Riding Helmet Safety

Helmet Facts - Here's Why You Need Your ASTM/SEI Approved Helmet for Every Ride...

An injured brain does not heal like a broken bone. Even seemingly insignificant head injuries can have serious long-term effects.

- Horseback riding carries a higher injury rate per hour of exposure than downhill ski racing, football, hang-gliding and motorcycle racing.
- Medical Examiner reports show that 60% or more of horse-related deaths are caused by head injuries. Helmets can reduce this possibility by 70-80%.
- Each year approximately 70,000 people are treated in emergency rooms because of equestrian related activities.
- The American Medical Equestrian Association calculates that ASTM/SEI approved helmets have reduced all riding-related head injuries by 30% and severe head injuries by 50%.
- Repeated trauma to the head, even when minimal, can cause cumulative damage to the brain. Each new accident expands the original damage and the brain cannot recover 100% from injury.
- Riders under the age of formerly had the highest head injury rate. Expanded use of ASTM/SEI helmets among this age group has shifted the highest head injury rate to those people ages 22-35.
- Non-ASTM/SEI certified helmets offer no protection whatsoever and are strictly for cosmetic purposes.
- Head injuries are responsible for more than 60% of horse-related deaths.
- Head injuries are the most common reason for horse-related hospital admissions.
- Liablity insurance must be provided by manufacturers on their porducts as part of the SEI certification process.

Helmet Fitting and Replacement

Here are some guidelines you can use to decide whether or not your helmet fits properly:

- When you wiggle your helmet it should move your eyebrows - this is one way to know that it fits tight enough. Only you can tell if the helmet feels too tight.
- The helmet should stay comfortably on your head when harnessed without moving around on your head no matter what you're doing. When trying on a helmet in the store, bend over at the waist and shake your head. A correctly fitted helmet will not move.
- After wearing the helmet for about 5 minutes, remove it and check for marks on your forehead. Indentations in your forehead left from the helmet may indicate you should try one size larger.
- Be sure to use the foam spacers that come with your helmet. These will help you get the best fit out of your helmet.
- Long hair should be secured below your helmet so as not to interfere with fitting.
- A helmet should fit equally all the way around the head without exposing the forehead or obscuring vision.

- When you open your mouth wide with the harness fastened, you should be able to feel pressure on your throat --not the tip of your chin. This will ensure stability of the helmet.

Signs That May Indicate Your Helmet is Too Big:

- Helmet wiggles when you move your head from side to side or back and forth.
- Your eyebrows do not move when you wiggle the helmet with your hand.
- The helmet obscures your vision.

Signs That May Indicate Your Helmet is Too Small:

- The helmet leaves a line on your forehead when you take it off.
- Wearing the helmet for more than a few minutes gives you a headache.
- The helmet is sitting up too high on the top of your head, leaving most of your forehead exposed.

What is ASTM/SEI?

All helmets not manufactured to ASTM/SEI standards carry a label or insert stating that the helmet is an item of apparel only and will provide no protection to the wearer from a fall or impact.

The ASTM (American Society for Testing and Materials) is an organization comprised of thousands of skilled volunteers including doctors, engineers and physicists. It is the job of the ASTM to set standards for many types of safety equipment. The ASTM has created criteria for horseback riding helmets to adhere to. These standards are summarized in ASTM F 1163. The SEI (Safety Equipment Institute) is an independent laboratory that tests helmets to be sure they meet the ASTM standard.

Why Do We Need a Standard?

In 1980 the United States Pony Club began tracking accidents reported among its members. Three years later, the Pony Club developed its own standard for riding helmets and required that all members wear their USPC standard helmets which had been tested at independent laboratories. In 1986 the USPC asked ASTM, an organization that had developed helmets for other sports to develop one for horseback riding helmets as well. ASTM F 1163 was first published in 1990 and is reviewed every five years.

The study the Pony Club began in 1980 continued for 12 years and provided arresting evidence in favor of the standard. The USPC found a 26% decrease in head injuries with the onset of the USPC standard helmet in 1983. Although there have been no official studies completed for the ASTM standard, the American Medical Equestrian Association estimates that ASTM/SEI approved helmets have decreased riding-related head injuries by 50%.

How to Distinguish Between Approved and Unapproved Helmets

The easiest thing to look for is the ASTM/SEI seal inside the helmet. If you are skeptical however, approved helmets have a thicker shell. Look at the helmets from below and you should be able to see the difference in thickness. Approved helmets cannot have a simple snap to secure the harness. Snaps are not used because they are prone to popping open upon impact. You can also look at the harness. There is no such thing as an approved helmet with a completely clear harness.

Companies Manufacturing Approved Helmets

- Troxel - makes only approved helmets:
- International Helmets
- Australian Holdings
- Charles Owens & Co. Ltd.
- Lexington Safety Products, Inc.
- Equine Science Marketing, Ltd.
- Del Mar Helmet Co., Inc.

Important Differences Between Bike Helmets and Riding Helmets

Bicycle helmets are designed to sustain impact from the height of a fall from a bike, not from the much greater height of a fall from a horse.

Bicycle helmets may seem sufficient for protecting your head and you may find them lighter, cooler and more comfortable. However, bike crashes and falls from horses are not at all similar and therefore the helmet design is drastically different. The results? **Bike helmets are not designed to protect your head when you're horseback riding!** The height of a fall from a horse is far greater than the height of a fall from a bicycle. Bicycle helmets are not designed to withstand impact from the height of a horse. Also, bike helmets are designed to Protect the top of the head since most falls from bicycles are forward. Falls from horses occur in all directions and therefore the back and sides of the head are just as vulnerable. These parts of the head are not protected by a bike helmet.

Think bike helmets are more comfortable? Helmet companies are now coming out with all kinds of new styles to meet the demand for cooler, lighter, more comfortable helmets for horseback riding, similar to bike helmets, while still offering the same protection of a horseback riding helmet.