

02-01

STATEMENT OF POLICY

Motorcycle Crash-Related Injury and Death Prevention

Policy

The National Association of County and City Health Officials (NACCHO) supports the enactment of universal helmet laws, which require all motorcycle operators and passengers to wear helmets that meet Federal Motor Vehicle Safety Standard 218 when riding a motorcycle. Furthermore, NACCHO encourages the Department of Transportation (DOT) to reinstate the incentive for states to enact universal motorcycle helmet laws in order to receive highway funds from DOT.

NACCHO also encourages research by the federal government and others to increase the evidence base for complementary state and local policies and practices related to (1) alcohol impairment detection, enforcement, and sanction; (2) surveillance of motorcycle crash-related injury and death and helmet use; (3) improvements to roadways; (4) education programs and campaigns; and (5) licensing and training for motorcycle users.

NACCHO urges local health departments to work collaboratively with local and state partners to develop and implement comprehensive strategies to reduce motorcycle crash-related injury and death. Universal helmet laws are one part of a comprehensive approach.

Justification

Strategies to reduce motorcycle crash-related injury and death include traffic laws and appropriate enforcement mechanisms, motorcycle operating licensing and training, road conditions improvements, mechanical improvements to vehicles, clothing and motorcycle visibility improvements, efforts to reduce impaired driving, and educational programs and campaigns.^{1,2} However, helmet use is the only scientifically proven strategy to reduce motorcycle crash-related injury and death. The most effective strategy to increase motorcycle helmet use is the universal helmet law.

In 2010, 4,502 people were killed in motorcycle crashes, accounting for 14 percent of all road traffic deaths.³ Per vehicle mile traveled in 2007, motorcyclists were about 37 times more likely than passenger car occupants to die in a motor vehicle traffic crash and nine times more likely to be injured.⁴ Since 2000, motorcycle-related deaths have increased by 55 percent.⁵ From 2004 to 2008, there were about 20 helmeted motorcyclists injured for each one that died in a traffic crash.⁶ For motorcyclists without helmets during the same period, there were about 14 injured per fatality.⁷



Helmets are estimated to be 37 percent effective in preventing fatal injuries to motorcycle riders and 41 percent effective for motorcycle passengers.⁸ In 2008, helmets saved the lives of 1,829 motorcyclists; an additional 823 lives could have been saved had all motorcyclists worn helmets.⁹ A University of Southern California study that analyzed 3,600 traffic crash reports covering motorcycle crashes concluded that helmet use was the single most important factor in surviving motorcycle crashes.¹⁰

The DOT requires that all helmets sold in the United States meet Federal Motor Vehicle Safety Standard 218, which defines minimum levels of performance that helmets must meet to protect the head and brain in the event of a collision. DOT-approved helmets should weigh about three pounds, include a thick inner liner, sturdy chin strap and rivets, and must not allow anything to extend further than two-tenths of an inch from the surface of the helmet.¹¹

Analysis by the Centers for Disease Control and Prevention of data from 2008 to 2010 examined state helmet laws and helmet use in fatal motorcycle crashes. Twelve percent of fatally injured motorcyclists in states with universal helmet laws were not wearing helmets compared to 64 percent in states with partial helmet laws and 79 percent in states with no helmet laws.¹² In addition, economic cost savings were nearly four times greater in states with universal helmet laws compared to states without such laws.¹³ The National Highway Traffic Safety Administration estimates that in 2008, motorcycle helmet use saved \$2.9 billion; had motorcycle helmets been worn in all motorcycle crashes, an additional \$1.3 billion would have been saved.¹⁴

In 1967, the federal government required states to enact helmet use laws in order to qualify for certain federal safety programs and highway construction funds. The law resulted in nearly all states enforcing universal motorcycle helmet laws. However, in 1976, states successfully lobbied Congress to change the law and discontinue financial penalties for states without helmet laws.¹⁵ At the time of publication, 19 states and the District of Columbia have universal helmet laws, 28 states have partial helmet laws that require specific groups to wear helmets, and three states (Illinois, Iowa, and New Hampshire) have no helmet laws.¹⁶

References

1. National Highway Traffic Safety Administration. (2011). *Countermeasures that work: A highway safety countermeasure guide for state highway safety offices* (6th ed.). Washington, DC: National Highway Traffic Safety Administration, U.S. Department of Transportation.
2. Teoh, E.R. (2011). Effectiveness of antilock braking systems in reducing motorcycle fatal crash rates. *Traffic Injury Prevention*, 12(2):169–173.
3. National Highway Traffic Safety Administration. (2011). *Fatality Analysis Reporting System*. Washington, DC: National Highway Traffic Safety Administration, U.S. Department of Transportation. Retrieved on March 27, 2013, from <http://www.nhtsa.gov/FARS>.
4. CDC. (2012). *Motorcycle Safety*. CDC Features, National Center for Injury Prevention & Control. Retrieved on Aug. 13, 2012, from <http://www.cdc.gov/features/MotorcycleSafety/>.
5. Ibid.
6. National Highway Traffic Safety Administration. (March 2011). *Traffic Safety Facts: Determining Estimates of Lives and Costs Saved by Motorcycle Helmets*. Retrieved on March 28, 2013 from <http://www-nrd.nhtsa.gov/pubs/811433.pdf>.
7. Ibid.
8. National Highway Traffic Safety Administration. (2008). *Traffic Safety Facts, Motorcycles, 2008 Data*.
9. Ibid.

10. Hurt, H.H., Jr., Ouellet, J.V., Thom, D.R. (1981). *Motorcycle Accident Cause Factors and Identification of Countermeasures Volume I: Technical Report*. University of Southern California, Traffic Safety Center, Motorcycle Accident Research. University Park, Los Angeles, CA.
11. National Highway Traffic Safety Administration. (2004). *How to Identify Unsafe Motorcycle Helmets*. Retrieved on May 20, 2013, from <http://www.nhtsa.gov/people/injury/pedbimot/motorcycle/unsafehelmetid/pages/page2.htm>.
12. CDC. (2012). *Motorcycle Safety*. CDC Features, National Center for Injury Prevention & Control. Retrieved on Aug. 13, 2012, from <http://www.cdc.gov/features/MotorcycleSafety/>.
13. Ibid.
14. National Highway Traffic Safety Administration. (March 2011). *Traffic Safety Facts: Determining Estimates of Lives and Costs Saved by Motorcycle Helmets*. Retrieved on March 28, 2013 from <http://www-nrd.nhtsa.gov/pubs/811433.pdf>.
15. Insurance Institute for Highway Safety. (2011). *History of U.S. motorcycle laws and changes in coverage*. Arlington: Insurance Institute for Highway Safety, Highway Loss Data Institute. Retrieved on March 28, 2013 from http://www.iihs.org/laws/helmet_history.aspx.
16. Ibid.

Record of Action

Proposed by NACCHO Injury and Violence Prevention Workgroup

Adopted by NACCHO Board of Directors February 28, 2002

Updated July 2007

Updated July 2013