



March 23, 2022

Hon. William C. Smith, Jr., Chair
Judicial Proceedings Committee, 2 East Wing
11 Bladen St., Annapolis, Maryland 21401

Re: Support-HB713 Vehicle Laws-Horse Riding-Helmet Requirements for Minors

Dear Sen. Smith, Sen. Waldstreicher and Members of the Judicial Proceedings Committee,

I am writing on behalf of the Brain Injury Association of Maryland (BIAMD) in support of HB713. Through its Toll-Free Brain injury Connection Center (1.800.221.6443), its website (www.biamd.org), and its social media presence, for the past 39 years, BIAMD has sought to educate, enlighten, and support the estimated 120,000 Maryland families currently living with the devastating effects of brain injury and the caregivers and professionals who support them. We support policies that prevent brain injuries or reduce the severity of brain injuries of Marylanders.

A brain injury in childhood can have lifelong consequences for both a child and their family. Symptoms and impact of a brain injury vary based on the part of the brain injured, severity of injury and the age or development of each child. The full impact of a brain injury during early childhood may not be fully evident until the child is expected to navigate more complex social, cognitive, and academic challenges. Longterm, those with an exposure to TBI in childhood are more likely to have poorer academic performance, premature mortality, mental health conditions, rely on public benefitsⁱ and poorer relationship qualityⁱⁱ Putting into place policies that reduce the severity of injuries, like requiring helmets, can help Maryland families avoid the devastating effects of a brain injury.

There are no concussion proof helmets, but research shows that equestrian helmets do reduce the severity of traumatic brain injury and reduce the likelihood that a person will sustain a skull fractureⁱⁱⁱ. Unhelmeted riders are more likely to have skull fractures and intracranial bleeding than those who were wearing helmets when they sustained their injuries^{iv}.⁰⁵

The American Medical Equestrian Association calculates that ASTM/SEI approved helmets have reduced all riding-related head injuries by 30% and severe head injuries by 50%. Based on data from MIEMMS (Maryland Institute for Emergency Medical Services System), 28% of minors treated for TBI related falls in equestrian sports were not wearing a helmet. Requiring a supervising adult to ensure that these children are wearing a well-fitting helmet approved by the American Society of Testing and Materials (ASTM) give the best chance of minimizing injuries, should the unexpected occur. No matter how experienced a rider is or how well trained a horse is, there will always be situations that can occur that are out of their control, like a stumble or loud noise.

Maryland has already enacted a law requiring helmets for minors riding a bicycle on public roads, trails, and sidewalks for the same reasons that we support this bill. We would recommend that passing this bill be paired with an educational campaign to ensure that adults and children participating in equestrian sports understand how to select a good quality helmet specifically designed for equestrian sports and how to properly fit a helmet as seen in [this fact sheet from the CDC](#)^v to ensure maximum protection.

We ask the Judicial Proceedings Committee for a favorable report on HB 713.

Thank you for your consideration,

Sincerely,

Catherine Rinehart Mello

Brain Injury Association of Maryland

443-364-9856

ⁱ Sariaslan A, Sharp DJ, D'Onofrio BM, Larsson H, Fazel S (2016) Long-Term Outcomes Associated with Traumatic Brain Injury in Childhood and Adolescence: A Nationwide Swedish Cohort Study of a Wide Range of Medical and Social Outcomes. *PLOS Medicine* 13(8): e1002103. <https://doi.org/10.1371/journal.pmed.1002103>

ⁱⁱ Rogers A, McKinlay A. The long-term effects of childhood traumatic brain injury on adulthood relationship quality. *Brain Inj.* 2019;33(5):649-656. doi: 10.1080/02699052.2019.1567936. Epub 2019 Jan 21. PMID: 30664366.

ⁱⁱⁱ Connor TA, Clark JM, Jayamohan J, Stewart M, McGoldrick A, Williams C, Seemungal BM, Smith R, Burek R, Gilchrist MD. Do equestrian helmets prevent concussion? A retrospective analysis of head injuries and helmet damage from real-world equestrian accidents. *Sports Med Open.* 2019 May 24;5(1):19. doi: 10.1186/s40798-019-0193-0. PMID: 31127396; PMCID: PMC6534639.

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

^v https://www.cdc.gov/headsup/pdfs/helmets/headsup_helmetfactsheet_equestrian_508.pdf