

HB07-1117 Pro/Con Analysis

For the Health District of Northern Larimer County Board of Directors
March 27, 2007

Bill Title:	Motorcycle Helmet Requirement for Persons Under 18
Issue Summary:	The bill requires persons under 18 to wear a protective helmet when operating a motorcycle.
Sponsors:	House – Dianne Primavera Senate – Ken Gordon
Bill History:	Passed the House on February 28, 2007 Senate Second Reading Special Order - Referred to Appropriations on March 7, 2007
Date of Analysis:	March 6, 2007
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Bill Summary

HB07-1117 requires a person under 18 years of age to wear a helmet while operating or being a passenger on a motorcycle or motorized bicycle. The bill sets the penalty and surcharge for failing to wear a protective helmet at \$100 and \$15, respectively. There is an additional \$10 surcharge for each violation to be deposited in the Colorado traumatic brain injury trust fund.

Background

Currently Colorado is one of three states that do not require helmet use for motorcycle riders. Twenty states, the District of Columbia, and Puerto Rico require helmet use for all motorcycle operators and passengers. In another 27 states, only those under a certain age, usually 18, are required to wear helmets.¹

The history of motorcycle helmet laws dates back to 1966. The Highway Safety Act of 1966 was an attempt by the Federal Government to influence state policy by authorizing the Department of Transportation to withhold portions of federal highway safety and road construction funds from states that failed to enact motorcycle helmet laws for all riders.² Forty states, including Colorado, enacted universal helmet laws by 1975.³ In 1976, The Highway Safety Act was amended to remove sanctions against states without motorcycle helmet laws.⁴ Between 1976 and 1978, 20 states weakened their helmet use laws by making them apply only to young riders. Eight states, including Colorado, repealed helmet use requirements for all motorcyclists.⁵

In 1990 the U.S. Senate authorized the United States General Accounting Office (GAO) to review and evaluate the available information on helmet effectiveness in preventing deaths and serious injuries, the effect of helmet laws on helmet use and motorcycle rider fatalities, and the costs to society of injuries to unhelmeted motorcyclists. GAO conducted the requested review and reported to Congress in July 1991. Their report concluded that "helmet use reduces fatality rates and reduces injury severity among survivors of motorcycle

¹ National Highway Traffic Safety Administration, *Traffic Safety Facts: Motorcycle Helmet Use Laws*, March 2005
<http://nhtsa.dot.gov>.

² Highway Safety Act of 1966, 23 USC Chapter 1, Section 153.

³ Insurance Institute for Highway Safety, *Q&A: Motorcycle Helmet Use Laws*, 2007 http://hldi.org/research/qanda/helmet_use.html.

⁴ National Highway Traffic Safety Administration, *State Legislative Fact Sheets: Motorcycle Helmet Use Laws*, August 1998
<http://nhtsa.dot.gov>.

⁵ Insurance Institute for Highway Safety, *Q&A: Motorcycle Helmet Use Laws*, 2007 http://hldi.org/research/qanda/helmet_use.html.

accidents" and that "universal helmet laws have been very effective in increasing helmet use, virtually doubling use compared with experience without a law or with a limited law applying only to young riders. Under universal helmet laws, most states experienced 20 to 40 percent lower fatality rates than during periods without laws or under limited laws." The report recommended that "because there is convincing evidence that helmets save lives and reduce society's burden of caring for injured riders, the Congress may wish to consider encouraging states to enact and retain universal helmet laws." As a result of the GAO report findings, Congress promoted universal helmet laws as part of the Intermodal Surface Transportation Efficiency Act of 1991, commonly known as ISTEA. ISTEA provided special "incentive" grants to states with both universal motorcycle helmet laws and passenger vehicle safety belt use laws. ISTEA provided that states without both a universal motorcycle helmet law and a safety belt use law by October 1, 1993, would have a portion of their fiscal year 1995 Federal-aid highway funds transferred to their highway safety programs. As most states had safety belt use laws in place, the provision's main goal was to encourage states to enact universal helmet laws. The ISTEA transfer provision for states lacking universal helmet laws was repealed by Congress in 1995.⁶

All available evidence indicates that motorcycle helmets reduce the chance of serious injury or death in the event of a crash. A 2004 review of studies on helmet use and fatalities and injuries in motorcycle crashes by the Cochrane Collaboration concluded that motorcycle helmets reduce the risk of mortality and head injury in motorcycle crashes. The National Highway Traffic Safety Administration (NHTSA) has determined that motorcycle helmets provide the best protection from head injury for motorcyclists involved in traffic crashes and that the passage of helmet laws governing all motorcycle riders is the most effective method of increasing helmet use. NHTSA estimates that between 1984 and 2003 helmets saved the lives of 14,992 motorcyclists.

Why is this issue important?

In 2004, 4,008 motorcyclists were killed and an additional 76,000 were injured in traffic crashes in the United States. This is an 8 percent increase in fatalities and a 14 percent increase in motorcyclist injuries from 2003.⁷ 377 of the motorcyclist fatalities and 11,000 of the motorcyclists injured in 2004 were drivers or occupants age 20 or younger.⁸ Almost forty-four percent of motorcycle riders killed in 2004 were not wearing helmets.⁹ From 1995 to 2005 in Colorado the percentage of un-helmeted riders fatally injured in motorcycle accidents has consistently stayed above 69%.¹⁰

Reasons to support bill:

- Overwhelming evidence suggests that motorcycle helmets provide the best protection from head injury. Fifty-three observational studies have shown that motorcycle helmets appear to reduce the risk of mortality in motorcycle crashes. Motorcycle helmets have been shown to reduce the risk of head injury by 72%.¹¹
- Unhelmeted riders involved in crashes are less likely to have insurance and are likely to have higher hospital costs. Only slightly more than half of motorcycle crash victims have private health insurance thus a majority of medical costs associated with motorcycle injuries are paid by the government.¹² A

⁶ NHTSA, *Evaluation of the Repeal of Motorcycle Helmet Laws in Kentucky and Louisiana*, October 28, 2003, <http://nhtsa.dot.gov/people/injury/pedbimot/motorcycle/kentucky-la03/Background.html>

⁷ NHTSA National Center for Statistics and Analysis, *Traffic Safety Facts: 2004 Data*, <http://www-fars.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSF2004/809908.pdf>

⁸ NHTSA *ibid.*

⁹ *IBID.*

¹⁰ NHTSA National Center for Statistics and Analysis, *Traffic Safety Facts: 2004 Data*, <http://www-fars.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSF2004/809908.pdf>

¹¹ Liu, B, Ivers, R, Norton R, Blows, S, Lo SK. *Helmets for Preventing Injury in Motorcycle Riders*. Cochrane Database Syst Rev. 2004;(2):CD004333. <http://www.ncbi.nlm.nih.gov>.

¹² Lawrence, B.A.; Max, W.; and Miller, T.T. 2002 *Cost of injuries, resulting from motorcycle crashes: a literature review*. Report no. DOT HS-808-347. Washington, DC: US Department of Transportation.

report by the General Accounting Office found that non-helmeted riders were more extensive users of medical services. They were more likely to 1) need ambulance service, 2) be admitted to a hospital as an inpatient, 3) have higher hospital charges, 4) need neurosurgery and intensive care, 5) need rehabilitation, and 6) be permanently impaired and need long-term care.¹³

- NHSTA estimates that motorcycle helmet use saved \$1.3 billion in 2002.¹⁴
- Without helmet laws motorcycle riders are less likely to wear helmets. An analysis of helmet use in Arkansas and Texas demonstrated that when all riders were required to wear helmets helmet use was 97%. In 1998, after the repeal of universal laws fewer riders wore helmets. Effective Aug 1, 1997, Arkansas required helmet use only for riders under age 21 and Texas required helmet use only for riders under age 21, and for older riders who have not completed a rider education course or who do not have a least \$10,000 medical insurance coverage. Within in one year observed helmet use had fallen to 52 percent in Arkansas and to 66 percent in Texas.¹⁵ Motorcyclist fatalities and head injuries increased in Arkansas and Texas after the repeal of universal helmet laws. In Arkansas fatalities increase by 21 percent in the first full year following the repeal. In Texas, fatalities increased by 31 percent.¹⁶
- Although helmet laws that only cover minors are difficult to enforce it is hoped that mandating helmet use for young riders will have the effect of increasing helmet use among all riders.

Reasons to oppose bill:

- Helmet laws that only cover minors are extremely difficult to enforce.¹⁷ Determining the age of a motorcycle rider is very difficult for law enforcement. According to the Insurance Institute for Highway Safety helmet laws that cover only minors are weak. “Helmet use rates for all riders remain low in states where restricted laws are in effect, and death rates are 20 to 30 percent higher when states have weak laws or no laws, compared with rates when helmet laws apply to all riders.¹⁸
- Many motorcyclists feel that helmet laws impinge upon personal freedoms and that helmet use should be an individual choice. Opponents of HB07-1117 feel this bill amounts to state intervention between a parent and child.¹⁹
- Opponents of mandatory helmet laws believe that education is superior to legislation in the pursuit of safety goals. The motorcycle community does not oppose the use of helmets, it opposes mandates.
- Opponents of the bill argue that studies have shown helmets can increase the risk of severe injury such as neck or spinal cord injury. Staff has been unable to locate any study of this nature published in a peer-reviewed journal. In fact, in a study of emergency departments of eight medical centers in the state

¹³ US General Accounting Office. 1991 *Highway Safety: Motorcycle helmet laws save lives and reduce costs to society*. Washington, DC.

¹⁴ NHTSA, *Motorcycle Helmet Use Laws*, March 2005, <http://nhtsa.dot.gov/people/injury/pedbimot/motorcycle/Motorcycle2005.pdf>

¹⁵ Preusser, D.F., J.H. Hedlund, and R.G. Ulmer, *Evaluation of Motorcycle Helmet Law Repeal in Arkansas and Texas*, September 2000 <http://nhtsa.dot.gov/people/injury/pedbimot/motocycle/EvalofMotor.pdf>.

¹⁶ Ibid.

¹⁷ Straus, Erica M. *Motorcycle Helmet Laws: The Role of Scientific Research in Public Policy*, March 6, 2006 <http://healthresearch.georgetown.edu/Erica/helmetlaws.htm>

¹⁸ Insurance Institute for Highway Safety Highway Loss Data Institute, *Q&A: Motorcycle Helmet Use Laws*, January 2007, http://hldi.org/research/qanda/helmet_use.html

¹⁹ ABATE of Colorado. <http://abateofcolo.org>.

of Illinois researchers determined that “helmet use may reduce the overall severity of injury and the incidence of head injuries resulting from motorcycle crashes”.²⁰

- Some motorcyclists claim that helmets can impair a driver’s ability to hear and see effectively.

About this Analysis

This analysis was prepared by Health District of Northern Larimer County staff to assist the Health District Board of Directors in determining whether to take an official stand on various health-related issues. Analyses are based on bills or issues at the time of their consideration by the Board and are accurate to the best of staff knowledge. It is suggested that people check to see that a bill has not changed during the course of a legislative session by visiting the Colorado General Assembly web page at www.state.co.us/gov_dir/stateleg.html. To see whether the Health District Board of Directors took a position on this or other policy issues, please visit www.healthdistrict.org/policy.

About the Health District

The Health District is a special district of the northern two-thirds of Larimer County, Colorado, supported by local property tax dollars and governed by a publicly elected five-member board. The Health District provides medical, mental health, dental, preventive and health planning services to the communities it serves.

For more information about this analysis or the Health District, please contact Carrie Cortiglio, Policy Coordinator, at (970) 224-5209, or e-mail at ccortiglio@healthdistrict.org

²⁰ Kelly, P Sanson T, Strange G, Orsay E. *A Prospective Study of the Impact of Helmet Usage on Motorcycle Trauma*. Ann. Emerg Med. 1991 Aug;20 (8): 852-6. <http://pubmed.gov>.