

State of Maryland

Maryland Institute for Emergency Medical Services Systems

Wes Moore Governor Clay B. Stamp Chairman, EMS Board Theodore R. Delbridge, MD, MPH Executive Director

March 20, 2023

The Honorable William C. Smith, Jr. Chairman Senate Judicial Proceedings Committee 2 East, Miller Senate Office Building Annapolis, Maryland 21401

Re: SB 933: Vehicle Laws-Protective Headgear Requirement for Motorcycle Rides-Exception (In Rememberance of Gary "Pappy" Boward)

Dear Chairman Smith:

I am writing to provide you with information that may be helpful as the Committee considers SB 933. SB 933 exempts a driver of a motorcycle as well as the driver's passenger from wearing protective headgear if the driver is at least age 21, has been licensed for a minimum of two years, and has completed a specified motorcycle safety course.

Maryland's current universal helmet law requires all motorcycle riders to wear eye-protective devices and headgear that meets certain standards. The law was the result of local, state, and national concerns regarding the incidence and severity of head injuries resulting from motorcycle crashes throughout the country and in Maryland.

- Motorcycle head injuries often result in fatalities or life-long disabilities and require intensive and costly inpatient and outpatient treatment and resources.
- A study published in *The American Journal of Surgery* in 2016 found the average acute care cost of un-helmeted riders was nearly \$28,000, 32 percent higher than for helmeted riders. http://www.iihs.org/iihs/sr/statusreport/article/51/7/2
- Most patients involved in motor cycle crashes who are treated in Maryland trauma centers are age 21 or older. The Maryland Institute for Emergency Medical Services Systems reports that Maryland's trauma centers treated 986 patients involved in motorcycle crashes during Fiscal Year 2022, of which 863 were 21 years of age or older. Of these patients, 203 sustained a head injury, of whom 18 subsequently died. Of the 203 riders who sustained head injuries, 145 (71.4%) were wearing a helmet and 58 (28.6%) were not. All 203 required treatment and 122 were admitted. Eighteen (14.8%) of the admitted patients stayed in the hospital for one day. Sixteen of the admitted patients required hospitalization for more than 28 days.
- Helmets have been shown to provide significant protection from head injury for motorcyclists. Because serious head injury is common among fatally injured motorcyclists, helmet use is important. Helmets are about 37 percent effective in preventing motorcycle deaths and about 67 percent effective in preventing brain injuries. http://www.iihs.org/iihs/topics/t/motorcycles/fatalityfacts/motorcycles

- The National Highway Traffic Safety Administration (NHTSA) reports in the *NHTSA Five-Year Motorcycle Safety Plan* that 60% of motorcyclist fatalities are caused by head injury, and the use of a helmet offers a motorcyclist the best protection from fatal and non-fatal injuries. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/13507-motorcycle_safety_plan_050919_v8-tag.pdf
- In States without universal helmet laws, 58 percent of motorcyclists killed in 2015 were not wearing helmets, as compared to 8 percent in States with universal helmet laws (National Highway Traffic Safety Administration Traffic Safety Facts: Motorcycles December 2016).
- NHTSA estimates that helmets saved 1,872 motorcyclists' lives in 2017 and that 749 more could have been saved if all motorcyclists had worn helmets.
 https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/13507-motorcycle_safety_plan_050919_v8-tag.pdf
- A study published in 2016 in *Injury Epidemiology* found that helmet use ranged from 85 to 92 percent in universal law states, compared to 29 to 54 percent in partial law states. Motorcyclists who were required to wear a helmet according to their age in partial law states did so only 44 percent of the time. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4779790/
- The Insurance Institute for Highway Safety Highway Loss Data Institute reported in 2016, that Michigan rolled back its helmet law in 2012 to cover only riders younger than 21 who have passed a motorcycle safety course and who have at least \$20,000 in medical coverage. The percentage of hospitalized trauma patients with a head injury increased 14 percent in the 12 months following the repeal compared to the 12 months prior to the repeal. http://www.iihs.org/iihs/sr/statusreport/article/51/7/2
- The U.S. Department of Transportation has urged manufacturers to provide free or heavily discounted DOT certified helmets or rider safety training with the purchase of every new motorcycle sold in the United States, noting that "...Helmets and proper training are just as important as brakes or headlights when it comes to the well-being of motorcyclists."

I hope that you find this information helpful as you consider SB 933. Please let me know if you have any questions or if I may provide you with any further information.

Sincerely,

Theodore R. Delbridge, MD, MPH Executive Director, MIEMSS

Cc: Members, Senate Judicial Proceedings Committee