



# DISABILITY FACT SHEET

## ANGELMAN SYNDROME

### What is Angelman Syndrome?

- Angelman syndrome is one of many genetic syndromes that are found in riders in RDA.
- Angelman syndrome is a complex genetic disorder that primarily affects the nervous system.
- This syndrome occurs in one in every 15,000 live births and affects both males and females.
- Individuals with Angelman syndrome will require life-long care and have a near normal life expectancy.
- Common characteristics of Angelman syndrome are:
  - developmental delay, intellectual disability and short attention span;
  - lack of speech or severe speech impairment;
  - seizures;
  - disorders of walking and balance (ataxia);
  - most children have a small head (microcephaly);
  - hyperactivity is very common but it tends to lessen with maturity.

### Benefits from working with RDA

- **Concentration**
  - Programs include educational concepts, learning numbers, colours, shapes, patterns and sequencing. Memory and concentration can be improved through playing games.
- **Speech and language difficulties**
  - The excitement of riding encourages riders to speak and communicate about their activities.
- **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.
- **Poor Self-discipline and emotional control**
  - The riders learn self-control through the structure of lessons.
- **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.
- **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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### Mia's Story



Mia's journey with RDA started 8 years ago when Mia was 3 years old. She had just been given her diagnosis of Angelman syndrome after 3 long years of searching for an answer.

Her mother, Peta, did much research about different therapies that could help her little girl. Mia's mother heard about hippotherapy and came across the RDA Centre in Victor Harbor. Her parents were a little hesitant about her age but still keen. John, Sue and all of the other volunteers were very welcoming and much to everyone's surprise she was on the horse within a week.

Mia still has separation issues every lesson, but we push on. Now she is walking, trotting and playing the games happily with volunteers. Riding has done wonders for Mia's balance and confidence, she sits up so lovely and waves to her parents like the queen. She's very proud of the competition ribbons she's collected over the years. Peta's parents are full of praise for the wonderful work of RDA and for giving Mia the opportunity.

### Intellectual Disability in RDA

- Angelman Syndrome falls into both the Intellectual and Physical Disability categories
- 22% of clients in RDA have an Intellectual Disability
- 10% of clients in RDA have a Physical Disability
- Clients with an Intellectual Disability are represented as:
  - Male: 44%
  - Female: 67%
- Clients with a Physical Disability are represented as:
  - Male: 38%
  - Female: 62%
- Both Intellectual and Physical disabilities are most common in the 11-20 age bracket

