

Acquired Brain Injury

What is Acquired Brain Injury?

- Refers to any type of brain damage that occurs after birth and can include damage sustained by:
 - Infection;
 - Disease;
 - Lack of oxygen;
 - A blow to the head.
- Long term affects can range from mild to profound and can affect physical, cognitive and psychological skills.
- Characteristics of an Acquired Brain Injury can include:
 - Fatigue (mental and physical)
 - Difficulty processing information
 - Memory, concentration and language problems
 - Changes in social behaviour
 - Impaired judgement and impulsive actions
 - Physical problems including walking, balance, coordination, gross and fine motor skills, strength and endurance

Benefits from working with RDA

- **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 and even fun. 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. By placing the rider in different positions on the horse (therapeutic riding), we can work different sets of muscles. Stopping and starting the horse, changing the speed and direction increases the benefits.
- **Poor 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 to know when you have given the correct cue. Hand/eye coordination is taught in tasks such as grooming and preparing the horse as well as other activities and exercises.
- **Slow Reflexes**
Repetition of the patterned movements required in controlling a horse quickens the reflexes and aids in motor planning.
- **Poor Motor Planning**
Something as simple as holding a pencil requires a great deal of motor planning. This is taught on horse-back through the use of obstacle courses, pole bending and many other games and activities.
- **Easily Fatigues**
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 Memory and Concentration**
Programs include educational concepts, learning numbers, colours, shapes, patterns and sequencing. Memory and concentration can be improved through playing games.
- **Psychological Benefits**
Adaptive equipment helps riders to participate in a sport to the best of their ability. This includes competition opportunities. Learning to control the horse and other skills provides riders with a sense of achievement.