Traffic Safety Facts
Laws

March 2005

EXHIBIT 1
DATE 2/15/07
HB 534

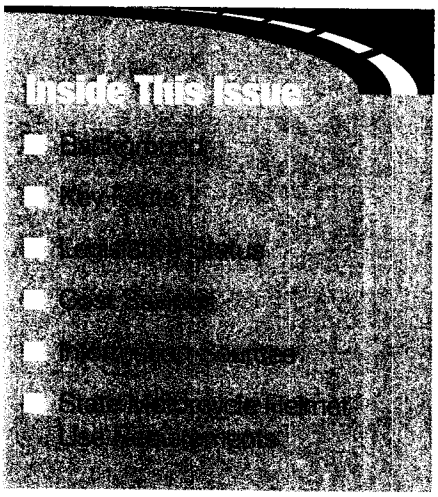
Motorcycle Helmet Use Laws

Background

Motorcycle helmets provide the best protection from head injury for motorcyclists involved in traffic crashes. The passage of helmet use laws governing all motorcycle riders is the most effective method of increasing helmet use. The National Highway Traffic Safety Administration (NHTSA) encourages States to enact legislation that requires all motorcycle riders to wear helmets. Additionally, NHTSA strongly supports comprehensive motorcycle safety programs that include motorcycle helmet usage, rider education, motorcycle operator licensing, and responsible use of alcohol.

Key Facts

- In 2003, 3,661 motorcyclists died and approximately 67,000 were injured in highway crashes in the United States.



- Per mile traveled in 2003, a motorcyclist is approximately 32 times more likely to die in a crash than someone riding in an automobile.
- Head injury is a leading cause of death in motorcycle crashes.
- NHTSA estimates that motorcycle helmets reduce the likelihood of a crash fatality by 37 percent.
- A Crash Outcome Data Evaluation System (CODES) study found that motorcycle helmets are 67 percent effective in preventing brain injuries and that unhelmeted motorcyclists involved in crashes were three times more likely to suffer brain injuries than those wearing helmets.
- From 1984 through 2003, NHTSA estimates that helmets saved the lives of 14,922 motorcyclists. If all motorcycle operators and passengers had worn helmets during that period, NHTSA estimates that 10,148 additional lives would have been saved.
- A study conducted at the University of Southern California, which analyzed 3,600 traffic crash reports covering motorcycle crashes, concluded that wearing helmets was the single most important factor in surviving motorcycle crashes.
- A 1994 study by the National Public Services Research Institute concluded that wearing motorcycle helmets does not restrict a rider's ability to hear auditory signals or see a vehicle in an adjacent lane.
- All motorcycle helmets sold in the United States are required to meet Federal Motor Vehicle Safety Standard 218, which established the minimum level of protection helmets must afford each user.
- Helmet use laws governing all motorcycle riders (universal helmet laws) significantly increase helmet use and are easily enforced because of the riders' high visibility.
- Repeal of State universal helmet use laws has resulted in fewer riders wearing helmets. According to the National Occupant Protection Survey, from 2000 to 2002, helmet use dropped from 71 percent to 58 percent nationally.
- Data on crashes in States where only minors are required to wear helmets show that fewer than 40 percent of the fatally-injured minors wear helmets even though the law requires them to do so. Helmet laws that govern only minors are extremely difficult to enforce.
- According to NHTSA's 2000 Motor Vehicle Occupant Safety Survey, public support for motorcycle helmet use laws

in the United States is strong, with four out of five (81 percent) people aged 16 and older, supporting such laws. This support has changed little from earlier occupant protection surveys, in 1998 (80 percent) and in 1994 (82 percent). Support was more prevalent among women (88 percent) than men (72 percent), and among non-motorcyclists (83 percent) than those who rode motorcycles (51 percent), with this gap seeming to have widened in the past two years. Support also was higher in States requiring all riders to wear helmets (84 percent), compared with States having lesser requirements (75 percent) or no requirement (79 percent).

- Reported helmet use rates for fatally injured motorcyclists in 2003 were 53 percent for operators and 50 percent for passengers.

Legislative Status

- 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. Three States do not have laws requiring helmet use.
- After the first year of the enactment of universal helmet use laws the following reduction in motorcycle fatalities occurred in these States: Oregon (33 percent), Nebraska (32 percent), Texas (23 percent), Washington State (15 percent), California (37 percent) and Maryland (20 percent).
- Since 1997, six States (Arkansas, Texas, Kentucky, Louisiana, Florida, and Pennsylvania) have weakened universal helmet laws to limit coverage to those under a specific age. These six States were the first States since 1983 to repeal or weaken a universal helmet law. In August 2004, Louisiana re-enacted a universal helmet use law.
- Helmet use decreased following the changes in helmet laws in Arkansas and Texas. In the first full year following repeal of the law, fatalities in Arkansas increased by 21 percent, compared with the fatality rate in the last full year under the universal use law. In Texas, operator fatalities increased by 31 percent compared with the previous year when the universal helmet law was in place.
- The 1998 universal helmet law repeal in Kentucky and the 1999 repeal in Louisiana produced similar effects to Arkansas and Texas. Observed helmet use dropped from nearly full compliance under the universal law to about 50 percent without the law. Motorcyclist fatalities increased by over 50 percent in Kentucky and over 100 percent in Louisiana. Injuries also increased substantially in both States (Louisiana 48 percent and Kentucky 34 percent). The rates of fatalities and injuries per registered motorcycle increased in both States following the helmet law repeals.

Cost Savings

- Analysis of linked data from the Crash Outcome Data Evaluation System (CODES) in three States with universal helmet laws showed that without the helmet law, the total extra inpatient charges due to brain injury would have almost doubled from $2,325,000 to $4,095,000.
- A number of studies have compared hospital costs for helmeted and unhelmeted motorcyclists involved in traffic crashes. These studies have revealed that unhelmeted riders involved in crashes are less likely to have insurance and more likely to have higher hospital costs than helmeted riders involved in similar crashes.
- The CODES study, mentioned earlier, also found that brain injury cases were more than twice as costly as non-brain injury cases for the one-year period studied. Among the un-helmeted motorcycle in-patients, charges for those suffering brain injuries were 2.25 times higher than for those without brain injuries. Long-term costs were not included.
- NHTSA estimates that motorcycle helmet use saved $1.3 billion in 2002 alone. An additional $853 million would have been saved if all motorcyclists involved in fatal crashes had worn helmets.
- NHTSA estimates that motorcycle helmet use saved $19.5 billion in economic costs from 1984 through 2002. An additional $14.8 billion would have been saved if all motorcyclists had worn helmets during the same period.

Information Sources

Evaluation of Motorcycle Helmet Law Repeal in Arkansas and Texas.

U.S. Department of Transportation, June 2000 (DOT HS 809 112). This report examined what happened in Arkansas and Texas when these States weakened motorcycle helmet use laws to cover only a segment of the riding population. The study reports declines in observed helmet use in both States, increases in injuries and fatalities resulting

from motorcycle crashes, and increases in costs to treat traumatic brain injury cases resulting from motorcycle crashes.

Without Motorcycle Helmet Laws We All Pay the Price.

U.S. Department of Transportation, August 1998 (DOT HS 808 600). Consolidates motorcycle helmet effectiveness information by documenting the life and cost-saving benefits of motorcycle helmets and the effectiveness of motorcycle helmet laws. The multimedia package discusses NHTSA's comprehensive approach to motorcycle safety and makes three points: (1) motorcycle helmets save lives and reduce head injuries to motorcyclists in crashes; (2) helmet laws for all riders increase helmet usage; and (3) helmet laws reduce the societal costs resulting from injuries and fatalities in motorcycle crashes.

The Effects of Motorcycle Helmets Upon Seeing and Hearing.

U.S. Department of Transportation, NHTSA, February 1994 (DOT HS 808 399). This study examined the effect of wearing a helmet on the ability of motorcycle riders to: (1) visually detect the presence of vehicles in adjacent lanes before changing lanes; and (2) detect traffic sounds when operating at normal highway speeds. Results indicated that wearing a helmet does not restrict the likelihood of seeing a vehicle in an adjacent lane or the ability to hear auditory signals.

The Crash Outcome Data Evaluation System (CODES): Technical Report.

U.S. Department of Transportation, NHTSA, January 1996 (DOT HS 808 338). This document presents State-specific results from the CODES project. These results show that safety belts and motorcycle helmets are effective in reducing fatalities and injuries. This report also indicates that safety belt and motorcycle helmet use saves millions of dollars in direct medical costs.

Report to Congress on The Benefits of Safety Belts and Motorcycle Helmets.

U.S. Department of Transportation, NHTSA, February 1996 (DOT HS 808 347). This study employed methods whereby Statewide data from police crash reports, emergency medical services, hospital emergency departments, hospital discharge files, claims, and other sources were linked so that those people injured in motor vehicle crashes could be followed through the health care system. Information for both the injured and uninjured was then used to determine the benefits of protective devices in motor vehicle crashes.

Report to Congressional Requesters Highway Safety: Motorcycle Helmet Laws Save Lives and Reduce Costs to Society.

U.S. General Accounting Office, July 1991 (GAO/RCED-91-170). This report evaluates studies on motorcycle helmet laws. The report summarizes each study's findings on: (1) the effectiveness of helmets in preventing deaths and serious injuries; (2) the effect of helmet laws on helmet use and fatality rates; and (3) the cost that society incurs when un-helmeted motorcyclists are involved in crashes. All studies comparing helmeted riders to un-helmeted riders found that helmeted riders had a lower fatality rate.

State Motorcycle Helmet Use Requirements

20 States, D.C. and P.R. Required Use For All Riders

Alabama
California
District of Columbia
Georgia
Louisiana
Maryland
Massachusetts
Michigan
Mississippi
Missouri
Nebraska
Nevada
New Jersey
New York
North Carolina
Oregon
Puerto Rico
Tennessee
Vermont
Virginia
Washington
West Virginia

Not Required In 3 States

Colorado
Illinois
Iowa

27 States Require Use For A Specific Segment of Riders (Usually Under 18)

Alaska
Arizona
Arkansas
Connecticut
Delaware (1)
Florida (2)
Hawaii
Idaho
Indiana
Kansas
Kentucky (3)
Maine (4)
Minnesota
Montana
New Hampshire
New Mexico
North Dakota
Ohio (5)
Oklahoma
Pennsylvania (8)
Rhode Island (6)
South Carolina
South Dakota
Texas (7)
Utah
Wisconsin
Wyoming

1. Required for riders under age 19 and helmets must be in the possession of other riders, even though use is not required
2. Required for riders under age 21 and for those without $10,000 of medical insurance that will cover injuries resulting from a motorcycle crash.
3. Required for riders under age 21, riders operating a motorcycle with an instruction permit, riders with less than one year's experience, and/or riders who do not provide proof of health insurance to county clerk. (insurance provision repealed effective July 15, 2000).
4. Required for riders under age 15 years of age, novices, and holders of learners permits.
5. Required for riders under age 18 and first year operators.
6. Required for riders under 21 and first year operators.
7. Required for riders age 20 and under and those who have not completed a rider training course or who do not have $10,000 medical insurance coverage.
8. Required for riders under 21 and age 21 or older who have had a motorcycle operator's license for less than two years or who have not completed an approved motorcycle safety course.

These reports and additional information are available from your State Highway Safety Office, the NHTSA Regional Office serving your State, or from NHTSA Headquarters, Office of Safety Programs, ATTN: NTI-121, 400 Seventh Street, S.W., Washington, DC 20590, 202-366-9508, or NHTSA's web site at: www.nhtsa.dot.gov

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