Purpose & Goals

This presentation is intended to educate volunteers on how to assist riders with varying disabilities participate in therapeutic riding.

After participating in this seminar a volunteer should know:

1. How to perform his or her part in the EAA team & understand their role
2. How to identify a riders disability
3. How to create a safe, fun, stress free environment in which a rider can participate
4. How to maximize the benefits of therapeutic riding and minimize the stress and pain that may accompany it for riders of varying ability.
The Equine Assisted Activity (EAA) Team

- The EAA team is the group of people who, working together, allow riders with disabilities to have the beneficial experience of riding.
- It takes **ALL** of the team members working together to create a safe and instructional riding experience.
What Makes A Team?

• The Horse:
  – A very special member of the team chosen because of his physical characteristics, temperament and sensitivity to the riders.

• The Instructor:
  – Sees that goals for each rider’s lesson are developed and met. He or she is in charge of the riding lesson and coordinates the riding team.

• The Horse Leader:
  – Understands the nature of the horse and can control it under unusual circumstances.

• The Sidewalker:
  – Helps with the safety of the rider or helps the rider carry out the instructions given by the instructor. May be one or two sidewalkers depending on the ability of the rider.
All Team Members Must...

- Be on time & adhere to program policies
- Call if unable to attend a lesson
- Be familiar with emergency procedures
- Read lesson plans or discuss responsibilities with the instructor prior to the lesson
- Learn the tasks of other members so as to work better with them
- Never tease, abuse, or correct a horse in such a way as to endanger the rider; punish a horse only for blatant disobedience
- Know where the telephone, emergency contact information, and first-aid supplies are located and become familiar with basic first-aid methods
- Be **sensitive** & **understanding** to the needs of individual riders
- Remember to have a good time and help the riders to enjoy themselves. In other words...
- **SMILE!**
The Horse, Of Course

The most important member of the team, the horse must be:

– Warmed-up prior to lessons
– Attentive to the lesson or therapy session
– Responsive to its handlers and the rider
– Suitable for the goals and purpose of the lesson or session.
The Instructor

- Supervises, coordinates, and teaches all instructors and volunteers as needed.
- Develops a team approach and commands the full cooperation of team members.
- Supervises horse care and management by selecting the horse for the program; training & exercising each horse; supervises the selection of horses, tack, and special equipment for the riders.
- Evaluates riders and supervises development of goals and lesson plans, writes progress reports.
Instructor Responsibilities

- Sets up lesson plans
- Supervises ring or arena preparation
- Conducts riding lessons
- May make rider evaluations as directed
- Exercises and trains horses
- Assists in training volunteers
- Performs horse-care management as assigned
- Has a working knowledge of the disabilities served
- Directs volunteers in assigned tasks, jobs, and responsibilities
- Has a willingness to perform additional activities as assigned by the Executive Director
The Horse Leader

- Takes responsibility for the horse at all times
- Knows the correct way to lead the horse
- Knows the personality of the horse and any special character traits
- May have exercise, ridden, and trained the horse
- Has worked with the horse before leading the horse with a rider
- Knows the program methods of grooming the horse and proper position of the tack and adaptive equipment (for special needs)
- Knows the correct riding aids and is able to use them while riding, lunging, or leading the horse
- Knows the types of body movements that disabled riders may have and will be able to manage the horse to avoid problems
- Knows the basic behavioral patterns of riders with emotional disorders, and will be able to manage the horse if these behaviors occur.
The Sidewalker

• Takes responsibility for the safety of the rider & feels comfortable working with both horse and rider
• Has knowledge about the disability of the rider he or she is working with and the plan for this particular riding session
• Attends to the balance and position of the rider and is competent to assist when needed to prevent loss of balance or a fall
• Communicates with the horse leader when the horse needs to be halted or slowed to allow the rider to regain position and balance
• Can walk at least ½ an hour at a time in an arena and jog if necessary
• Must at all times not interfere with the rider’s ability to develop independent balance or disturb the riders independence.
The Mounting Assistant

- This person assists the team in mounting a rider & knows the most suitable mounting methods and procedures.
- Allows the rider to transfer with maximum independence without jeopardizing overall safety.
- Removes the wheelchair or other assistive devices from the mounting ramp if other riders will be mounting.
Overview of Disabilities
Autism is a neurological disorder which may produce the following characteristics:

1. May not relate to people; avoids eye contact; delayed or no smile; lack of speech or unusual speech patterns; may repeat “parrot like.”
2. Normal physical development w/ abnormal repetitive movement actions – moving fingers continuously.
3. Perseveration or sameness – tend to get “stuck” in an action or obsessed with possessions, spinning of an object, rocking or perseverance or an idea; may be fearful of new things.
4. May appear deaf or blind although he or she can hear and see.
5. Functionality can vary from hour to hour; usually very smart in specific skills w/ excellent memory.

What to do with a rider who is autistic:

1. Approach the individual slowly and without demands. Do not force or expect interaction including eye contact. A person with autism may have low tolerance for stress and show unusual behavior for no apparent reason. Be ready for actions such as getting off the moving horse or having a tantrum.
2. Be respectful and remember that person may understand you though he or she cannot respond and may appear in their “own world.” Make them comfortable with tasks that are easy and bring the most joy.
3. Expect good behavior. Do not create stress. Give praise for accomplishments and effort. Lack of response to your statements does not mean a lack of understanding.
Developmental Delay is an umbrella term used to include most or all functional disabilities that are seen in infants and children. Developmental delays include all children who are delayed or retarded in any or all of: gross motor behavior, fine motor behavior, adaptive & language behavior, and social behavior.

Mental Retardation

1. Disorder caused by brain damage, under-development of the brain or genetic disorders. Retardation is based on comparison of the level of functioning to the average child or adult of the same age.

2. A mildly retarded person is an individual who has an I.Q. of below 70 points. A moderately retarded person can perform 50% of the average abilities and is considered “trainable”. An individual suffering from moderate retardation can usually function independently within the home but needs supervision elsewhere due to difficulties in judgment & immaturity in social activities. A severely retarded person functions at 25% or below the average person’s ability. They can learn but do so slowly.

What to do if a rider is mentally retarded:

1. Speak slowly using common words and short sentences
2. Riders may need strict guidance. If not, instructor will not include strict structure in the lesson.
3. Work w/ rider on his or her level, NOT below it. All people can learn but at different rates.
4. Keep activities simple, challenging, and FUN! Encourage situations which produce success. Give plenty of praise for a job well done. DO NOT praise a poor job.
5. Riders who have not been instructed in reign management should not be give reigns. It is easier to set good habits than to correct bad ones later!
Learning Disability

• **Learning Disability** is a brain dysfunction caused by interference with the normal process of storing, processing and producing information and may reveal itself in: perception, conceptualization, language production and/or reception, control of attention, motor coordination, control of impulses.

• **Learning disabilities** are described by terms such as minimal brain dysfunction, perceptual-motor deficit, dyslexia, attention-deficit disorder or hyperkinetic disorder. A person with a learning disorder may have:
  - Average or above average intelligence
  - Basically normal abilities in motor, hearing, vision, and emotional areas.

• **How to identify a rider with a learning disability**
  1. Self-centered thinking, poor perception of others’ thinking and actions. Difficulty in interpreting vocal, facial, and body language may cause misunderstandings in communication.
  2. Easily distracted and/or impulsive, short attention span and fatigue easily.
  3. May have difficulty sequencing tasks, judging time and space/space relations. May not know right from left.

• **What to do if a rider suffers from a learning disability**
  1. Develop an understanding of the rider’s problem. If appropriate, have the rider tell you what activities are especially difficult and which are the best ways for him to learn and understand. Keep stress to a minimum and create an atmosphere which is light and pleasant.
  2. Try to figure out how the rider can learn best through his or her strong areas. Some learn best visually, others through listening.
  3. Make sessions short when necessary but always challenge the rider.
  4. **Practice & Patience!** Remember the rider is intelligent but unable to perform tasks as he/she desires.
Genetic Disorders

• **Alzheimer’s Disorder** is a disease of middle age and older persons characterized by:
  1. confusion, forgetfulness, and impaired intellectual functions.
  2. Recent memory is a major problem. Riders will have difficulty remembering anything they are told.
  3. “The task (putting on socks) seems simple as I think about it but when I try to do it that is a whole different story.

• **What to do if a rider suffers from Alzheimer's:**
  1. Your rider will have some ability to control his actions.
  2. Speak slowly and use simple language; face the rider as you talk; give one instruction at a time.
  3. **Focus on the pleasure and exercise of riding.** Show understanding and empathy.
  4. The instructor will help the rider to improve balance and strength.

• **Riders suffering from Down Syndrome:**
  1. May function at a low normal to severally retarded capacity.
  2. Usually are very friendly individuals. They will always try to please but **watch out!** Some can be very manipulative.
  3. Muscles tend to be ‘soft’ and floppy. Joints tend to be loose and almost disjointed.
  4. Hips may be formed differently than the normal child.
  5. Hands and fingers may be small or stunted.
  6. The limbs are out of proportion to the trunk which makes it difficult to find a saddle that fits them well.
  7. **Balance may be poor.**

• **What to do if a rider suffers from Down Syndrome:**
  1. Support the back if it is weak and balance is poor. Encourage good posture.
  2. Persons may have a fear of heights and movement. Be supportive allowing time to get used to being on the horse. Therapist or instructor may back ride.
  3. Increase riding time slowly; riders that have the strength to steady their heads and bodies will enjoy trotting.
Riders with Dwarfism prefer to be called Little People.

Of normal intelligence, riding concerns focus on the physical disabilities.

1. Children may have middle ear infections which will cause balance problems and speech delays.
2. Lungs and breathing patterns may be atypical with less volume

If a rider is of short stature

1. Make sure all tack and equipment fit the rider.
2. Symmetry of movements is important so that all limbs are strengthened equally. Encourage good posture.
3. Follow procedures used for persons with arthritic conditions when joint problems are present.
4. In growing children, avoid stress on weight-bearing joints – such as trotting while standing in the stirrups.

Fragile X Syndrome is the most common inherited cause of mental retardation.

– 13% of mentally retarded boys and 50% of girls have and IQ in the normal range and may suffer from learning disabilities and emotional problems.
– Physical characteristics include long faces, and prominent ears
– Behavioral characteristics may include
  – Awkward social skills, hyperactivity
  – autistic-like attribute such as hand-flapping, hand biting, sensory defensiveness and difficulty with eye-contact
  – disorganized motor planning and skills

What to do if a rider suffers from Fragile X Syndrome:

1. Decrease stimulation AS MUCH AS POSSIBLE
2. Be understanding and supportive to these children; speak slowly and keep sentences simple
3. Do not expect these children to be able to control all of their behavior. Problems decrease slowly if at all be patient and tolerable.
Sickle Cell Anemia

- Sickle Cell Anemia is a chronic blood disease characterized by:
  - pain in the feet, hands, and abdomen.
  - Affects the lungs, liver, spleen, and kidney

- If a rider suffers from Sickle Cell Anemia:
  1. Instructor MUST have extra help in handling such a person since falls must be avoided.
  2. Damage to the skin can be caused easily. Use extra padding. Beware of complaints of Pain!
Hearing Impairment

• If a rider is hearing impaired remember that he or she uses other senses for communication:
  – vision, vibrations, feeling.
  – Uses their eyes much more.

• If a rider is hearing impaired:
  – Remember that the goal is to develop all of the riders senses, so use activities that require sight & feel!
  – Teach the rider to feel the horse’s movements and understand what they mean. The horse can provide the rider with much information as he or she learns to interpret its movements.
Language Disorders

- **Language Disorders** can be very different and, depending on the disorder, a rider may require different accommodations.
  - **Aphasia** – loss or impairment of speech or ability to understand speech caused by damage to the brain.
  - **Expressive aphasia** – loss of ability to produce or recall spoken words
  - **Receptive aphasia** – loss of ability to recognize and understand speech. Words can be heard but not understood as though words were a foreign language.
  - **Apraxia of speech** – loss of voluntary control of muscles which produce speech sounds. May be slowed or slurred
  - **Alexia** – word blindness; may not recognize written or printed words.
  - **Agnosia** – is the inability to recognize and interpret symbols, shapes, directions, sounds.

- **If a rider suffers from an expressive language disorder:**
  1. Remember that INTELLIGENCE is not the problem. LOTS OF PATIENCE to understand these riders
  2. DO NOT be afraid to say you do not understand what the rider is saying.
  3. Encourage single word responses. It is easier for them to initiate speech than to respond, so give them ample time. Use directions that do not require a verbal answer

- **If a rider suffers from a receptive language disorder:**
  1. Use as much non-verbal language as possible. Visual demonstrations can preclude the use of language.
  2. Speak slowly while looking at the rider. **Do not treat the rider as stupid for not understanding you. SMILE!**
**Neuromuscular Disorders**

- **Friedreich’s Ataxia** – genetic disorder that appears in late childhood or early adulthood. Degenerative disease that affects the spinal cord and lower section of the brain. Intelligence is normal but walking becomes difficult, vision and speech may be affected. Symptoms vary from day to day.

- **Guillian-Barre syndrome** – disease caused by a virus that affects the peripheral nerves. There is initially a respiratory infection followed by muscle weakness and then paralysis of muscles. May be no feeling in the limbs, but as the nerves regenerate, there may be hypersensitivity or pain to touch or actual pain. **Intelligence is not affected.**

- **Multiple Sclerosis (MS)** – disease which begins in young adults. Damage to nerves in the brain and spinal cord cause ‘short outs.’ May be inflammation, pain, destruction of tissue and weakness, double vision, dizziness, mixed emotional states. Memory and attention can be affected. Riders may be sensitive to extreme hot and cold weather which may increase his symptoms.

- **Muscular Dystrophy (MD)** – occurs in several forms and having a genetic basis, MD causes progressive weakening of the muscle groups. Muscles may appear large but are actually weak due to fatty tissue build up.
If a rider suffers from a Neuromuscular condition:

1. Always encourage good, balanced posture so that spinal curvatures and contractures do not develop. Encourage equal strengthening and full movement of the limbs on both sides of the body to prevent deformities.

2. Goal is to strengthen muscles, respiration, do not let the rider get too tired or stressed.

3. Ask how they are doing today, since day-to-day changes in condition.

4. Be careful of tight hip muscles when putting the rider on the horse – these cause considerable pain from stretching.

5. Watch for pressure sores if the rider has poor sensation in the legs and buttocks.

6. Make the lesson stimulating to the rider’s intellect.

7. Excessive exercise, stress or heat increase symptoms. Look for unsteadiness, slurred speech, cramping, spasms, decreased sensation and provide 10 to 20 minutes off the horse as needed.
A rider suffering from a Spinal Curvature will have very poor balance. Several spinal curvatures are:
- A functional spinal curve is usually flexible and may be due to persistent poor posture.
- Kyphosis (humpback);
- Lordosis (hollow back of the lower spine; abnormal forward curve in the neck area);
- Scoliosis (side to side curve).

If a rider suffers from Spinal Curvature:
1. Therapist supervision is important. Rider must be positioned carefully or spinal curve may worsen.
2. Keep the persons riding posture balanced and upright.
3. Muscle balance can be increased by:
   - A well-balanced horse
   - Deep seated, balanced saddle
   - Circling the horse in large circles in the direction that tends to straighten the spine.
   - Supporting the rider from the back by a back rider will not necessarily straighten the spine. Stirrups should be adjusted to achieve a level pelvis and encourage symmetry.
Spinal Cord Disorders

- **Spina Bifida** – a birth defect to a part of the spinal cord. There is damage to the nerves of the body below the site of cord damage; the degree of dysfunction depends on the level of damage to the spinal cord.

- **Spinal cord injuries** – these injuries are due to trauma to the spine or less often, from tumors. Damage can lead to complete paralysis, partial, or weakness only, to areas below the injury. Damages are defined by location: cervical (neck, arms); thoracic (chest, abdomen); lumbar (hips, knees); sacral (bowel, bladder, and reproductive organs)

- **If a rider suffers from a spinal cord disorder:**
  1. Braces and special riding equipment and tack may be required. Riders should wear pants w/out seams
  2. Riders skin can be very prone to pressure problems. There may be a need for a sheepskin or other seating equipment to cover the saddle to avoid pressure areas.
  3. Include the rider in your team to assist you in understanding his specific problems.
**Respiratory Disorders**

- **Asthma** – characterized by an increased response of the trachea and bronchi to various stimuli causing narrowing of the airways, producing wheezing. May be mild to severe. An asthmatic may be allergic to horses, dust, pollens, hay and perfume.

- **Cystic Fibrosis** – inherited disorder of the exocrine glands. The major complication is chronic pulmonary disease.

- **If a rider suffers from a respiratory disorder:**
  1. Exercise is good for these riders as it improves the lung muscles and stimulates general health
  2. Dust MUST be avoided, both the dust from the arena, barn, and horse.
  3. Cold or dampness may trigger an asthmatic attack. Ride inside on days when the weather is cold and damp.
  4. Have plenty of water on hand for rides with cystic fibrosis since they sweat more than usual and get dehydrated.
Visual Impairment

• Normal vision is considered 20/20. A person is legally blind at 20/200. Moderate somewhere between 20/100 and 20/200. Mild 20/70 to 20/100.

• Types of impairments:
  1. Central vision (can only see directly in front)
  2. Peripheral vision (can only see to the sides)
  3. Myopia (near sightedness);
  4. Hyperopia (far sightedness);
  5. Strabismus (cross-eyed or squinted);
  6. Nystagmus (rapid involuntary movements of the eyes);
  7. Cortical blindness (nothing wrong with the eyes, visual parts of the brain do not function);
  8. Ptosis (eyelids droop, does not affect vision);
  9. Amblyopia (lazy eye, difficulty in focusing, depth perception, blurred vision);
 10. Cataracts (blurring of vision);
 11. Photophobia (painful sensitivity to light).

• If a rider suffers from a visual impairment:
  1. Use white or high contrast colored reins.
  2. Many completely blind persons can ‘feel’ their environment, such as an object coming toward them. Describe the ring, other horses, equipment, etc.
  3. Ask the rider for instruction, they will tell you if their vision may cause a problem during riding.
  4. Allow the rider time to interpret what he or she sees and to adjust eye focus or feel.
  5. Give a mental picture if the rider cannot see an object or his or her environment; gently touch or speak to him or her. Do not surprise a blind rider with a heavy grasp or a sudden touch. **Tell them what you plan to do.**
  6. Talk most of the time so the rider has a point of reference; give lots of very specific instructions.
  7. Encourage independence as confidence builds.
The major problem faced by limb deformity/loss riders is the lack of balance because one side of the body has less weight and less function than the other.

If a rider suffers from a limb deformity/loss:
1. For leg amputees, a specially adapted saddle may be necessary to help give the rider additional support.
2. If an artificial limb is worn, care must be taken not to cause rubbing or sores. Remind the rider to note irritation.
3. Goal is to strengthen muscles, joints, of other areas while improving balance.
Emotional/Behavioral Problems

- **Anxiety Disorders** – feelings of extreme uncertainty, panic, tension, irritability or crisis. The individual may look fatigued, may sweat, have difficulty breathing or be very apprehensive. Remember – the situation is REAL to them.

- **Depressive disorders** – cause extreme sadness, feelings of rejection, low self-esteem, feeling constant failure, negative attitudes. Rider may tell you he did not want to ride or did not enjoy the session even though he actually did.

- **Obsessive-Compulsive** – may have isolated, unwanted thoughts or actions which are constantly repeated or performed and cannot be controlled. Interference with these acts can cause the individual extreme anxiety or distress. The rider may become so concerned with the details of brushing the mane that he or she never gets finished grooming the horse.

- **Paranoid Disorders** – suspicious, hypersensitive, rigid, jealous, hostile, or have feelings of great and superior self-worth. Tendency to believe many acts by group and volunteers are directed specifically at them. May think you came to spy on them.

- **Psychopathic personalities** – tendency to blame others for their actions and will cause others to suffer rather than themselves. May be non-conformist, rebellious, have superficial charm, be untruthful, display poor judgment, and not learn from experience. They truly believe in their actions.

- **Psychosis** – individual withdraws from the real world into one of fantasy and delusion. May be for a short period or an indefinite time. May be psychotic. These people do not usually have impairment of orientation, memory, or intellect.

- **Schizophrenia** – often displays altered thinking, misconceptions of reality and strange behavior. Speech can be symbolic. The person’s reactions can swing in and out of states of schizophrenia.

If a rider suffers from an Emotional/Behavioral problem:
  1. Listen carefully to you rider – do not argue or challenge a fantasy.
  2. Watch for manipulation – follow instructions carefully
  3. Find in reach rider something unique and nice. People with long term psychiatric problems may be difficult to like but all have some traits to which you can relate on a personal and friendly basis.
Arthritic Conditions

- **Arthrogryposis** – congenital condition in which joints are deformed, stiff and weak. Joints can be placed in a bent or straight position. Upper extremities are most commonly affected.

- **Osteoarthritis** – caused by trauma or continued stress to joints. There are destructive changes to the bone and joint which can become severe and painful and cause mild to severe limitation of movement.

- **Juvenile Rheumatoid Arthritis** – appears in children two and four years of age. Disappears at puberty in 85% of individuals. Disease may involve only a few or all joints. The soft tissue of the joints is inflamed, painful and weak.

- **Osteochondritis** – condition which causes inflammation of the bone and cartilage of the femur (upper leg bone).

- **Osteogenesis Imperfecta** – “brittle bone” disease. Bones may fracture with little stress. Can be deformities, skin can be thin and bruise easily.

- **Osteopetrosis** – increased density of the bones. Deformity and fractures are more common than normal.

- **Osteoporosis** – involves a decrease in bone tissue causing weakness of the bone and possibility of fractures. Disease usually seen in older people.

- **Rheumatoid arthritis** – severe crippling condition which involves inflammation and destruction of tendons, ligaments, and soft tissue of the remission.

**If a rider suffers from Arthritis:**
1. Riding is an excellent exercise for a person with arthritis. A smooth-gaited horse may be most comfortable.
2. Never pull on joints that are painful or have contractures.
3. Sheepskin or sponge pad may help protect painful joints.
4. Exercises to relax the rider are helpful. The gentle rocking of the horse helps to stretch tight muscles and gives overall relaxation.
Brain Disorders

- Brain disorders have many causes producing varying neurological deficits. Some disorders:

- **Cerebral Palsy (CP)** – caused by damage to the motor area of the brain. CP is an injury and not a disease, characterized by a lack of ability to control the body. The injury can occur before birth, during birth or during the early developmental years. CP may be accompanied by other brain disorders, vision and hearing problems, or learning disabilities. When asking a rider to raise his head, his chest and arms may also rise. When bending the arms, the legs may also bend.
  - Spastic (feels as if the arms are grasping 70 lb. boulders when picking up reins.)
  - Hypotonic (lack of solidness to a muscle, generally moves slower than average, may weigh more or ‘feel’ heavier because low tone muscle mass does not resist against gravity.)
  - Athetoid (there is excessive and seemingly purposeless erratic movement, as though the limb cannot decide if it will reach or retreat.
  - Ataxia (non-coordination of voluntary muscle action. Person may be clumsy, shaky, may show tremors and walk with a wide based gait.
  - Rigid (extreme stiffness; rider displays constant excessive muscle tightness with little ability to move or bend.)
  - Mixed (Spasticity and athetosis can be present concurrently in many of those afflicted with cerebral palsy.

- **CVA (Stroke)** – caused by an interruption of the brain blood supply, generally affecting one side of the brain, which causes motor impairment (loss of speech or arm and leg movement) to the opposite side of the body.

- **Epilepsy** – brain disorder which causes recurring seizures.

- **Hydrocephalus** – “water on the brain” is due to a blockage of the normal flow of cerebrospinal fluid between the ventricles of the brain and the spinal canal. This blockage causes an increase in the fluid in the brain which in turn causes pressure on the brain tissue. The head may enlarge concomitantly. There may or may not be damage to the brain.
If a Rider Suffers From a Brain Disorder

1. Make sure the rider “feels secure” at all times. Their center of balance may shift unexpectedly.
2. Help maintain the best possible posture but remember that riders tend to lean into support. Be careful not to encourage this.
3. Focus on exercises for stretching and balance. Encourage the rider to look up. This improves head control, posture, and balance.
4. Encourage relaxation. **Have fun – laugh and sing!**
5. Ataxia and Athetosis CP riders may have better balance than they appear. Be alert for needed support but **do not overprotect** – give each rider a chance to be independent.
Apraxia is defined as a complete or partial loss of memory of how to perform complex muscular movements resulting from damage to an area of the brain.

It is not necessarily an obvious physical disorder but rather a problem with motor planning; the rider knows what to do but is slow or uncoordinated in the task.

If a rider suffers from Apraxia:
1. Rider may need to use his or her eyes to compensate for poor coordination and to concentrate on tasks. Give the rider only one instruction at a time.
2. Give the rider lots of time and be patient!
Hypersensation/Hyposensation

- **Hypersensation** can occur in a number of disabilities when nerves are healing or inflamed
  - Results in an increased awareness to stimuli. Contact to otherwise normal surfaces (rough, sharp, furry) will feel offensive.

- **If a rider suffers from Hypersensation:**
  1. Touch the rider as little as possible; firm touch is less offensive than light.
  2. Let the rider initiate touch; the deep stimulation from the horse helps to bombard the touch system and desensitization occurs over time.
  3. Ask the rider to wear long sleeve shirts and long pants.

- **Hyposensation** results in a decreased awareness of stimuli to the body. It is a loss that can be mild, distorted, or complete.
  - Pressure may seem like light touch but the feedback from affected and unaffected limbs will feel quite different.
  - Positioning of limbs will be difficult. To say “put your heels down” or “tighten your grasp” may be meaningless.

- **If a rider suffers from Hyposensation:**
  1. Show the rider what you mean or how to do it. Have the rider copy you if possible.
  2. Using tape on a finger may help increase feeling in the hand, or attaching weight onto a limb will make a person more aware of it.
  3. The horse provides the rider with much stimulation in movement, pressure and skin sensation. Let the horse stimulate the rider with a good walking or trotting pace.
Altered Muscle Tone

- **Spastic, tight, stiff muscles:**
  - Be gentle handling tight limbs. Pulling on tight muscles will make them tighter. The limb will resist quick change.
  - Have the rider breathe in and exhale extra hard. This helps to relax the muscles and the rider’s overall body.
  - Use mental image games to help the rider to stretch out, such as “pretend to be a rag doll and let everything go,” or “imagine that there are strings tied to your legs pulling them down.”

- **Weak or floppy muscles:**
  - Be careful not to pull so hard as to dislocate a joint. Remember that these muscles can be weak and will not hold the joint firmly together.
  - Make sure the rider’s head does not bob, which can produce whip lash and other injuries. A rider with a weak neck-head musculature must be carefully watched by your therapist.
**Pathological Reflexes**

- A rider with brain damage may have weak or absent protective **reactions**, which may result in an inability to stay upright in sitting or standing or to re-balance when thrown off balance.

- **Reflexes are seen in specific patterns:**
  - 1. the head is lifted and the total body straightens
  - 2. the arms bend and the total body bends.
  - 3. the hand is raised to the face while the arm turns inward toward the body.
  - 4. the legs may cross each other (scissoring).

- **If a rider suffers from pathological reflexes:**
  1. When the rider is relaxed and having fun, abnormal reflexes may decrease.
  2. Do not expect the rider to relax upon command. He or she is more likely to become tense to this command. Movement, singing, fun or other tactics are more likely to give you the right response.
  3. **A therapist with neurodevelopmental training will show the team how to avoid triggering pathological reflexes.**
Vestibular System Deficits

- The vestibular system affects one’s body in relation to space, the direction of one’s movement or the lack of movement. This system affects muscle tone, body balance, visual perception, and alertness.

- Some riders need increased movement to make their systems work. They may ‘rock back and forth’ frequently and show great joy when the horse trots.

- If a rider suffers from Vestibular System Deficits:
  1. For riders who need lots of movement, change directions and speed frequently.
  2. Riders who are hypersensitive to movement may need to ride for short periods until they can tolerate the movement better.
  3. Do not say things like “it’s OK, it’s not that bad.” Remember that the problem is disagreeable to the rider – his or her physical system is over reactive and he or she may feel panic.
  4. If the rider gets too tense from trotting, trot only for short periods.
  5. Have the rider sit on a sheepskin pad and use a vaulting surcingle. The softness of the pad may help to relax the rider and the vaulting surcingle provides good solid handles for security.
THANK YOU
We look forward to having you as a part of our EAA team!

Good Hope Equestrian Training Center, Inc.