



American Medical Equestrian Association
Safe Riders Foundation

American Medical Equestrian Association Safe Riders Foundation

Support for The Thinking Rider

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Doris Bixby Hammett, MD, was honored as a national legend at the United States Pony Club Jubilee in Philadelphia, January 17, celebrating the 50th year of the organization.

Dr. Hammett is a USPC life member who served on the first Safety Committee. She has continued her work for safety through the safety committee of the United States Pony Clubs as well as other national organizations. The nomination stated:

The United States Pony Clubs was the first organization to establish a Safety Committee as a Standing Committee in 1981. This committee conducted the first organization study of the injuries which occurred in its activities and has continued this yearly study since that time. The first study showed that the head was the most frequently injured body



AMEA Founder Honored by United States Pony Clubs

part and this injury was the most severe injury of those that occurred.

The United States Pony Club had always required a hard hat as part of its attire, but under the direction of this committee the first standardized protective helmet was developed. The committee worked with manufacturers and certifying organizations until the improved present standard of ASTM equestrian standard, SEI certified helmet was developed. The United States Pony Clubs under the leadership of the

Safety Committee was the first to require an ASTM standard SEI-certified secured helmet in all its activities.

The Safety Committee developed the Safety Packet which is still used by the USPC. The accidents figures were studied each year and changes recommended when indicated by the evaluation. This included steps to prevent heat illness (removing coat, encouraging liquids, checking temperature and humidity to determine if activities should be held.) The safety committee

recommended procedures to be taken when a member had a fall from a horse, had a concussion or traumatic brain injury, and a check list for activity organizers to be prepared for an accident. It listed equipment and supplies for first aid at activities, and the persons needed and qualifications of these persons. The committee prepared questions for know downs and rating testing. The committee provided answers to questions from the membership relating to safety throughout the year.

The United States Pony Clubs provided leadership for the present safety standards of the horse community. The leadership of the first years of the Safety Committee is a legend for the United States Pony Clubs.

The AMEA/SRF extends a hearty congratulations to Dr. Bixby Hammett.

JOIN NOW!

Imagine yourself in a room full of doctors, educators and horse people who have the combined goal of leaving that room with an organization in place that will educate the equestrian community about aspects of equestrian safety and provide community assistance when accidents do happen.

Well, if your imagination conjures Manhattan at 5 p.m. or a cattle stampede from an old John Wayne movie, then you just about have it. The AMEA/SRF has taken all that energy and chaotic thought, and applied hard work and good intentions, and to every one's benefit, we got it done. At the end of our first year working together as AMEA/SRF, we present a working and useful forum.

• The **educational arm** of the organization has information that you can "put your hands on" through the

newsletter and the educational tools that we endorse and make available to the public.

• The **helping side** of the AMEA/SRF is also ready to assist you. The structures are in place to allow people who need help to reach us; for us to assess needs brought to us and for us to provide help. That is a VERY good place to be.

Here is where you come in...we need on-going support from people and members financially to be able to do our work over the long haul. Your membership helps both ways. You are part of the safety network. You become an educated safety consumer who takes the cause out to the equestrian community and provides a way for people in need of help to get to us.

Please join us now!

Jeffray Ryding
AMEA/SRF Secretary

**AMERICAN MEDICAL
EQUESTRIAN
ASSOCIATION
SAFE RIDERS
FOUNDATION**

A tax exempt 501c3 organization.

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MISSION STATEMENT

The American Medical Equestrian Association/Safe Riders Foundation is dedicated to the philosophy, principles and application of safety of people in equestrian activities. This purpose is achieved through education, research and resource.

- ▲ EDUCATION of health care professionals, organizational representatives and individuals, including an emphasis on public awareness;
- ▲ RESEARCH to better define injury patterns and risks, efficacy of safety measures and equipment, and assistance in equipment design;
- ▲ A RESOURCE of experience and expertise to be shared and utilized for the benefit of equestrian safety.

AMEA/SRF Vision

by Rusty Lowe, EMT-P, Executive Director, AMEA/SRF



On December 14th, I boarded a plane early in the morning, leaving the USEA Convention in Boston to head home to enjoy my children's Christmas program. Bad weather caused delays, long lines in the airport, delayed baggage claim, and the usual nightmares of travel. While I was on the flight or waiting in the airport, I thought back on the convention. I was disturbed at how the Safety Committee's open forum was rudely interrupted by the next scheduled group, although the previous group had gone well beyond their assigned times. In addition, the controversies related to eventing, the reluctance of folks to address concussions, and other issues weighed heavily on my mind. I began to think that I had wasted my time attending this meeting.

When I finally arrived home, I just made it to the church in time for the program. There were parents, grandparents, friends, and others fighting for seats. Ushers were pleading with attendees to make room for the crowd. It was hot. Again, I began to think that I had wasted my time attending. My attitude could be classified as less than holiday cheer.

After a grueling wait, the lights went down. A little girl appeared and began to sing "Once in Royal David's City" beautifully, and the rest of the children and congregation joined her. Throughout the next hour and a half, children sang and we heard readings of the story of Christmas. Near the end, the four-year-olds joined



the program and stole the show. There was not a dry eye in the house. I thought that my Julie and Russell were the best in the group, although I might be a little biased!

The spirit of Christmas was alive and well during the program. It made me realize that things are not so bad. Through the eyes and voices of children there was the reminder of hope for the world. Yes, even better for me and my "bad day." I also realized that I cannot let the bad behavior or actions of a few "trees" affect my view of the beauty of the entire "forest."

Later, I was able to focus on the positives from Boston. At the meeting, quite a few board members and members of the AMEA/SRF had manned a booth that spread the message of safety (and received quite a few donations). The Safety Committee had been able to initiate study of concussions within the sport, and there were successes within the USEA, including promising recovery of all injured competitors from this past year. The helmet rule has been a success. Our board members that were present attended the USEA Board meeting (after I left) and this resulted in us gaining column space in *Eventing USA* magazine, as well as official recognition of AMEA/SRF by the USEA organization.

We also were able to meet John Long, the new CEO of the national governing body of equestrian sports, the US Equestrian Federation. He committed his assistance to aiding

the AMEA/SRF to become more involved within all equestrian disciplines.

Our year has been positive and successful, and I look for an even better year in 2004. Please continue to assist us in our mission and to provide hope for those injured during equestrian activities.

I hope that this column finds you enjoying a productive and safe new year. May you focus on the good in the world, rather than the bad. No matter what your faith or beliefs involve, there is still the consistency of the message of hope, demonstrated in how you celebrate the season.

Thank you for your support. Happy Holidays and Happy New Year! May you see the world through the eyes of a child.

— Rusty

MEMBERSHIP REMINDER

Dues notices have been mailed to the address listed for your AMEA/SRF News. If you are not up to date on your 2004 Membership Dues, please verify that your information is correct and submit your dues. We are also asking you to consider a donation in addition to your dues to help us continue with our present activities and to be able to broaden our capabilities. The AMEA/SRF is a 501c3 not for profit organization. Your dues and donations are tax deductible.

Please encourage others to join and thanks in advance for your cooperation and kindness.

— Rusty

The President's Corner

Two Different Horse Shows

During the fall I had the opportunity to play an active role in two major horse shows at the Kentucky Horse Park. What a difference the show makes as it relates to helmet safety.

During September, the United States Dressage Federation (USDF) Regional Championship was held at the KY Horse Park. The show drew 450 horses and riders from more than 6 states. There were 6 dressage rings, 4 warm up rings and over 1000 trips in front of a judge by horse/rider combinations. It was a very, busy show. As the president of the AMEA/SRF, I was very interested in the rider safety factor at this show.

At the USDF event, the majority of riders did not wear ASTM/SEI certified helmets. They wore either hunt caps or top hat, which are not protective. The majority of the ASTM/SEI helmets that were worn were on the heads of children, young adults, and adult medical professionals.

A few riders were asked why they did not wear an ASTM/SEI-certified helmet. The most common replies were: "It did not look good," "It doesn't fit with the riding habit," and "they are not up to the dressage image." When asked if they were concerned about a serious head injury resulting from a horse accident, they always replied, "It will not happen to me." They all put safety as a secondary concern. Over 90% of the riders at this show did not wear ASTM/SEI-certified helmets. On the bright side, there was excellent medical representation on site and no injuries were noted.

The other horse show that I attended was the Mid-South 3-Day Event (CCI*) and Horse Tri-

als. This show took place in mid-October and had over 300 riders participating. All riders wore ASTM/SEI-certified helmets during the jumping phases and the majority of riders also wore those helmets during the dressage phase. It is a joy to see how the event riders are very aware of safety within the sport. Safety vests, medical arm bands, and ASTM/SEI-approved helmets are a part of the riders outfit.

This event had excellent medical coverage, the same medical coverage that the Rolex 3 day event uses. There were no noted accidents during this event. Also, a judge and technical delegate seminar was held in conjunction with this event. This was a great venue to show our officials how an event can be run in a safe and efficient manner.

The question we must ask is: Why was there such a difference in the safety aspects of the two shows?

Here are a few of my thoughts about the differences:

- US Eventing stresses safety as a practice.
- Eventers seem to be very aware of the safety issues of the sport.
- Event riders have embraced the safety aspect of their sport, with rules, safety committees, evaluations, etc.
- Dressage riders do not seem to be as concerned with helmet safety.
- Dressage riders seem to feel that since they ride on the flat, they will not have an accident.
- Dressage riders appear to be more interested in "the look;" believing that the ASTM/SEI certified helmets are not the correct image for a dressage rider.
- Because they ride on the flat,

most dressage riders don't seem to consider a potential concussion or head injury.

- Safety does not seem to be strongly promoted in the dressage discipline/community.

What can members of the AMEA/SRF do to promote more safety in all disciplines?

Educate
Educate
Educate.

You can lead them to water, however you cannot make them drink.

In 2004, when you attend horse shows, take the initiative



Joe Carr

President, American Medical Equestrian Association/Safe Riders Foundation
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to promote helmet and rider safety. If we save one life, we have done well.

Have a successful and safe new year.

Joe Carr
President, AMEA/SRF

QUESTIONS & ANSWERS

Dear Dru,

I would greatly appreciate your advice on helmet safety. What I would like to know is whether a helmet should be replaced after a fall if the helmet has no external signs of damage. My daughter took a bad fall in her GPA helmet. The helmet did its job and prevented serious head injury from occurring. I have been told by some people that if there is no external crack the helmet is fine, and I have also been told that it could have internal damage. What would you advise?

Drusilla Malavase replies:

The troublesome thing about our modern helmets is that the damage generally occurs under the hard shell, where the foam liner compresses (the action which makes the helmet do its protective job). Without taking the helmet apart or cutting it apart, it's really impossible to know whether damage has happened. Most of the time both

shell and liner look fine after a hard fall and the damage goes unsuspected.

I don't know what, if any, replacement policy the new distributor of the GPA has in place. And I realize that this is a very costly helmet to replace, unlike the U.S. and Aussie models which automatically supply a new helmet for a relatively small fee. I suggest you have a look at the fitting information/owner's information which should have been included with the helmet when it was purchased to see what they say. But all the manufacturers recommend replacement after a hard fall, and your daughter is too valuable to take a chance. Even at full price, a new helmet is the way to go, and were she my child, I would replace it immediately!

Best regards and I am so glad that your daughter didn't suffer serious damage.

Dru Malavase

Horse Related Injuries and Deaths in Western Montana

Shelley Smith Otoupalik
University of Wisconsin-Eau Claire

This study describes horse-related injuries and deaths in western Montana during the years of 1995 through 2000. The data were acquired from the Trauma Registry, a patient database of a Level II Trauma Center, and from the State Bureau of Vital Statistics.

Records of 482 persons with horse-related injuries were included. Of these 482 records representing patients, 50 records were obtained from the Trauma Registry, four from the Bureau of Vital Statistics and 428 from a hospital database. The Trauma Registry database was the most complete source with enhanced data such as how the person was injured (i.e. bucked off, fell off, stepped on, bitten, etc.). It also contained a brief narrative written by the Registrar describing the circumstances surrounding the incident such as "the patient was bucked off the horse and found five hours later by the Search and Rescue team." The records from the Bureau of Vital Statistics and the hospital database records contained basic demographic and injury information. Records were cross-examined using date of injury and demographic information to avoid duplication of patients. Although the format of the three databases differed, demographic and other crucial information were extracted using a Horse Related Injury/Death Data gathering worksheet and entered into the SPSS¹ database.

GENDER

The represented sample was made up of 255 (52.7%) males and 227 (47.3%) females. There were six deaths in the sample population.

AGE

Table I: Age of Persons with Horse-Related Injuries and Deaths

Age (years)	Number	Percent	Deaths	Percent
0-9	27	5.6%	1	16.6%
10-19	86	17.8%	1	16.6%
20-29	57	11.8%	0	0.0%
30-39	102	21.2%	1	16.6%
40-49	87	18.0%	2	33.3%
50-59	70	14.5%	0	0.0%
60-69	33	6.9%	0	0.0%
70+	20	4.2%	1	16.6%
Total	482		6	

The youngest reported victim was 1 year old and the oldest victim was 88 years old (Table I). Mean age of the sample was 36.27 years (S.D. 18.2). Greater than five percent (N=27) of people injured were less than 9 years old and a little over four percent (n=20) were 70 years or older. The group of people who were most frequently (n=102 or 21.2%) injured in horse-related accidents was 30-39 years old.

The month of injury or death in the 482 persons reported was highest in May with 15.6%. Greater than two-thirds (70.1%) of all injuries occurred in the summer months. The fewest injuries and deaths occurred during the winter months of December, January and February with less than 2% occurring in each of these months.

DEATHS

Only 1.24% of horse-related injuries in this population resulted in a fatality. Of the people who died, four (66%) were males ages 5, 12, 42 and 77 years old, and two (33%) were females, ages 37 and 43 years.

INJURIES

Frequency

Eight hundred and two injuries occurred in the sample of 482 victims (Table II), and multiple injuries were common. Nearly one-third (30.8%) of all people involved in horse-related incidents suffered multiple injuries while 69% of people represented in this study had a single reported injury.

Table II: Frequencies of Injuries

Injuries	Number	Percent
1	334	69.2%
2	114	23.7%
3	26	5.4%
4	7	1.5%
5	1	0.2%
Total	482	

Body area injured

Thirty-seven percent of all injuries in the sample populations were to the extremities (Table III). Head injuries occurred in 28% of the injured persons. The next most frequently injured areas were the chest (12.1%) and back (10%). The category of "other" included hematuria, multiple abrasions and multiple unspecified injuries.



Table III: Body Area of Injury

Area	Number	Percent
Extremity	297	37.0%
Head	224	28.0%
Chest	97	12.1%
Back	79	9.9%
Abdomen	34	4.2%
Neck	26	3.2%
Pelvis	18	2.2%
Other	27	3.4%
Total	802	

HOSPITALIZATION

Fifty of the 482 patients in this study were hospitalized for injuries sustained from horse-related incidents (Table IV). The average length of hospital stay for this group was 4.96 days. The length of hospital stay ranged from several hours for those treated and released from the Emergency Department to a seventeen-day hospitalization. Ten percent (n=5) of the patients hospitalized were subsequently discharged to an inpatient rehabilitation program or transferred to a different acute care facility.

Table IV: Length of Hospital Stay

Days	Number	Percent
<1	431	90.0%
1	16	4.3%
2	6	1.2%
3-5	10	1.8%
6-8	12	2.4%
9-11	2	0.1%
12-14	2	0.1%
15-17	3	0.1%
Total	482	

DISPOSITION

The majority of people injured in horse-related incidents (92.3%) did not require activation of the trauma team² in the Emergency Department (ED) and were subsequently discharged from the Emergency Department with non-life or non-limb threatening injuries (Table V).

Table V: Disposition of Patients

Disposition	Number	Percent
Discharged from ED	430	89.0%
Hospitalized	46	9.8%
Died in Hospital	4	
Died in Pre-Hospital Area	2	1.2%
Total	482	

EXTERNAL CAUSE (E) CODES:

The injuries were separated into specific injury subset according to the Injury Codes.

Table VI: External Cause of injury

E Code	#	%
813.5 motor vehicle accident involving collision with another vehicle/rider of animal	1	0.2%
817.5 Non-collision motor vehicle traffic accident while boarding or alighting/rider of animal	1	0.2%
822.5 Other motor vehicle Non-traffic accident involving collision with moving object/rider of animal	1	0.2%
823.5 Other motor vehicle; Non-traffic accident involving collision with stationary object/rider of animal	2	0.4%
824.5 Other motor vehicle; Non-traffic accident while boarding or alighting/rider of animal	15	3.1%
825.5 Other motor vehicle; Non-traffic accident of other and unspecified nature/rider of animal	2	0.6%
828.2 Accident involving animal being ridden/rider of animal	282	59.0%
828.8 Accident involving animal being ridden/other specified person	3	0.6%
906.8 Other injury caused by animal	175	36.3%
Total	482	

EXTREMITY INJURIES

Extremity injuries, the most frequent category of injury, were subdivided from the most to the least severe in nature (Table VII).

Table VII: Extremity Injury Subset Type

Type	#	Percent Extremity	Percent Total Injuries
Upper Extremity Fracture/Dislocation	60	20.0%	7.5%
Lower Extremity Fracture/Dislocation	17	5.7%	2.1%
Upper Extremity Sprain/Strain	20	6.7%	2.6%
Lower Extremity Sprain/Strain	17	5.7%	2.1%
Upper Extremity Abrasion/Laceration	25	8.4%	3.1%
Lower Extremity Abrasion/Laceration	14	4.8%	1.7%
Upper Extremity Contusion	49	16.6%	6.1%
Lower Extremity Contusion	87	29.4%	10.8%
Unspecified Upper Extremity Injury	3	1.0%	0.4%
Unspecified Lower Extremity Injury	5	1.7%	0.6%
Total	297	100.0%	37.0%

Continued on page 6

HEAD INJURIES

Head injuries were the second most frequent type of injury (Table VIII). These were divided into subsets as on previous page.

Table VIII: Head Injury Subset Type

Type	#	Percent Head Injuries	Percent Total Injuries
Subarachnoid/Subdural Hematoma	7	3.1%	0.9%
Concussions	39	17.4%	4.8%
Intercranial Injuries	25	11.1%	3.1%
Skull Fractures	11	5.0%	1.4%
Facial Fractures	12	5.3%	1.5%
Scalp/Facial Lacerations, Abrasions or Contusions	96	42.9%	12.0%
Eye/Ear Injuries	22	9.8%	2.8%
Unspecified Head Injuries	12	5.4%	1.5%
Total	224	100%	28.0%

CHEST INJURIES

Chest injuries were the third most frequent type of injury (Table IX).

Table IX: Chest Injury Subset Type

Type	#	Percent Chest Injuries	Percent Total Injuries
Pneumothorax	6	6.3%	0.7%
Lung Contusion	3	3.0%	0.4%
Rib Fractures	33	34.0%	4.1%
Clavicle Fracture	14	14.5%	1.7%
Chest Abrasion/Laceration/Contusion	39	40.2%	4.9%
Unspecified Chest Injuries	2	2.0%	0.3%
Total	98	100.0%	12.1%



BACK INJURIES

Back injuries were the fourth most frequent injury type, accounting for 10% of all injuries (Table X).

Table X: Back Injuries Subset Type

Type	#	Percent Back Injuries	Percent Total Injuries
Thoracic/Lumber/Sacral/ Fracture/Dislocation	20	25.5%	2.5%
Scapular Fracture	3	3.8%	0.4%
Back Sprain/Sprain	23	29.0%	2.9%
Abrasions/Contusions/Lacerations	20	25.0%	2.5%
Buttock Injury	11	14.0%	1.5%
Unspecified Back Injuries	2	2.7%	0.3%
Total	79	100.0%	10.0%

ABDOMINAL INJURIES

Abdominal injuries were the fifth most frequent type of injury, accounting for 4.2% of all injuries (Table XI).

Table XI: Abdominal Injuries Subset Type

Type	#	Percent Abdominal Injuries	Percent Total Injuries
Spleen	5	14.7%	0.6%
Liver	3	8.9%	0.4%
Kidney	2	5.9%	0.2%
Abrasion/Contusions	20	58.8%	2.5%
Unspecified Abdominal Injury	4	11.7%	0.5%
Total	34	100.0%	4.2%

NECK INJURIES

Neck injuries were the sixth most common type of injury, and they can be one of the most disabling (Table XII).

Table XII: Neck Injuries Subset Type

Type	#	Percent Neck Injuries	Percent Total Injuries
Cervical Spine Fracture/Dislocation	7	27.0%	0.9%
Neck Strain/Sprain	18	69.0%	2.2%
Laceration/Abrasion	1	4.0%	0.1%
Total	26	100.0%	3.2%

PELVIC INJURIES

There were 18 (2.2%) pelvic injuries in this sample. Riders often have pelvic fractures because of impacting the saddle horn on western saddles (Table XIII).

Table XIII: Pelvic Injuries Subset Type

Type	#	Percent Pelvic Injuries	Percent Total Injuries
Pelvic Fractures	7	39.2%	1.0%
Genital Injuries	3	16.0%	0.0%
Hip Abrasions Contusions/Sprains	7	39.2%	0.9%
Unspecified Pelvic Injury	1	6.0%	0.1%
Total	18	100.0%	2.2%

HEADGEAR

Of the 482 patients in the sample, there was zero documentation of use of protective headgear by the represented equestrians. Further examination showed that there was not a specific area to document the use of protective headgear on the hospital database or the vital statistics records. However, "Use of Protective Equipment" was a specific question on the Trauma Registry. Nevertheless, every record indicated "NO" under the column of "Use of Protective Equipment."

Concerns were raised as to whether this was an accurate reflection of the situation or a documentation issue. In an attempt to clarify this issue, informal questions were asked of eleven full time long-term nurses in the Emergency Department of the participating hospital, inquiring whether they ever recalled a patient from a

OTHER STUDIES (Table XIV)

Table XIV: Comparison Between Four Studies on Horse Related Injuries and Deaths in North America

Author(s)	Otoupalik	Thompson & vonHollen ³	Sorli ⁴	Bixby-Hammett & Brooks ⁵
Location of Research	Western Montana, US	Calgary, BC, Canada	B.C, Canada	A review of 31 studies
Years of research	1995-2000	1989-1991	1991-1996	1959-1986
Number of Subjects	n=482	n=150	n=1,950	n=180,133
Prospective vs. Retrospective	Retrospective	Retrospective	Retrospective	Both
Men Injured	53%	56%		
Women Injured	47%	44%		
Ages	1-88 years	2-86 years	1-83 years	0-65+ years
Helmet Use	0	0.60%		20%
Death Rate	1.20%	0.66%	0.76%	0-1%
Three Most Commonly Injured Body Areas	Extremity, head, chest	Upper extremity, Lower extremity, trunk	Head, upper limb, trunk/lower limb	Lower trunk, head, upper trunk
Patient Disposition: Discharged Home	89%	84.60%		
Patient Disposition: Admitted to Hospital	9.80%		3-38%	

Similarities exist among these four studies. First, a retrospective design has been used throughout. Second, when noted, the findings show injuries to males slightly outnumber injuries to females. Third, the age of equestrians ranges from toddlers to octogenarians, and fourth, injuries to the extremities are the most common. However, there is a difference in death rate noted, with the current study reporting approximately twice the death rate as Thompson and vonHolleran (1996) and Sorli (2000). Overall, equestrian injuries do not seem to differ throughout North America.

horse-related incident reporting using or wearing protective headgear.

These eleven nurses represented 174 years in the ED department. Only 6 patients reported wearing a helmet of any kind. Comments from the polled ED nurses included: "Patients said they were going to wear their helmets from now on (following the accident)" and "The only patient I ever took care of who had their helmet on was one of the ED nurses." Though anecdotal evidence based on memory, these responses support the overall findings that patients seen in the Emergency Department following horse-related incidents rarely report the use of protective headgear.

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ADDITIONAL ANALYSES

In examining the subset of horse-related fatalities, all of the deceased (n=6) suffered severe central nervous system injuries that resulted in death. The victims were either found dead at the scene of the accident (n=2), found unconscious and remained unconscious in spite of aggressive therapeutic interventions after arriving at the hospital (n=3), or found disoriented and quickly developed a loss of consciousness that did not respond to interventions (n=1). All incidents resulting in death occurred greater than 25 miles from the Level II trauma center.

When injuries were analyzed by gender, men suffered more extremity, chest, abdominal, pelvic and other injuries, while women suffered more head, neck and back injuries. Injuries were also tabulated according to age. The 30-39 year old group experienced the greatest number of extremity, neck and abdominal injuries. The 40-49 year old group suffered the greatest number of head, back and other injuries.

TRAUMA REGISTRY PATIENT SUBSET

A subset from the Trauma Registry was separated and examined independently from the general sample population data. This group was comprised of 60% men and 40% women. The average length of hospital stay was 4.96 days, with 86% of the patients being discharged home, 8% being transferred to other acute care facilities, 2% being transferred to inpatient rehabilitation facilities, and 4% succumbing to death. Age ranged from seven to eighty two years old, with the greatest number of victims (20%) in the 40-49 year range. The most common reason for hospitalization for this group was significant head injury, followed by chest and extremity injuries. The most common cause of death was an insult to the central nervous system. Eighty percent of these people had multiple documented injuries.

In this population, 40% of the injuries were caused by being bucked off the horse, 33% from falling off the horse, 4% were stepped on, 6% were knocked over, 6% were rolled over and 8% were kicked. Six out of fifty or 12% were injured as non-riders. In 34% of all these incidents, the patient reported multiple insults occurring at the time of the horse related-accident.

CONCLUSIONS

Safety education geared towards encouraging the use of protective headgear and a change in current usage of protective headgear needs to happen prior to the accident in order to make an impact on outcome. Health care providers are in the most opportune position to provide education to equestrians, young and old alike, in regard to injuries related to horse incidents. Nurses should take every opportunity, both when caring for patients and through community-based primary prevention programs, to provide education on safe horsemanship. Nurses could use their position as respected health care providers to speak to 4-H groups, rodeo and riding clubs, drill teams and other youth groups regarding riding safety.

The most important basic safety rule in regard to horse-related activities:

Wear an ASTM/SEI certified protective headgear when working on or around horses.

In addition to research-based implications, a common-sense approach needs to be used in everyday equestrian activities with the practice of basic safety habits:

1. Be especially cautious with children around horses due to the location of their head in relationship to the horse's legs and hooves.
2. Wear clothing that protects you from the elements and other inherent dangers of the outdoors (eg. branches, brush, sticks, barbed wire fences).
3. Make others aware of your intentions when you ride out.
4. Carry a cell or satellite phone when riding in remote areas.
5. Wear appropriate footwear that can easily slip off if your foot gets caught in the stirrup.
6. Use caution when matching horse with rider. Consider level of experience, level of comfort and decision making ability on the part of the rider, as well as age, disposition, environment and previous experience of the horse.
7. Invest in riding lessons or professional instruction for yourself and your children, no matter what your level of experience.
8. Make smart, educated choices when choosing a horse to purchase.

Edited from "A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Nursing. Adult Health Nursing at The University of Wisconsin-Eau Claire. Shelley Smith Otoupalik, RN, MSN, CEN, CFRN, EMT-P.

1 SPSS is a modular, tightly integrated, full-featured product line for the analytical process — planning, data collecting, data access, data management and preparation, analysis, reporting and deployment.

2 A "Trauma Alert" activation status refers to the notification of the trauma team to include the trauma surgeon and other ancillary departments (radiology, laboratory, respiratory therapy and others) to provide comprehensive care for the trauma patient immediately upon his/her arrival to the Emergency Department. "Trauma Standby" activation status refers to activation of the same team, minus the trauma surgeon, for the care of a patient whose mechanism of injury and initial presentation is less severe than that of a "Trauma Alert" patient.

³Thompson J.M. vonHollen B. Causes of horse-related injuries in a rural western community. *Canadian Family Physician* 1996 42:1103-9.

4 Sorli JM. Equestrian injuries: a five year review of hospital admissions in British Columbia, Canada. *Injury Prevention* 2000 6:59-61.

5 Bixby-Hammett DB & Brooks WH. Common injuries in horseback riding. A review. *Sports Medicine* 1990 9(1): 36-47.

The choice of a riding facility is always an extremely personal one involving not only the choice of the horse professionals, but also the choice of people one wishes to ride with, or the kids with whom one prefers to be pals. Beyond those factors lie others that in some ways may be more important, but in some ways they may be less.

LOCATION

This is the first thing to consider for various reasons. Whether you board a horse, take lessons, take a child for lessons, or have a teen that drives to ride her horse you must consider the distance.

Is the distance so far that you will skip riding because it is too much trouble to get there? Will you resent taking your child for lessons or skip going yourself? Will you worry about your teen driver going every day to the distant barn? There may be no reasonable choice, but if there is, closer is better.

NEATNESS

The facility does not have to have fancy landscaping, or even any landscaping, but it needs to be neat and well maintained. Sloppy premises, fences in need of repair, leaking roofs, overgrown arenas, gates that don't work and junk stacked everywhere are a sign of poor management. There is a qualifier to this. Arenas become overgrown when there has been a great deal of rain and the tractor can't get in. Things also get a bit rough when the tractor is in the shop. Depending on the climate, these things can and should be taken into consideration.

PART III: Choosing a Riding Facility



The sorts of things that matter are maintenance problems that seem to be long standing. If everything else looks fine yet the physical facility seems a bit rundown, ask about it. There could have been a change of management or other reason. Just remember that one is looking for neatness that requires effort, not window dressing that costs additional money. Money is something a small facility will not have to spare, yet it may be a quality facility.

PERIMETER FENCE

A facility should have a good solid four-foot, or more, fence around the perimeter of the facility so that a loose horse cannot reach a public roadway. An electric gate is a convenience that is greatly appreciated by most customers. Some facilities leave the gate open and close it only at night, especially if they have a long

inaccessible lane leading out to the gate. This is not a good practice, as most states do not look kindly on loose horses on public roadways, especially in urban areas. This problem would not ordinarily be covered under an Equine Activity Statute.

PARKING

While parking does not seem to be of great importance when choosing a facility, one should know if horses and vehicles are kept separated. Does this facility pay any attention to this at all? Will vehicle traffic frighten one's horse or interfere with a lesson?

CONTROL OF VISITOR TRAFFIC

Who is allowed into the barn? Can anyone go see the horses and possibly get into the stalls? Who is allowed to watch lessons? Is visitor traffic monitored at all?

STALLS

Are the stalls at least 12' x 12' and bedded deeply with shavings or other appropriate material? Are they cleaned once a day? This means well cleaned with the manure removed, the wet spots removed and the shavings turned to introduce air to the floor and fluff the bedding? Water buckets or waterers should be clean and not located next to places where grain and hay are fed. Stall latches should close securely, leaving no space around the door. There should be no spaces that a horse can get his leg under unless it is at least 2' from the ground so that if he can get a leg under, he can probably get it out. Walls should be smooth and free of protrusions or anything that could cut or catch on the horse. The ceiling should be high enough that a horse can rear up at least half way and not injure itself. Light fixtures should be covered with unbreakable containers made for that purpose.

WASH RACK

The wash rack should have a safe hitch rail that will not pull out of the ground. It should be at least 4' high. If cross-ties are used, not a favorite at American Association for Horsemanship Safety (AAHS), there must be a butt bar and plenty of escape room for the handler. Wash racks need non-skid surfaces because they are usually wet. Cement is fine, but it should have large, 2" rocks embedded in it or ridges for traction. Good drainage is essential. A place for storage of utensils is necessary or each person must bring his own

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PART III: Choosing a Riding Facility

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tools each time. There should be a sign stating rules and equipment available for immediate manure removal.

FEED ROOM

It is important that access to the feed room is limited to those who do the feeding, and that horses cannot gain access to the feed room.

TACKING-UP AREAS AND CROSS-TIES

Where do the boarders and students tack up? The space should be adequate allowing at least 12' to 15' between horses, 20' is better. If tacking areas with cross-ties are used, there need to be butt bars in the individual areas with plenty of escape room. The problem with these situations is that the escape is usually under the feet of the horse next door. All cross-ties should have panic snaps. The practice of cross tying in the aisle is extremely dangerous. Not only does the horse not have a butt bar, but aisles are often too narrow for safe passage. The biggest danger is that cross-tied horse will sit back, slip and flip over, injuring himself or others.

ARENAS

Do all the arenas have good gates? Are the fences adequate? Is lungeing prohibited when riders are present? Are rules of arena etiquette made known to all riders? Is the surface good and well maintained on a regular basis? Are all customers and instructors required to put equipment away after use? In jumping areas, are all empty jump cups removed and

put in appropriate containers when not in use? Are necessary cautions used when moving practice stock (e.g. cattle)? Extreme care should be taken to avoid starting a practice when there are riders in the arena who lack the skill to be there. An arena full of cows, or with a roper swinging his loop (or both), is not a good place to be if one happens to be a pleasure rider from another discipline. This is a scheduling and management problem.

FEEDING

Horses should be fed at least twice a day, more if needed. If a horse needs more food, the facility should give three feedings rather than to load the two feedings. Feed should be weighed, at least initially, so that horses are fed by weight rather than by coffee can, i.e. volume. Feeding should be done on a regular schedule. Our preference is to give hay, then water, and finally grain to discourage grain-woofing. It is important to inquire about the facility's basic daily ration, what feed is used, and if the facility charges extra for feeding supplements or just for the supplement cost.

EMERGENCIES

Are emergency phone numbers posted by each phone? Are procedures in place? Emergency phone numbers should include the veterinarian as well as 911, and relevant management numbers.

HEALTH ISSUES

While one assumes that good facilities always check Coggins tests and make sure all horses are up to date, it is wise to check. The same goes for parasite control. While one can

maintain one's own horse's vaccinations, the way a facility manages Coggins tests and parasite control affects all horses. It is a good idea to check with several local vets. A less-than-perfect facility will have used several veterinarians and the vets will probably find a way to not recommend a place they feel is inadequate.

EQUINE FIRST AID

It is important that staff members have been trained in equine first aid so that there is always someone on the premises that can manage basic first aid, take vital signs, and contact the veterinarian. It is also important to have a horse trailer and appropriate vehicle handy in case a horse needs to be taken to the clinic.

HUMAN FIRST AID

All instructors should be certified in first aid and CPR. This doesn't mean that they will be treating anyone but they will be more aware of injuries, and if they need to do something, they can.

SCHOOL HORSES

Is there any criteria for choosing school horses? Many facilities inherit horses of former borders. Is there a limit to what the place will accept? Can they state specifically what they consider "beginner" or an "intermediate" or an "advanced" horse? Is there a test that a horse must pass before becoming a school horse, even if only in someone's mind? What will cause the facility to get rid of a school horse? Has the facility ever gotten rid of a school horse? Has anyone ever fallen off one of the present school horses? What were the circumstances?

HIRING PRACTICES

Depending on what one's interest is in the facility, be it boarder, student, or parent, it is important to know the qualifications of the relevant equine professionals. Good trainers have trained "somewhere," rode with "someone," or have paid their dues and they have put horses in the ribbons and even better. Successful ones will not mind sharing those details. The same goes for instructors. With instructors, certification is an added bonus since it shows that the instructor was interested in some training with respect to safety. Look for professional credentials, either horses that they've trained have accomplished something, or their students have. Competition is not the end-all and be-all, but it is the only thing we have where instructors and trainers can go out and compare their product against that of someone else. There are many kinds of competition, ranging from shows to competitive trail riding. Without that information, one must do a considerable amount of research. An inexperienced rider may end up with an instructor or trainer who doesn't have much experience either.

THE LAST WORD

Except when one purchases a package of lessons there is usually no contract that ties a customer to a barn. One can take a few lessons or board for a month and if the comfort level is not there move on to the next choice. There is never any reason to stay in a place that is uncomfortable for you, the rider, or the horse. Being uncomfortable usually means

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being unsafe for many reasons. The general stress level of a facility is a serious consideration as well. Some places are calm and friendly and easy to be in and others are filled with unpleasantness. The former is healthier for many reasons for both horses and people. This list could go on forever, but these are some of the things that relate directly to the health and well-being of boarded horses and the safety of riders. What is important to remember is that if one is not comfortable with the surroundings there is probably a reason. One need not wait to find out what the reason is. The discomfort may be a warning; it is possible to find a place where both horse and human are comfortable.



JAN DAWSON is an attorney and President of the American Association for Horsemanship

Safety Inc. She is the author of *Teaching Safe Horsemanship*, and through AAHS, has conducted many clinics teaching safe riding by the *Secure Seat*sm method. Jan and her husband Dr. Bob Dawson (a law professor at the University of Texas) are long time friends of the AMEA/SRF and are responsible for maintaining our website and providing valuable support. For more information about AAHS, go to www.ameaonline.org and click on "links."

Year End Donations

The AMEA/SRF ended the year with some very generous donations including a wonderful surprise from the well known **Wayne-Dupage Horse Trials**. Erin and Dan Kowalewski (event organizers), presented a check for \$1,100 to the AMEA/SRF during the United States Eventing Association (USEA) annual meeting in Boston, Mass. They had donated five dollars from each competitor's entry fee to the foundation "because they wanted to support an organization that supported the riders," and felt that AMEA/SRF was a worthwhile investment.

For a second year, Dana Sachey and Wendy Wergeles of **The Event Derby**[®] competition series, based in California, donated a portion of the proceeds of their competitions (\$750) to AMEA/SRF. They were then surprised and heartened when prize money recipients at the year-end jackpot show also donated the monies to the AMEA/SRF. **The Event Derby**[®] also co-sponsored with **Focus On Sport Horses**[®] booth in the USEA trade fair.

The Event Derby[®] and AMEA/SRF wish to thank the following competitors for their generosity:

Jennifer Giralдин	\$200
Jennie Enholm	\$100
Bill Enholm	\$100

Many thanks to all the above donors. For information on having *your* competition benefit the AMEA/SRF through our 501C.3 tax status, contact Rusty Lowe at the main office.

Trade Fair a Huge Success

The AMEA/SRF presence in the trade fair at the United States Eventing Association (USEA) annual meeting in Boston, Mass., was successful in many aspects.

The booth at the trade fair offered many things for attendees including copies of the newsletter, membership forms, a donation box, and *The Neil Ayer Rider Safety Video* which played on a TV monitor (and was for sale).

AMEA/SRF offers a great opportunity which everyone should consider — the opportunity to make a tax deductible financial donation to the AMEA/SRF in the name of a special person for birthdays, anniversaries, or special holidays. AMEA/SRF sends a letter to that special person indicating your generosity on their behalf.

Our presence at the trade fair promoted public awareness of our organization's many benefits, helped foster our relationship with the USEA, and brought approximately \$2,500 into the organization.

Next year the USEA Annual Meeting will be in San Francisco, Calif., where the AMEA/SRF will hold the 2004 Annual General Meeting, as well. Please mark your calendar for December 1-5, 2004 and plan on attending.

**THANK YOU
for editorial assistance**

**Dr. Josie Trott, UVM
Post Doctoral Researcher**

Safety Seminar held at U.S. Equestrian Meeting

The United States Equestrian Federation (USEF) offered a safety seminar as part of the 2004 U.S. Equestrian Annual Meeting held Jan. 14-18, 2004, in Los Angeles, Calif. The USEF Safety Seminar was a forum for an exchange of information regarding a wide array of safety related topics including headgear and concussions, medical coverage for competitions, equine liability statutes, weather issues, motorized vehicles on competition grounds, barn safety, and safety in warm-up areas.

The most important concerns in equestrian sport are the safety of both horse and rider. Paramedic and Safety Committee co-vice chair, Rusty Lowe, EMT-PA; Dick London, MD, Radiologist; Jan Dawson, attorney; and Safety Committee chair and competition manager, Andrew Ellis, addressed these concerns. Based on feedback, there was more interest and questions than time allotted, but the time spent on these topics was productive and informative.

The safety seminar, sponsored by the United States Equestrian Federation, Inc., was free for all registered convention attendees and was available, along with four other educational seminars. For further information regarding any of these workshops, contact Krista Greathouse at kgreathouse@usef.org.

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**American Medical Equestrian Association
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Rusty Lowe, Executive Director
P.O. Box 130848
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