ADVOCATES FOR HIGHWAY & AUTO SAFETY

Motorcycle Helmets

Motorcycles are the most hazardous form of motor vehicle transportation.[1] In 2018, 4,985 motorcyclists were killed.[2] Additionally, 89,000 were injured on our nation's roads in 2017, the most recent year injury data is available.[3] In 2018, motorcyclists represented 14% of the total traffic fatalities,[4] and where use was known, 38% of motorcyclists killed were not wearing a helmet.[5] NHTSA estimates that helmets saved the lives of 1,872 motorcyclists in 2017 and that 749 more lives in all states could have been saved if all motorcyclists had worn helmets.[6] The number of motorcycle crash fatalities has more than doubled since a low of 2,116 motorcycle crash deaths in 1997.[7] All-rider helmet laws increase motorcycle helmet use, decrease deaths and injuries, and save taxpayer dollars.

Helmets Save Lives & Reduce Health Care Costs

- According to a 2012 Government Accountability Office (GAO) report, "laws requiring all motorcyclists to wear helmets are the only strategy proved to be effective in reducing motorcyclist fatalities."[8]

- According to NHTSA, in 2018, there were 9 times as many unhelmeted fatalities (1,670 fatalities) in states without a universal helmet law compared to states with a universal helmet law (177 fatalities). These states were nearly equivalent with respect to total resident populations.[9]

- Annually, motorcycle crashes cost $12.9 billion in economic impacts and $66 billion in societal harm as measured by comprehensive costs based on 2010 data. Compared to other motor vehicle crashes, these costs are disproportionately caused by fatalities and serious injuries.[10]

- Motorcycle helmets are currently preventing $17 billion in societal harm annually, but another $8 billion in harm could be prevented if all motorcyclists wore helmets.[11]

- Per vehicle mile traveled, motorcyclists were nearly 27 times more frequently killed in a traffic crash than occupants of passenger cars in traffic crashes.[12]

- In Michigan, which repealed its all-rider law in 2012, there would have been 26 fewer motorcycle crash deaths (a 21 percent reduction) if the helmet mandate was still in place, according to the University of Michigan Transportation Research Institute.[13] Additionally, in the remainder of the year after the helmet repeal was enacted (April of 2012), only 74 percent of motorcyclists involved in crashes were helmeted, compared to 98 percent in the same time period of the previous four years.[14]

- A study of motorcyclist crash injuries before and after Michigan partially repealed its motorcycle helmet-use law found that following the repeal, the percentage of hospitalized trauma patients with a head injury rose 14 and the percentage of skull fracture-related injuries rose 38 percent. The study also found that trauma patients with head injuries were more likely to need costly hospital services, such as intensive-care unit stays, ventilation, and neurosurgical interventions than patients without head injuries.[15]

- A study of motorcycle crash victims in Wisconsin from 2010-2015 by researchers at the University of Wisconsin in Madison found that unhelmeted riders in the state sustained cervical spine injuries twice as often as riders who wore helmets. [16]

- In states with an all-rider helmet law, use of a helmet resulted in economic costs saved to society of $725 per registered motorcycle, compared with $198 per registered motorcycle in states without such a law.[17]

- Helmets are currently saving $2.7 billion in economic costs annually.[18]

- In 2018, the most recent year full data is available, motorcyclists represented 14 percent of the total traffic fatalities,[19] despite representing on average only three percent of all registered vehicles.[20]

- By an overwhelming majority (more than 82 percent), Americans favor state laws requiring all motorcyclists to wear helmets.[21]

- Motorcycle helmets reduce the risk of head injury by 69 percent and reduce the risk of death by 42 percent.[22]

- When crashes occur, motorcyclists need adequate head protection to prevent one of the leading causes of death and disability in America -- head injuries.[23]

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[1] The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised), NHTSA, May 2015 (Revised), DOT HS 812 013, available at http://www-nrd.nhtsa.dot.gov/Pubs/812013.pdf

[2] Traffic Safety Facts: 2018 Fatal Motor Vehicle Crashes: Overview, NHTSA, Oct. 2019, DOT HS 812 826, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812826

[3] Traffic Safety Facts 2017: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System, NHTSA, 2019, DOT HS 812 806, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812806

[4] Traffic Safety Facts: 2018 Fatal Motor Vehicle Crashes: Overview, NHTSA, Oct. 2019, DOT HS 812 826, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812826

[5] Fatality and Injury Reporting System Tool (FIRST), NHTSA, available at https://cdan.dot.gov/query, accessed Jan. 16, 2020.

[6] Traffic Safety Facts: Lives and Costs Saved by Motorcycle Helmets, 2017, NHTSA, Dec. 2019, DOT HS 812 867, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812867

[7] Traffic Safety Facts 2017: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System, NHTSA, 2019, DOT HS 812 806, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812806

[8] Motorcycle Safety: Increasing Federal Flexibility and Identifying Research Priorities Would Help Support States' Safety Efforts, GAO, 2012, GAO-13-42, available at http://www.gao.gov/assets/660/650037.pdf

[9] 2018 data provided by NHTSA to Advocates for Highway and Auto Safety (Advocates) per request

[10] The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised), NHTSA.

[11] The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised), NHTSA.

[12] Traffic Safety Facts. 2017 Data: Motorcycles, NHTSA, Aug. 2019, DOT HS 812 785, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812785

[13] Flannagan CA, Analysis of Motorcycle Crashes: Comparison of 2012 to Previous Years, 18th Michigan Traffic Safety Summit, 2013.

[14] Flannagan CA, Analysis of Motorcycle Crashes: Comparison of 2012 to Previous Years, 18th Michigan Traffic Safety Summit, 2013.

[15] Status Report, Vol. 51, No. 7, "Head injuries rise as riders ditch helmets in Michigan", IIHS, September 1, 2016; available at https://www.iihs.org/iihs/sr/statusreport/article/51/7/2.

[16] Page PS, Wei Z, Brooks NP, *Motorcycle helmets and cervical spine injuries: a 5-year experience at a Level 1 trauma center*, Journal of Neurosurgery: Spine, Vol. 28, No. 6, June 2018. Available online at: http://thejns.org/doi/full/10.3171/2017.7.SPINE17540

[17] Centers for Disease Control and Prevention (CDC), Helmet use Among Motorcyclists Who Died in Crashes and Economic Cost Savings Associated With State Motorcycle Helmet Laws – United States, 2008-2010, MMWR Morb Mortal Wkly Rep, 61(23), 425-430, 2012.

[18] The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised), NHTSA

[19] Traffic Safety Facts: 2018 Fatal Motor Vehicle Crashes: Overview, NHTSA, Oct. 2019, DOT HS 812 826, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812826

[20] Traffic Safety Facts 2017: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System, NHTSA, 2019, DOT HS 812 806, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812806

[21] AAA Foundation for Traffic Safety, *2017 Traffic Safety Culture Index, March 2018*. Available at: https://bit.ly/2GesYcS

[22] Liu BC, Ivers R, Norton R, Boufous S, Blows S, Lo SK, *Helmets for preventing injury in motorcycle riders (Review)*, The Cochrane Library, Issue 1, 2009. Available online at: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD004333.pub3/abstract (Accessed Nov. 11, 2013).

[23] Coronado VG, Xu L,, Basavaraju SV, McGuire LC, Wald MM, Faul MD, Guzman BR, JD Hemphill, *Surveillance for Traumatic Brain Injury--Related Deaths --- United States, 1997—2007*, MMWR Morb Mortal Wkly Rep, 60(05), 1-32, 2011, available at http://www.cdc.gov/mmwr/pdf/ss/ss6005.pdf