



Hero Hearts EquiCenter, Inc

Equine Assisted Activities & Therapy

Volunteer Manual



NARHA

Member Center

NARHA Certified Instructors

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MISSION

The mission of Hero Hearts EquiCenter, Inc, a non-profit corporation is:

“To provide a positive outdoor equestrian experience for those with special needs, while promoting the ability to build independence and self-confidence through the unique power of the horse.”

The goal of the center is to provide a pilot program for wounded, active duty soldiers, veterans, retirees and service personnel via the NARHA (North American Riding for the Handicapped Association) Horses for Heros program.

VOLUNTEERS

Volunteers are the critical key to the continued success of Hero Hearts EquiCenter. Each volunteer is trained to work directly with participants in need of therapy for TBI, PTSD, mental, emotional, and physical special needs. Volunteers give moral and physical support to riders and enjoy the personal satisfaction of seeing each individual's progress from week to week.

You have chosen to give some of your valuable time to volunteer to help improve the lives of the participants you will be working with. We hope that in doing so, you will find that your own life has been enhanced as well. Thank you for becoming a part of our growing organization.

This manual has been developed to provide you with some guidelines for working with our disabled riders. **Please read it carefully.** The information it contains is important, and will improve the quality of your work. If you have any questions, please don't hesitate to ask.

We want you to know that every person you are helping is aware of and grateful for your help. Without you, this program could not exist. You are valuable to us, and we appreciate all that you do.

OVERVIEW

Horseback riding helps people to achieve a quality of life that is improved, enhanced and enriched through contact with horses and activity in the outdoors. Based on input from doctors, therapists, teachers and parents, the student's individual goals are designed to complement ongoing therapy and education. The benefits of therapeutic riding include the following:

Physical: The three-dimensional motion of the horse provides the rider hip, back, and trunk action that simulates natural walking. Riding relaxes and strengthens muscles and improves body tone, posture, balance, joint mobility and coordination.

Emotional: Contact with horses and horsemanship training provides a non-competitive setting for learning. New abilities, self-discipline, and improved concentration build self-confidence and self-esteem.

Social: Horseback riding nurtures a positive self-image. Riders may, for the first time in their lives, experience some independence and a sense of being a part of a team.

Hero Hearts serves participants with a variety of mental, physical and/or emotional disabilities. Therapeutic Horseback Riding is conducted by a NARHA (North American Riding for the Handicapped Association) Registered Certified Instructor. Instructors design and monitor individualized treatment plans for each student to address their physical, emotional and social needs while they learn the skills of horseback riding. Students are evaluated regularly, and goals are set for short and long-term goals. Individual and class goals encourage each rider to be the best he or she can be, on or off the horse.

WHO DO YOU CALL?

Who do I call if I can't come?

If you know ahead of time that you can't come, call our volunteer coordinator:

Name: Sue Riley
Phone: 520-366-0201
Email: jsrileyjetmec@hotmail.com

OR

Name: Shannon Stewart
Phone: 520-678-3969
Email: info@heroheartsequicenter.org

If you have an emergency on the day of the class, contact us as soon as possible so we can arrange a substitute for your time frame.

Who do I call if I need more information or if I have a question?

You can call either:

Al Armenta—President 520-227-1659
Shannon Stewart—Vice-President 520-678-3969

How will I know when classes are scheduled or cancelled due to weather or holidays?

We plan to have a schedule of classes. At this time they will be Monday and Saturday mornings. We can contact you by email or phone, with a reminder, if needed. If there is inclement weather, you will be notified no later than one hour prior to the start of sessions.

How do I sign in?

We will have a sign in/out sheet in the office. Please be sure to sign in/out at **each** session as we need to log your volunteer time. Don't forget to put on your badge.

What do I do in an emergency?

There is more information on this in the manual, but basically, you follow the directions of the instructor of the class, the head instructor, or the program director.

GENERAL GUIDELINES

Please dress neatly, professionally, and wear closed shoes (no sandals or loafers) to prevent foot injuries. Hard shoes with heels are preferred. Unless it is extremely hot, please wear long pants. Avoid loose clothing and jewelry, as they can be obstructive and cause injury. Wear sunglasses or a hat to protect your eyes. Please use sunscreen as volunteers spend few to several hours in the Arizona sun.

Cell phones are not allowed in the arena. If you are expecting a call, please leave your phone with one of the volunteers or parents who is not in the arena. Answering a call takes your attention away from your most important job—the safety of our riders.

Chewing gum, eating and drinking are not allowed in the arena. This is both for your safety and the safety of the riders.

Don't forget to sign in. If you are getting school credit for volunteering, we need proof that you were here. We also use it to make us eligible for certain kinds of funding. Your hours are also noted by us for use in volunteer recognition and volunteer rewards.

We depend on you to be here. If you can't come, please let us know ahead of time so that we can arrange for a substitute. We really appreciate your consideration.

We treat our horses firm but gently. **NEVER** kick or hit a horse. If a reprimand or schooling is necessary, let the instructor do it, or as the horse handler under the advice of the instructor.

We treat our students with RESPECT. Talk to them appropriately for their age, and never yell. Use positive rather than negative reinforcement. Be patient. Count to 30 before repeating a request, especially if the student is learning disabled. He or she might need extra time to process what you asked. Be understanding of fear, but if you can't handle a problem with a student, ask the instructor for help.

Keep what happens at the center confidential. We know you are excited about what you do here, and want to share it with others. Please do so in a way that does not identify the riders. They have a right to privacy.

Keep busy. If you have a long break, there are plenty of things you can do to help out. Clean up the tack room or office, wash out buckets, clean the toys, pull weeds, groom a horse that isn't being used, muck the stalls, pick up rocks from the arena (when arena is not in use), or just ask us how you can help.

Most of all have fun! Smile, laugh, and enjoy yourself. Your enthusiasm is contagious!

MOUNTED ACTIVITY EMERGENCY PLAN

If there is an emergency while a lesson is in session:

1. All horses will be halted.
2. All horse handlers will position themselves to the left of the horse's head. **The horse handlers are responsible ONLY for the horse, not the riders.** Please do not try to help in any way with the rider – let the side walkers and instructor handle the rider.
3. All side walkers will stabilize their riders (arm over leg support or upper body support). If there are two riders on the same horse, the side walker on the left supports the rider in front and the side walker on the right supports the rider in the back. The side walkers are responsible ONLY for the rider, not the horse.
4. The instructor will supervise the dismounting, either verbally or personally. If there are two riders on the same horse, the side walker on the left is responsible for dismounting the rider in front. The side walker on the right is responsible for dismounting the rider in back.
5. In the event that a rider must be removed from the horse quickly, as in a seizure or a spooked horse, the side walker on the left is responsible for dismounting the rider, along with assistance from other volunteers and the instructor.
6. If circumstances call for the arena to be evacuated, the riders will be escorted out first by their volunteers (if used) and the horses will be removed by their leaders to an appropriate place, after the riders are out of danger.
7. The instructor will determine if medical personnel are required and will request assistance in contacting specific personnel.

KEEPING OUR PROGRAM SAFE

Facility Safety

Fire is an ever-present danger. Please do not smoke when you are here. If you need a cigarette break, notify the instructor in charge, and smoke off the property.

Drinking and drug use do not mix with horses. Please do not drink within 2 hours of volunteering. If you are taking any medications that will impair your reflexes or judgment, it is better to refrain from volunteering until you are no longer using them.

If you are driving on facility property, please drive SLOWLY. The facility speed limit is 5 miles per hour. Horses spook at fast cars, and there are dogs and children around that you may not see.

Running is not allowed, for your safety and the safety of the horse. If a horse is loose, WALK over to catch it. The same is true of any other emergency.

Dogs can frighten horses, and many of our students are afraid of them. Please don't bring dogs with you.

Safe Tacking and Untacking

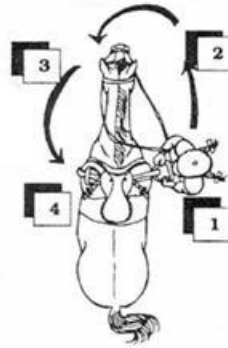
1. Think of a horse as having a 6-foot "danger zone" surrounding it. Within 6 feet, the horse can kick, buck, cow kick (kick to the side), bite, or rear—and you or a student can be seriously injured. Approach the "danger zone" with caution.
 - If you must walk behind a horse, approach from the side, touch the horse and speak to it. Keep touching it as you walk very closely around the horse.
 - Warn a horse that you are approaching. Use your voice and a gentle touch. Approach from the side, NEVER from the rear.
 - When standing next to a horse, stand VERY close. If the horse kicks, he can't kick very hard if you are close.
 - Keep your feet away from the horse's hooves and from beneath the horse. You might get stepped on.
 - Never walk under a horse's neck (it might rear from fright). Never walk under a horse. You might not be that short, but some children are.
 - Never stand directly in front of a horse except to hold the horse for a rider in the ramp mount area. Never stand behind a horse for any reason.
 - Hand feeding is an invitation to have your fingers bitten. After the food is gone, your fingers still carry the smell. A horse can't tell the difference between a carrot and a finger that smells like a carrot. Keep your hands away from the horse's mouth. ALL horses bite! No treats are allowed.

- Don't yell, run or make sudden movements near a horse. Be deliberate and gentle.
2. Keep horses well away from each other at all time. Fighting horses are a danger to everyone nearby. Keep an eye on their heads and rear ends. If the ears are flattened, the horse is about to fight. If he lifts his leg, he is getting ready to kick. **DO NOT ALLOW HORSES TO SNIFF EACH OTHER.**
 3. Never tie a horse to the arena or fences unless for temporary purposes. Use the tie rails or hold the horse.
 4. Always use a bitless bridle/halter and neck tie combo to tie a horse. **NEVER** tie a horse by his bit. **NEVER** tie a horse by his reins.
 5. Always lead a horse by his lead, not by the reins.
 6. If a tied horse rears or pulls back, or otherwise acts upset, **STAY AWAY**. Let the instructor handle the problem. A panicked horse is very dangerous.

HOW TO DO A SAFETY CHECK

Check

All parts of bridle are straight & buckled properly. Bit & bridle fit correctly. Strap ends are in their keepers.



Check

All parts of bridle are straight & buckled properly. Bit and bridle fit correctly. Strap ends are in their keepers.

Check

Saddle pad is straight. Girth is properly buckled & tight enough. Safety bar is open. Pull left stirrup down.

Check

Saddle fits properly. Saddle pad is straight. Girth is properly buckled & tight enough. Safety bar is open. Pull right stirrup down.

Why do we do a safety check before we mount?

No matter how carefully we check when we saddle the horse, or how many times we have done it before, there is always the possibility that we overlooked something. An incorrectly fitted saddle or saddle pad can irritate or hurt the horse, and an unhappy horse may hurt the rider. A loose girth will cause the saddle to slip when mounting or riding. If the bridle is not properly fitted and buckled, it may come off while riding. An extra minute is all it takes to do a safety check by walking around the horse before mounting and following the steps shown above.

MOUNTING

Never mount a horse while the horse is tied. If the horse pulls back, the rider and the horse could be injured. **Never** mount next to a fence, car, another horse, or any solid object that the rider could be thrown into. **Never** mount on pavement.

Lead an unmounted horse on your right. Use two hands—the right hand should be about 12 inches below the snap, and the left hand holds the **FOLDED** (not coiled) end of the lead rope. Don't let the lead rope drag on the ground. It could trip you or your horse could step on it. Don't throw it over your shoulder. It could get tangled and choke you.

ALWAYS check the girth for tightness before mounting or helping a student to mount. Check that the saddle and bridle are placed properly on the horse, the stirrups are the correct length and are down, and that nothing is broken or worn. **MAKE SURE THE RIDER HAS THEIR HELMET ON SECURELY.** Don't assume that someone else will do this. Better to check twice than not at all.

ALL riders must be mounted by the instructor or under the instructor's supervision.

When mounting from the ground, one volunteer stands to the left by the head of the horse and holds the lead. A second volunteer stands on the off-side of the horse and puts weight into the stirrup to counter-balance the rider. The instructor may assist the rider to mount as necessary. If the saddle starts to slip or the horse starts to walk forward during mounting, stop the mounting and remedy the situation before continuing.

If a rider is mounting with a "leg up", be sure that both the rider and the person giving the leg up know what they are doing. Do not use your knee as a mounting block, even for a small rider. You could get hurt.

Ask for assistance if the rider is unable to mount unaided. Do not attempt to help the rider alone. Assisted mounting from the mounting ramp is always done by the instructor or therapist. You may be asked to assist on the opposite side of the horse.

When assisting at the ramp, stand on the block, not on the ground. It is dangerous to be standing between the block and the horse, especially if the horse spooks or moves.

IN THE ARENA

Students should never be in the arena other than when mounted except to mount or dismount the leave the arena, or as part of a supervised activity.

The arena gates must be closed and latched at all times when there are horses in the arena.

If you are leading a horse, walk between the horse's head and shoulder, NOT in front of the horse.

When leading or holding a horse with a mounted rider, always inform the rider **BEFORE** moving or changing directions. Avoid sharp turns or sudden stops. Allow the rider to initiate all movement if possible. Give the rider time to give commands to the horse. **ALWAYS** let the riders do as much as possible.

Help your rider if he or she needs it, but first allow plenty of time for the rider to perform independently. Responses often take longer than we expect. Allow the rider to perform at his or her own pace. But do make sure the rider understands the instructor.

Riders should always stay at least 2 horse lengths apart from each other, whether moving or standing still. If your rider's horse gets too close to another horse, ask the rider to circle or cross to the other side of the arena.

When passing another horse, always pass on the inside (the side closest to the center of the arena) and at least 6 feet away from the horse being passed.

Do not circle a horse near another horse. Watch that no other horses are in the way.

All horses should be going in the same direction. If one rider reverses, all riders must reverse. A reverse is always made by turning in toward the center of the arena.

Never trot a horse up to or past a walking horse. Never canter up to or past a walking or trotting horse.

When leading a rider in the arena, always walk on the inside (closest to the center of the arena). Do not allow the horse to get too close to the fence.

It is very important to pay attention to the rider and instructor. Don't chat with riders or other volunteers while the class is in session. Be friendly, answer direct questions from the rider briefly, but keep your ears on the instructor and your eyes on the rider.

You may reinforce what the instructor is saying by showing the rider or touching the appropriate area. Try not to talk. If you are talking, you might miss an emergency instruction.

Never *yank* on the reins or lead to stop the horse. Pull slowly and steadily on the lead. Yanking frightens the horse and can cause rearing or backing up. If a horse pulls back, **do not resist**. Move with him, holding the lead. The harder you pull a horse, the harder he will resist you.

NEVER HIT OR KICK A HORSE. If a horse is misbehaving, call the instructor for help.

If the horse or rider you are working with is nervous or upset, walk the horse to the center of the arena and ask the instructor if you should dismount the rider. Horses should be calm and riders should be alert. If this is not the case, bring it to the instructor's attention immediately.

If you aren't comfortable for any reason with your horse or rider, tell the instructor immediately. You are often the first person to be aware of a potential problem. **Trust your instincts.**

During classes, horses should not stand at the rail (fence) except under the instructor's directions. If your rider needs to stop, come off the rail and move to the center of the arena so you don't block the movement of other riders.

If a horse is running away, (with or without a rider), **STAY CALM**. Do not yell and do not run. Halt *your* rider and stay with him/her. Wait for instructions from the instructor. If you are not with a student, but are spotting, walk slowly toward where the horse is running to and wait for instructions.

If another rider has a problem or a fall, DON'T rush to assist. Stay with your rider and listen for instructions. The instructor will handle the problem and ask for assistance if needed. The rider you are assisting is **YOUR FIRST RESPONSIBILITY**.

If your rider falls, the horse handler or leader/side walker is responsible for the horse, not the rider. A loose horse is a danger to every rider in the arena. Stop the horse, get it away from the rider and call for the instructor. The side walker stays with the rider until the instructor arrives, and then follows the directions of the instructor.

When dismounting to the ground unassisted, make sure the rider takes **BOTH** feet out of the stirrups before lowering himself to the ground. Assisted dismounts should always be done by the instructor.

THE TACK ROOM

The tack room is the building where we store saddles, bridles, reins and other horse related equipment, collectively know as “tack”. A well-organized tack room makes the job of the volunteers easier. Knowing your way around the tack room and keeping things in order is vital to the smooth running of the program

Rules for the tack room:

All saddles are numbered, as are the saddle racks. Saddles are to be stored on the same-numbered rack. Saddles can be covered by dry saddle pads to keep them free of dust.

Saddle pads must be allowed to dry out before putting them away.

English and dressage girths are stored separately from the saddles. **DO NOT** leave them attached to the saddle.

All girths are numbered. Try to put them back on the girth rack in numerical order. EG girths are English Girths and are stored on the top rack. DG girths are Dressage Girths and are stored on the bottom rack.

Each horse has his own bitless bridle/halter combination and reins. They are stored on bridle racks on the wall. Each rack has a horse’s name above it. Bridles also have the horse’s name on them. Please be careful to put the bridles and away under the correct name.

The bridle and neck tie are used as the halter to put the horse away. Once the horse is put up, return the bridle to the tack room.

Grooming tools are kept in grooming buckets. There should be at least one stiff brush, one body brush, rubber curry, mane comb, and hoof pick in each box. The tools are numbered for each bucket. After you use a tool, please put it back in the corresponding grooming bucket. Many volunteers put the hoof picks in their pockets and accidentally take them home. Please check your pockets before you leave.

Thank you for keeping our tack rooms neat and clean.

RESPONSIBILITIES OF THE HORSE HANDLER

The responsibility of a horse handler is to control the horse. For this reason, a horse handler should be someone with some experience in horsemanship. The rider has a handler because he or she is unable, at this time, to control the horse fully. The goal is to allow the rider to be as independent as possible. Although the handler is responsible for guiding the horse, stopping and starting, the handler should allow the rider to do as much of this as possible, assisting only when necessary.

How to lead a horse:

1. The handler usually stands on the side of the horse closest to the center of the arena, next to the horse's neck (between the head and the shoulder).
2. The handler holds the lead rope, 12-14 inches from the horse's head, in the hand that is closest to the horse. The remaining rope is folded, not looped, and held in the free hand. Be careful not to allow the lead rope to drag on the ground or to be looped around the handler's hand.
3. When the horse is stopped for more than a second or two, the handler should stand to the left of the horse's head. Do not hold the lead too strongly, or the horse will resist and start to move around or pull its head back.
4. When a rider is mounting at the mounting ramp or block, lead the horse to the start of the ramp, then move to the front of the horse and walk backward into the ramp corridor, leading the horse as close to the ramp as possible. Remain standing in front of the horse and keep him as still as possible during the mounting.
5. **Walking the horse:** Walk next to the horse's neck, between the horse's head and shoulder. DO NOT drag the horse or walk ahead of it. If necessary, slow your speed to that of the horse. The side walker can gently prod the horse on the barrel to encourage a faster pace. If the horse is walking too fast, a gentle tug on the lead will slow it down.
6. **Trotting the horse:** After the rider cues the horse to trot, gently tug the lead and move into a gentle trot (not a run) next to the horse. Remain alongside the horse's neck during the trot. Control the speed with a quick tug backwards on the lead if the horse goes too fast.
7. Pay attention to the instructor at all times. It is important that you not engage in conversation when leading, as this will interfere with your knowing what is going on. The instructor will tell the riders to walk, trot, turn right or left or halt. The leader needs to hear these commands so as not to interfere with the rider's efforts, and to supplement them if needed.

8. Be aware of other horses in the arena, and do not let the horse you are leading approach another horse too closely. There should be a two-horse distance between riders at all time. Horses must NEVER be allowed to put their noses together
9. If a rider should fall, the leader is responsible for the horse ONLY. Keep the horse calm and move it away from the fallen rider. STAY with the horse. The instructor will take care of the fallen rider.

RESPONSIBILITIES OF THE SIDE WALKER

The responsibility of the side walker, **FIRST AND FOREMOST**, is the safety of the rider. Side walkers assist the riders to the degree necessary. Riders on taller horses should, if possible, have tall side walkers. Riders on ponies should have short side walkers.

How to sidewalk:

1. The side walker walks next to the rider's leg, helping to support the rider's balance if necessary. The Instructor will inform you if you need to use a support hold. There are three support holds, as follows:
 - a. **ARM-Over-Leg support:** This position provides support for the rider without interfering with the rider's trunk control, allowing the rider to build up strong trunk support. Facing toward the rider's rear, the hand closest to the horse holds the front of the saddle, with the arm resting lightly across the rider's thigh. In the event that the rider slips, a gentle downward pressure with that arm will support the rider in place.
 - b. **Crutch support:** This is used for riders who have no upper body control. Facing the front of the horse, the hand closest to the horse forms a crutch under the armpit of the rider, with the thumb in front of the shoulder and the fingers behind it. Resting the elbow on the saddle will increase the support and help prevent fatigue on the volunteer's part.
 - c. **Ankle support:** This is the least restrictive form of support, allowing the rider to use all muscles to provide his or her own support. Facing the front of the horse, the hand closest to the horse encircles the rider's ankle lightly. In the event that the rider slips, a light tug will bring the rider back into alignment with the saddle. **DO NOT** yank on the ankle. **DO NOT** keep constant pressure downward on the ankle. If the rider loses balance forward, gently moving the leg forward will counterbalance the rider. If the rider loses balance backward, gently moving the leg backward will also counterbalance the rider.
2. Be aware that it may be necessary to change sides frequently if your arm gets tired. If this happens, ask the leader to stoop, and tell the other side walker that you need to change sides. Ask the other side walker to support the rider as you move around to the other side. Take the support position on the new side and support the rider while the other side walker moves to the opposite side. When the other side walker has indicated that he/she is ready, inform the leader that they can resume walking.
3. At the trot, the side walkers must trot alongside the rider at the rider's leg. If providing support, use the arm-over-leg position, holding firmly to the front of the saddle. Additional support may be provided by gentle downward pressure on the rider's ankle with your free hand. Riders using the crutch support should not trot.

4. If a rider starts to fall, try to push the rider back into the saddle. If this is not possible, the next best thing to do is to try and break the fall. To do this, the side walker on the side of the horse that the rider is falling toward turns and puts his or her back against the rider and goes down to the ground with the rider. This not only slows the fall, it prevents the side walker from being injured in an attempt to save the rider.
5. Once a rider has fallen, the side walker will stay with the rider while the horse handler moves the horse out of the way. **DO NOT** attempt to help the rider—this is the responsibility of the instructor. Be prepared to go for help at the direction of the instructor. Know where the first aid kit is, where the phone is, and where the emergency numbers are.
6. Other responsibilities of the side walkers include encouraging the rider to pay attention to the instructor, helping the rider to follow directions, showing the rider which side is right and left, assisting in games, demonstrating to the rider where to place the legs and how to keep heels down, encouraging the horse to keep moving (by gently prodding the horse in the side) and providing encouragement and enthusiasm for the rider's efforts. (The instructor will guide you as to the appropriate assistance needed for each rider.) **PLEASE FOLLOW THE INSTRUCTORS GUIDANCE.**
7. It is important that the side walkers pay attention to the instructor at all times. Conversations should be non-existent when instruction is taking place. Side walkers reinforce, but do not teach, so restrain the urge to tell the rider what to do and how to do it unless the instructor tells you to do so.
8. If there is only one side walker and no leader, the side walker takes on the additional responsibility of control of the horse in the event that the rider has trouble controlling his mount. This is only done when the rider's balance is sufficient to not need support and the rider is beginning to ride independently.

GLOSSARY OF DISABILITIES

The following are brief, non-medical descriptions of some disabilities and conditions of participants one might encounter in a therapeutic riding setting. This is not intended as a comprehensive explanation of a specific disability. Rather, it is a general overview with an explanation of how therapeutic riding can be beneficial.

Arthritis

An inflammatory disease of the joints

Types: Osteo, rheumatoid and juvenile rheumatoid.

Characteristics: Pain, lack of mobility, deformity, loss of strength.

Benefits (of therapeutic riding): Gentle rhythmic movement to promote joint mobility and relieve pain.

Autism

A self-centered mental state from which reality often tends to be excluded

Characteristics: Unresponsiveness to the presence of others; withdrawal from physical contact; severely delayed and disordered language; self-stimulating behaviors; unusual or special fears; insensitivity to pain; unawareness of real dangers; hyperactive; passive; unusual behaviors such as smelling/tasting/licking or mouthing all objects; ritualistic behaviors; developmentally delayed; unusual response to sounds; clumsiness; social withdrawal; resistance to change.

Benefits: Interactions in a group setting stimulates interest away from self and toward others and the horses. Postural and verbal stimulation.

Cerebral Palsy

Brain damage occurring before, at, or shortly after birth. It is a non-progressive motor disorder.

Types and Characteristics:

Spastic—hyper tonicity with hyperactive stretch reflexes, muscle imbalances and equilibrium. Increased startle reflex and other pathological reflexes.

Athetoid—extensor muscle tension, worm-like movements, abnormal posturing and slow and deliberate speech.

Ataxic—poor balance, difficulty with quick, fine movements and are often described as having a “rag doll” appearance.

Benefits: Normalization of tone, stimulation of postural and balance mechanisms, muscle strengthening and perceptual motor coordination.

Associated Problems: Seizures; hearing defects; visual defects; general Sensory impairment; perceptual problems; communication problems; mental retardation; emotional disturbance; learning disabilities.

Cerebral Vascular Accident (CVA or Stroke)

Hemorrhage in brain, which causes varying degrees of functional impairment.

Characteristics: Flaccid or spastic paralysis of arm and leg on same side of body. May cause mental impairment; impair speech, sight, balance, coordination and strength.

Benefits: Promotes symmetry, stimulates balance, posture, motor planning, speech and socialization.

Developmental Disabilities (DD)

A general term applied to children functioning two or more years below grade level.

Characteristics: Varied, but can include slow physical, motor and social development.

Benefits: Provides arena for success, opportunity for sport and recreation, stimulates body awareness.

Down Syndrome

A condition in which a person is born with an extra chromosome; resulting in mental retardation and development delay.

Characteristics: Broad flat face, slanted eyes, neck and hand are often broad and short. Usually Hypotonic, have hyper mobile joints and tend to be short and slightly overweight. Prone to respiratory infections.

Benefits: Riding improves expressive and receptive language skills, gross and fine motor skills, balance, muscle tone, and coordination.

Emotional Disabilities

A congenital or acquired syndrome often compounded by learning and/or physical disabilities incorporating numerous other pathologies.

Characteristics: Trouble coping with everyday life situations and interpersonal relations. Behaviors such as short attention span, avoidance, aggression, autism, paranoia and schizophrenia may be exhibited.

Benefits: Increases feelings of self-confidence and self-awareness, and provides appropriate social outlet.

Epilepsy

Abnormal electrical activity of the brain marked by seizures with altered consciousness.

Types and Characteristics:

Petit Mal: Brief loss of consciousness with loss of postural tone. May have jerky movements, blank expression.

Grand mall: Loss of consciousness and postural control. Usually preceded by an aura. (Note: an active seizure disorder is a contraindication for horseback riding.)

Hearing Impairment

Congenital or acquired hearing loss varying from mild to profound.

Characteristics: Communication difficulties—may use lip reading, finger spelling or sign language. Often phase and have attention deficits.

Benefits: Stimulates self-confidence, balance, posture and coordination. It also provides appropriate social outlets and interactions.

Learning Disabilities (LD)

Catch-all phrase for individuals who have problems processing, sequencing and problem-solving, but who appear to have otherwise normal intelligence skills.

Characteristics: Short attention span, easily frustrated, immature.

Benefits: Effects depend upon the particular disorder. Stimulates attention span, group skills, cooperation, language skills, posture and coordination.

Mental retardation (MD)

Lack of ability to learn and perform at normal and acceptable levels. Degree of retardation is referred to as educable, trainable, severe or profoundly retarded.

Characteristics: Developmentally delayed in all areas. Short attention span.

Benefits: Stimulates group activity skills, coordination, balance, posture, gross and fine motor skills and eye-hand coordination. Provides a structured learning environment.

Multiple Sclerosis (MS)

Progressive neurological disease with degeneration of spinal column tracts, resulting in scar formation.

Characteristics: Most commonly occurs in the 20 to 40 year old range. It is progressive with periods of exacerbation and remissions. Fatigues easily. Symptoms include weakness, visual impairment, fatigue, loss of coordination and emotional sensitivity.

Benefits: Maintains and strengthens weak muscles and provides opportunities for emotional therapy.

Associated Problems: Visual impairment, emotional lability, and impaired bowel and bladder function.

Muscular Dystrophy (MD)

Deficiency in muscle nutrition with degeneration of skeletal muscle. Hereditary disease that mainly affects males.

Characteristics: Progressive muscular weakness, fatigues easily, sensitive to temperature extremes.

Benefits: Provides opportunity for group activity, may slow progressive loss of strength, stimulates postural and trunk alignment, and allows movement free of assistive devices.

Associated Problems: Lordosis, respiratory infection.

Polio

Infectious viral disease.

Characteristics: Flaccid paralysis, atrophy of skeletal muscle, often with deformity.

Benefits: Strengthens non-paralyzed muscles, stimulates posture.

Scoliosis

Lateral curve of the spine with C or S Curve with rotary component.

Characteristics: Postural asymmetry. May wear scoliosis jacket or have had stabilization surgery.

Benefits: Stimulates postural symmetry. Strengthens trunk muscles.

(Note: Severe scoliosis is a contraindication for therapeutic riding.)

Spina Bifida

Congenital failure of vertebral arch closure with resultant damage to spinal cord.

Characteristics: Varying degrees of paralysis of the lower limbs coupled with sensory loss.

Benefits: Stimulates posture and balance, improves muscle strength and self-image.

Associated Problems: Hydrocephalus, incontinence, urinary tract infection, lordosis, scoliosis, and hip dislocations.

Spinal Cord Injury (SCI)

Trauma to the spinal cord resulting in a loss of neurological function.

Characteristics: Paralysis of muscles below the level of injury—can be flaccid or spastic. Fatigue, sensory loss and pressure sores.

Benefits: Stimulates posture and balance, strengthens trunk muscles, is an option for sports participation and recreation.

Traumatic Brain Injury (TBI)

Accidental injury to the head resulting in intra—cranial bleeding with death of brain cells.

Characteristics: Gross and fine motor skills deficits. Often have impaired memory, speech and/or vision. May have psychological effects.

Benefits: Stimulates balance, posture, gross and fine motor skills, speech and perceptual skills.

NOTE: See News Story in Appendix for more information

Visual Impairment

Moderate to total loss of sight.

Characteristics: Insecure posture, lack of visual memory, anterior center of gravity, fearfulness and developmental delay.

Benefits: Stimulates spatial awareness, proprioception, posture and coordination. Provides social outlet, structured risk taking and freedom of movement.

VOLUNTEER OPPORTUNITIES

Several opportunities are available for those volunteers wishing to do more than (or instead of) volunteering as horse handlers and side walkers. If volunteering at the facility doesn't work out, but you want to promote our cause, consider volunteering for one of the "Non-Horsey" projects. All volunteers are encouraged to spread the word about HERO HEARTS to friends, clubs and organizations who would be interested in providing financial support, volunteers, or riders. If you have a contact you would like us to follow up on, please tell a staff member and he or she will get in touch with the right person.

Horse Related Opportunities

Senior Volunteer: A senior volunteer helps train new volunteers at orientation and during the session, helps coordinate volunteers for special events, and meets with the instructors to evaluate the program from the volunteer's point of view. Requirements include at least 20 volunteer hours, good working knowledge of handling, tacking, grooming horses; and show knowledge and compassion while helping with the riders.

Schooling: Our horses need periodic "tune ups" to keep them interested and responsive in their work in the therapeutic setting. Experienced riders capable of performing elementary dressage movements (leg yields, turn on the forehand, etc.), getting the horse in a round frame, and bending through turns, in addition to smooth gait transitions, are eligible.

Assorted Service Projects: Tack cleaning and repair, carpentry (finishing our classrooms, building shelves, jumps and ramps, etc.), painting, electrical or plumbing services, poster design, videotaping and photography are just some of the opportunities currently available.

"Non-Horsey" Opportunities

If you have a special interest or ability in any of the following, please let us know.

Fundraising: Interested individuals are welcome to coordinate a fundraising committee to help us meet our financial needs. The committee will plan and execute our fundraising drives, contact clubs and organizations interested in offering financial assistance, help with getting donations for special events and contact vendors to donate needed items, thereby reducing Hero Hearts expenses.

Grant writing: Experienced grant writers or those people interested in learning are needed to help identify foundations or grants with a potential for donating to Hero Hearts, and to write those grants.

Public Relations/Marketing: Submit periodic press releases as needed. Obtain media coverage, striving for higher community visibility. Assist in writing proposals and other written material.

Rider and Volunteer Recruitment: Solicit new clients to maximize the utilization of the program and help create community awareness. Notify colleges, universities, schools and organizations of our need for volunteers. Place volunteer ads in the newspapers.

Office Help: Filing, answering phones, and answering questions or referring them to the appropriate staff members.

APPENDIX

News Story

Wednesday, March 18, 2009

Traumatic Brain Injury: The Basics

Traumatic brain injury (TBI) is the most common combat-related injury. In fact, nearly 30 percent of all patients with combat-related injuries seen at Walter Reed Army Medical Center from 2003 to 2008 sustained a TBI. Although it is an important issue year round, March is designated as Brain Injury Awareness Month—a time to focus on this condition that affects so many of our brave service members.

"The importance of brain injury awareness certainly goes beyond one month, but having the month of March to spotlight it gives the Military Health System an opportunity to educate our service members and their families," said Maj. Megumi Vogt, interim deputy director, TBI Clinical Standards of Care, Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury.

A traumatic brain injury is defined as a blow or jolt to the head or a penetrating head injury that disrupts the function of the brain. This can be caused by a direct blow to the head (like one might get from boxing, a motor vehicle crash, or a bicycle accident without protective head gear), an indirect force (car whiplash), a penetrating injury (fragmentation from blast/explosion), or blast/explosive pressure wave (explosion alone without other injuries).

America's Armed Forces in Iraq and Afghanistan have sustained repeated attacks from weapons such as rocket-propelled grenades, improvised explosive devices and land mines. Service members suffering from brain injuries from these devices require specialized care from providers experienced in treating TBI in its various severities. Exposure to these incidents and to the stressors that inevitably accompany them has a dramatic effect on the overall psychological health of our deployed troops.

There are three forms of TBI: Mild, Moderate and Severe.

Symptoms of TBI

Each of the three forms of TBI display different symptoms to be aware of. Mild TBI, otherwise known as concussion, is more difficult to diagnose both in civilian life and on the military battlefield.

With mild TBI patients, full recovery can be within minutes to hours; a small percentage have symptoms that may persist months or years.

Symptoms of mild TBI include headache, dizziness, nausea/vomiting, trouble concentrating, memory problems, irritability.

Moderate TBI includes a population of patients that falls between the mild and severe spectrum. Moderate TBI patients have the most variability in the clinical presentation picture.

There is usually loss of consciousness, from an hour to a day; there can be confusion for days to weeks; and mental or physical deficits that can last months or be permanent.

The vast majority of these service members are identified and evaluated at theater-level medical facilities, and are evacuated back to the United States for further evaluation and care.

Severe TBI usually results from a significant closed head injury, as in an automobile accident or most open or penetrating injuries, where there may be considerable residual deficits of brain function.

Depending on the injury, a severe TBI could impact speech, sensory, vision and cognitive deficits including difficulties with attention, memory, concentration, and impulsiveness.

There is an aggressive initial treatment program in theater, with neurosurgical expertise.

Diagnosing and Treating TBI

The Department of Defense (DoD) is implementing an exposure screening program for all service members returning from theater. Exposures to events that carry a risk of TBI will trigger further evaluation by the screening health care provider and possibly yield a referral to a specialist. This will complement the screening program that was established by the Department of Veterans Affairs (VA). DoD and the VA are sharing this important data across the departments to ensure that care providers have all the information they need to diagnose and treat a TBI.

“While there is much ongoing research in the area of mild TBI prevention and treatment, one of the most far-reaching developments has been the educational campaign surrounding the diagnosis, the symptoms and the recovery process,” said Maj. Vogt. “This has led to dramatic changes to include management of TBI in sports, especially children, an increased awareness of the problems related to multiple concussions, and improved functional outcomes of warriors with mild TBI as they have been identified and thus received treatment.”

Initial focus of treating a TBI is to stabilize the injured person in order to minimize secondary complications. As a patient enters a care facility, initial medical treatment goals include ensuring proper oxygen and blood flow to the brain and body, stabilizing blood pressure, and treating any problems or conditions affecting other parts of the body (besides the brain) that have arisen because of the injury. After individuals with TBI have been stabilized, the treatment plan generally involves rehabilitation efforts to teach patients how to cope with their specific injury-related symptoms.

Depending on the severity of the TBI, a rehabilitation team may consist of:

Physical Therapists who help patients regain their coordination, flexibility, and range of motion, and to address pain and stiffness

Occupational Therapists who help patients relearn how to perform the simple activities of daily living

Neuropsychologists, whose testing of patients' functional abilities helps the health care team identify specific areas of cognitive functioning that require specific rehabilitative efforts, and then measure progress toward addressing deficits

Psychiatrists, who help patients to better manage their cognitive, emotional and behavioral symptoms

Brain injury rehabilitation assists in reaching maximum levels of independence. Care strategies are based on the severity of brain injury. The more severe brain injuries may require a variety of approaches to care. Additional factors in dealing with TBI include patient care coordination; provider, patient and family education; and emerging medical technologies that enhance TBI care.

Each brain injury and its recovery is different, and the brain has a remarkable way to adjust after injury. It is critical to know the symptoms and to seek treatment before there is a chance for additional, more serious complications to occur. For more information about TBI, please visit [Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury](#) and [Defense and Veterans Brain Injury Center](#).

Please also visit www.health.mil/braininjury