



Statement of

National Transportation Safety Board

Before the

Committee on Judicial Proceedings

MARYLAND SENATE

— *On* —

Senate Bill 712

Protective Headgear Requirement for Motorcycle Riders - Exception

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Annapolis, Maryland • February 23, 2021



An Independent Federal Agency

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline. We determine the probable cause of the accidents we investigate and make safety recommendations aimed at preventing future accidents and crashes. The recommendations that arise from our investigations and safety studies are our most important product.

The NTSB has recommended for many years that states adopt and maintain strong laws requiring all motorcycle riders to wear helmets meeting federal standards. Thus, we are very concerned about SB 712, as it would allow motorcycle operators who are 21 or older to operate a motorcycle without protective headgear.

The growing number of Americans who have been killed or injured in motorcycle crashes is extremely troubling. Although motorcycles represent only 3 percent of the registered vehicles on our roads, motorcyclists account for 14 percent of all highway deaths. Almost 5,000 motorcyclists lost their lives in crashes nationwide in 2018, including 62 in Maryland.¹

Head injury is a leading cause of death and disability in motorcycle crashes. A US Department of Transportation (DOT) report published in 2004 stated that helmets are 37 percent effective at preventing fatalities in motorcycle crashes.² According to a study conducted by the National Highway Traffic Safety Administration (NHTSA), the use of a safety helmet that complies with US Federal Motor Vehicle Safety Standard 218 is the “single critical factor in the prevention [and] reduction of head injury.”³ In the event of a crash, helmets are highly effective at preventing brain injuries, which often require extensive treatment and may result in lifelong disability. Unhelmeted motorcyclists are 3 times more likely than helmeted riders to suffer traumatic brain injuries in a crash.

According to NHTSA, helmet use continues to be significantly higher in states that require all motorcyclists to be helmeted. In 2019, 89 percent of motorcyclists observed in states with universal helmet laws were wearing DOT-compliant helmets. In states without such laws, helmet use was just 56.5 percent. NHTSA estimates that helmets saved an estimated 1,872 motorcyclists’ lives in 2017, and an additional 749 lives could have been saved if all motorcyclists wore helmets. In states without universal helmet laws, 57 percent of motorcyclists killed in 2018 were not wearing helmets, as compared to 9 percent in states with universal helmet laws.⁴

When universal helmet laws are weakened, helmet use rates decrease dramatically and motorcycle deaths and injuries increase markedly, even when accounting for changes in ridership that may be associated with weakening the law. For example, Michigan weakened its helmet law in 2012 and the percentage of motorcyclists not wearing helmets quadrupled the year after the repeal. A study conducted 3 years after the repeal found increases in crash scene fatalities, greater

¹ National Highway Transportation Administration, National Center for Statistics and Analysis. November 2020. *Motorcycles: 2018 Data*. Traffic Safety Facts. Report No. DOT HS-812-979). Washington, DC: NHTSA.

² Deutermann W. 2004. *Motorcycle Helmet Effectiveness Revisited*. Report No. DOT HS-809-715. Washington, DC: National Highway Traffic Safety Administration.

³ Hurt HH, Ouellet JV, and Thom DR. (1981). *Motorcycle Accident Cause Factors and Identification of Countermeasures Volume I: Technical Report*. Los Angeles, CA: Traffic Safety Center, University of Southern California. NHTSA Contract No. DOT HS-5-01160.

⁴ National Highway Transportation Administration, National Center for Statistics and Analysis. June 2020. *Motorcycle Helmet Use in 2019—Overall Results*. Traffic Safety Facts Research Note. Report No. DOT-HS-812-936. Washington, DC: NHTSA.

injury severities, worse neurologic injury, and heightened hospital mortality among nonhelmeted riders involved in crashes.⁵ SB 712 requires only motorcycle operators under age 21 to wear a helmet, which leaves a significant portion of Maryland's motorcycle-riding population unprotected. This is simply not good public safety policy.

The remarkable effectiveness of universal helmet laws in preventing death and disability among motorcyclists is a powerful argument for retaining such laws. For more than 70 years, research has shown that helmets protect motorcyclists and passengers from death and serious injury. I hope that, as the Senate Judicial Proceedings Committee considers SB 712, you will consider these decades of research and the indisputable evidence that helmets—and helmet laws—save lives, and reject this measure.

Thank you for this opportunity to provide a statement in support of Maryland's existing universal motorcycle helmet requirement. We would be happy to provide additional information in response to any questions that the committee might have.

⁵ Striker RH, Chapman AJ, Titus RA, Davis AT, and Rodriguez CH. 2016. Repeal of the Michigan helmet law: the evolving clinical impact. *The American Journal of Surgery*. 211(3):529–533.