Training First Responders on Equine Handling and Technical Rescue

By: C.A. Shea Porr, Virginia Tech MARE Center

Emergency responders may have little training in equine behavior, and the instinctive reactions of the horse can quickly make emergency situations more perilous. A pilot survey in Northern Virginia revealed that while over 60% of first responders had attended emergencies involving horses, less than 25% had training handling horses. Two programs were developed. In each, topics were presented as lectures and followed by hands-on practice with live animals. A basic program was designed to educate first responders on equine behavior, handling, and first aid. An advanced program included detailed rescue techniques and practice with specialized equipment. Surveys were administered during each program and assessed previous horse handling experience and comfort level, and knowledge gained during the program. In the basic course, 82% reported no horse handling training prior to the program and 30% had never owned horses. Over 78% reported learning “a lot” about topics covered. While 15% were “not comfortable” handling horses before the program, none held this view after the training. Comfort level handling horses increased in 94% of participants. After the advanced program, 67% had gained “a lot” of knowledge on techniques and equipment options. Confidence levels again shifted upward: 65% were more comfortable handling horses and 94% would be more comfortable directing an emergency scene involving large animals. Single and multi-day training programs appear to be effective at increasing knowledge of equine behavior, first-aid, and appropriate rescue methods, and at improving the comfort level and confidence of emergency responders handling horses.
Training First Responders on Equine Handling and Technical Rescue

C.A. Porr and R.K. Splan
Middleburg Agricultural Research and Extension (MARE) Center
Virginia Tech, Middleburg, VA

Introduction

The horse industry in the United States has an economic impact of $102 billion1. Between 1996 and 2005:
- Number of horses increased from 6.9 to 9.2 million
- 42% involved in recreational activities
- 39% involved in showing and racing
- Travel for these activities brings horses into unfamiliar areas

Emergency responders may have little experience handling horses, which can make emergency situations more perilous.2

Types of incidents can include:
- Loose animals on fair grounds, state parks, and highways
- Horses or riders hit by cars
- Animals trapped in ditches, mud, septic tanks, swimming pools
- Trailers overturned
- Barn fires

Why train?
- “Everyone” wants to help.
- Often, no single person has all the training or equipment necessary to achieve the goal.
- Can coordinate the rescue efforts and provide proper comfort level and confidence in handling horses.
- Use of live, trained animals as well as models for hands-on instruction could help keep people safe and improve comfort level.

Results

One-day Horse Handling Training:
- Since 2007, 274 emergency responders participated in 15 sessions
- Before the training:
- 82% had received no formal training
- 30% had no experience with horses
- 15% were “uncomfortable” handling horses
- After the training:
- 78% learned “a lot”
- All were at least “somewhat comfortable” handling horses
- 89% became more comfortable with handling horses

Three-day Technical Large Animal Emergency Rescue (TLAER):
- Since 2009, 351 emergency responders and horse industry professionals participated in seven training sessions.
- 67% gained “a lot” of information on disaster response, equipment options, and trailer, mud, and water events.
- 69% became more confident in handling horses.
- 94% became more comfortable coordinating a scene involving a large animal.

Discussion and Conclusions

Single and multi-day training programs appear to be effective at increasing knowledge of equine behavior, first aid, and appropriate rescue methods, and at improving comfort level and confidence in handling horses.

Although horses and situations encountered during these training programs were much less stressful than an actual emergency:
- Simply having handled horses and discussed scenarios may not be enough.
- Even if participants remained uncomfortable handling horses during an emergency:
- Confidence in coordinating a rescue increased.
- Understanding of horse behavior and handling increased.
- The ability to coordinate the rescue efforts and provide proper instruction could help keep people safe and perform the rescue of the equine more efficiently.

Materials and Methods

Two educational programs were designed.

One-day Horse Handling Training:
- Classroom sessions
  - Equine behavior and handling
  - What to do until the vet arrives
  - Basic equine first aid
- Hands-on sessions
  - Basic equine handling
  - Catching, leading, releasing individual horses
  - In stalls and paddocks
  - Advanced equine handling
  - Moving horses around obstacles, trotting
  - Grooming, handling feet
  - Trailer awareness
  - Goose neck versus bumper hitch
  - Overview of different types of trailers
  - Loading and unloading horses
  - Basic first aid
  - Taking temperature, pulse, and respiration
  - Bandaging limbs

Three-day Technical Large Animal Emergency Rescue (TLAER):
- More technical information and hands-on practice
- Mud and water rescues
- Trailer overturn scenario
- Vertical lifting exercises for extrication from ditches, pools
- Barn fire scenario
- Night search and rescue exercise
- Information and discussion on hazardous materials situations
- Helicopter rescues
- Use of live, trained animals as well as models for hands-on
- Discussion and practice with standard as well as specialized equipment
- Review of equipment on typical rescue vehicle
- Review of equipment on local equine ambulance

Objectives

The objective of this effort was to develop training programs combining theoretical and practical instruction to:
- Familiarize emergency responders and horse industry professionals with horse behavior and handling, basic first aid
- Instruct both groups in the technical requirements of large animal emergency rescue
- Educate both groups on the responsibilities, duties, and expectations of people who may arrive on scene during an emergency situation

Materials and Methods

A preliminary survey of emergency responders revealed:
- Over 60% had responded to emergency calls involving horses
- Only 21% had received any formal training handling horses
- Less than 24% were comfortable handling horses
- 39% of the events involved vehicular accidents
- Only 27% reported having a veterinarian on site

Discussion and Conclusions

First responders arriving on scene may have little experience handling large animals.

Data Collection:
- Surveys distributed before and after training
- Assessed
  - Prior experience handling horses
  - Prior training in handling horses
  - Comfort level in handling horses
  - Comfort level in directing activities at a scene involving horses

Literature Cited