

How does Spina Bifida affect the body?

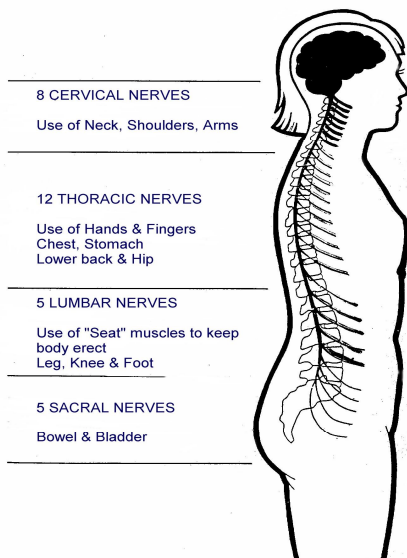
Varying effects

The physical effects of spina bifida are life-long and extremely variable. The effects range from minor to severe and every individual is affected slightly differently.

The central nervous system

The brain and the spinal cord make up the central nervous system. In a fully functioning spinal cord messages from the brain travel along nerves through the spinal cord to a specific area of the body.

People with spina bifida are born with a lesion on their back where the spine and spinal cord have not properly formed. The nerves at and below the lesion may also be damaged and so messages from the brain cannot be carried properly. Without these messages a wide range of muscles, organs and bodily functions may not work properly. The physical effects of spina bifida tend to be more severe when the lesion is higher up the back as more nerves are affected.



Four key physical effects:

The four main ways in which spina bifida affects the body are:

- Mobility
- Continence
- Skin sensation & allergies
- Cognitive issues

Mobility

People with spina bifida experience walking difficulties ranging from reduced feeling or weakness in the legs to an inability to walk. The position of the lesion determines which muscles in the trunk and legs will work. As a general rule, the higher up the spine the lesion occurs the greater the immobility of the lower limbs will be.

Continence

Bladder and bowel function are controlled by the sacral nerves that are located in the lower section of the spinal cord. Since almost all of the damage to the spinal cord associated with spina bifida occurs above this level, almost all individuals with spina bifida experience some level of urinary and faecal incontinence.

Skin sensation & allergies

Sensory nerve endings in the skin respond to pain, touch, heat and cold. Due to damaged and improperly developed nerves people with spina bifida may have little or no feeling in some areas of the skin and so damage may occur without their knowledge. People with spina bifida also have an increased chance of developing an allergy to *latex* (a natural rubber).

Cognitive issues

Many people with spina bifida also experience difficulties in specific areas of learning. This is due to the fact that most people with spina bifida have either hydrocephalus (a build-up of cerebrospinal fluid in the brain) and/or the Arnold Chiari malformation (where the brain stem physically 'jams into' the spinal cord).

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