

# Why Riding Helmets Work

By:

MyHorse.com



Everyone has an excuse for not wearing a helmet when they ride: "I'm not going to jump; I'm just going for a trail ride; my horse is perfectly safe; I'm only going to let my horse stretch his legs for a few minutes; I'm not going to do anything dangerous."

Now think back to the last time you came off your horse. Were you jumping a high fence on a strange horse after an hour of hard work? Probably not. You were more likely doing an activity you do every day with your horse and the unexpected occurred, something you never could have anticipated.

That's why it's a good idea to wear a helmet every time you climb on a horse. You never know when and how an accident will occur. We work with our horses to minimize spooking, runaways and other dangerous situations. But we can't anticipate everything. And if we're challenging ourselves and our horses athletically, eventually we're likely to attempt something that will cause a fall.

Fortunately, helmet manufacturers have been working to design better and safer helmets. So if you wear one and do fall, you're much more likely to avoid a head injury than ever before. That's important because, according to the American Medical Equine Association/Safe Riders Foundation, head injuries account for 20% of all equestrian injuries and 60% of fatalities occur from head injuries.

The danger to your head in a fall isn't just the possibility of cracking your skull or sustaining a gash if your horse's hoof hits your head. A lot of head injuries are actually injuries to the brain. When you are moving and your head meets a solid object (usually the ground), your brain doesn't immediately stop its motion. It continues forward, often hitting the opposite side of your skull from where the impact occurred.

Many of today's helmets conform to ASTM/SEI safety standards, meaning they have passed tests by the Safety Equipment Institute based on standards set by the American Society for Testing and Materials. These tests are designed to emulate impacts that can occur in a fall from a horse. The helmets meeting these thresholds have an outside shell built to resist impact coupled with cushioning material inside the helmet to protect your skull and brain.

These helmets also have sturdy straps bolted into the helmet so that once you secure the strap under your chin, they are unlikely to come off. It is important to wear the harness strap properly latched every time. If your helmet goes flying off your head before you hit the ground, it won't do you any good.

Proper fit will also allow the helmet to do its job. Not only do you need to find the correct size, everyone's head has a different shape. The brand of helmet that fits your friend's head may not be right for you. The helmet should sit comfortably on your head, and when you hold your head still and rock the helmet, your scalp should move with it. If your head is in between sizes, you can replace the pads inside the helmet with the thicker or thinner pads that the manufacturer often provides. Be sure that the harness strap fits under your chin snugly yet comfortably. If you have long hair, fasten it at the nape of the neck instead of trying to put the hair up under the helmet.

Many equestrian organizations and some states now have rules or laws in place that require wearing helmets when riding, especially for children. Groups such as the U.S. Equestrian Federation and many states' 4-H organizations will prohibit a rider from competing in events where a helmet is required unless the rider has one that meets or exceeds ASTM/SEI standards.

In an effort to encourage equestrians to use a helmet, the Washington State University Cooperative Extension and Washington State 4-H Foundation have produced a 20-minute video narrated by William Shatner called "Every Time...Every Ride." It blends interviews with video of horses in many sports, showing the benefits of wearing a proper helmet and the consequences of riding without one. The video notes that it's the height that puts a rider at risk, and points out that an unprotected head can receive more than 1,000 g's of force in any fall at any speed.

So strap on that helmet no matter what activity you plan with your horse today. It only takes a minute, and it could save your life.

### **Helmet Hints**

Choose a helmet that meets or exceeds ASTM/SEI safety standards.

Always fasten the harness strap.

Be sure the helmet fits properly, so that when you rock it, your scalp moves with the helmet.

Fasten long hair at the nape of the neck instead of putting it up under the helmet.

If the helmet is involved in a fall, either replace it or have it inspected to ensure that it still has its protective qualities.

### **Helmet Facts**

Between 12 to 15 million persons in the United States ride a horse or pony every year.

Approximately 20% of horse-related injuries occur on the ground and not riding.

Most riding injuries occur during pleasure riding.

Head injuries are the most common reason among riders for admission to the hospital or death.

A fall from two feet can cause permanent brain damage. A horse elevates a rider eight feet or more above ground.

A human skull can be shattered by an impact of 7-10 kph. Horses can gallop at 65 kph.

According to the National Electronic Surveillance System figures, the most likely ages for injury is 5-14 and 25-44 years with each decade having about 20% of the injuries.

A rider who has one head injury has a 40% chance of suffering a second head injury. Children, teens and young adults are most vulnerable to sudden death from second impact syndrome: severe brain swelling as a result of suffering a second head injury before recovery from the first head injury.

Death

is not the only serious outcome of unprotected head injuries. Those who survive with brain injury may suffer epilepsy, intellectual and memory impairment, and personality changes.

Hospital costs for an acute head injury can be in the range of \$25,000 per day. Lifetime extended care costs may easily exceed \$3 million. There is no funding for rehabilitation outside the medical setting.

Helmets work.

Most deaths from head injury can be prevented by wearing ASTM (American Society for Testing Materials), SEI (Safety Equipment Institute) approved helmets that fit correctly and have the harness firmly applied. Other types of helmets, including bike helmets, are inadequate.

Racing organizations require helmets and as a result, jockeys now suffer fewer head injuries than pleasure riders. The U.S. Pony Clubs lowered its head injury rate 29% with mandatory helmet use. Britain's hospital admission rate for equestrians fell 46% after helmet design improved and they came into routine use.