

# **Therapists Guide**

New Zealand Riding for the Disabled

# THE ROLE OF THE THERAPIST IN A THERAPEUTIC RIDING PROGRAM

### **FINDING A THERAPIST**

The clientele of a program determines the type of therapist needed. All therapists have general knowledge about working with impaired clients. However, many therapists have additional training in movement specialties, pediatrics, adult rehabilitation, or sensory integration and can bring the advantages of their specialized training to the therapeutic program. Finding a therapist who is a horseback rider will be helpful to your program. Often however, it is necessary to teach the therapist basic equestrian skills and horse psychology. Specialized training in therapeutic riding should be sought by any therapist who works in that field.

Recruitment of a therapist involves contacting local pediatric treatment facilities, schools, rehabilitation centre and hospitals. Local physical and occupation therapy associations often have mailing lists and regularly published newsletters.

### ROLE OF A THERAPIST

**Overview** Works with rider to help them achieve their potential and maximum benefit by:

- 1. assessment
- 2. setting and helping with exercise advising the optimal positioning, postures etc
- 3. helping plan programs.

### *Teaching* Works with Instructors and Helpers

- 1. teach lifting and handling and mounting
- 2. teach conditions and precautions
- 3. teach about aids and appliances etc
- 4. teach handling and positioning skills.

#### Works with Instructors

1. to plan suitable programs and exercises.

### Specifically

- 1. Receives medical referral liases with Doctor
- 2. Initial assessment of riders forms
  - Balance
    - Joint restrictions
    - Muscle control and strength
    - Splints and footwear
    - Mounting and Dismounting
    - Use of reins
    - Sensory defects
    - Spatial awareness/Body Image (up/down in/out etc)
    - Ability to understand instructions speech and language problems

- Fear of heights/animals etc
- Medical restrictions/precautions/contraindications
- Mental development.
- 3. Mounted assessment
  - Position of rider in saddle
  - Ability to balance on horseback
  - Body awareness and position sense
  - Reactions of rider to horse and movements
  - Changes in muscle tone and joint mobility
- 4. Prepare information cards for Instructor and Volunteers
  - Any required preparation of rider for the lesson
  - Special equipment to be used
  - Special mounting/dismounting techniques
  - Type of horse
  - Length of time for lesson
  - Any precautions or contraindications
  - Specifics to work on.
- 5. In conjunction with Instructor
  - Develop goals and set a program for rider
  - Discuss any special exercises to be used
  - Review progress and assess periodically.

### TRAINING

- 6. Lifting/Handling Mounting/Dismounting
  - Advise on correct and safe techniques for different riders
  - Teach safe handling and how to preserve dignity of rider.
- 7. Conditions
  - Contraindications and precautions
  - Wheelchairs, aids and appliances
  - Special techniques for handling disable people.
- 8. Assist Instructor with exercises for specific riders.
- 9. Liaison with other therapists/community/medics
- 10. Attend Instructors meetings to share discussion of riders.

# **BENEFITS OF RIDING**

Some of the numerous benefits can be divided into the following headings, showing the holistic nature of Riding.

**Physical** Relaxation and muscle stretching via:

Warmth, 3D movement mimics human walk (sensory input) Muscle spasm Breathing capacity Muscle function Balance Co-ordination and agility Mobility (improves ease of handling) Constipation Sensory integration, body awareness, spatial awareness

#### Psychological

Self esteem Confidence Trust Provides sense of achievement Independence Knowledge Concentration

#### Social

Social contacts Develops communication skills and appropriate behaviour. Encourages group participation and builds relationships. Fun.

Moral boost – for once disabled person is in control and responsible for a creature that is dependent on his/her commands – this is important for those who are always dependent on others.

Successes are important – they help develop self worth and value, therefore don't set sights too high.

Much of the benefits are lost if the person doesn't derive pleasure from the sport.

### BENEFITS OF DEVELOPMENT POSITIONS ON HORSEBACK

#### Prone

- relaxation decreased general tone
- TA and hamstring stretches
- increased back extensor tone
- postural drainage
- relax shoulder girdle protraction scapula
- flat hands/open (*spaghetti fingers*)
- head control lifting head

- watch reflex
- watch shunt/hydrocephalus
- caution Scoliosis/Kyphosis
- breathing watch
- not allergic to horse hair
- need appropriate behaviour from rider ie no biting
- could cause propping

#### Prone over rump

- elbow propping/forearm support
- head control
- cocontraction should girdle stability
- proprioceptive input
- weight bearing
- hamstring stretch
- increased back extension
- relaxation/decreased tone
- towel over rump useful
- reaching
- propping on extended arms
- flat hands thumbs out

#### Sitting backwards

- hands over horses rumps
- flat hands thumbs out
- wider arms trunk rotation
- weight transference
- increased adductor stretch
- increased back extension
- trunk rotating reaching
- more vestibular and proprioceptive input used

#### Sideways

- hold hips and knees block
- balance
- lateral flexion
- weight transference hip hitching
- rotation both arms held to rump
- weight bearing through arms

### Sitting forward

- eyes shut
- balance
- proprioception

# 4 pt Kneeling & 4 pt Squatting

- proprioceptive input
- alternative joint proximation hips and shoulders
- flat hands
- trunk rotation
- approximates crawling
- wide backed horse
- use vaulting surcingle

### Supine

- have a 'rounded' horse
- hip flexor stretch
- open chest
- extension rotation and added stretch of arms
- traction on spine
- increased breathing
- trust helpers
- caution with spinal deformities
- caution reflex extensor pattern

### Side Saddle Position

- increased pelvic and hip movement
- very stable (especially with saddle)
- hips facing forwards

# SADDLES VS CLOTHS

Both saddles and cloths are used in therapeutic riding, choice of which depends on:

- why rider is riding
- what you are working on
- rider preference
- Specifics of condition (pressure etc)
- Therapeutic goals

Continual reassessment and re-evaluation of goals is necessary to validate your choice.

### Saddle - Pros

- Stirrups take weight off hips, backs and feet
- Provide more support
- Increase proprioception through feet in stirrups
- Easier balance with stirrups and saddle because base in wider
- Wider saddle adds stretch
- Increased confidence more pieces to hold on to
- More normal social benefit
- Possible needs less side walkers
- Best for independence/self esteem
- Spina Bifida independent riding
- Can use stirrup length changes to help
- With stirrups at walk and trot
  - weight transference
  - sit / stand
  - standing balance

#### Saddle - Cons

- Provides too much support
- Wide saddle too much stretch
- Stimulation on the ball of the foot
- Pressure area potential

### Cloths - Pros

- Required more concentration increases focusing
- · Can use with surcingles or handles floppy/rigid
- More comfortable
- More suitable for pressure problems
- Increase in proprioception to the trunk
- Better for increased balance challenges balance
- Heat gives relaxation
- Increased feel of movement through cloth
- - Better for decreasing tone
- Increased choices of positions more potential for therapeutic riding
- Easier to fit/easier for mounting
- Can see Rider's position better easier assessment
- Younger Spina Bifida
- People with poor balance aiming on working with balance
- Cerebral Palsy's with increased tone

### Cloths - Cons

- Less stable
- Increase in anxiety

# MOUNTING TECHNIQUES

### Introduction

The Instructor must be prepared to discuss any special mounting requirements with the Rider and/or Therapist.

# 1. Ramp Total Lift

- a) Position chair and Rider away from the edge of the ramp and before the horse enters.
- b) Brakes on, arm rest removed, footrests removed or moved to the side.
- c) 3 assistants



# d) Exit - do not exit until everyone is ready

Helpers 1 and 3 double hold and helper 2 keeps riders left foot above ramp if necessary.

# 2. Ramp Sitting Mount

- a) 3 assistants
  - i) Rider stands between A1 and A2 with back to horse.
  - ii) Rider walks backwards to edge of ramp A1 and A2 use own feet to stop stepping over.
  - iii) Helper 1 and Helper 3 hold under armpit and over forearm and brace Rider's knee with their closest knee.
  - iv) Rider bends as in normal sitting HELPER 3 locks arm around waist and assist lowering into position.
  - v) Helper 2 lifts both legs and Helper 3 receives one leg with arm around waist. A1 supports under arm and prevents falling back.
- b) Exit as total lift.

# 3. Ramp Standing Mount

- a) 3 assistants
  - i) Rider standing in position.
  - ii) Helper 1 stands between Rider and horse's head and puts arm around Rider's waist. Gives assistance with Rider's hands onto wither.
  - iii) Rider stands with toe towards horse's point of shoulder and lifts leg over helped by Helper 2 hand under knee and foot.
  - iv) Helper 3 receives Rider's leg and assist to gentle sitting.
- b) Exit as total lift.

### 4. Leg Up

a) 3 assistants

Helper 1	asks Rider to put hands on the with and put left hand under armpit, right hand around inside of Rider's bent knee. Counts for Rider to jump.
Helper 2	assists right leg over rump and must prevent horse being kicked.
Helper 3 receiv	es leg.

# 5. With Safety Stirrup – (preferably from ramp)

- a) 2 assistants
  - i) Riders takes reins in left hand.
  - ii) Faces horse's tail and turns stirrup towards them with right hand.
  - iii) Puts left foot in stirrup and points toe to the ground.
  - iv) Hops to point left knee towards front of saddle, looks between horse's ear and springs up pushing down on left hand and putting tight hand on the far side of the saddle NOT ON THE CANTLE.
  - v) Helper 1 assists right leg over cantle.
  - vi) Helper 2 receives right leg and assists gentle sitting.

# **DISMOUNTING TECHNIQUES**

### 1. Complete Lift off

#### 3 assistants

- a. Position wheelchair
- b. Helper 1 reaches around Rider's trunk and grasps each forearm securely.
- c. Helper 2 lifts leg up over horse's neck (leader having asked horse to lower head and neck).
- d. Helper 3 lifts leg on Helper 1's side and receives opposite to join it.
- e. As Rider is lowered Helper1 and Helper 3 take the weight and carry to wheelchair DO NOT HURRY. Leader backs horse away from Rider and chair.

### 2. Leg Over Neck

2 assistants

- a. Helper 1 puts hand around waist and other arm under Rider's thigh, standing with own leg between horse and Rider.
- b. Helper 2 lifts other leg over and puts hand under armpit to support Rider's upper body.
- c. Helper 1 lowers Rider using the horse for support.

### 3. Leg Over Rump

2 assistants

- a. Helper 1 asks Rider to lean forward and put head on opposite side of dismount supporting him under the arm.
- b. Helper 1 and Helper 2 assist both legs above horse's rump by lifting above the knees.
- c. Helper 1 moves arm around hips and assists legs to the ground putting own leg between Rider and horse.

### 4. Emergency Dismount

2 assistants Helper 1 – receiver

- a. Helper 2 assistant side walker
- b. Helper 1 and Helper 2 ensure Rider's feet out of stirrups, reins free and out of the way.
- c. Helper 1 (receiver) grasps the Rider around the waist and pulls the Rider towards them and guides them to the ground safely.
- d. 2 Side walkers being used decide who is Helper 1 (receiver) and Helper 2 (assistant side walker).
- e. Helper 2 (assistant side walker) lifts Rider's leg over the horse's neck to aid the dismount.

# **GUIDELINES FOR SAFE BACKRIDING OF ALL TYPES**

Backriding is a highly skilled technique. The following are guidelines for the safe use of backriding.

A physical or occupational therapist or a therapeutic riding Coach need to review all riders with physical disabilities who are candidates for backriding.

The total person should be considered.

It requires constant problem solving, using a team approach between the therapist, riding coach, side walkers and leader.

### THE BACK RIDER

It is essential that a Backrider is a highly skilled rider. They need to stay on if the horse moves suddenly. The Backrider must not ride behind a standard saddle or vaulting roller. This places the Backrider too far back on the horse and increases the strain on the horse. It also places the Backrider in an ineffective position for handling the rider.

### CATEGORIES OF RIDERS

- a) For riders with a physical disability in a Hippotherapy program, a Physiotherapist or Occupational Therapist, can be the Backrider.
- b) For riders with emotional or intellectual disabilities, the Doubler should be an RDA Coach or knowledgeable horse person.
- c) The Backrider/Doubler must be of adequate height so that the rider's head is *below* the Backrider's chin.

### PRE-REQUISITE SKILLS FOR A BACKRIDER/DOUBLER

The Backrider must be able to:

- a) Ride at the walk, trot or canter while being lunged (no saddle, stirrups, reins or holding on). Fleece or pad with surcingle permitted.
- b) Independently control different horses at the walk, trot and canter.
- c) Groom the horse and prepare it for backriding, demonstrating confidence and rapport with the horse.
- d) Recognise signs of the horse's basic moods and behaviour (ear position, tail placement, head/neck position, eyes, breathing, reaction to other horses).
- e) Recognise if the horse's back is being stressed during backriding and respond appropriately.
- f) The Physiotherapist or Occupational Therapist should be able to analyse and treat neuromuscular movement deficits.

### THE HORSE

### BEHAVIOUR AND CONFORMATION OF THE BACKRIDING HORSE

The backriding horse must have:

- A safe, quiet and reliable disposition.
- A strong back to tolerate the work. The horse should be well balance with a level top line. Avoid horses with a long back, high withers, high rump or swayback. The Backrider should not sit on the horse's croup and the riders should not sit on the horse's neck or withers.
- An appropriate height. The ideal height of a backriding horse is 14.2 to 15.2 hands. Larger or smaller horse may be appropriate. Consider the size of the Backrider and rider to determine if the horse can carry the load. The maximum combined weight of both the people on the horse must not exceed 70kg (154lbs). In cases where the combined weight limit is exceeded, an RDA person external to the Group and experienced in backriding should be consulted. Contact NZRDA.
- An appropriate back width. The ideal width of the horse's back depends on the rider's spasticity and balance difficulties. If the rider can accommodate the width, a wide base of support is helpful.
- Movement that is supple, symmetrical and rhythmic.
- The ability to change length of stride.
- A quiet standing or walking disposition while the rider is in a variety of positions.

Routinely evaluate the backriding horse for soreness or behaviour changes. Discontinue backriding if signs of stress are present. Maximum riding time 30 mins including dismount and mount, and only once a day.

### THE WELFARE OF THE HORSE IS PARAMOUNT

### TRAINING OF THE BACKRIDING HORSE

The backriding horse must be trained with able-bodied riders first.

- To quietly carry two people before a rider is put on with a Backrider.
- As a therapeutic horse so it is comfortable with instructional equipment (balls, rings, stuffed animals) and equipment used by riders (wheelchairs, crutches).
- To stand quietly at the mounting ramps and not react to slow and sometimes difficult mounting procedures.
- To be comfortable with the number of assistants (leasers, side walkers) required while backriding.

### STAFF AND VOLUNTEERS

### HORSE LEADERS

Leaders are required to be:

- Experienced horse handlers that are responsible for the control and straightness of the horse and must never leave its head.
- Able to recognise signs of the horse's basic moods and behaviours, and respond appropriately.
- Attentive to the instructions and needs of the therapist/coach team.
- Must never take sharp, quick turns. They must be wide and slow so the riders do not become unbalanced.

### SIDE WALKERS

Side walkers must be:

- Available in the appropriate numbers per rider. A minimum of 2 side walkers is required. On occasions, more side walkers may be needed. It is the responsibility of the therapist/coach team to carefully determine the number of side walkers for each individual situation.
- Matched in height and strength to the size of your rider, Backrider and horse.
- Trained in backriding, such as safety, the needs of therapist/coach team and an agreed emergency procedure.
- They must realise that the safety of the Backrider is their responsibility. The Backrider is responsible for the safety of the rider.
- Must maintain a physical hold on Backrider including whilst mounting.

### EQUIPMENT

### Pads

There are a variety of pads to bring the rider closer to the warmth and movement of the horse. A sheepskin or western saddlecloth, bareback or high-density foam pad are appropriate option. Extra padding may be required. The pad should be big enough for two. Secure it with surcingle or non-elastic girth.

### Surcingles

Pads may be attached to the horse by several methods:

- A non-elastic strap, an anti-cast surcingle or elastic surcingle.
- Elastic surcingles effectively secure the pad to the horse.

For added comfort for the horse and rider a sheepskin sleeve over the top of the surcingle should be used.

Anti-cast surcingles have one handle that does not interfere with leg position. This surcingle benefits special riders who need the handle to assist with balance and trunk control, but who cannot use a vaulting surcingle because two handles interfere with their leg position.

### Neck strap

A neck strap must be provided for the Backrider for emergency situations. The team must have an emergency procedure known to all team members.

### Helmets

The Backrider must wear a NZRDA approved helmet correctly fitted.

### WHO IS APPROPRIATE – CLIENTS WITH:

- Poor head control and/or trunk control.
- Little or no balance reactions.
- Little or no independent sitting balance.
- Severely abnormal tone, ie hypotonic or hypertonic when accommodating to the horse's movement.
- An asymmetrical posture and/or who have strong reflexes ie ATNR.
- Clients who are not progressing in treatment.
- Clients who are frightened and need greater security or who are quick to tire.

### TREATMENT METHODS AND TECHNIQUES

- Main objectives are promoting sitting balance and proximal stability.
- The treatment must be active and working towards independence.
- If the rider is hypotonic, the therapist may assist to maintain pelvic position and/or facilitate the obliques.
- If rider is hypotonic, the therapist may use stomach or hand to encourage lumbar spine, work towards elevation of the sternum, assist with symmetrical posturing.
- Reaching, grasping, and crossing midline can also be encouraged.

### **Backriding:**

A therapeutic tool used by a qualified PT/OT, suitably experienced horsewise.

### **Doubling:**

Recreational riding carried out by a suitably qualified Instructor or hosre person. This is a shoort term technique to facilitate progression to riding with support from the ground.

Generally 6/12 to achieve goals. Constant re-assessment throughout (every 2/52).

# Guidelines and Strategies for Teaching People with Intellectual Disability

#### General:

The term "Intellectual Disability" applies to those people (children and adults) in our community who, because of impaired learning ability are unable to function independently ongoing support services. Often, there are no visible signs of an intellectual disability, and the degree of disability varies from person to person. The causes are extremely diverse and are not usually significant to helpers. However, instructors must ensure that they are aware of any relevant health details.

Riding provides the chance to:

- Improve fitness.
- develop new skills.
- increase social contacts.
- experience personal enjoyment and challenges achieve the thrill of competition.
- learn to care for and respect the horse.

Providing there are no associated physical conditions, the same physiological response to riding and exercise can be expected from people with intellectual disability as their non-disabled peers.

### Intellectual Disability is a Disability of Learning

Some general learning characteristics of people with ID:

- · poor ability to think in abstract terms
- poor ability t make decisions
- poor short term memory
- · learning difficulties such as limited literacy and numeracy skills are common
- inconsistent attention spans
- can copy or mimic well
- little or no safety awareness

NB: These will not apply to all people and should only be used as a guideline.

#### **General Principles**

- make all sessions fun and enjoyable but be aware of safety at all times.
- Keep language clear and precise and simple.
- Be patient, tolerant, consistent and tactful.
- Sequence learning tasks break down complex activities into small, achievable steps.
- Always use age appropriate activities, and treat adults as adults.
- Encourage the learning of correct, appropriate language and terminology.

- Give positive appropriate language (eg you turned the pony really well, rather than 'good girl')
- expect appropriate behaviour, and redirect or discipline unacceptable behaviour.
- Reinforce concepts of activities frequently and repeat key instructions frequently.
- Keep environmental distractions to a minimum.
- Teach by showing not telling, or use a combination of both.
- Build on existing skills, ensuring it is established before moving on. Never assume a skill is mastered until you see it used independently.
- Allow increased time to finish an activity.
- Coordination, balance and body awareness may be associated problems. Use activities that can develop these.

#### Remember:

Often not enough is expected of people with intellectual disability. Don't make allowances – encourage people to meet the requirements of riding to the best of their ability.

Accomplishments and positive attitudes developed at RDA can have a positive impact on the quality of daily living of all people.

# Teaching People with Disabilities General Principles

There are basic principles of teaching and Communication that relate to all educational or learning situations and that apply when working with riders, whether disabled or non-disabled.

However, in the RDA setting, it will be necessary to modify and adapt methods to be able to communicate effectively with people who have a variety of characteristics or special needs, and to ensure that the riding sessions are beneficial and safe.

Where as basic principles will apply to all riders, a change of approach to or focus on the teaching or coaching sessions will be needed for individual needs. These include riders with.

- Physical Disability
- Intellectual Disability
- Sensory Disability or Disorder
- Multiple Disability
- Learning Disability
- Psychiatric Disorder or illness
- Behavioural or Social Dysfunction

RDA Groups may also be working with people who have a variety of health related Conditions. These include diabetes, epilepsy, asthma and heart disease.

While teaching or communication strategies will not necessarily require modification, it is Vital that participants in a riding program have medical clearance or consent which indicates any relevant medical information. It is essential that RDA personnel are aware of any potential problems, and the correct procedure and contacts for dealing with an emergency.

The issue at hand with people who have health related conditions is the work intensity and the ability of the individual to cope with physical stress.

Teaching people with disabilities need not be difficult if the coach or teacher is able to accept each participant as an individual.

As with teaching all riders, instructors need to be able to:

- Assess individual strengths and weaknesses;
- Set Challenging, realistic and appropriate Goals;
- Communicate clearly and effectively;
- provide positive feedback;

# **General Guidelines and Techniques**

- Approach the rider as an individual
- Communicate to identify the riders ability and recognise existing knowledge
- Set realistic and achievable goals and objectives
- Create a positive and enjoyable atmosphere
- Be consistently firm with discipline
- Evaluate and reward progressing
- Express yourself in clear, simple terms, especially where cognitive ability may be affected.
- Ask riders if they fully understand you
- Repetition and practice establishes skill, but avoid boredom
- Never underestimate intellectual or physical abilities.
- Establish and consider any relevant health / medical details, or contra-indications
- Promote independence at every opportunity
- Always be aware of safety aspects.

### Remember:

Always keep in mind the benefits of riding – constantly remind yourself why this person is coming to RDA and participating in Riding Therapy.

As a teacher, it is important to earn the respect of pupils by being

knowledgable consistant realistic sensitive to needs flexible motivated confident assertive

# Teaching Children with Special Learning Needs

#### Characteristics of children with special needs

- Attention span difficulties difficulties in focusing and sustaining their attention for a period of time long enough to initiate and complete a set task or assignment. Poor concentration, easily distracted, tend to 'switch off", daydreamers.
- Increased activity levels restless, fidgety, cannot sit still, can be hyperactive, in extreme cases.
- Impulsive impetuous, do not stop to think of the consequences of their actions, which can lead to
  difficulty retaining verbal information than visual.
- Perceptual motor difficulties perceptual motor learning involves all the senses) seeing, touching, tasting, smelling, hearing, moving) often poorly coordinated, poor fine motor skills, clumsy. Poor balance, mixed dominance (right/left handed), eye/hand and eye/foot coordination problems. Poor auditory and visual discrimination.
- Speech and language difficulties poorly developed listening skills, decreased ability to follow directions, under-developed receptive and expressive language ability, articulation and sequencing difficulties.
- Immature juvenile behaviour, often act 'class clown' to gain approval, often emotionally immature.
- Reluctant Learners withdrawal, non-compliant, verbal or physical aggression, difficulty in motivation and competing tasks, slow in grasping new concepts.
- Poor self image and self esteem

#### Benefits of a RDA Program for special needs children

Within the RDA environment and lessons we can:

Provide structure and consistency

Set boundaries

Set personal goals that can be achieved

Develop short term memory by the need to retain information form one session to the next

Improve fine motor skills eg saddling, holding the reins

Help develop balance

#### Improve coordination

Provide opportunities to experience cause / effect, or action / reaction

#### Develop listening ability and concentration

Incorporate activities to help remedial learning difficulties

Introduce classroom activities in a fun, non-academic setting

Motivate the reluctant learner

Reinforce behaviour modification

### Education

RDA can reinforce and introduce language concepts a child needs to know to be able to follow instructions in early school years

Space - location, direction, orientation, dimension; (through, below, first, left, between, corner, straight etc)

**Quantity and Number-** Some, half, second, pair, equal, last, none, whole, few etc.

Volume and Mass - Full, more, empty, less, heavy, light etc

Size - Big, wide, long, tall, thickest, narrow, largest, shortest, little, middle sized etc

Time - After, beginning, never, always

Temperature - Hot, cold, warm, cool

#### These language areas can be included in enrichment activities

Body parts – include shoulder, ankle, elbow, wrist etc. Clothing names Colours Shapes Household items, names, rooms, appliances etc Family words, brother, grandmother, uncle etc At school Modes of transport Food People and their occupations Animals - homes, babies, names\instructions Courtesies - please thank you, hello, excuse me Traffic signs and words on the community - stop, go, cross, don't walk, toilet, men .pull Names of vehicles Names of emotions (recognize and verbalise) Days of the week Months of the year Seasons - recognize and talk about changes Counting - on and backwards Numerical recognition and sequencing Numbers on to ten Letters of the alphabet - names and sounds Recognition of basic sight vocabulary eq the, I, you, my, are, a, in etc.

Riding and activities that incorporate the above concepts, will promote growth in oral language, promote visual and auditory discrimination and memory, promote muscular coordination and promote thinking power.

Praise, encouragement, tangible rewards and success will provide the motivation to achieve.

Take the opportunity to make all experiences learning ones.

# Guidelines and strategies for teaching people with Sensory Disabilities

#### Hearing Impairment

Hearing loss is a communication disorder and is and extremely isolating condition. There are varying degrees of hearing impairment including:

- Hard of Hearing, or mild hearing loss
- Partial hearing, or moderate hearing loss
- Deafness, or severe and profound hearing loss

People who have hearing loss can relay on aided, lip reading, attentive listening, sign language or gestures or a combination of these, for communication. People who are born deaf, or become deaf early in life have very little natural speech or language, and often cannot understand the speech of others. Instructors should be aware that the initial slower learning which occurs with deaf people is due to the communication difference, not lack of ability.

#### **General Principles**

- Be sure you have a persons attention so they can ascertain the whole message
- See and be seen position yourself where you can see face on, at close range and in a good light, so the person can lip read and see your facial expressions
- Hand gestures and facial expressions help make sure the meaning clear. However, keep hands away from the face
- Consider environmental conditions ie wind and sun and avoid background noise
- Keep instructions short and simple avoid unnecessary words or long sentences
- Check that you have been understood, and rephrase if necessary
- Aim to give all instructions before the activity has begun, using visual aids and demonstration where possible. Use demonstration as the most important cue.
- Speak naturally and clearly, and be patient
- Use a flag, or hand signals to gain attention
- Some people experience on-going ear problems be aware that there may be balance or spatial awareness difficulties, or dizziness.

#### Remember

For effective communication with a person who is deaf or hearing impaired, it is necessary to ascertain the extent of the deafness and many other disabilities they may have. The more you learn about a person, the better equipped you will be to work with them.

### **Visual Impairment**

People who are visually impaired have the same needs as any other person. However, the degree of visual impairment will determine the activities and modification. Visual impairment varies considerably with the degree ranging from – Low vision involving significant useable residual vision, with Impairment perception of colour, light and shadow; to Total Blindness where a person has no vision or no significant useable vision.

A Riding program should focus on balance, Posture, coordination of motor tasks, Body Image and spatial awareness.

People who are visually impaired rely on hearing and touch to gain information about their environment.

### **General Principles**

- When giving directions, use words like in front, to your left, opposite parallel and the clock face to describe locations.
- Allow people to become familiar with their environment before commencing an activity
- Give constant verbal feedback on locality and progress of activities
- When demonstrating or teaching movement. Let the person feel your movements or alternatively use them as a model
- To understand the problems a particular skill may present to a pupil with a visual impairment, the instructor should attempt the activity with own eyes closed.
- Speak directly to the person, identify yourself, and address them by name. Do not yell
- Be articulate and give full descriptions of the technique and descriptions of poor technique
- Demonstrate techniques individually, breaking down complex movements into component parts.
- Acoustic signaling eg metronome, music, beeper may be required for advanced, independent work
- Develop a good level of spatial awareness
- Use brightly coloured equipment or which makes a noise
- Do not omit words like 'look' or 'see' from your vocabulary the person with a visual impairment uses their hands to look and see.
- As riding requires concentration, allow students a break in the lesson to relax.

### Remember

Be consistently aware of the degree of Visual Impairment and consider this when developing a well structured and specific learning program.

# Sensory Integration Difficulty

Sensory Integration is the organization of sensation for use. Sensations include – touch, taste, smell, hearing, vision, joint pressure and movement, muscle stretch or laxity, sensations of movement, acceleration, speed and gravity. These sensations are sent to the spinal cord and brain, where they are perceived, processed and organized, and then messages are sent out to the body to give responses, such as reflexes, balance reactions, posture, joint movements, coordination, muscle tone, bilateral activity.

All these responses are necessary for horse riding.

Sensory Integration difficulties are not obvious and often underlay slow learning and poor behaviour. There are many different types of SI dysfunction, but the following are common to children we may come across at RDA:

- Dyspraxia poor motor planning, and difficulty performing unfamiliar movements.
- Tactile Defensiveness reacting negatively and emotionally to touch sensations.
- Gravitational Insecurity fear and difficulty negotiating slopes, uneven surfaces, heights or obstacles.

The movement of the horse enhances Balance reactions, bilateral coordination, muscle tone, posture and body confidence.

### **General Principles**

- "model' the riders hands /body to demonstrate movements.
- Use firm, positive handling to encourage comforting, calming sensations. Light or unexpected touch can be threatening.
- Accept a child as he/she is and move only gradually in your expectations of him/her/
- Be patient and understanding
- Provide and encourage challenge, but do not expect more than the rider can cope with.
- Give lots of reassurance but be ready to fade out help as confidence builds up.
- Avoid situations where children have to perform or compete in front of peers until they are confident
- Use exercises to help motor planning.

### Remember

Riding naturally lends itself as an aid towards independence and greater self worth.

# Guidelines and strategies for teaching people with physical disabilities

### Cerebral Palsy

- A group of different conditions affecting control, movement and posture
- Appears at birth or early life
- Is non-progressinve and not a disease
- Main forms are Spacticity, Athetosis and Ataxia

A person with Cerebral Palsy may also have perpetual, visual or learning problems, or epilepsy.

People with CP require activities to promote **Posture**, **Balance** and **Motor Planning** and this is why riding is so beneficial. Riding also encourages body symmetry.

### **General Principles**

- Avoid over-excitement which can exaggerate movements and increase spasticity promote a relaxed environment.
- Aiming for stationary objects rather than moving is easier for a person who has athetoid CP.
- Use gross (large) and repetitive body movements to promote and emphasise slow, deliberate body movement.
- Make allowance for muscle weakness and poor gripping ability.
- Keep activity periods short to accommodate fatigue and poor attention spans.
- Promote maximum use of both sides of the body, even the affected side if the person has hemiplegia
- Selection of horse size and gait are important. Use riding to strengthen weak, floppy muscles (therefore a broad horse with a brisk, active gait) and to stretch and relax tight or spastic muscles (a narrow type horse with a slow, rhythmic gait)

### Remember

Don't underestimate mental or physical abilities. Always see and encourage the potential of the individual.

### Spine Related Disabilities

- Result from injury, disease or birth defect including accident, stroke or head injury and Spine Bifida (congenital malformation of the spine)
- Usually involves some form of paraplegia which can occur from the upper torso down.

When working with people with spine disability, RDA personnel need to be aware of decreased mobility, incontinence, or the presence of ventricular shunts and leg braces.

Riding Therapy for people with spine related disabilities should concentrate on **Balance**, **Postural Stability**, and **Upper Body Strengthening** and **Compensation Skills**.

### **General Principles**

• Promote abilities in non-paralysed parts of the body - increase arm and trunk strength, eg

catching and throwing.

- Provide support during activities requiring greater balance and righting reactions, eg varying pace and cornering.
- Beware effects of heat, cold pressure and abrasions in affected limbs.
- Check if the person needs assistance with personal regimes, eg emptying urinary bags before riding.
- Be aware of increased fatigue, and that people may experience spasm in limbs individuals will deal with them.
- Riding can be emphasized as a sport for people with spine related disabilities encourage healthy competition with self and others.

#### Remember

Have and understanding of which muscle groups are usable therefore which movements are possible.

### Multiple Disability

A person with Multiple Disability is one who has severe or profound physical and intellectual disability. Problems and difficulties will be unique to each person, and all or any of the parts and function of the body may be affected.

#### Guidelines for RDA

- Thorough and accurate assessment of the person by a Therapist is essential before starting any activities
- Use the assessment to form aims for the programme
- Don't be overwhelmed by the extent and complexity of the persons disability and wonder hoe RDA can help accept to give pleasurable 'pony rides'. Of course in some situations this may be the simple purpose of the ride.
- The relationship developed with a person is very important to their development process.
- Ensure that the person with a disability receives planned experiences rather than random experiences
- Break each riding or horsecare skill you wish to teach into small achievable steps.
- Be consistent, repetitive and precise in the way you instruct or direct.
- Ensure each small step of a skill is mastered before introducing a new step. Avoid trying to teach too much at one time.
- People with multiple disability usually respond well to physical contact and eye contact and the human voice.
- People may need a lot of handling because of the affects of their physical disability. Be aware of the way you handle them, as it conveys a great deal. Be positive and confident.

#### Remember

Believe that each person has potential and is capable of change or progress no matter how small. Expect and plan for change.

# New Zealand Riding for the Disabled Association Incorporated

Patron: H.R.H. The Princess Royal G.C.V.O.

# Referral / Request To participate in Riding Programme

To: The Secretary / Chief Instructor	RDA Group
Address:	
Prospective Client:	
Contact Person, address phone:	
Age, approx height / weight:	
Therapeutic needs:	
Physicians name / contact:	
Other relevant information:	

This information is required to enable the RDA Group to initially consider whether they are able to accept the prospective client into the riding programme. All information supplied will be considered confidential, and stored and used only in accordance with the Privacy Act 1993.

- 11. I understand that this information is required to enable the RDA Group to consider suitability to participate in an RDA programme.
- 2. I understand and consent that if accepted, further medical or educational information can be supplied for safety and planning purposes.
- 1. I understand that final acceptance will be at the discretion of the RDA Group personnel, after consultation with other relevant people / agencies where necessary, and that request / referral does not guarantee entrance into a riding programme.

Signed / dated	(Client / Parent / Guardian)
Referred by: (name / designation)	
Contact address / phone:	
• • • • • • • • • • • • • • • • • • • •	

	Group Letter Head / Logo This form is to be completed by the rider's doctor before starting the riding programme. Please also attach a copy of separate sheet 'Information for Physician'
	Medical Consent
Name	Date of Birth
Address	Telephone
programme. Signed Diagnosis	on for Dr to supply relevant medical information to theGroup RDA for the purpose of establishing a ridingDatedDated
Medication Allergies	
Epilepsy	ases
	Information / Precautions
In my opinion supervision. Physician's sigr	this person can participate in a riding programme and associated activities with appropriate
Physician's nan Address	
	Date
	nis completed form to: Group RDA
	Date:

# Information for Physician

The following conditions, if present, may represent precautions or contraindications to therapeutic horseback riding. Therefore when completing the **Medical Consent form**, please note whether these conditions are present, and to what degree.

# Orthopaedic

Spinal Fusion Spinal Instabilities / Abnormalities Atlantoaxial Instabilities Scoliosis Kyphosis Lordosis Hip Subluxation and Dislocation Osteoporosis Pathologic Fractures Coxas Arthrosis Heterotopic Ossification Osteogenesis Imperfecta Cranial Deficits Spinal Orthoses Internal Spinal Stabilisation Devices

# Neurologic

Hydrocephalus / shunt Spina Bifida Tethered Cord Chiari II malformation Hydromyelia Paralysis due to Spinal Cord Injury Seizure Disorders

# Medical / Surgical

Allergies Cancer Poor Endurance Recent Surgery Diabetes Peripheral Vascular Disease Varicose Veins Haemophilia Hypertension Serious heart Condition Stroke (Cerebrovascular Accident)

# Secondary Concerns

Behaviour problems Age under two years Age two – four years Acute exacerbation of chronic disorder Indwelling catheter

For persons with Down's Syndrome a Cervical X-Ray for Atlantoaxial Instability may be required.

For information on precautions and contraindications please contact

### Group Letter Head / Logo

This form is to be completed by the rider's doctor. An annual update is recommended for each rider.

# Medical Consent Update

Group

Dear Dr/Mr

With reference to

Following a course of therapeutic riding for

He/she has made the following progress / non progress

It is necessary to update medical consent every 12 months.

If there have been significant changes that would mean that this client <u>could not continue</u> with the riding programme and associated activities please comment below.

In my opinion this person can participate in a riding programme and associated activities with appropriate supervision.				
Physician's signature Physician's name Address	Tel/Fax Date			
Received by:	Date:			

# Group Letter Head / Logo

Form for reporting back to the doctor on the rider's progress.

# **Treatment Progress Report**

Group
Date
Dear Dr / Mr
Regarding your referral for
Name
Diagnosis
Date Treatment Commenced
Comments

Yours sincerely \_

	Group Letter Head / Logo Evaluation and Assessment forms to be completed by the Group Therapist before					
	commencing a riding programme.					
Initial Evaluation Form						
Name	Date of Birth					
Date of evaluation	Therapist					
Diagnosis						
Medical History						
	_					
Medication						
X-Rays	mont					
Assistive Equip						
Height	Weight					
CONFIDENTIAL						

# Assessment

# Background Information

**General Appearance** 

Social Skills

# **General Functional Status**

Ambulatory		Amb w/assist. Device		Non-amb	
Assistive Devic	els				
Stairs Amb. Level Su Amb. Unlevel S Inclines Transfers Transfers (des Standing Sitting Type of sitting	Surfaces cribe)		Independent	W/assist	
Mobility / F	ROM				
Cervical Lumbar			Thoracic		
Hips	Flexion Extension Abd. W/90 deg flex	∢& Ex Rot	Left		Right
Hamstrings TA Upper Extremit	ies				
Muscle To	ne				
Hypotonic Hypertonic Fluctuating Other	Head no	eck	Trunk	UE	LE

# Cognition / Perceptual / Behaviour

Hearing	Vision / Visual Fie	ld
Follow Commands: 1-Step		2-step:
3 - step	Complex	
Attention Span Memory Co operation Impulse Control		
Pain	Sensation	
Skin Integrity / Pressure Areas Comments		
Oral Motor Function		
Lip Closure Drooling Vocalisations Diaphragmatic/Chest Breathing		
Language Skills		
Expressive Language Receptive Language Method		
Visual / Perceptive		
Left/Right Discrimination Proprioception Spatial Awareness Crossing Midline Coordination		

# Postural Assessment: (circle appropriate level)

# 1. Head and Neck

- a. If neck is in good symmetrical alignment, head in midline.
- b. W/ min neck flexion, asymetry or capital hyperextension
- c. W/ mod neck flexion, asymetry or capital hyperextension.
- d. W/ severe neck flexion, asymetry or capital hyperextension.

# 2. Shoulder and Scapula

- a. If shoulders are symmetrical and not protracted, and if scapulae show evidence of symmetrical alignment and stability.
- b. W/ min asym of shoulders, min protraction or min. scap retract.
- c. W/ mod asym of shoulders, mod protraction or mod scap retract.
- d. W/severe asym of shoulders, severe protract or severe scap retract.

# 3. Trunk

- a. W/ evidence of symmetrical trunk control.
- b. W/ evidence of min trunk asym, or weakness, such as min lat trunk flexion or min shortening on one side.
- c. W/ evidence of mod trunk asym, or weakness, eg as above at 2.
- d. W/ evidence of severe trunk asym, or weakness, eg as above at 2.

# 4. Spine

- b. W/ evidence of symmetry and normal spinal curvatures.
- c. W/ evidence of min asym lateral curve or exaggeration of any three normal curves.
- d. W/ evidence of mod asym etc as above at 2.
- e. W/ evidence of severe asym etc as above at 2.

# 5. Pelvis

- a. W/ an obviously stable, neutral pelvis in symmetry.
- b. W/ evidence of min ant or post pelvic tilt, or min asym.
- c. W/ evidence of mod ant or post pelvic tilt, or mod asym.
- d. W/evidence of severe ant or post pelvic tilt, or severe asym.

# **Movement Patterns**

Rolling
Supine to sit
Prone to 4-point kneeling
Floor to stand
Crawl
Gait

# **Reflex Integration**

Equilibrium Reactions (Intact, delayed, Absent)

Sitting Standing		Right	Left	Forward	Backward
	Protective Extern	nsion Reactions (Intact, De	elayed, Absent)		
Sitting Standing		Right	Left	Forward	Backward

# Summary

Patient Strengths:

**Patient Problems:** 

Long Term Goals:

Short Term Goals:

Signature:\_\_\_\_\_

\_Date:\_\_\_\_\_

	Group Letter Head / Logo
	This form to be completed by Class Teacher to assist with evaluation and planning of a riding programme.
Learner Profile	
Name	Date of Birth
Date of Assessment	Teacher
School	Telephone
Physical Balance Motor Control Hand / eye coordination Health	
Hearing Vision	
Social / Emotional Behavioural Social Family / Home Situation Self-care Skills	
Pre-Academic Skills Eye Contact Attention Ability / Span Ability to follow direction / instruction Awareness Motivation / Initiative	
Academic Language Reading Mathematics	
Comments	

RDA Therapists Guide

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