



DISABILITY FACT SHEET

SPINA BIFIDA

What is Spina Bifida?

- Spina Bifida is Latin for “split spine” and is characterised by a defective closure of the vertebral (spinal) column. Sometimes the spinal cord protrudes in a hernial sac. Other characteristics common among people with Spina Bifida are:
 - A cyst-like growth on the spine at birth
 - Disruption of the circulation of cerebro-spinal fluid resulting in hydrocephalus (water on the brain). A shunt is usually inserted to drain fluid into the abdomen or heart.
- Spina Bifida is commonly caused by a lack of folate during pregnancy and there is no cure for the condition. This disability occurs in one in every thousand pregnancies in both male and female fetuses and can be detected 18 weeks into the pregnancy.
- People with Spina Bifida also have damage to the spinal cord that can cause:
 - Weakness or paralysis of lower limbs;
 - Poor or no bowel and bladder control;
 - Curvature (scoliosis) of the spine;
 - Deformities of lower limbs;
 - Poor circulation;
 - Impaired balance and sensation
 - Osteoporotic (brittle) bones

Benefits from working with RDA

- **Weakness, paralysis or lack of muscle control**
 - Muscles are strengthened by increase use involved in riding. Even though riding is exercise, it is perceived as enjoyment, therefore the rider has increased tolerance and motivation to lengthen the period of exercise.
- **Poor Balance**
 - As the horse moves, the rider is constantly thrown off balance, requiring the rider’s muscles to contract and relax in an attempt to re-balance. This exercising is similar to physiotherapy, reaching the deep muscles, but making the therapy more enjoyable. The three-dimensional rhythmic movement of the horse is similar to the motion of walking, teaching rhythmical patterns to the muscles of the legs and trunk. Placing the client in different positions on the horse works different sets of muscles. Stopping and starting the horse, changing the speed and direction increases the benefits.
- **Poor Fitness**
 - Trotting and cantering increase both respiration and circulation. Riding is a physical activity and over time riders increase their stamina and endurance.
- **Poor Confidence and Self-Esteem**
 - Confidence is gained in mastering new skills normally performed by able-bodied people. The ability to control an animal much larger and stronger than oneself is a great confidence builder
- **Difficulty with Fine Motor Coordination**
 - Riding a horse requires a great deal of coordination in order to get the desired response from the horse. Since the horse provides instant feedback to every action from the rider, it is easy for the rider to know when they have given a correct cue. Repetition of patterned movements required in controlling a horse quickens reflexes and aids in motor planning.

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Mercede's Story



Mercede was born with spina bifida that resulted in altered sensation and severe weakness below her waistline. She was never expected to walk or even sit up straight. Mercedes started riding at the age of 3 under the recommendation of her physiotherapist

Her first lesson at RDA required a high level of support. There were many days where, even with this amount of support, the activity was too tiring for her and the coaches would 'drape' her over the horse on her stomach. The movement of the horse and the constant approximation of muscle tone proved miraculous. Mercedes now walks unaided and has a healthy love of physical exercise.

She now rides independently and is also competing in the Special Olympics, even having won a gold medal in dressage.

Spina Bifida in RDA

- Spina Bifida falls into the Physical Disability category
- In RDA, 6% of clients have a Physical Disability
- Clients with a Physical Disability are represented as:
 - Male: 38%
 - Female: 62%
- Clients with a Physical Disability are most predominant in the 4-17 age bracket
- South Australia has the highest representation of clients with a Physical Disability (46%).

