



DATE: February 17, 2022 **COMMITTEE:** Environment and Transportation
BILL NO: House Bill 713
BILL TITLE: Vehicle Laws - Horse Riding - Helmet Requirement for Minors
POSITION: Support

Kennedy Krieger Institute supports House Bill 713 - Vehicle Laws - Horse Riding - Helmet Requirement for Minors.

Bill Summary:

House Bill 713 – requires a minor that is riding a horse on a highway, public horse-riding path or other property open to pedestrian or vehicular traffic must wear a properly fitted and secured helmet.

Background:

Kennedy Krieger Institute provides specialized services to patients nationally and internationally. Kennedy Krieger Institute is dedicated to improving the lives of children and young adults with developmental, behavioral, cognitive and physical challenges. Kennedy Krieger’s services include inpatient, outpatient, school-based and community-based programs.

Kennedy Krieger Institute has led the nation in evaluation and rehabilitation of children with traumatic brain injury (TBI) for more than 40 years. We are experts in caring for children with all etiologies and severity of TBI, ranging from children with concussion to those in coma due to very severe TBI.

Rationale:

Horseback riding is known to be associated with a risk of TBI due to fall/throw from a horse. TBIs account for approximately one-quarter of emergency room visits related to horseback riding and up to 50% of all horse-related injuries. TBIs related to horseback riding span the entire range of injury severity, from concussion through very severe injuries with complex skull fractures and multiple sites of bleeding within and around the brain. Children are at higher risk than adults for more severe forms of brain injury related to horseback riding, due to greater head-to-body size ratio and thinner skull bones. While most children with concussion will experience recovery within a few months, children with more severe injuries typically experience life-long impairments in motor, thinking, and behavioral skills which impact their social relationships and academic/vocational opportunities.

Helmets have repeatedly been shown to protect children from more severe brain injuries related to horseback riding. Helmets are known to prevent skull fractures and associated bleeding around and within the brain. While wearing a helmet does not make a child “concussion-proof”, wearing a helmet does decrease the risk of TBI, decrease overall injury severity, and decrease the likelihood of admission to an intensive care unit. Researchers have compared the severity and mortality of injuries incurred riding horseback without a helmet to those of being struck by a car.

Fortunately, helmets are accessible and proven to decrease severity of injury. We have an opportunity to prevent and/or reduce the severity of TBI occurring in children in Maryland. It is important that we take this opportunity to protect our children before even one more unnecessary injury occurs.

Kennedy Krieger Institute requests a favorable report on House Bill 713.

Referenced Literature:

Head and Spinal Injuries in Equestrian Sports: Update on Epidemiology, Clinical Outcomes, and Injury Prevention.
Gates JK, Lin CY. *Curr Sports Med Rep*. 2020 Jan;19(1):17-23. doi:10.1249/JSR.0000000000000674.PMID: 31913919

Impact of helmet use in equestrian-related traumatic brain injury: a matched-pairs analysis.
Bier G, Bongers MN, Othman A, Hempel JM, Vieth V, Heindel W, Ernemann U, Burg MC. *Br J Neurosurg*. 2018 Feb;32(1):37-43. doi: 10.1080/02688697.2017.1409874. Epub 2017 Dec 5.PMID: 29205071

Helmet under-utilization by children during equestrian events is associated with increased traumatic brain injury.
Short SS, Fenton SJ, Scaife ER, Bucher BT. *J Pediatr Surg*. 2018 Mar;53(3):545-547. doi: 10.1016/j.jpedsurg.2017.03.043. Epub 2017 Mar 20.PMID: 28365105

Non-fatal horse related injuries treated in emergency departments in the United States, 2001-2003.
Thomas KE, Annest JL, Gilchrist J, Bixby-Hammett DM. *Br J Sports Med*. 2006 Jul;40(7):619-26. doi: 10.1136/bjism.2006.025858. Epub 2006 Apr 12.