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

INJURY EXPERIENCE

Fatal Injuries
- The most frequent cause of death and serious injury for mounted and dismounted horse activities is head injury.
- 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.

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.
- Female equestrians 10-19 years represent 57% of the cases treated in an ED annually.
- Contusions, fractures, sprains/strains, lacerations, internal injury and concussions are the most common horse-related injuries to youth seen in an ED.
- The most frequent body parts injured, in order, include head/neck/face, arms and legs include arms, and legs.

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%).
- The severity of youth equestrian-related injuries is greater compared to other sports-related injuries.
- 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.
- Studies indicate 20-30% of equestrian-related injury occur while dismounted such as leading, grooming, or playing around a horse.
- Dismounted injuries most often involve a youth being kicked or trodden by a horse.
- Mounted injuries most often involve a youth falling off or being thrown from a horse.
- Studies suggest helmet use is more common among females; those riding English style; and recreational riders.

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

Continued
ASSOCIATED FACTORS

Factors associated with equestrian-related injuries
- Female gender\textsuperscript{1,2,4,5,9}
- 10-19 years of age\textsuperscript{1,2}
- No helmet use\textsuperscript{2,11,13,18,19}
- Immature judgment, risk taking, motor skills or technique\textsuperscript{10}
- More experienced riders (5+ years)\textsuperscript{11-13}
- Riding English style\textsuperscript{20}
- Riding 15-24 hours per month\textsuperscript{20}
- Horse being “spooked” by people, noises, or traffic\textsuperscript{1}

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\textsuperscript{†} certified will prevent head injury.\textsuperscript{18,21-23}
- The American Academy of Pediatrics (AAP)\textsuperscript{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

\textsuperscript{‡} This document can be downloaded from the Internet, \url{www.childrenssafetynetwork.org}.


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