

THE MEDICAL FACTS

About 7,000,000 people participate in horse activities in the USA annually.

Whether riding Western or English, the height above the ground, the frequency of falls and the variables introduced by the horse itself, create an environment where head impacts are relatively common. Despite the agility and experience of a rider, it is often impossible to adjust one's position during a fall to avoid a high energy, head impact with the ground, a rock or other objects.

Facts from a range of equestrian studies.

- 70,000 people are treated in emergency rooms because of equestrian related injuries accounting for an estimated 2,300 admissions annually. Head injuries account for 18% of emergency room injuries.
- Lifetime riders who report riding six or more times per year reported a 13% lifetime rate of being hospitalized because of a riding injury.
- Head injuries account for the majority of hospitalizations and deaths.
- The risk of head injuries appears to be similar in English riding as compared to western riding. Serious head injuries and deaths are more common with aggressive riding such as jockey's and eventer's. Deaths are rare when wearing an ASTM certified helmet during non-aggressive riding activities.
- The mechanism of the majority of equestrian related head injuries relates to your distance above the ground. In more aggressive forms of riding such as jumping and racing, the potential for a crush type injury is increased. The majority of head injuries occur from falls caused by unpredictable events. However, about 20 percent occur while performing non-riding activities or as a bystander.

- Risk of injury relates more to your cumulative time riding and less to level of expertise. Concussions accounted for 8% of horse riding related emergency room data, a rate that is higher than many other major sporting activities. The majority of riders with a onetime concussion resolve completely without residual problems. This high rate of complete recovery diminishes with subsequent concussions.

- Public health studies indicate that there are scattered riding related fatalities each year throughout the USA. Deaths are significantly reduced by wearing an ASTM certified helmet. For each fatality, there are many times more head injuries.

- Recurrent head traumas (or TBI's) and their consequences are uncommon in equestrian riding in contrast to contact sports such as football. They do occur to riders who frequently ride in high risk activities.

- Certified helmets provide a highly effective means of absorbing much of the impact with the ground or objects such as a rock or the horse's hoof. Helmets are certified for their ability to absorb energy, cover your skull and stay properly in place. Equestrian riders are wise to wear certified helmets. Uncertified helmets are for look and vanity. They should not be worn as a means of head protection. Riders who wear ASTM certified helmets rarely suffer serious head injuries or death from a head impact but there are exceptions especially during aggressive riding activities.

Richard Timms, MD for Troxel, April 2016
See www.troxelhelmets.com