

Equestrian Riders' Helmets

Our topics for this week are:

- **Need for head protection when around horses**
- **Ratings for equestrian helmets**
- **How to fit an equestrian helmet**

Approximately 25% of all injuries from riding horses are head injuries. It is the most common type of sports-related head injury among adults in the U.S. Therefore, equine helmets are recommended to be worn when riding, especially if the rider is inexperienced or the horse is young. The United States Eventing Association requires competitors in classes that require jumping to wear helmets. However, currently in the U.S., only about 1 in 8 riders in all disciplines of equestrian activities wear helmets.

Head injuries from horses can occur from being thrown off, knocked into a wall, a hoof when the horse rears, fall to the ground and being stepped on by the horse, the horse slinging its head, among other possibilities. Not all head injuries occur as a result of riding a horse.

Children should wear an equestrian helmet anytime they are near horses. Many states have laws requiring riding helmets for riders 18 years old, or younger. The United States Equestrian Federation requires a helmet be worn by all riders less than 18 years of age in hunt seat classes.

Types of Helmets

Equestrian helmets are designed to protect the back and sides of the head and are different from bicycle or motorcycle helmets. Many bike helmets have gaps in the shell for ventilation and are pointed in the back to improve air flow, but this design provides insufficient protection for a fall from a horse.

Riders should wear an equestrian helmet that has met standards set by the American Society of Testing Materials (ASTM) international and certified by the Safety Equipment Institute (SEI). The ASTM is a volunteer committee consisting of helmet manufacturers and people who use equestrian helmets. The testing of helmets is based primarily on dropping helmets from a height of 6 feet, at different angles and directions, onto an anvil. Until recently, there has been no further evaluation of helmet quality beyond meeting minimal ASTM criteria. In late 2022, the Virginia Tech Helmet Lab in Blacksburg announced an independent rating system called STAR, which stands for Summation of Tests for the Analysis of Risk. Their evaluation involves 12 impact tests to the front, side, and back of helmets. Only ASTM approved helmets are rated by

STAR. STAR ratings range from 0 to 5. The rating number is intended to present the number of concussions that would result if the helmet was worn by a human during the STAR impact tests.

Fitting a Helmet

A rider should be sure that a helmet is adjusted to fit his head. The chin strap has a “Y” that fits over the ears which should be adjusted so that the bottom of the “V” portion of the “Y” is just below the ear. The chin strap should be snug enough to permit just one finger underneath. The visor part of the helmet should be 1 inch above the eyebrows. If an impact occurs to the helmet, it should be replaced even if there visually appears to be no damage. No earrings should be worn since they can get caught in the helmet straps. After the chin strap is fastened, adequacy of the fit should be determined by the rider attempting to move the helmet forward and backward and to each side. Proper fit allows little movement.

If you have comments or you're interested in particular animal handling subjects contact us at CBC@BetterAnimalHandling.com

Now let's recap the key points to remember from today's episode:

- 1. Most people and all children should wear equestrian helmets when around or riding horses.**
- 2. The traditional ASTM certification system rates helmets as pass/fail.**
- 3. The new Virginia Tech STAR rating system assesses ASTM certified helmets on a scale of 0-5 based on a more comprehensive method of testing.**

More information on animal handling can be found in my recent books, *Animal Handling and Physical Restraint*, *Concise Textbook of Small Animal Handling*, and *Concise Textbook of Large Animal Handling* published by CRC Press and available on Amazon and from many other fine book supply sources.

Additional information is provided at: www.betteranimalhandling.com. This website has more than 150 past podcasts with notes on handling of dogs, cats, other small mammals, birds, reptiles, horses, cattle, small ruminants, swine, and poultry.

Don't forget, serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the needed skills should be under the supervision of an experienced animal handler.