



What is Spina Bifida?



Spina Bifida literally means 'split spine'

Spina Bifida is a relatively common condition, which affects about one in every 1000 children born per year in Ireland. Ireland has one of the highest incidences of Spina Bifida births in the world. Spina Bifida is the most common neural tube defect (NTD) which causes incomplete development of the spinal cord. Translated, it literally means 'split spine'.

The Central Nervous System (CNS)

The nervous system is essentially a biological information highway, and is responsible for controlling all the biological processes and movement in the body. At the centre of this system is the Central Nervous System (CNS).

The CNS consists of the brain and spinal cord. It is responsible for receiving and interpreting messages and also sends out messages, either consciously or unconsciously.

The Spine

The spine is made up of separate bones called vertebrae, which normally cover and protect the spinal cord. With Spina Bifida, some of these vertebrae are not completely formed. Instead, they are split and the spinal cord and its coverings usually protrude through a sac-like bulge on the back, covered with a thin membrane.

The Neural Tube

In the developing vertebrate, the neural tube is the embryo's precursor to the central nervous system.

The central nervous system and spine develops between the 14th and 23rd day after conception. Spina bifida occurs when the neural tube fails to close correctly. The vertebrae also fail to close in complete rings around the affected portion of the spinal cord. This leaves a gap posteriorly (at the back), involving one or more vertebrae. Spina Bifida may occur in one or more of the vertebrae but it is most common around waist-level.

