



Statement of

National Transportation Safety Board

To the

Judicial Proceedings Committee

Maryland General Assembly

– On –

Senate Bill 933

Protective Headgear Requirement for Motorcycle Rides—Exceptions

Annapolis, MD • March 21, 2023



An Independent Federal Agency

The National Transportation Safety Board (NTSB) appreciates the opportunity to provide testimony on Senate Bill (SB) 933.

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable cause of the accidents we investigate and issue safety recommendations aimed at preventing future accidents. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for any accident investigated by the agency.

The NTSB has no power to regulate or legislate, and we rely on the persuasive power of our comprehensive investigations and research to encourage the recipients of our recommendations to act to improve safety. We have 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 933, 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. In 2020, the number of motorcyclists killed in crashes increased by 11 percent from 2019.¹ Although motorcycles represent only 3 percent of the registered vehicles on our roads, motorcyclists account for 14 percent of all highway deaths. 5,579 motorcyclists lost their lives in crashes nationwide in 2020, including 85 in Maryland.²

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.³ 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.”⁴ 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 2021, 86.1 percent of motorcyclists observed in states with universal helmet laws were wearing DOT-compliant helmets.

¹ National Highway Traffic Safety Administration, National Center for Statistics and Analysis. May 2022. *Motorcycles: 2020 Data*. Traffic Safety Facts. Report No. DOT HS-813-306. Washington, DC: NHTSA.

² NHTSA. *Motorcycles: 2020 Data*.

³ Deutermann W. 2004. *Motorcycle Helmet Effectiveness Revisited*. Report No. DOT HS-809-715. Washington, DC: National Highway Traffic Safety Administration.

⁴ 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.

In states without such laws, helmet use was just 53.4 percent.⁵ 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.⁶ In states without universal helmet laws, 57 percent of motorcyclists killed in 2020 were not wearing helmets, as compared to 11 percent in states with universal helmet laws.⁷

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 injury severities, worse neurologic injury, and heightened hospital mortality among nonhelmeted riders involved in crashes.⁸ SB 933 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 Judiciary Proceedings Committee hears SB 933, 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 National Highway Traffic Safety Administration, National Center for Statistics and Analysis. March 2022. *Motorcycle Helmet Use in 2021—Overall Results*. Traffic Safety Facts. Report No. DOT HS 813 270. Washington, DC: NHTSA.

⁶ National Highway Traffic Safety Administration, National Center for Statistics and Analysis. December 2019. *Lives and Costs Saved by Motorcycle Helmets, 2017*. Traffic Safety Facts. Report No. DOT HS 812 867. Washington, DC: NHTSA.

⁷ NHTSA. *Motorcycle Helmet Use in 2021—Overall Results*.

⁸ 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.