



Equestrian Safety Fact Sheet

May 2005

Background

In the United States an estimated 30 million people are involved in equestrian activities annually.¹ Youth ride horses for occupational, recreational, and competitive purposes.⁶ Horses can weigh up to 1100 pounds and travel up to 40 MPH.³

INJURY EXPERIENCE

Fatal Injuries

- The most frequent cause of death and serious injury for mounted and dismounted horse activities is head injury.^{2,4,5,6}
- In the United States from 1999-2002 there were 76 fatal injuries to youth under 20 years involving riding an animal or an animal drawn vehicle.⁷

Emergency Department (ED) Treated Injuries

- In the United States, an estimated 23,000 youth under 20 years are treated from equestrian-related injuries in an ED annually.⁸
- Female equestrians 10-19 years represent 57 % of the cases treated in an ED annually.⁸
- Contusions, fractures, sprains/strains, lacerations, internal injury and concussions are the most common horse-related injuries to youth seen in an ED.⁶
- The most frequent body parts injured, in order, include head/neck/face, arms and legs include arms, and legs.^{4,9-13}

Injury Statistics

- A study of U.S. equestrian-related pediatric trauma events revealed incidents occurred at home (36%), at a recreational area (23%), on a farm (19%), and at school (5%).⁹
- The severity of youth equestrian-related injuries is greater compared to other sports-related injuries.^{1,4}
- A population-based report in rural Wisconsin revealed the equestrian-related injury rate for youth under 16 years to be 5.6 injuries per 10,000 person-years compared to 3.9 per 10,000 for adults.¹³
- Studies indicate 20-30% of equestrian-related injury occur while dismounted such as leading, grooming, or playing around a horse.^{9,10}
- Dismounted injuries most often involve a youth being kicked or trodden by a horse.^{9,10}
- Mounted injuries most often involve a youth falling off or being thrown from a horse.^{9,10}
- Studies suggest helmet use is more common among females; those riding English style; and recreational riders.¹⁴⁻¹⁶

Cost Data

- The average cost of animal riding deaths is \$89.7 million annually.¹⁷
- Nonfatal equestrian-related injuries to youth 0-19 years treated in an ED cost an average of \$945.6 million per year.⁸
- Females 10-19 years seen in an ED due to equestrian-related injuries cost an average of \$433.7 million per year.⁸

Continued

ASSOCIATED FACTORS

Factors associated with equestrian-related injuries

- Female gender^{1,2,4,5,9}
- 10-19 years of age^{1,2}
- No helmet use^{2,11,13,18,19}
- Immature judgment, risk taking, motor skills or technique¹⁰
- More experienced riders (5+ years)¹¹⁻¹³
- Riding English style²⁰
- Riding 15-24 hours per month²⁰
- Horse being “spooked” by people, noises, or traffic¹

Youth who are physically or mentally disabled should be evaluated by appropriate medical personnel to determine if therapeutic riding is a suitable and appropriate activity.

RECOMMENDATIONS/REQUIREMENTS FOR PROMOTING SAFE PARTICIPATION IN EQUESTRIAN-RELATED ACTIVITIES

- Evidence demonstrates that consistent use of a secured equestrian helmet that meets the ASTM* standard and is SEI† certified will prevent head injury.^{18,21-23}
- The American Academy of Pediatrics (AAP)²⁴ recommends young riders:
 - Wear a helmet that meets the ASTM standard and is SEI certified while riding horses
 - Be supervised based on skill level
 - Ride horses appropriate for their levels of cognitive development and riding ability
- New York state and Plantation, FL have enacted legislation requiring helmet use for youth under 14 and 16 years (respectively) mounted on a horse. Organizations such as the United States Pony Club, National Hunter/Jumper Council Board of Governors, the USA Equestrian Board of Directors and some state and local 4-H club require youth to wear an approved helmet in equestrian events and on the horse show grounds. The effectiveness of these laws in preventing equestrian-related injuries is unknown.

*American Society of Testing Materials, ASTM F-1163-04a

†Safety Equipment Institute, SEI

📄 This document can be downloaded from the Internet, www.childrenssafetynetwork.org.

Equestrian safety materials also available are the: Equestrian Safety Programs: Best Practices, Safe Equestrian Etiquette: Frequently Asked Questions, and Organizations Promoting Equestrian Safety.

For more information:

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