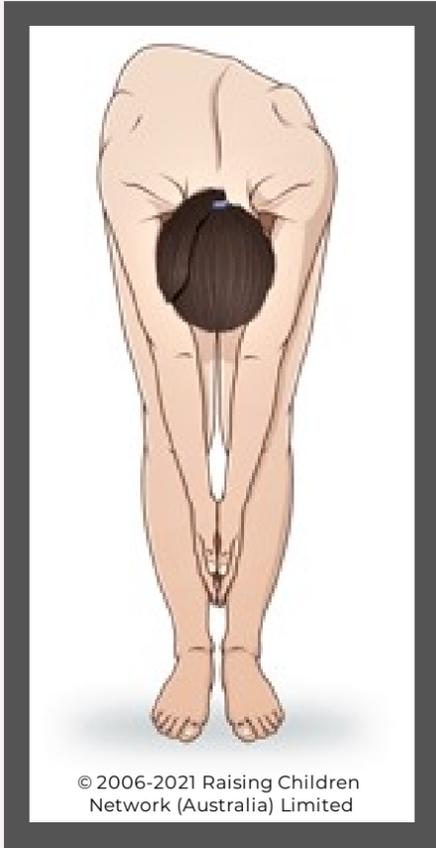
a) You may notice one or more of the following **outward signs of scoliosis** in your child when he/she is standing:



Other **outward signs of scoliosis** include:

- Body does not appear symmetrical
- One side of the chest or breast may appear more prominent than the other (in girls)
- Clothes do not fit properly

b) The **Forward Bending Test** can be used to diagnose scoliosis.



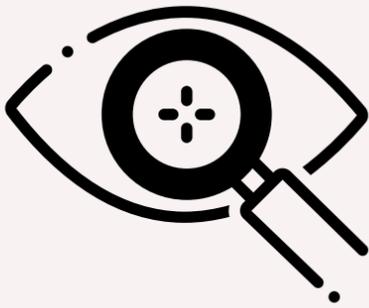
The child needs to stand with both feet together and parallel. Then, he/she needs to bend forward as far as possible, keeping the knees straight, palms facing each other and pointing towards the two big toes.

When bending forward, a rib "hump" may appear. **In scoliosis**, one side of the upper chest (thoracic) region or the lower back (lumbar) region will be **more than 1cm higher** than the other.

If the difference between the two sides is less than 1cm, it is unlikely a significant curvature is present. The difference is simply due to asymmetrical growth of the body.

If you think that your child has one or more of the above signs, take him/ her to the doctor for further evaluation.

## 4 WHY SHOULD YOU DETECT SCOLIOSIS EARLY?



Very small curves are common and are of no significance. However, approximately 2% of students require medical observation when they mature as a small handful of students will require further treatment. The earlier treatment is instituted, the better the outcomes are in the long run.

## 5 WHAT FURTHER TESTS ARE DONE?



An X-ray of the spine can help doctors to confirm the diagnosis of scoliosis, measure the degree of the spinal curve and ascertain the maturity of the child's skeleton. The degree of the spinal curve will determine the severity of scoliosis: mild, moderate or severe scoliosis.

Mild curves less than 10 degrees are not considered as scoliosis, and deemed to be insignificant.

## 6 HOW IS SCOLIOSIS TREATED?

The management of scoliosis will depend on the child's age, maturity of bones, severity of curve and how fast the curve is progressing. Scoliosis management include one or a combination of the following:

### MONITORING



For mild scoliosis, we monitor regularly to look for progression of the curve.

### BRACING



For moderate scoliosis, bracing may be offered to prevent the curve from worsening.

### SURGERY



For severe scoliosis, surgery may be offered to correct the spinal curve.