

MINUTES OF THE SENATE COMMITTEE ON TRANSPORTATION AND UTILITIES

The meeting was called to order by Sen. Bill Morris at  
Chairperson

9:00 a.m./~~pm~~ on February 28, 1985 in room 254-E of the Capitol.

All members were present ~~except~~.

## Committee staff present:

Hank Avila, Research Department  
Louise Cunningham, Secretary

## Conferees appearing before the committee:

Roger McCollister, Topeka  
Richard Schlegel, Topeka, ABATE  
George Blevins, Lawrence, ABATE  
Don McKay, Topeka  
Carl Robinson, Topeka, Retread International  
Randy Forbes, Motorcycle Industry, Topeka  
Kelly Wendeln, Chanute  
Richard Leeman, Silver Lake  
Chester Pottorf, Ozawkie

On a motion from Sen. Martin and a second from Sen. Hayden the Minutes of February 26, 1985 were approved. Motion carried.

HEARING ON S.B. 156 - The Helmet Bill.OPPONENTS:

Roger McCollister, said he is an attorney and rider. When he rides his motorcycle sometimes he wears his helmet and sometimes he does not. He said he had heard the testimony given by proponents of S.B. 156 and was very sorry about their injuries and could sympathize with their families. He said there have been confusing statistics on the effect of motorcycle helmet use. He said motorcycles and bicycles account for only 4.6% of all head injuries and why should helmets be put on everyone. He submitted a copy of "Review and Analysis of Government Claims about the Effect of Motorcycle Helmet Laws" by the American Motorcyclist Association. A copy is attached. (Attachment 1).

Richard Schlegel, ABATE, said states that have helmet laws do not have lower statistics than states without helmet laws. He said helmets can contribute to accidents because they restrict hearing and distort sound. He submitted charts which showed motorcycle fatalities per 1,000 registrations. These charts showed that there was no appreciable difference in the years when a helmet law was in effect. These charts are attached. (Attachment 2).

George Blevins, ABATE, said Kansas is receiving misleading information pertaining to helmets. Kansas has a lower fatality rate than states with helmet laws. He said an aggressive motorcycle licensing program and safety education along with public awareness are the means to prevent injuries and fatalities. He was not opposed to helmets but was opposed to mandatory helmet laws. He submitted a position paper by ABATE against S.B. 156. A copy of this position paper is attached. (Attachment 3).

Don McKay, Topeka, said he has ridden a motorcycle for 19 years and has heard arguments on both sides. He was not against helmets but is pro-choice.

Carl Robinson, Topeka, said he was retired and a member of Retread International which requires, in order to be a member, that you be over age 40 and a cycle rider. He said the group had over 25,000 members with approximately 600 in Kansas. They were not against helmets but were against a mandatory helmet law. He said this was "big brother coming in again" and "why fix something that isn't broke?"

CONTINUATION SHEET

MINUTES OF THE SENATE COMMITTEE ON TRANSPORTATION AND UTILITIES,  
room 254-E, Statehouse, at 9:00 a.m. ~~XXX~~ on February 28, 1985

Randy Forbes, Motorcycle Industry, Topeka, said his organization was a voluntary association representing most of the major motorcycle dealers in Kansas. They do not oppose helmet useage but feel it should not be mandatory. Also, more emphasis should be focused to driver education programs. A copy of his statement is attached. (Attachment 4).

Kelly Wendeln, Chanute, thanked the senators who had voted for repeal of the helmet law in previous eyars. He submitted a list of Kansas Motorcycle Registrations and Fatalities from the Kansas Department of Transportation from the years 1963 through 1978. A copy of this list is attached. (Attachment 5). He also submitted articles from newspapers which urged helmets for bicycle riders, horse riders, and automobile occupants. Copies of these articles are attached. (Attachment 6).

Richard Leeman, Silver Lake, said helmets give riders a false sense of security. They feel because they are wearing a helmet they won't get hurt. He told the committee of a personal experience he had when a bee got into his helmet. He got stung on the ear and lost part of his hearing. He did not have an accident because of his riding ability. He said that 90% of helmets tested are defective. He wants the right to decide for himself whether to wear a helmet or not.

Chester Pottorf, Ozawkie, said he has had 13 years of riding experience. He has taken his share of falls and spills, mostly while he was wearing a helmet. He said most accidents are caused by a lack of riding experience. He said his last two accidents were caused by automobile drivers. There was no way possible for him to avoid the accident. Riders need better training and education and automobile drivers need education to make them aware of the cyclists.

Meeting was adjourned at 10:00 a.m.

SENATE TRANSPORTATION & UTILITIES COMMITTEE

Date 2-28-85 Place 254-E Time 9:00

GUEST LIST

PLEASE PRINT

NAME

ADDRESS (City)

ORGANIZATION

| <u>NAME</u>                | <u>ADDRESS (City)</u> | <u>ORGANIZATION</u>          |
|----------------------------|-----------------------|------------------------------|
| <del>Shelley Wendler</del> | <del>Chanute</del>    |                              |
| BOB BLACK                  | PITTSBURG             | FREEDOM OF ROAD RIVERS, INC. |
| GARL ROBINSON              | TOPEKA                | REALTY & INT                 |
| Rich Harrington            | Topeka                | KSNA                         |
| Rebecca Burroughs          | Topeka                | KSNA                         |
| Mary Seano                 | Topeka                | KSNA                         |
| Patty Faerber              | Topeka                | KSNA                         |
| Priscilla Smith RN         | Lawrence, Ks          | KSNA                         |
| Elder South RN             | Topeka                | KSNA                         |
| Alan Yi Davis              | Topeka                | SNOW                         |
| Sandy Schuck               | Manhattan             | WUNS                         |
| Brian W. Bryant            | Topeka                | WUNS                         |
| Jane - Jess                | Walden                | KSNA                         |
| Marian Wood                | Walden                | KSNA                         |
| Jill Schwartz              | Mid Valley, Mo        | KSNA                         |
| Linda Sifert               | Topeka                | KSNA                         |
| Zona King                  | "                     | KSNA                         |
| Ivan McKay                 | Topeka, Kansas        | —                            |
| Dorothy Morris             | Topeka                | —                            |
| Mary Ann                   | Lawrence, Kns         | KSNA                         |
| Todd Van                   | Topeka, KS            | WUNS                         |
| Lina M Miller              | Topeka, KS            | WUNS                         |
| Janet J Topky              | Topeka, KS            | WUNS                         |

Clark Brady 2113 Swarth Terr #14 Topeka, KS 66611 own  
Roger McCollister Topeka  
LONNIE HARPER OZARK

SENATE LABOR, INDUSTRY & TOURISM COMMITTEE

Date \_\_\_\_\_ Place \_\_\_\_\_ Time \_\_\_\_\_

GUEST LIST

NAME

ADDRESS

ORGANIZATION

|                  |                          |                              |
|------------------|--------------------------|------------------------------|
| Joanne Mills     | Topeka, KS               | WU NS                        |
| Lacie Mattui     |                          | Sen waker office             |
| George R. Blawie | Lawrence, KS             | ABATE of Kansas              |
| Katrina Rowan    | Topeka, KS               | WU NS                        |
| Kristie Koelzer  | Kansas City, KS          | ABATE of KS                  |
| William Wald     | Shawnee Mission, KS      | ABATE of KS                  |
| E. R. Kimber     | 1507 Central KC KS 66105 | ABATE of KS - NATIONAL ABATE |
| JAY Kreipe       | 1016 W 8th Topeka        | ABATE of KS                  |
| Linda Beach      | Box 82 McLeish 6654      | ABATE                        |
| Bob Beach        | "                        | ABATE                        |
| Danny Beach      | "                        | ABATE                        |
| Jaclyn Haynes    | 1936 Maryland Topeka KS  | ABATE                        |
| Edward L Self    | 224 7th Dr Topeka        |                              |
| Dean Hartman     | 2514 Mass.               | own                          |
| Janice Almy      | R#1 Wakarusa             | own                          |
| Marta Clark      | OTTAWA, KS               | ABATE                        |
| Virginia Wertz   | OTTAWA                   | A.B.A.T.E.                   |
| James Dora       | OTTAWA                   | A.B.A.T.E.                   |
| Curtis J. Family | Ottawa, KS               | ABATE of KS                  |
| E. Leaf Carter   | 709 Lytle Topeka         | None                         |
| Ernest Jones     | 2211 Calif. Topeka       | None                         |
| Lyle Small       | 3435 Blair Topeka        | chute                        |
| Ronald Berger    | LANSING, KNS             | ABA E                        |
| Royce Simpson    | Leavenworth KS           | ABATE                        |

**A REVIEW AND ANALYSIS  
OF GOVERNMENT CLAIMS  
ABOUT THE EFFECT OF  
MOTORCYCLE HELMET LAWS**

The American Motorcyclist Association  
April, 1981

ATT. ①  
2/28/85



## INTRODUCTION

In the Surface Transportation Assistance Act of 1978 the United States Congress instructed the National Highway Traffic Safety Administration (NHTSA) to evaluate the effect of the removal of NHTSA's authority to withhold Federal highway funds from states that repealed their helmet laws. In April, 1980, NHTSA released "A Report to the Congress on the Effect of Motorcycle Helmet Use Law Repeal — a Case for Helmet Use" (herein referred to as the "Helmet Law Report" or the "Report").

The American Motorcyclist Association (AMA) has over 126,000 members and has represented American motorcyclists since 1924. It has always supported voluntary use of motorcycle helmets, but has opposed laws requiring their use on streets and highways. AMA believes citizens can and should be encouraged to use safety devices voluntarily rather than be forced to do so. AMA is committed to making motorcycling safe transportation and recreation. Toward that goal, AMA has prepared this commentary on the Helmet Law Report.

### THE EFFORT TO LINK HELMET LAWS WITH FATALITY RATES

The Helmet Law Report reasons the decline in helmet use, resulting from the removal of NHTSA's power to force the states to have helmet laws, was the most significant factor in the 46 percent increase in motorcycle fatalities between 1976 and 1979. Citing "social and economic harm," NHTSA concludes that state helmet use legislation is in the "national interest"; consequently it asks Congress to "define the responsibility of states in enacting helmet use legislation." (1-5)\*

AMA disagrees with NHTSA's conclusion and recommendation because they are contrary to the Association's position on helmet laws, and because they are not supported by NHTSA's data or arguments. NHTSA has often misconstrued data or acted in absence of data to justify its own preconceived theories.<sup>1</sup>

With the authority given NHTSA by the Highway Safety Act of 1966, all but three states were forced to enact helmet laws by 1975. When NHTSA was deprived of this sanctioning power, state legislatures were urged by motorcyclists to repeal their helmet laws. Though it had nine years during the era of sanction-mandated laws to amass data supporting helmet laws, NHTSA could not convince the legislators that those laws should be retained. As a result, 30 states have repealed their helmet laws for adults. In the April, 1980, Helmet Law Report, NHTSA still recommends helmet laws as a primary solution to motorcycle safety and claims repeals have been the main cause of increases in motorcycle fatalities. But the Report does not support this conclusion. Incomplete and inaccurate in some areas, it cannot stand as a clear statement on the effects of helmet law repeals. This incompleteness is acknowledged in the Report, which states, "NHTSA also agrees that any study using overall fatalities or fatality rates cannot deal with helmet laws in isolation but must consider the effects of other safety programs and other non-safety factors which can

influence fatalities." The Helmet Law Report specifies that motorcycle fatalities are affected by at least three factors: "1. Helmet usage 2. Other safety programs 3. Nonsafety factors (length of riding season, vehicle miles traveled, size, weight, and horsepower of motorcycles, number of riders per motorcycle, and type of roads and weather)." (V-25)

In its response to the *Federal Register*, February 27, 1979, AMA cautioned NHTSA not to ignore factors like the changes in the number of motorcycles registered, changes in the number of operators licensed, the effect of weather and seasonal variation in motorcycle use, or effects of other legislative or market shifts. The extent to which such factors have contributed to changes in fatality rates should have been included in the Helmet Law Report. These factors, while mentioned by NHTSA, were not further considered. So while NHTSA acknowledges that it cannot report on the effect of helmet use in isolation, it proceeds to do so.

NHTSA also admits, "Adequate data are not available for precise comparisons between states of the effect of helmet laws on motorcycle fatality rates because of the inadequacies and lack of uniformity in state accident data collection and reporting systems." (VIII-4) In spite of these admissions, as illustrated in Figure 1, NHTSA places primary importance upon (and uses as a cover for the Helmet Law Report) a depiction of *all* state motorcycle fatality rates (see page 4 herein).

NHTSA's graph seems to provide proof that helmet laws caused the fatality rate to plunge after 1965, only to rise again in 1976 with helmet law repeals. But NHTSA's graph includes not only the states that repealed their helmet laws, but also states that retained them. A comparison of the fatality rates in the repeal states with those that did not repeal for the years 1976-1979 shows the upward fatality trends are not much different for those years (see Figures 2 and 3). Thus, NHTSA ignores that fatality rates increased in states retaining helmet laws at a similar rate to states which repealed helmet laws.

Also, in describing the cover graph, the Helmet Law Report normalized the fatality data by the number of registered motorcycles to distribute the number of fatalities over the increased number of motorcycles. NHTSA concedes, "Although motorcycle miles traveled is a better measure for normalizing fatalities, this data is not available." (II-1) It is unavailable even though NHTSA has been charged with leadership of motorcycle safety since 1966. NHTSA had no mileage data because it had not collected it over fourteen years of helmet laws.

If, as NHTSA contends, repeal of helmet laws causes the jump in motorcycle fatalities, then states that have repealed helmet laws should have tremendously higher fatality rates than those that did not. But this is not the case, as illustrated by Table 1, which contrasts the fatality per accident (f/a ratio) of repeal and helmet law states.

The slight difference ( $p > .10$ ) between the average f/a for the repeal states (3.08) and for the helmet law states (2.79) does not reveal the significant increase that all repeal states should have experienced under NHTSA's "cause and effect" hypothesis. To be the case, all or nearly all repeal states would have experienced a significant increase in their f/a ratio, and all or most all

\* (refers to pages of the Helmet Law Report)

**TABLE 1**

| States Not Repealing Adult Helmet Law | Fatality per 100 Accident Rate, 1979 | States Repealing Adult Helmet Law | Fatality per 100 Accident Rate, 1979 |
|---------------------------------------|--------------------------------------|-----------------------------------|--------------------------------------|
| Alabama                               | 2.13                                 | Alaska                            | 3.74                                 |
| Arkansas                              | 3.30                                 | Arizona                           | 3.29                                 |
| Florida                               | 2.17                                 | Colorado                          | 2.95                                 |
| Georgia                               | 3.45                                 | Connecticut                       | 2.98                                 |
| Kentucky                              | 3.52                                 | Delaware                          | 3.08                                 |
| Massachusetts                         | 2.56                                 | Hawaii                            | 3.51                                 |
| Michigan                              | 1.75                                 | Idaho                             | 3.89                                 |
| Mississippi                           | 3.04                                 | Indiana                           | 3.50                                 |
| Missouri                              | 2.50                                 | Iowa                              | 2.78                                 |
| Nevada                                | 3.13                                 | Kansas                            | 2.45                                 |
| New Jersey                            | 1.94                                 | Louisiana                         | 2.20                                 |
| New York                              | 2.15                                 | Maine                             | 2.77                                 |
| North Carolina                        | 3.47                                 | Maryland                          | 1.66                                 |
| Pennsylvania                          | 3.26                                 | Minnesota                         | 3.38                                 |
| South Carolina                        | 2.72                                 | Montana                           | 3.36                                 |
| Vermont                               | 2.42                                 | Nebraska                          | 2.17                                 |
| Virginia                              | 2.20                                 | New Hampshire                     | 3.66                                 |
| West Virginia                         | 3.15                                 | New Mexico                        | 2.68                                 |
| Wyoming                               | 4.19                                 | North Dakota                      | 3.29                                 |
| Average:                              | <b>2.79</b>                          | Ohio                              | 2.89                                 |
|                                       |                                      | Oklahoma                          | 3.71                                 |
|                                       |                                      | Oregon                            | 4.66                                 |
|                                       |                                      | Rhode Island                      | 3.07                                 |
|                                       |                                      | South Dakota                      | 3.69                                 |
|                                       |                                      | Tennessee                         | 2.23                                 |
|                                       |                                      | Texas                             | 3.40                                 |
|                                       |                                      | Utah                              | 2.52                                 |
|                                       |                                      | Washington                        | 3.03                                 |
|                                       |                                      | Wisconsin                         | 2.88                                 |
|                                       |                                      | Average:                          | <b>3.08</b>                          |
|                                       |                                      | * (California 1979 f/a            | 2.65)                                |
|                                       |                                      | * (Illinois 1979 f/a              | 2.53)                                |

\* California has never had a helmet law; Illinois law, which was in effect for only nine months, was declared unconstitutional in 1969.

helmet law states would have shown decreases or constancy.

Furthermore, NHTSA's own Fatal Accident Reporting System (FARS) reported in its *Motorcycles, Special Report, 1977*, "There is no significant difference in the fatality rates of states requiring or not requiring the wearing of a motorcycle helmet." (p. 72) It is curious that NHTSA excluded that data from the Helmet Law Report. Perhaps it did so because the 1977 FARS report clearly shows that, over the long term and over all states, helmet laws insignificantly impact fatality/accident and fatality/registration rates.

In the Helmet Law Report NHTSA asserts that the f/a ratio test is inexact because of other factors which could influence it. It contends data of head injuries and fatalities from head injuries are more exact. (V-26) NHTSA has based its position on a small number of states that experienced fatality increases, including Kansas, South Dakota, Colorado and Oklahoma. But with this argument NHTSA provides no "control" (non-repeal) state with which in-depth comparisons can be made on the same set of variables. This dilutes NHTSA's objectivity. Table 1 provides both repeal and non-repeal information.

The Helmet Law Report cites a study by the Planning and Research Department of the Washington State Patrol to prove that non-helmeted riders are more apt to be seriously injured than those using helmets. However, it ignores a 1976 study by the same department stating the

state's ten-year helmet law "failed to conclusively show that this requirement by itself positively disturbed motorcycle injury and/or fatal accident rates."<sup>2</sup>

NHTSA also cites a 1979 Utah study as support for its position, selecting out a few cases for three years. NHTSA ignored that study's conclusion, "motorcycle injury accidents are not over-represented as a proportion of registered vehicles" and "average fatality rates per number of registrations over a ten-year period is almost identical for motorcycles and passenger cars."<sup>3</sup> The data implies the helmet law has not had the effect NHTSA would suggest.

### THE ATTEMPT TO PORTRAY THE MOTORCYCLIST AS A "SOCIAL BURDEN"

The Helmet Law Report contends, "the failure of many motorcyclists to wear helmets places substantial economic burdens on society through insurance, medical care and welfare benefits, and to the extent possible, these costs should be reduced." While the Helmet Law Report does not state the costs of this "social burden," it provides a vague estimate of "many millions." (VI-3)

The estimated social cost of all traffic accidents is \$50 billion a year, according to the Motor Vehicle Manufacturers Association. Thus, the "social burden" of injured motorcyclists is a small percentage of the cost of all traffic accidents.

The Report attempts to prove that helmet law repeals have increased medical costs, using data from Craig Hospital in Colorado. But according to Dennis J. O'Malley, executive director of that hospital's Rocky Mountain Regional Spinal Injury Center, Inc., "Spinal cord injuries and brain injuries occur with much greater frequency as a result of automobile accidents than any other cause. In general, our experience would suggest that the cost of care for spinal cord and brain injury is not significantly different because of the cause of injury."<sup>4</sup>

O'Malley told AMA that 51.9 percent of all spinal disabilities are related to transportation accidents. Of this group, however, motorcycle and bicycle accidents account for only 4.6 percent of the 1978 total and 4.2 percent of the 1979 total. As shown in Figure 4, the injured motorcyclist cannot be depicted as an unusual or extraordinary public burden.

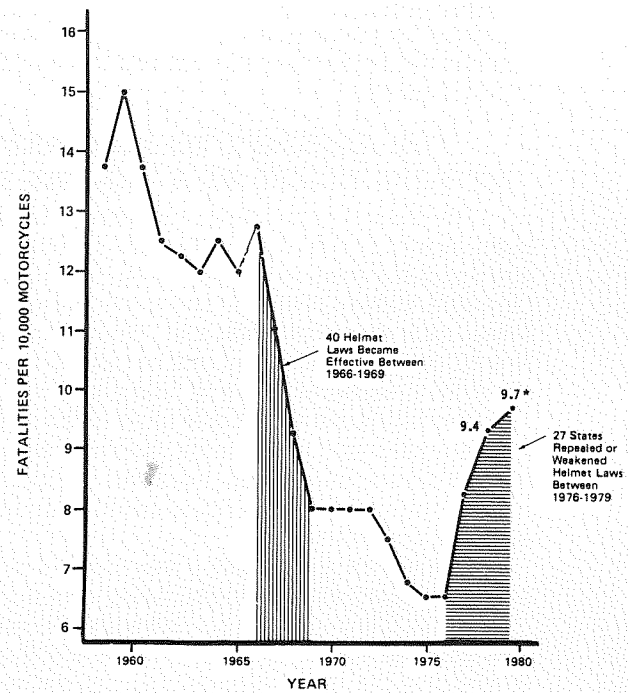
South Dakota, one state studied by NHTSA, reported in June, 1980, that it compared medical costs plus others such as job-related losses for helmeted versus unhelmeted riders. By NHTSA's own admission, the "driver helmet use variable was not found to have a statistically significant relationship with cost estimates or [the] days disabled variable." Indeed, the presence of a helmet law in South Dakota would apparently not change this situation.

The Helmet Law Report addresses motorcyclists as though they are the only group voluntarily risking their safety. "Each driver in this country accepts reasonable limitations on how he or she may use the roads. Because of the substantial economic burden that society incurs for head injuries to unhelmeted motorcyclists helmet use is a reasonable limitation which motorcyclists should accept as a condition for using their vehicles on the public

(text continued on page 6)



**A REPORT TO THE CONGRESS  
ON  
THE EFFECT OF MOTORCYCLE  
HELMET USE LAW REPEAL --  
A CASE FOR HELMET USE**



APRIL 1980

U.S. Department of Transportation  
National Highway Traffic Safety Administration

**FIGURE 1**

NHTSA has widely publicized — including on its Helmet Law Report cover — a graph apparently linking declines and increases in motorcycle fatalities with presence and absence of mandatory helmet laws, shown above in Figure 1.

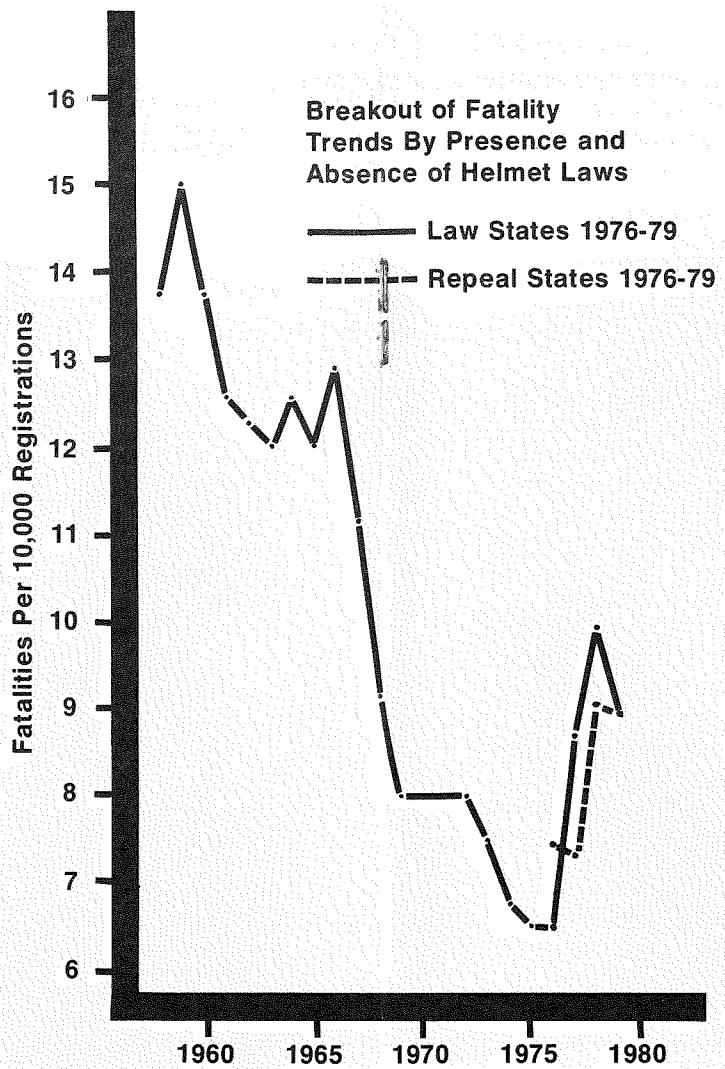
However, while NHTSA's graph reveals alarming changes in fatality rates, it fails to distinguish between states which have or don't have mandatory helmet laws.

When the states repealing or weakening helmet laws between 1976 and 1979 are broken out from states retaining their laws, as shown in Figure 2 above, there is no appreciable difference. The law states (solid line) show fatality rates rising as rapidly as the repeal states (broken line).

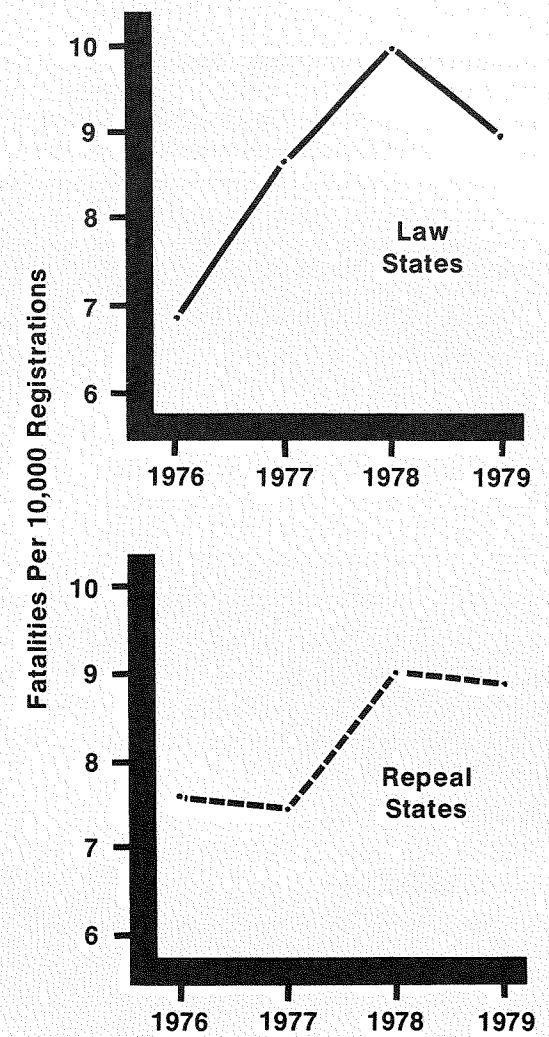
This comparison is more clearly seen in Figure 3, where the graphs focus on only the four years in question. Also, Figures 2 and 3, using accurate 1979 data, reveal that NHTSA's projection of even higher fatalities in 1979 was wrong. Both in repeal and law states, fatalities per 10,000 registrations declined, further calling into question NHTSA's contention that more repeals would bring more deaths.

NHTSA has focused on head and spinal injuries among motorcyclists in an attempt to argue that mandatory protection of head and neck may be justified. However, data available from the Rocky Mountain Regional Spinal Injury Center, displayed in Figure Four, show that two-wheeled vehicles, including bicycles and motorcycles rank well below other causes of head and neck injury. While other forms of transportation are the cause of nearly half the head and neck disabilities, two-wheeled vehicles account for less than five percent.

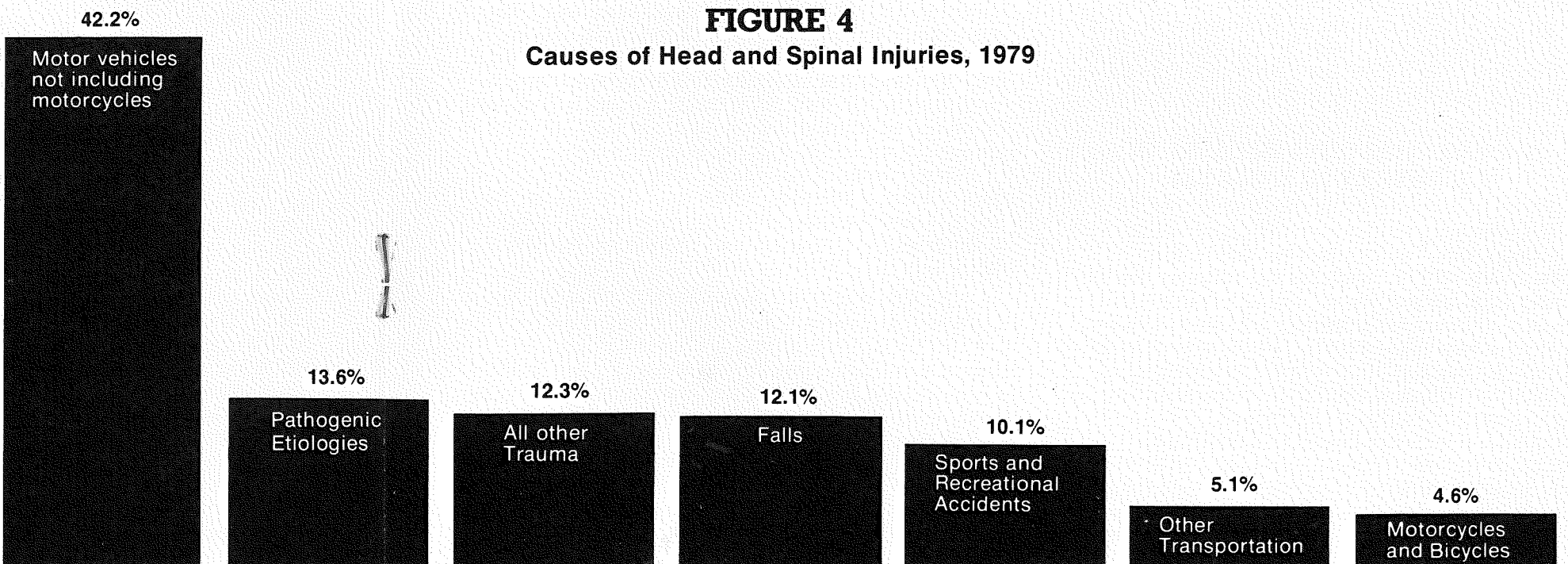
**FIGURE 2**



**FIGURE 3**



**FIGURE 4**  
Causes of Head and Spinal Injuries, 1979



(continued from page 3)

roads." (VIII-3) This implies that motorcyclists should accept helmet laws because of their high social burden potential. But as Table 2 shows, the rate of head injuries to non-helmeted riders is less than the rate for unrestrained auto occupants.

**Table 2  
FATAL AND NON-FATAL INJURIES BY BODY  
LOCATION**

|                | <b>Unhelmeted<br/>Motorcyclist, %*</b> | <b>Unrestrained Auto<br/>Driver, %**</b> |
|----------------|--|--|
| Head           | 24.9                                   | 39.6                                     |
| Face           | 6.1                                    | Not Listed                               |
| Neck           | 4.3                                    | 7.7                                      |
| Chest          | 8.7                                    | 12.7 ("thorax")                          |
| Abdomen        | 6.3                                    | 2.7                                      |
| Pelvis         | 2.6                                    | Not Listed                               |
| Back           | Not Listed                             | Not Listed                               |
| Extremities    | 46.6                                   | 37.3                                     |
| TOTAL          | 99.5                                   | 100.0                                    |
| Head/Face/Neck | 31.0                                   | 47.3                                     |

\*Helmet Report (V-3) Average of Colorado, Oklahoma, South Dakota studies.

\*\*National Crash Severity Study, 1979, Unpublished, by National Center for Statistics And Analysis, NHTSA.

While rates of head injury are even less for motorcyclists than for auto drivers, there is little outcry for compulsory seat belt laws by NHTSA. Why, then, do only motorcyclists require self-protection laws?

### **THE EFFORT TO VILIFY MOTORCYCLISTS AS IRRESPONSIBLE CITIZENS**

In the Helmet Law Report NHTSA claims injured motorcyclists neglect hospital and medical costs: "A sizeable portion of these expenses go unpaid." (VI-12) While the Report claims 32.2 percent of the bills remain unpaid, it does not specify what portion of that amount is due to unhelmeted riders and contains no comparison to the unpaid social burden imposed by injured automobile drivers. (VI-9) Consequently, we cannot determine if injured motorcyclists neglect payments to the extent necessary for NHTSA to argue a helmet law, especially in view of NHTSA's failure to press for seat belt laws. This entire section of the Helmet Law Report is a slur against motorcyclists and is irrelevant to the question of helmet use.

### **AN UNSUPPORTED DISMISSAL OF VOLUNTARY HELMET USE**

While convinced of the inadequacies of NHTSA's data and reasoning, AMA agrees that under almost every circumstance riders should wear helmets — but voluntarily. But NHTSA concludes that voluntary helmet use campaigns are ineffective: "voluntary helmet use promotion programs are extremely unlikely to achieve high rates of helmet use found in helmet law states and voluntary use programs, which at the present time are only marginally effective, will be the most expensive programs ever initiated for motorcyclists." (I-4)

Expense is a curious motive for discouraging voluntary helmet use programs. Compared to NHTSA's single attempt to promote voluntary helmet use through the limited distribution of a pamphlet denouncing the major complaints voiced by motorcyclists about helmets,

almost any cost could be considered expensive. Prior to the Helmet Law Report NHTSA had spent essentially no money on voluntary helmet use programs.

Voluntary helmet use programs need not be expensive. Specifically, NHTSA failed to acknowledge the results of the voluntary use campaign conducted in Maryland by the Motorcycle Safety Foundation. As described in the Foundation's newsletter, "MSF On The Move," and in its report on the Maryland Voluntary Helmet Use Campaign November, 1979, voluntary helmet use increased from 50 to 55 percent after repeal of the state's helmet law to as high as 68 to 82 percent immediately after the campaign. Safety messages were mailed to motorcyclists urging them to use helmets and common sense. The program cost \$9,000, or just a dime for each of the 87,000 registered motorcycles in the state. The rate of voluntary use of helmets for the initial period examined exceeded that of voluntary seat belt use by 400 percent. It should be noted that since the campaign's end, the rate has returned to something under 60 percent, lower than during the campaign, but higher than NHTSA's observations of 50 percent in Colorado, Kansas and South Dakota, where voluntary use campaigns have not been conducted.

NHTSA acknowledges in the Helmet Law Report that it has funded a study by Applied Science Associates (ASA)<sup>5</sup> to "develop educational materials and strategies to encourage voluntary use of safety helmets." NHTSA prejudices the results on the basis that such messages have been "quite unsuccessful in other highway safety efforts, such as seat belt usage." (VII-3) Though the findings of the study were available when the Helmet Law Report was submitted, NHTSA did not highlight them, perhaps because they undermined the agency's history of declarations against the viability of voluntary helmet use programs.

In its survey of over 10,000 randomly selected motorcyclists, ASA determined that they possess distinct but independent attitudes. One of these groups of attitudes was statistically isolated and called "resistance to regulation." The ASA study described this attitude as suggesting "that a campaign to increase voluntary helmet use, rather than a re-introduction of helmet laws, would be prudent at this time. Additionally it would appear that the source selected to deliver safety messages should not be directly associated with a regulatory agency."<sup>6</sup>

Thus, it may be wise for NHTSA to fund private development of voluntary helmet use materials because of this "resistance to regulation," and to reduce this backlash in the motorcycle community by relaxing its law-only stand.

The ASA study also addressed NHTSA's claim, "many young riders consider it macho not to wear a helmet." (VIII-3) The study shows only 1.4 percent of the respondents agreed with the statement, "Helmet usage is a sign of cowardice," while 88.4 percent expressed strong disagreement. Only 3.2 percent of the surveyed riders thought the "wind in the hair" argument was a reason for not wearing helmets. That NHTSA would place credence in the "macho" argument prior to ASA's having an opportunity to explore that concept is just one indication of why NHTSA lacks credibility among motorcyclists.

Furthermore, when AMA asked NHTSA how it arrived at this belief, NHTSA replied in a letter that it was based on staff opinion of how motorcyclists perceive themselves. Again, we see assumptions which reveal more about NHTSA's attitudes than about the subject at hand.

### **MOTORCYCLISTS GENERALLY DISAPPROVE OF HELMET LAWS**

NHTSA lists ten studies to support its statement, "random surveys which measured motorcyclists' opinion generally reported a substantially lower portion of motorcyclists (than members of the general public) which favor helmet laws 40 to 81 percent." (IV-24) The Helmet Law Report concludes motorcyclist opinion is "about equally divided" on helmet laws. (IV-24)

However, several of the studies can hardly be described as "random." The Idaho study surveyed motorcyclists *after* they had been in accidents. The Virginia study, claiming 81 percent of motorcyclists favored helmet laws, explained its methodology nowhere in its fifty pages.

Ironically, the NHTSA-funded ASA study, which was conducted randomly over a large sample of riders, revealed that 77.9 percent of motorcyclists did not want helmet laws. Those results parallel two surveys AMA has made of its members which revealed that an average of 74.8 percent of them were against helmet laws. Clearly, NHTSA's claim that motorcyclists favor helmet laws is false.

### **NHTSA'S CONTRADICTIONARY POSITIONS**

It is ironic that NHTSA calls seat belt laws "politically unfeasible" because of drivers' opposition, while the agency maintains helmet laws are the answer to motorcycle safety. This is the case even though, while motorcyclists overwhelmingly disapprove of helmet laws, 400 percent more riders use helmets voluntarily than auto operators use seat belts.

Concern over head injuries should apply not just to motorcyclists, but to automobile occupants as well. The Helmet Law Report attempts to indicate that head injuries are an over-represented cause of motorcyclist fatalities, especially if the rider is unhelmeted. (V-3) While the Report again offers no comparison, Table 2, contrasting types of injuries to unhelmeted motorcyclists to those of unrestrained automobile operators, reveals head injuries alone constitute a smaller proportion for motorcyclists than for automobile operators.

NHTSA's contradictory positions stem from voluntary use rates of safety devices. Seat belt use, as mentioned, recently dropped to an all-time low of 11.9 percent, while voluntary helmet use remains at over 50 percent. With this consideration, it is hard to understand why NHTSA has not suggested mandatory helmet laws for automobile occupants.

### **AMA'S CONCLUSIONS AND RECOMMENDATIONS**

This commentary began by criticizing NHTSA for its historical misuse of data to support its preconceived ideas. This criticism applies specifically to the Helmet Law Report. When Congress asked NHTSA to report on

the effect of repealing helmet laws, it was asking for preordained conclusions. Politically, NHTSA had no other choice.

It may be noted, however, that since the publication of the Helmet Law Report, NHTSA may be acting in accord with its own data in the ASA study showing the unpopularity of helmet laws and the popular demand for rider education and improved licensing. The agency has recently published program papers directing states to adopt comprehensive motorcycle safety programs, including rider education and improved licensing. AMA sees this orientation as a farsighted, acceptable move toward motorcycle safety.

AMA agrees that the disturbing increase in motorcycle fatalities should be addressed. Congress should be applauded for the concern that prompted the Helmet Law Report. However, it should not accept NHTSA's recommendations regarding helmet laws for only one group of road users experiencing increases in fatalities. Rather, Congress should look at how it addressed the central question in 1975. It concluded then that the choice to enact helmet laws should be left to the states.

AMA agrees with the Helmet Law Report that the development of comprehensive motorcycle safety programs in the states has not kept pace with the growth of motorcycle use. (VIII-5) AMA believes NHTSA's singular dogmatic reliance on helmet laws for so many years caused that failure. Based on that record, it would be unwise to reinstate NHTSA's power to require helmet laws.

AMA encourages voluntary use and agrees with NHTSA's statement, "Safety helmet use is an important safety measure, but it is only one element of a comprehensive motorcycle safety program. Each state should have a motorcycle program which encompasses rider education, operator licensing, enhanced vehicle and rider conspicuity, vehicle standards, vehicle inspection, motorist awareness of motorcyclists, and helmet use." (VIII-5)

AMA therefore recommends that NHTSA abandon its campaign for reinstatement of unpopular helmet laws; that NHTSA truly cooperate with private organizations to develop high quality voluntary use educational materials; that NHTSA work with speed, diligence, and leadership to create a nationwide uniform system of meaningful and accurate motorcycle data — data NHTSA acknowledges does not exist; and that NHTSA aid the states in establishing rider training and licensing programs and other necessary aspects of effective motorcycle safety programs.

#### **FOOTNOTES**

<sup>1</sup>The General Accounting Office has recently made similar allegations (refer to GAO Report CED-80-87, July 28, 1980).

<sup>2</sup>Paulrude, S.P. and Kehl, S.E. "An Evaluation of Washington State's Motorcycle Safety Laws Effectiveness," State of Washington Department of Motor Vehicles, April 1976; p. ii.

<sup>3</sup>Utah Department of Public Safety. "Analysis of Motorcycle Safety in Utah." Utah Highway Safety Division, November, 1979, p. 6.

<sup>4</sup>Letter from O'Malley to AMA, June 19, 1980.

<sup>5</sup>DOT Contract No. DOT HS-9-02090.

<sup>6</sup>Thackray, Richard M. and Green, John C.T. "Development of Safety Helmet Educational Materials." Proceedings, International Motorcycle Safety Conference, Motorcycle Safety Foundation, May, 1980, p. 1414.

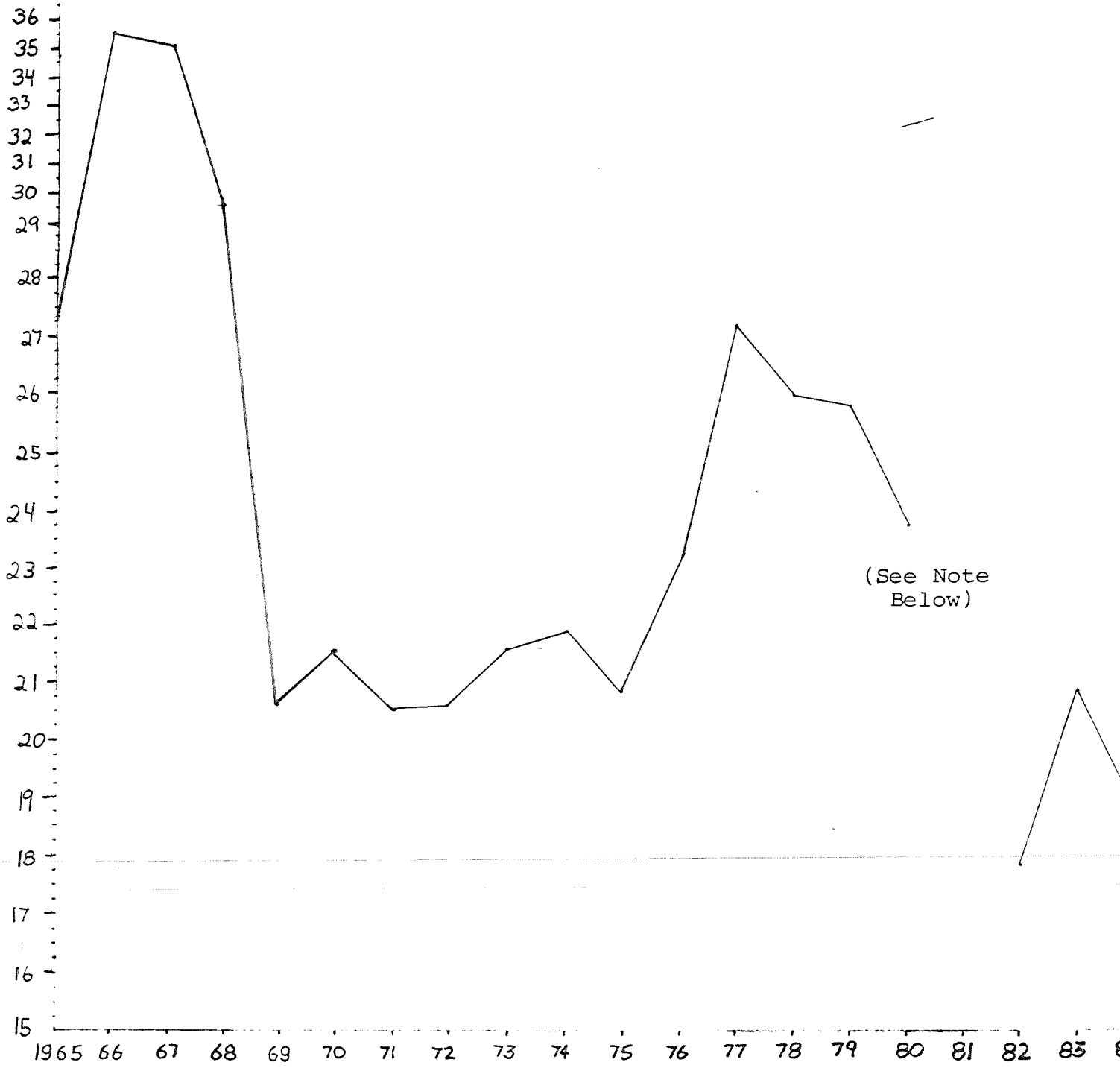


**AMERICAN MOTORCYCLIST ASSOCIATION**

P.O. BOX 141  
WESTERVILLE, OHIO 43081  
(614) 891-2425

2

Total Motorcycle Accidents per 1,000 Registrations



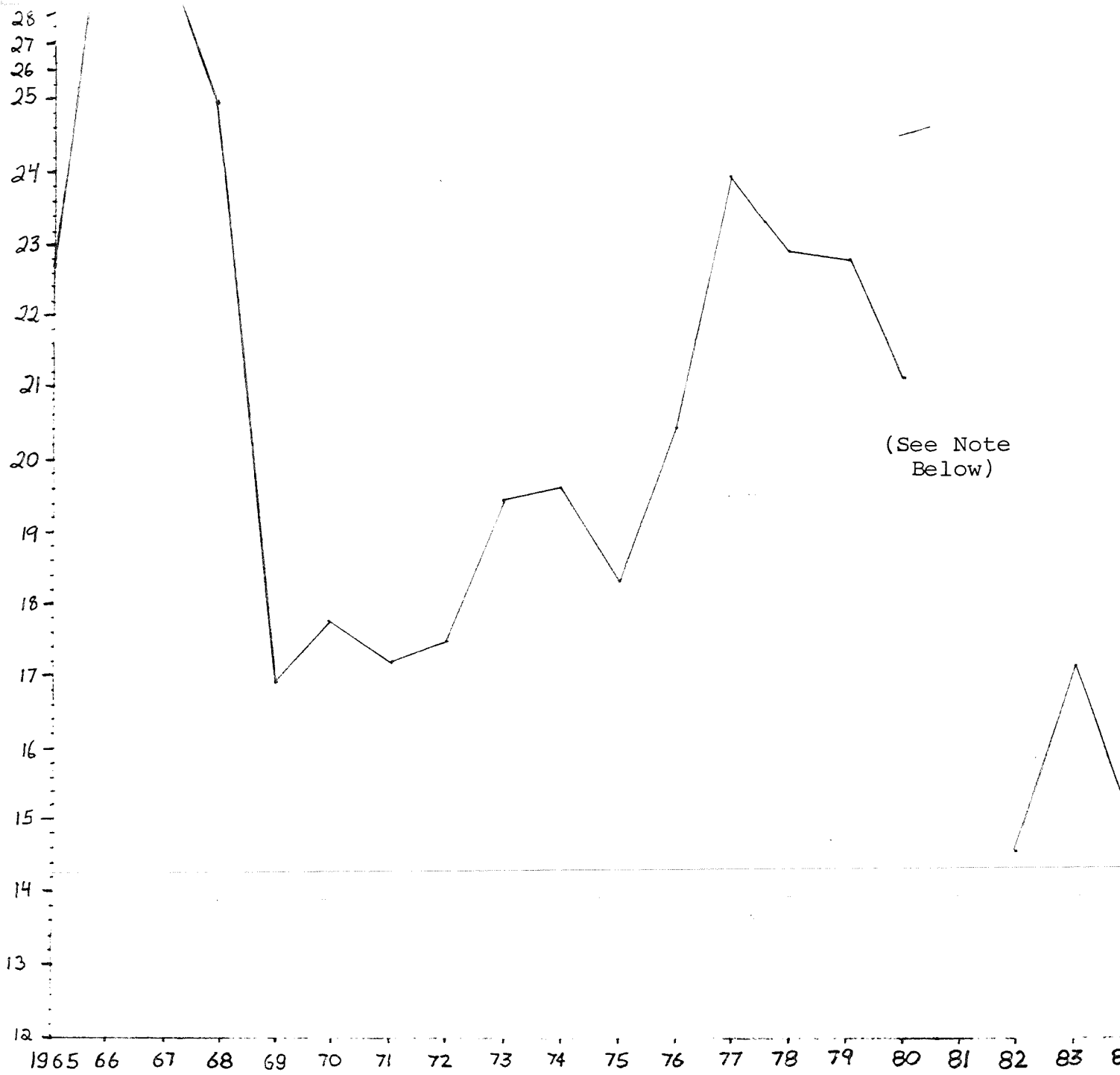
(See Note Below)

Note: 1981 registration statistics are inaccurate due to that year being the first year of the "staggered" registration system going into effect.

Page 1

ATT. ②  
2/28/85

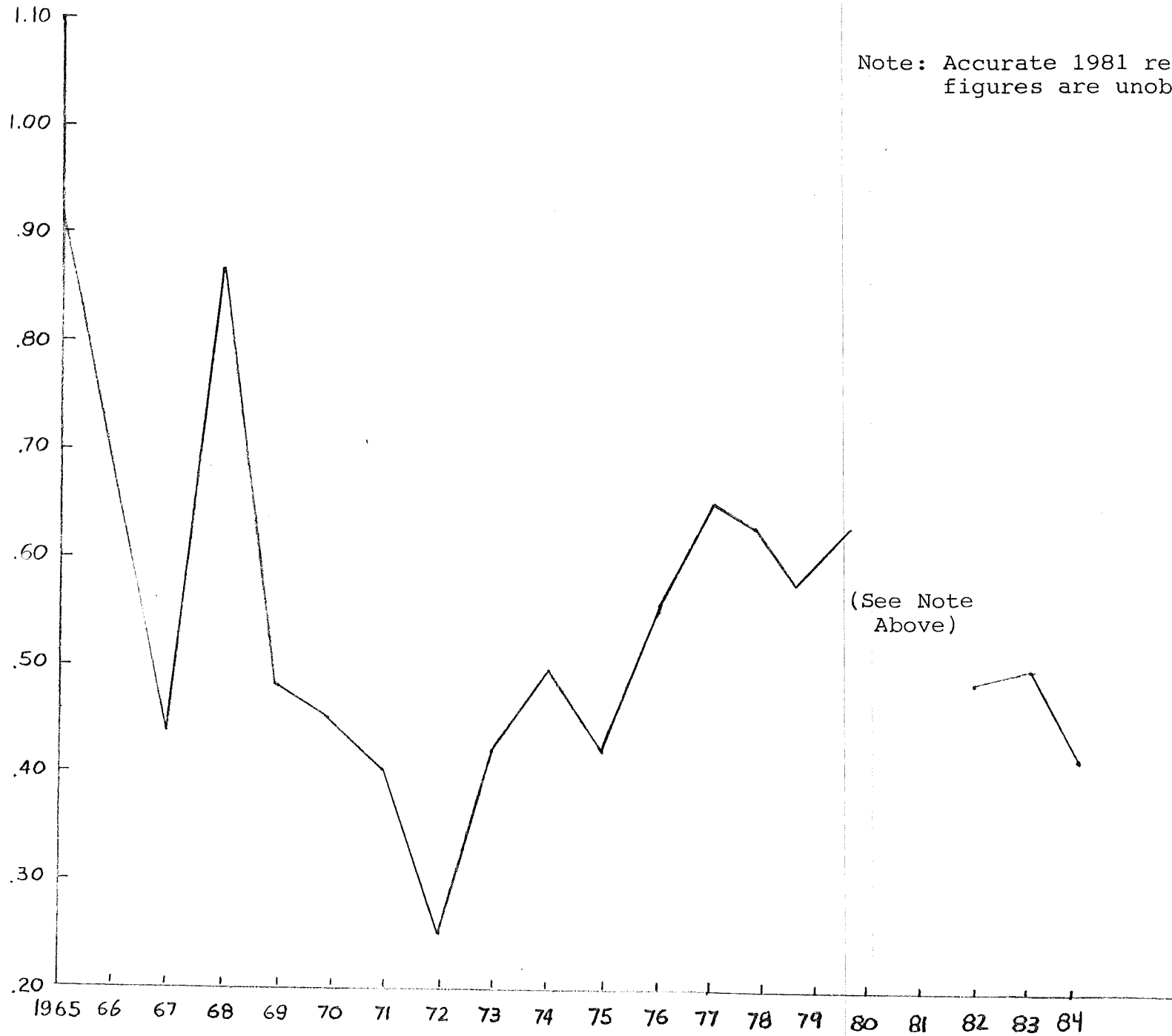
Total Motorcycle Injury Accidents per 1,000 Registrations.

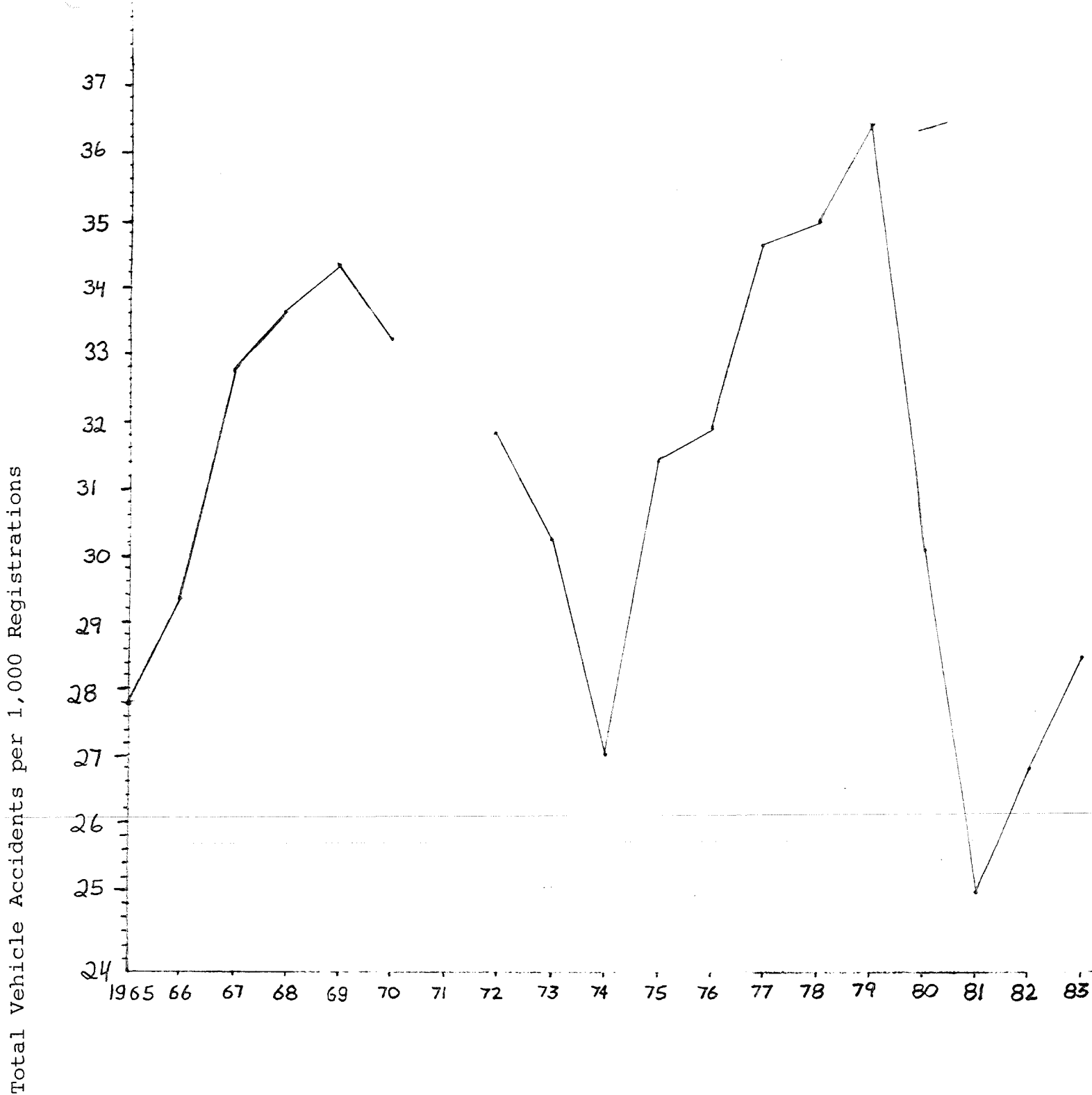


(See Note Below)

Note: 1981 registration statistics are inaccurate due to that year being the first year of the "staggered" registration system going into effect.

MOTORCYCLE FATALITIES PER 1,000 Registrations

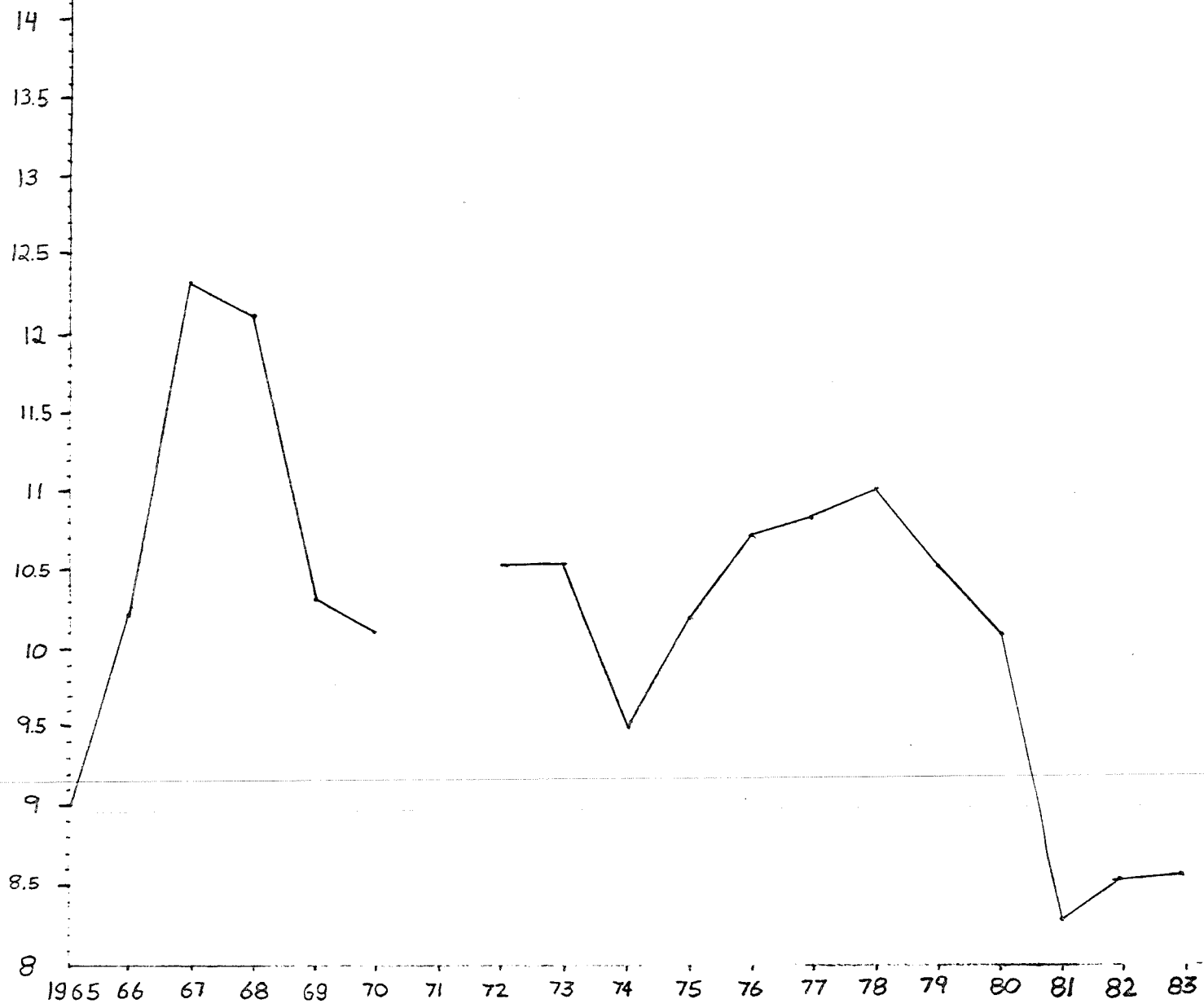




Note: Vehicle statistics for 1971 are incomplete due to that being the first year of the "staggered" registration system (alphabetical) and numerous double registrations occurred that year.



Total Vehicle Injury Accidents per 1,000 Registrations



Note: Vehicle statistics for 1971 are incomplete due to that being the first year of the "staggered" registration system (alphabetical) and numerous double registrations occurred.

Statistics;

Column A: Registrations  
 Column B: Total Accidents  
 Column C: Total Injury Accidents  
 Column D: Motorcycle Fatalities

|      | <u>Column "A"</u> |       | <u>Column "B"</u> |        | <u>Column "C"</u> |        | <u>Column "D"</u> |        |
|------|-------------------|-------|-------------------|--------|-------------------|--------|-------------------|--------|
| 1965 | 21,881            |       | 599               |        | 496               |        | 19                |        |
| 1966 | 28,015            | +28%  | 995               | +66%   | 861               | +73%   | 22                | +15%   |
| 1967 | 31,538            | +12%  | 1107              | +11.2% | 964               | +11.2% | 14                | -26.4% |
| 1968 | 34,336            | +8%   | 1014              | -8.5%  | 856               | -11.3% | 30                | +114%  |
| 1969 | 39,835            | +16%  | 822               | +19%   | 672               | -21.5% | 19                | -46.7% |
| 1970 | 53,847            | +35%  | 1161              | +41%   | 957               | +42%   | 24                | +26.3% |
| 1971 | 74,525            | +38%  | 1527              | +31.5% | 1281              | +33.8% | 28                | +16.6% |
| 1972 | 88,894            | +19%  | 1831              | +19.9% | 1503              | +17.3% | 22                | -21.5% |
| 1973 | 99,499            | +12%  | 2143              | +17%   | 1934              | +28.6% | 41                | +86%   |
| 1974 | 92,354            | -8.2% | 2017              | -5.9%  | 1812              | -6.4%  | 43                | +4.8%  |
| 1975 | 90,329            | -2.2% | 1890              | -6.3%  | 1659              | -8.5%  | 37                | -14%   |
| 1976 | 86,789            | -4%   | 2016              | +6.6%  | 1774              | +6.9%  | 41                | +10.8% |
| 1977 | 84,502            | -2.7% | 2296              | +13.8% | 2024              | +14%   | 55                | +34.1  |
| 1978 | 81,944            | -3.1% | 2124              | -7.5%  | 1884              | -7%    | 57                | +3.6%  |
| 1979 | 87,511            | +6.7% | 2256              | +6.2%  | 1994              | +5.8%  | 50                | -12.3% |
| 1980 | 92,218            | +5.3% | 2188              | -3.1%  | 1946              | -2.5%  | 57                | +14%   |
| 1981 | (See Note "A")    |       | 2223              | +1.5%  | 1915              | -1.6%  | 69                | +21%   |
| 1982 | 106,566 (Note B)  |       | 1895              | -14.8% | 1561              | -19.5% | 52                | -24.7% |
| 1983 | 83,587            | -22%  | 1740              | -8.2%  | 1442              | -7.7%  | 42                | -19.3% |
| 1984 | 83,744            | +0.1% | 1267              | -27.2% | 1029              | -28.7% | 35                | -16.7% |

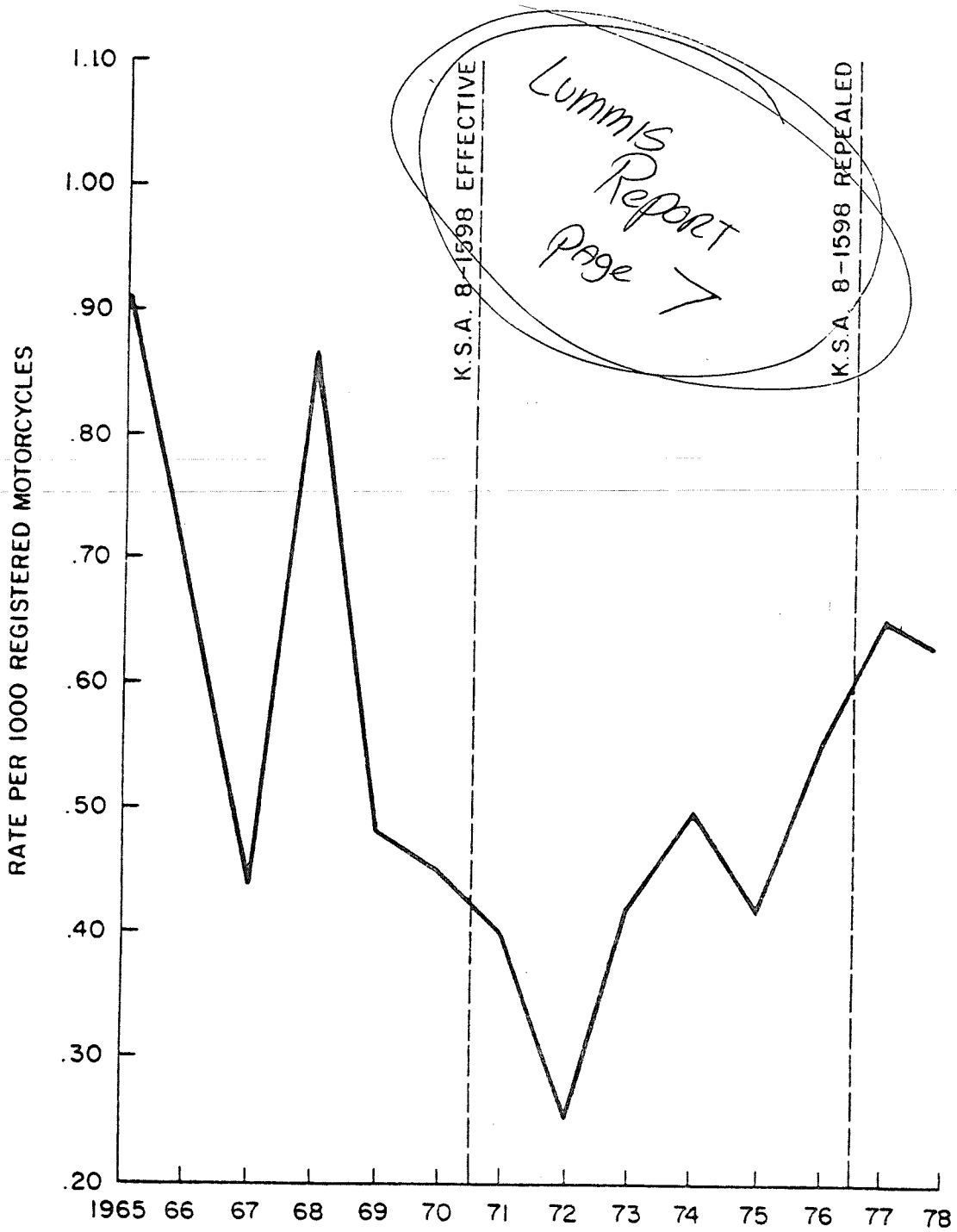
The percentage figures in the above columns denotes increases or decreases to the previous year.

Note "A": 1981 was the first year for the "4-Year" tag to be issued for motorcycles in Kansas. Consequently, there is a large number of registrations which are counted twice as many people were obliged to register the motorcycles twice in 1981.

Note "B": Since the figures for 1981 registrations are inaccurate, the percentage of increase or decrease is unable to be calculated. Although the 106,566 total registrations for 1982 appears disproportionately high compared to other years, Mr. H. Turntyne, KDOT, assures that these should be the correct figures. There is no explanation for the increase and decrease following 1982.

1984 figures are for the first 8 months of the year. There is no reason to expect any significant change in the statistics since, by the end of August, the heaviest riding period of the year is at an end and the amount of exposure and mileage traveled will drop dramatically.

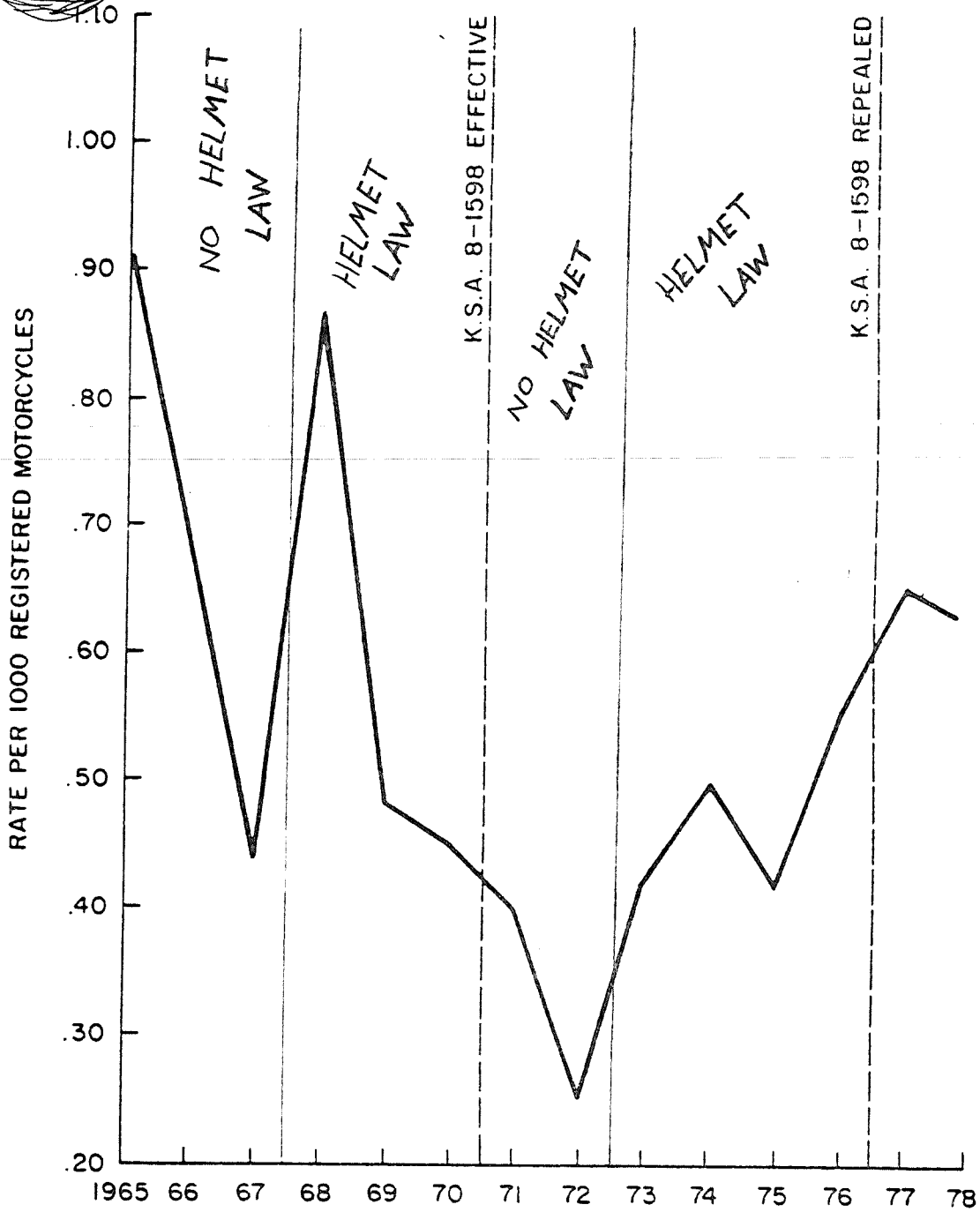
FIGURE 1-4  
FATALITY MOTORCYCLE ACCIDENT RATES  
1965 - 1978



LUMMIS Report  
Page 7  
(CORRECTED)

FIGURE 1-4

FATALITY MOTORCYCLE ACCIDENT RATES  
1965 - 1978



# IMPORTANT

READ BEFORE WEARING YOUR SIMPSON HELMET

---

## SIMPSON HELMETS

---

### CAUTION

In safety helmet design, the extent of protection is directly related to the coverage of the helmet. It is quite possible that your hearing ability and peripheral vision may be compromised in order to achieve greater impact protection. Careful attention should be paid to the following points:

#### **HEARING:**

Any safety helmet which covers the ears may cause a reduction in hearing. With your helmet on, check your ability to hear, as necessary for your type of activity.

#### **NOISE:**

The two pads supplied with the Simpson helmet fit into the ear piece. Should you desire to eliminate noise, simply press them into place. **Snell Approval sticker is located in ear pocket.**

#### **LEXAN SHIELD:**

All Simpson Lexan shields have black snaps for easy identification. Lexan shields must be cleaned with a soft lint-free cloth and rubbing alcohol.

#### **ACETATE SHIELD:**

All Acetate shields have chrome snaps for easy identification. Acetate shields can be cleaned with most plastic cleaners.

#### **PIVOT PINS:**

The pivot pins have a snap ring groove in them for installation of the E. clips to hold shield in place for extra protection.

#### **SEAL BETWEEN HELMET AND VISOR SHIELD:**

The weatherstrip foam is to reduce the amount of dust coming into the helmet. To install: Flip the shield up. Remove the paper backing from the strip of foam. Stick the foam weatherstrip around the outside of the rubber molding at the eye opening. Close the shield and you will have a very tight fit.

---

ARGUMENTS AGAINST S.B. 156

the  
Mandatory Helmet Law

POSITION PAPER

by  
ABATE of Kansas, Inc.

2/28/85  
ATT. ③

## INTRODUCTION

ABATE of Kansas, Inc.

ABATE of Kansas is the largest motorcycle rights organization in Kansas. The organization is dedicated to improving motorcycle safety by promoting fair, responsible legislation, public awareness campaigns, and rider training and education programs.

ARGUMENTS AGAINST S.B. 156

Table of Contents

SECTION I ..... Helmet Effectiveness and Failures

SECTION II ..... The Public Burden Theory

SECTION III ..... Constitutional Issues



SECTION I

ARGUMENTS AGAINST S.B. 156

Helmet Effectiveness and Failures

## ARGUMENTS AGAINST S.B. 156

### A Review and Analysis of Motorcycle Accidents Nationwide

The membership of ABATE of Kansas Inc. are totally opposed to this legislation. The following information and statistics clearly demonstrates that mandatory helmet laws DO NOT reduce motorcycle accident or fatality rates.

1. In 1979, Kansas, which did not have an adult helmet law, had a fatality rate of 2.49 per 100 accidents. The national average of fatalities per 100 accidents of states with an adult helmet law was 2.79.  
Source: Motorcycle Safety Foundation and the American Motorcyclists Association from here on referred to as MSF and AMA.
2. Claim: Helmets are universally recognized as the most significant protection safety device for motorcyclist. A cyclist is 3 to 9 times more likely to die in an accident if he is helmetless.  
Fact: If this were true, non-law states would have a much higher overall fatality rate rather than the 8% "lower" rate they had between 1977 to 1981.  
Source: MSF and AMA
3. The 1982 motorcycle accident statistics document:
  - a. Fatalities per 10,000 registrations:
    1. National average 8.13
    2. Kansas 4.78
  - b. Of 29 states ranking below the national average of fatalities per 10,000 registrations, 18 DO NOT have an adult helmet law, only 11 states do.
  - c. Of 22 states ranking above the national average of fatalities per 10,000 registrations, 10 have an adult helmet law, only 12 do not.
  - d. If helmets significantly reduced fatalities then logic dictates that all adult helmet law states would rank as the lowest in fatalities per 10,000 registrations. This has been proven not to be true.
  - e. The two states with the highest rate of fatalities per 100 accidents (Mississippi and West Virginia) have adult helmet laws.
  - f. Averaging the number of accidents per 10,000 registrations and the number of deaths per 100 accidents, the four safest states are: Iowa, no helmet law; Wisconsin, helmets required only for riders under 19; South Dakota, no helmet law; and Kansas, helmets required only for riders under 18.

Source: MSF and AMA

continued on next page

4. On October 12, 1972, the National Highway Traffic Safety Administration released to the public these results: "74 tests of 54 different model helmets showed that only eight complied with the standards set by the industry's American National Standards Institute".
5. Studies support the contention that helmets deter the rider's ability to remain aware of the more dangerous elements of his traffic environment. An audiometric evaluation performed on December 8, 1974 by the Speech and Hearing Clinic at the University of Utah, Salt Lake City, Utah reports: a) helmets restrict hearing (moderate to severe); b) helmets distort sound direction creating confusion.
6. From the 1983 motorcycle accident statistics the MSF reports:
  - a. Total registrations were down 1.7%
  - b. Total fatalities were down 3.2%
  - c. The average of fatalities per 10,000 registrations, the average of accidents per 10,000 registrations, and the average of fatalities per 100 accidents is higher among helmet law states than helmet "repeal" states.
7. On a 90 degree day, temperatures can reach 130 degrees inside a helmet, creating road fatigue.  
Source: Road Rider Magazine
8. Helmet removal from injured persons may cause paralysis.  
Source: American College of Surgeons, Committee on Trauma, July, 1980.
9. One thing most of the safest states in which to ride a motorcycle have in common is an aggressive motorcycle licensing program. Kansas, for example, uses a modified version of the MSF's Motorcycle Operator Skill Test, which is credited with reducing bike accidents by 15% in states that have adopted it.

\*\*\*\*\*

Conclusion on following page

## CONCLUSION

Motorcycle safety education and public awareness are the means in which to reduce motorcycle injuries and fatalities. Preventing the accident or being able to avoid accidents are the goals of ABATE of Kansas. These goals reap far greater benefits in motorcycle safety than the philosophy of trying to protect an individual from injury "ex post facto".

Nationwide statistics gathered by the Motorcycle Safety Foundation show that Kansas ranks as one of the four safest states in which to ride a motorcycle. This is because Kansas has been progressive enough to establish rider education programs and uses a modified version of the MSF's Motorcycle Operator Skill Test for motorcycle licensing. Motorcycle safety education and public awareness that "motorcycles are out there" are the keys to less crippling and fatal accidents.

ABATE of Kansas, in cooperation with the Motorcycle Safety Foundation, is promoting a statewide public awareness campaign in 1985. This program is aimed at the motoring public in an effort to increase motorcycle safety by preventing accidents. Our organization believes that with these types of campaigns along with rider training and education and by continuing the motorcycle licensing program now being used, motorcycle accidents and fatality rates will continue to decline in Kansas.

ABATE of Kansas, due to the aforementioned reasons, would very much appreciate your "NO" vote on S.B. 156.

ARGUMENTS AGAINST S.B. 156

Medical Reports

Drs. John M. Losee and William Q. Sturner, of the Brown University Program of Medicine, in a study of fatalities in Rhode Island before and after the repeal of the helmet law, found that helmets may in fact be associated with greater risk of some neck injuries. Their study suggest that helmets are either nonprotective or in fact possibly do contribute to fractured necks and facial bone fractures. This information can be verified by contacting Brown University and requesting from their Medical Library, paper #(R.I. Med. J. 61:333-40, 1978)

\*\*\*\*\*

CDR E.J. Colangelo, MC, USN, Naval Safety Center, compared the aviators helmet to the hangmans noose. He showed how forced applied to the side or front of the helmet will force the opposite edge of the helmet into the base of the skull and spinal cord resulting in serious injury or death. This information can be verified by calling the Naval Safety Center (804) 444-7926.

\*\*\*\*\*

British studies have revealed that so called safety helmets may be killing many riders whose deaths are falsely attributed to head injuries from a crash. Gordon Hadfield, chief medical officier for the British Motorcycle Racing Club, says that the bigger the helmet, the more dangerous it is. Hadfield, an orthopedic surgeon, states that the rotating weight of the helmet rotates the head as a rider falls, causing him to break his neck. In one hospital, 7 riders in 18 months were found to have been killed by their helmets. Most died from broken necks but a few bled to death after jagged fiber-glass pieces stabbed them in the carotid artery or jugular vein.

\*\*\*\*\*

A study conducted under NHTSA contract DOT HS-5-01160 by Professor H. H. Hurt concluded that most motorcycle accidents could be prevented by:

1. Making the other motor vehicle driver aware of the presence of the motorcycle in time to avoid the accident
2. Improving the accident avoidance skills of the motorcycle operator

1982

MOTORCYCLE ACCIDENT STATISTICS by STATE

Fatalities per 10,000 Registrations

Source: Motorcycle Safety Foundation in cooperation with  
the American Motorcyclists Association

National average: 8.13 Fatalities per 10,000 registrations

| STATE         | Fatalities<br>per 10,000<br>Registrations | Helmet<br>Law<br>Everyone | Helmet<br>Law<br>Repealed | Partial<br>Helmet<br>Law | Comments |
|---------------|---|---------------------------|---------------------------|--------------------------|----------|
| Iowa          | 2.93                                      |                           | x                         |                          |          |
| South Dakota  | 3.64                                      |                           |                           | x                        | under 18 |
| Montana       | 3.93                                      |                           |                           | x                        | under 18 |
| Idaho         | 4.12                                      |                           |                           | x                        | under 18 |
| N. Hampshire  | 4.26                                      |                           |                           | x                        | under 18 |
| Wyoming       | 4.55                                      | x                         |                           |                          |          |
| Utah          | 4.63                                      |                           |                           | x                        | under 18 |
| Minnesota     | 4.70                                      |                           |                           | x                        | under 18 |
| *Kansas       | 4.78                                      |                           |                           | x                        | under 18 |
| Massachusetts | 5.07                                      | x                         |                           |                          |          |
| Dist. of Col. | 5.08                                      | x                         |                           |                          |          |
| Michigan      | 5.15                                      | x                         |                           |                          |          |
| Nebraska      | 5.63                                      |                           | x                         |                          |          |
| Missouri      | 5.85                                      | x                         |                           |                          |          |
| Vermont       | 5.96                                      | x                         |                           |                          |          |
| N. Dakota     | 6.06                                      |                           |                           | x                        | under 18 |
| Wisconsin     | 6.06                                      |                           |                           | x                        | under 18 |
| Colorado      | 6.29                                      |                           | x                         |                          |          |
| W. Virginia   | 6.63                                      | x                         |                           |                          |          |
| Viringia      | 6.70                                      | x                         |                           |                          |          |
| Oregon        | 6.75                                      |                           |                           | x                        | under 18 |
| Illinois      | 6.80                                      |                           | x                         |                          |          |
| Oklahoma      | 6.84                                      |                           |                           | x                        | under 18 |
| Indiana       | 7.12                                      |                           | x                         |                          |          |
| Ohio          | 7.14                                      |                           |                           | x                        | under 18 |
| Alabama       | 7.32                                      | x                         |                           |                          |          |
| Pennsylvania  | 7.46                                      | x                         |                           |                          |          |
| Maine         | 7.71                                      |                           |                           | x                        | under 15 |
| N. Carolina   | 7.72                                      | x                         |                           |                          |          |
|               | 8.13                                      | --National Average--      |                           |                          |          |
| New Jersey    | 8.15                                      | x                         |                           |                          |          |
| Kentucky      | 8.20                                      | x                         |                           |                          |          |
| Washington    | 8.27                                      |                           | x                         |                          |          |
| New Mexico    | 8.36                                      |                           |                           | x                        | under 18 |
| Arkansas      | 9.25                                      | x                         |                           |                          |          |
| Maryland      | 9.89                                      |                           |                           | x                        | under 18 |
| Georgia       | 10.01                                     | x                         |                           |                          |          |

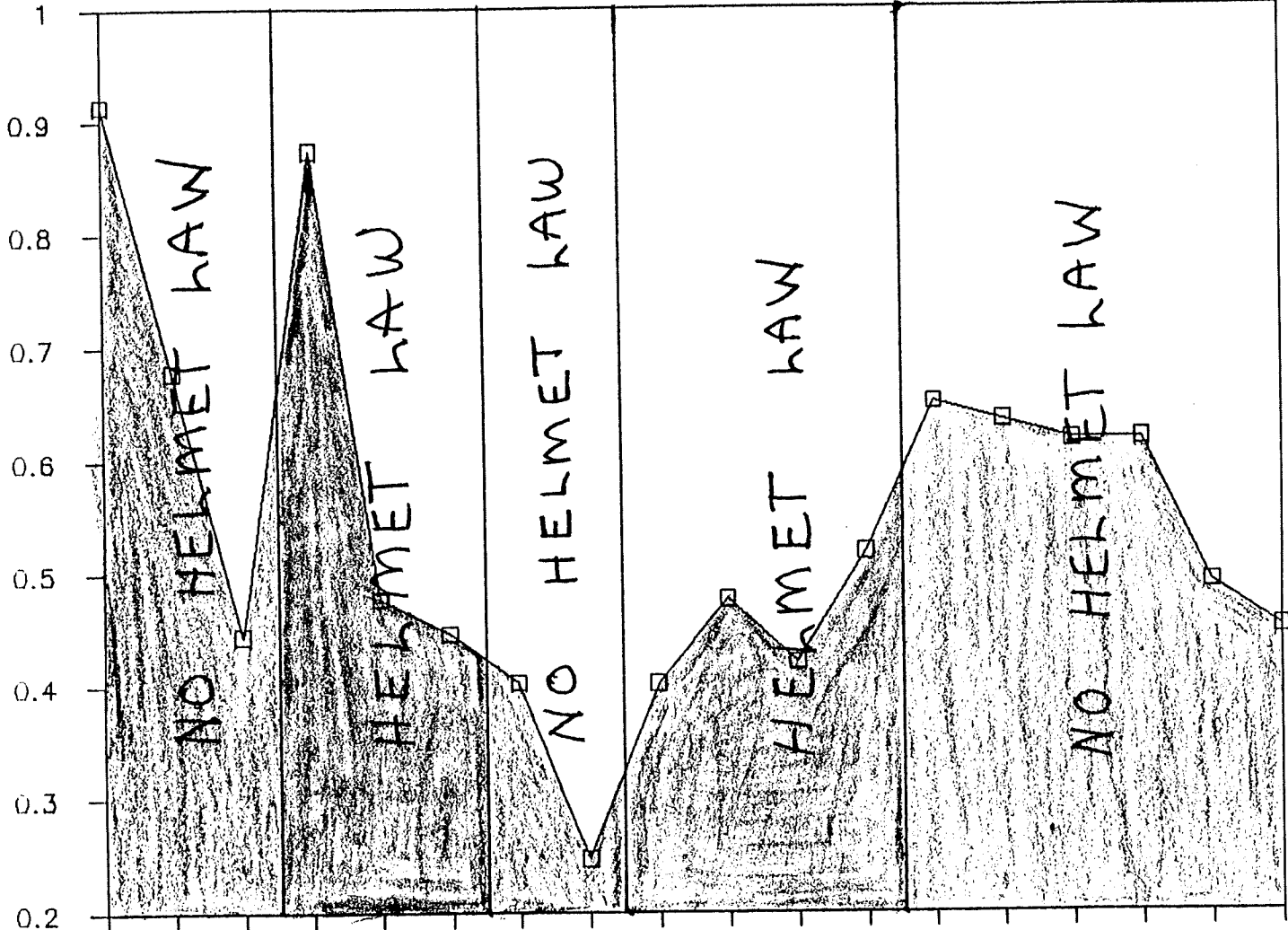
continued on next page

| <u>STATE</u> | <u>Fatalities<br/>per 10,000<br/>Registrations</u> | <u>Helmet<br/>Law<br/>Everyone</u> | <u>Helmet<br/>Law<br/>Repealed</u> | <u>Partial<br/>Helmet<br/>Law</u> | <u>Comments</u> |
|--------------|--|------------------------------------|------------------------------------|-----------------------------------|-----------------|
| Rhode Island | 10.04  |                                    | x                                  |                                   |                 |
| Tennessee    | 10.32  | x                                  |                                    |                                   |                 |
| Arizona      | 10.38  |                                    |                                    | x                                 | under 18        |
| Nevada       | 10.48  | x                                  |                                    |                                   |                 |
| California   | 10.55  | -never had a helmet law-           |                                    |                                   |                 |
| Louisiana    | 11.34  | x                                  |                                    |                                   |                 |
| Hawaii       | 11.48  |                                    |                                    | x                                 | under 28        |
| Connecticut  | 11.63  |                                    | x                                  |                                   |                 |
| Florida      | 11.68  | x                                  |                                    |                                   |                 |
| New York     | 12.04  | x                                  |                                    |                                   |                 |
| Texas        | 13.51  |                                    |                                    | x                                 | under 18        |
| Alaska       | 13.76  |                                    |                                    | x                                 | under 19        |
| Mississippi  | 14.44  | x                                  |                                    |                                   |                 |
| S. Carolina  | 18.55  |                                    |                                    | x                                 | under 21        |
| Delaware     | 21.90  |                                    |                                    | x                                 | under 19        |

# MOTORCYCLE FATALITIES PER

1000 REGISTRATIONS

DEATHS PER 1000 REGISTRATIONS



Statistics from:  
Kansas Department of Transportation

HELMET LAW ANALYSIS



... states *WITHOUT* helmet laws are shown to be *SAFER* than states with helmet laws.

*Old myths about motorcycle safety, however, still need answering.*

**CLAIM:** Helmets are universally recognized as the most significant safety protection for motorcyclists.<sup>1</sup> A cyclist is 3 to 9 times more likely to die in an accident if he is helmetless.<sup>2</sup>

**FACT:** If that were true, non-law states would have a much higher overall fatality rate rather than the 8% lower rate the graph shows.

**CLAIM:** Motorcycle deaths doubled in Colorado after repeal of the helmet law on May 20, 1977.<sup>1</sup>

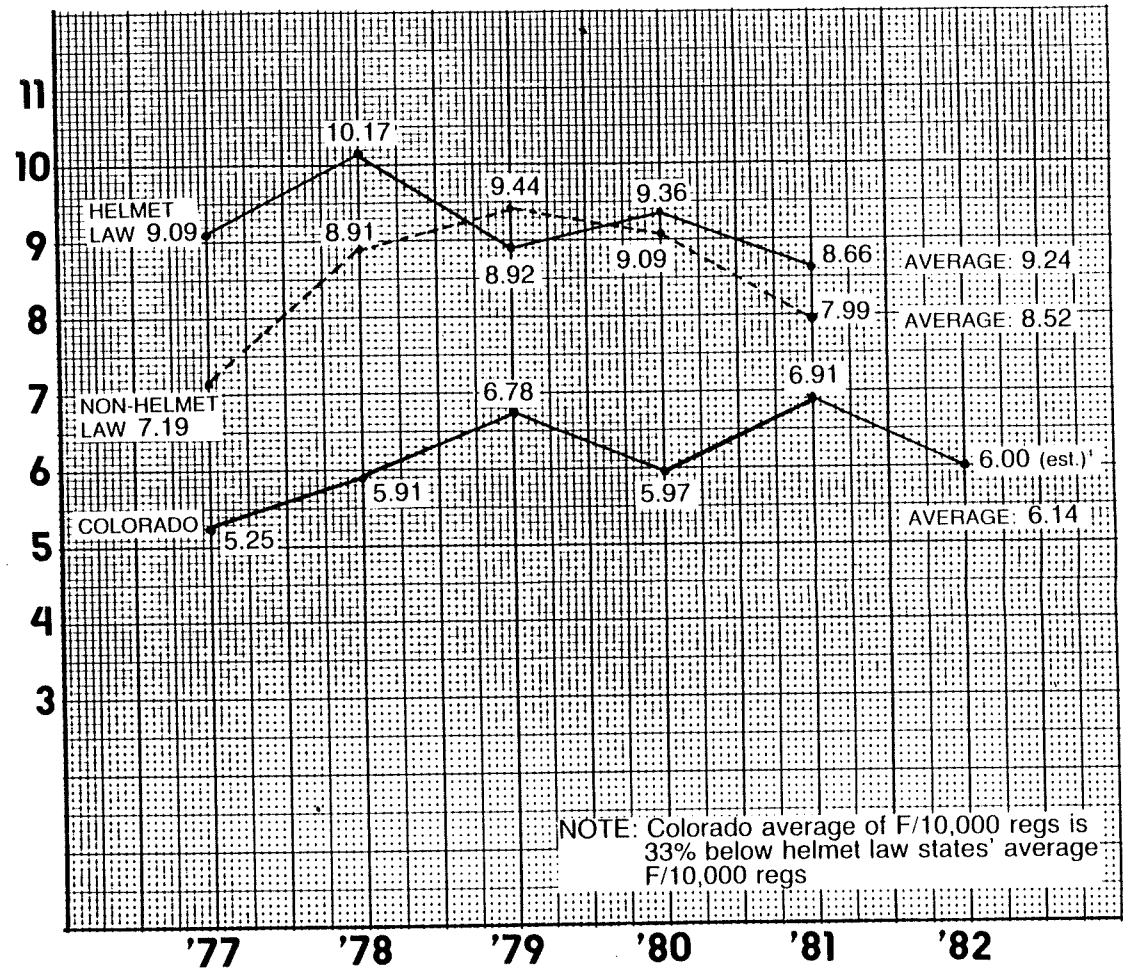
**FACT:** The above statement is completely false. The 1977 cycle fatality toll of 61 is compared to 1976's 36 with claims that helmet law repeal is responsible. But the State Patrol reported 1974 and 1975 tolls of 57 and 49.<sup>3</sup> To forget these years and use 1976 alone to represent all helmet law years is a statistical con game. 1977 and years following have been generally average in Colorado – and much superior to the national record (see graph).

**CLAIM:** Society pays the costs of motorcycle accidents because motorcyclists themselves pay only a small percentage of their medical bills.

**FACT:** False and misleading because our health insurance system is designed to assure that no person, regardless of medical need, has to pay more than a fraction of total costs.

Motorcyclists contribute fully and fairly to their own health care costs and the costs of others. Not only in health insurance premiums, but motorcycling and its industry *gives* far more in economic benefits, taxes and other contributions than it has been falsely charged with "taking".

## Fatalities per 10,000 registrations A comparison between Colorado, Helmet law states and Non-helmet law states



Source: American M/C Assn and M/C Safety Foundation annual compilations of FHWA data cross-checked with states.

Notes:

Helmet-law states – those with a compulsory-use helmet law for all motorcycle users.

Non-law states – those which repealed their compulsory-use laws between 1977-80.

**A REVIEW AND ANALYSIS  
OF GOVERNMENT CLAIMS  
ABOUT THE EFFECT OF  
MOTORCYCLE HELMET LAWS**

The American Motorcyclist Association  
April 1981

## INTRODUCTION

In the Surface Transportation Assistance Act of 1978 the United States Congress instructed the National Highway Traffic Safety Administration (NHTSA) to evaluate the effect of the removal of NHTSA's authority to withhold Federal highway funds from states that repealed their helmet laws. In April, 1980, NHTSA released "A Report to the Congress on the Effect of Motorcycle Helmet Use Law Repeal — a Case for Helmet Use" (herein referred to as the "Helmet Law Report" or the "Report").

The American Motorcyclist Association (AMA) has over 126,000 members and has represented American motorcyclists since 1924. It has always supported voluntary use of motorcycle helmets, but has opposed laws requiring their use on streets and highways. AMA believes citizens can and should be encouraged to use safety devices voluntarily rather than be forced to do so. AMA is committed to making motorcycling safe transportation and recreation. Toward that goal, AMA has prepared this commentary on the Helmet Law Report.

### THE EFFORT TO LINK HELMET LAWS WITH FATALITY RATES

The Helmet Law Report reasons the decline in helmet use, resulting from the removal of NHTSA's power to force the states to have helmet laws, was the most significant factor in the 46 percent increase in motorcycle fatalities between 1976 and 1979. Citing "social and economic harm," NHTSA concludes that state helmet use legislation is in the "national interest"; consequently it asks Congress to "define the responsibility of states in enacting helmet use legislation." (1-5)\*

AMA disagrees with NHTSA's conclusion and recommendation because they are contrary to the Association's position on helmet laws, and because they are not supported by NHTSA's data or arguments. NHTSA has often misconstrued data or acted in absence of data to justify its own preconceived theories.

With the authority given NHTSA by the Highway Safety Act of 1966, all but three states were forced to enact helmet laws by 1975. When NHTSA was deprived of this sanctioning power, state legislatures were urged by motorcyclists to repeal their helmet laws. Though it had nine years during the era of sanction-mandated laws to amass data supporting helmet laws, NHTSA could not convince the legislators that those laws should be retained. As a result, 30 states have repealed their helmet laws for adults. In the April, 1980, Helmet Law Report, NHTSA still recommends helmet laws as a primary solution to motorcycle safety and claims repeals have been the main cause of increases in motorcycle fatalities. But the Report does not support this conclusion. Incomplete and inaccurate in some areas, it cannot stand as a clear statement on the effects of helmet law repeals. This incompleteness is acknowledged in the Report, which states, "NHTSA also agrees that any study using overall fatalities or fatality rates cannot deal with helmet laws in isolation but must consider the effects of other safety programs and other non-safety factors which can

influence fatalities." The Helmet Law Report specifies that motorcycle fatalities are affected by at least three factors: "1. Helmet usage 2. Other safety programs 3. Nonsafety factors (length of riding season, vehicle miles traveled, size, weight, and horsepower of motorcycles, number of riders per motorcycle, and type of roads and weather)." (V-25)

In its response to the *Federal Register*, February 27, 1979, AMA cautioned NHTSA not to ignore factors like the changes in the number of motorcycles registered, changes in the number of operators licensed, the effect of weather and seasonal variation in motorcycle use, or effects of other legislative or market shifts. The extent to which such factors have contributed to changes in fatality rates should have been included in the Helmet Law Report. These factors, while mentioned by NHTSA, were not further considered. So while NHTSA acknowledges that it cannot report on the effect of helmet use in isolation, it proceeds to do so.

NHTSA also admits, "Adequate data are not available for precise comparisons between states of the effect of helmet laws on motorcycle fatality rates because of the inadequacies and lack of uniformity in state accident data collection and reporting systems." (VIII-4) In spite of these admissions, as illustrated in Figure 1, NHTSA places primary importance upon (and uses as a cover for the Helmet Law Report) a depiction of *all* state motorcycle fatality rates (see page 4 herein).

NHTSA's graph seems to provide proof that helmet laws caused the fatality rate to plunge after 1965, only to rise again in 1976 with helmet law repeals. But NHTSA's graph includes not only the states that repealed their helmet laws, but also states that retained them. A comparison of the fatality rates in the repeal states with those that did not repeal for the years 1976-1979 shows the upward fatality trends are not much different for those years (see Figures 2 and 3). Thus, NHTSA ignores that fatality rates increased in states retaining helmet laws at a similar rate to states which repealed helmet laws.

Also, in describing the cover graph, the Helmet Law Report normalized the fatality data by the number of registered motorcycles to distribute the number of fatalities over the increased number of motorcycles. NHTSA concedes, "Although motorcycle miles traveled is a better measure for normalizing fatalities, this data is not available." (II-1) It is unavailable even though NHTSA has been charged with leadership of motorcycle safety since 1966. NHTSA had no mileage data because it had not collected it over fourteen years of helmet laws.

If as NHTSA contends, repeal of helmet laws causes the jump in motorcycle fatalities, then states that have repealed helmet laws should have tremendously higher fatality rates than those that did not. But this is not the case, as illustrated by Table 1, which contrasts the fatality per accident (*f/a* ratio) of repeal and helmet law states.

The slight difference ( $p > .10$ ) between the average *f/a* for the repeal states (3.08) and for the helmet law states (2.79) does not reveal the significant increase that all repeal states should have experienced under NHTSA's "cause and effect" hypothesis. To be the case, all or nearly all repeal states would have experienced a significant increase in their *f/a* ratio, and all or most all

\*refers to pages of the Helmet Law Report)

**TABLE 1**

| States Not Repealing Adult Helmet Law | Fatality per 100 Accident Rate, 1979 | States Repealing Adult Helmet Law | Fatality per 100 Accident Rate, 1979 |
|---------------------------------------|--------------------------------------|-----------------------------------|--------------------------------------|
| Alabama                               | 2.13                                 | Alaska                            | 3.74                                 |
| Arkansas                              | 3.30                                 | Arizona                           | 3.29                                 |
| Florida                               | 2.17                                 | Colorado                          | 2.95                                 |
| Georgia                               | 3.45                                 | Connecticut                       | 2.98                                 |
| Kentucky                              | 3.52                                 | Delaware                          | 3.08                                 |
| Massachusetts                         | 2.55                                 | Hawaii                            | 3.51                                 |
| Michigan                              | 1.75                                 | Idaho                             | 3.89                                 |
| Mississippi                           | 3.04                                 | Indiana                           | 3.50                                 |
| Missouri                              | 2.50                                 | Iowa                              | 2.78                                 |
| Nevada                                | 3.13                                 | Kansas                            | 2.45                                 |
| New Jersey                            | 1.94                                 | Louisiana                         | 2.20                                 |
| New York                              | 2.15                                 | Maine                             | 2.77                                 |
| North Carolina                        | 3.47                                 | Maryland                          | 1.66                                 |
| Pennsylvania                          | 3.26                                 | Minnesota                         | 3.38                                 |
| South Carolina                        | 2.72                                 | Montana                           | 3.36                                 |
| Vermont                               | 2.42                                 | Nebraska                          | 2.17                                 |
| Virginia                              | 2.20                                 | New Hampshire                     | 3.66                                 |
| West Virginia                         | 3.15                                 | New Mexico                        | 2.68                                 |
| Wyoming                               | 4.19                                 | North Dakota                      | 3.29                                 |
| Average:                              | 2.79                                 | Ohio                              | 2.89                                 |
|                                       |                                      | Oklahoma                          | 3.71                                 |
|                                       |                                      | Oregon                            | 4.66                                 |
|                                       |                                      | Rhode Island                      | 3.07                                 |
|                                       |                                      | South Dakota                      | 3.69                                 |
|                                       |                                      | Tennessee                         | 2.23                                 |
|                                       |                                      | Texas                             | 3.40                                 |
|                                       |                                      | Utah                              | 2.52                                 |
|                                       |                                      | Washington                        | 3.03                                 |
|                                       |                                      | Wisconsin                         | 2.88                                 |
|                                       |                                      | Average:                          | 3.08                                 |
|                                       |                                      | *(California 1979 1/2a            | 2.65)                                |
|                                       |                                      | *(Illinois 1979 1/2a              | 2.53)                                |

\* California has never had a helmet law; Illinois law, which was in effect for only nine months, was declared unconstitutional in 1969.

helmet law states would have shown decreases or constancy.

Furthermore, NHTSA's own Fatal Accident Reporting System (FARS) reported in its *Motorcycles, Special Report, 1977*. "There is no significant difference in the fatality rates of states requiring or not requiring the wearing of a motorcycle helmet." (p. 72) It is curious that NHTSA excluded that data from the Helmet Law Report. Perhaps it did so because the 1977 FARS report clearly shows that, over the long term and over all states, helmet laws insignificantly impact fatality/accident and fatality/registration rates.

In the Helmet Law Report NHTSA asserts that the 1/2a ratio test is inexact because of other factors which could influence it. It contends data of head injuries and fatalities from head injuries are more exact. (V-26) NHTSA has based its position on a small number of states that experienced fatality increases, including Kansas, South Dakota, Colorado and Oklahoma. But with this argument NHTSA provides no "control" (non-repeal) state with which in-depth comparisons can be made on the same set of variables. This dilutes NHTSA's objectivity. Table 1 provides both repeal and non-repeal information.

The Helmet Law Report cites a study by the Planning and Research Department of the Washington State Patrol to prove that non-helmeted riders are more apt to be seriously injured than those using helmets. However, it ignores a 1976 study by the same department stating the

state's ten-year helmet law "failed to conclusively show that this requirement by itself positively disturbed motorcycle injury and/or fatal accident rates."<sup>2</sup>

NHTSA also cites a 1979 Utah study as support for its position, selecting out a few cases for three years. NHTSA ignored that study's conclusion, "motorcycle injury accidents are not over-represented as a proportion of registered vehicles" and "average fatality rates per number of registrations over a ten-year period is almost identical for motorcycles and passenger cars."<sup>3</sup> The data implies the helmet law has not had the effect NHTSA would suggest.

### THE ATTEMPT TO PORTRAY THE MOTORCYCLIST AS A "SOCIAL BURDEN"

The Helmet Law Report contends, "the failure of many motorcyclists to wear helmets places substantial economic burdens on society through insurance, medical care and welfare benefits, and to the extent possible, these costs should be reduced." While the Helmet Law Report does not state the costs of this "social burden," it provides a vague estimate of "many millions." (VI-3)

The estimated social cost of all traffic accidents is \$50 billion a year, according to the Motor Vehicle Manufacturers Association. Thus, the "social burden" of injured motorcyclists is a small percentage of the cost of all traffic accidents.

The Report attempts to prove that helmet law repeals have increased medical costs, using data from Craig Hospital in Colorado. But according to Dennis J. O'Malley, executive director of that hospital's Rocky Mountain Regional Spinal Injury Center, Inc., "Spinal cord injuries and brain injuries occur with much greater frequency as a result of automobile accidents than any other cause. In general, our experience would suggest that the cost of care for spinal cord and brain injury is not significantly different because of the cause of injury."<sup>4</sup>

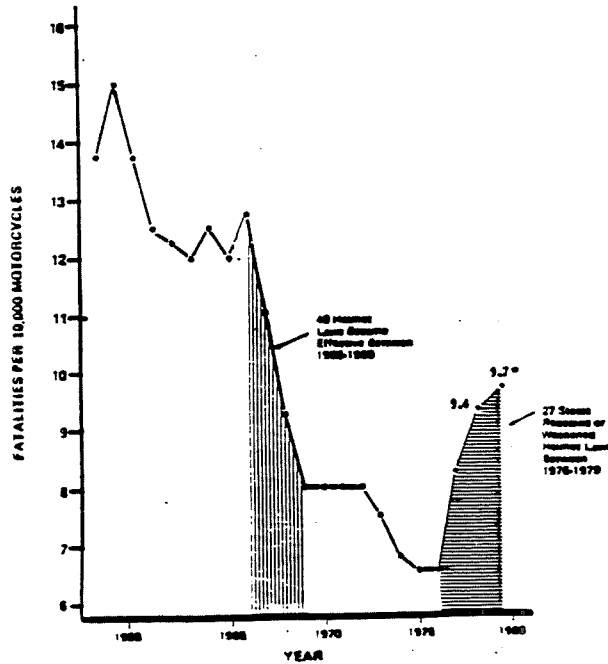
O'Malley told AMA that 51.9 percent of all spinal disabilities are related to transportation accidents. Of this group, however, motorcycle and bicycle accidents account for only 4.6 percent of the 1978 total and 4.2 percent of the 1979 total. As shown in Figure 4, the injured motorcyclist cannot be depicted as an unusual or extraordinary public burden.

South Dakota, one state studied by NHTSA, reported in June, 1980, that it compared medical costs plus others such as job-related losses for helmeted versus unhelmeted riders. By NHTSA's own admission, the "driver helmet use variable was not found to have a statistically significant relationship with cost estimates or [the] days disabled variable." Indeed, the presence of a helmet law in South Dakota would apparently not change this situation.

The Helmet Law Report addresses motorcyclists as though they are the only group voluntarily risking their safety. "Each driver in this country accepts reasonable limitations on how he or she may use the roads. Because of the substantial economic burden that society incurs for head injuries to unhelmeted motorcyclists helmet use is a reasonable limitation which motorcyclists should accept as a condition for using their vehicles on the public

(text continued on page 6)

# A REPORT TO THE CONGRESS ON THE EFFECT OF MOTORCYCLE HELMET USE LAW REPEAL -- A CASE FOR HELMET USE



APRIL 1980

U.S. Department of Transportation  
National Highway Traffic Safety Administration

FIGURE 1

NHTSA has widely publicized — including on its Helmet Law Report cover — a graph apparently linking declines and increases in motorcycle fatalities with presence and absence of mandatory helmet laws, shown above in Figure 1.

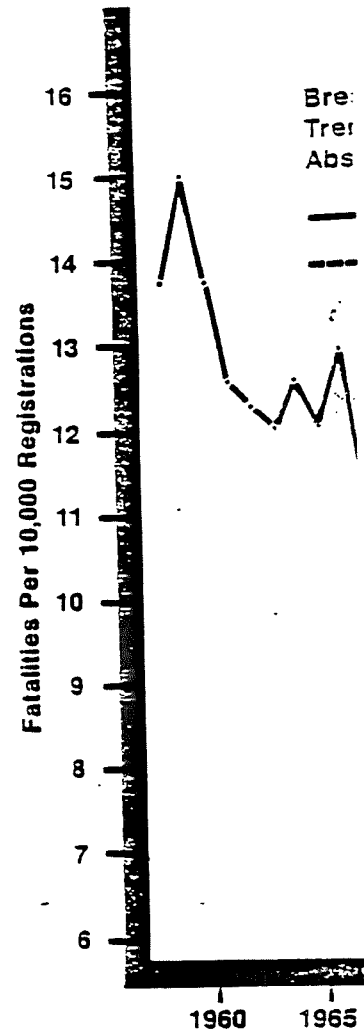
However, while NHTSA's graph reveals alarming changes in fatality rates, it fails to distinguish between states which have or don't have mandatory helmet laws.

When the states repealing or weakening helmet laws between 1976 and 1979 are broken out from states retaining their laws, as shown in Figure 2 above, there is no appreciable difference. The law states (solid line) show fatality rates rising as rapidly as the repeal states (broken line).

This comparison is more clearly seen in Figure 3, where the graphs focus on only the four years in question. Also, Figures 2 and 3, using accurate 1979 data, reveal that NHTSA's projection of even higher fatalities in 1979 was wrong. Both in repeal and law states, fatalities per 10,000 registrations declined, further calling into question NHTSA's contention that more repeals would bring more deaths.

NHTSA has focused on head and spinal injuries among motorcyclists in an attempt to argue that mandatory protection of head and neck may be justified. However, data available from the Rocky Mountain Regional Spinal Injury Center, displayed in Figure Four, show that two-wheeled vehicles, including bicycles and motorcycles rank well below other causes of head and neck injury. While other forms of transportation are the cause of nearly half the head and neck disabilities, two-wheeled vehicles account for less than five percent.

FIGURE 2



42.2%

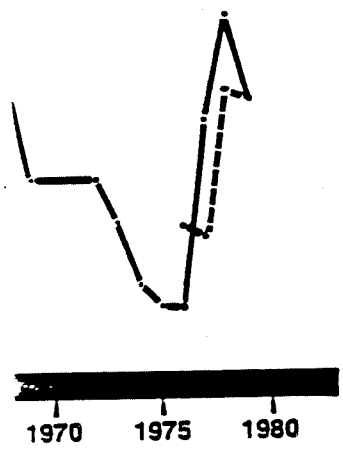
Motor vehicles  
not including  
motorcycles

13.6%

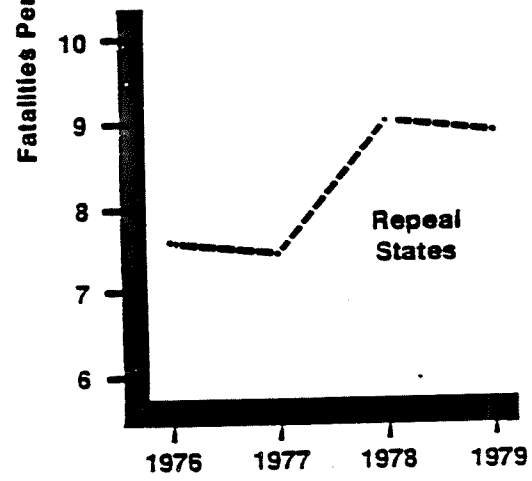
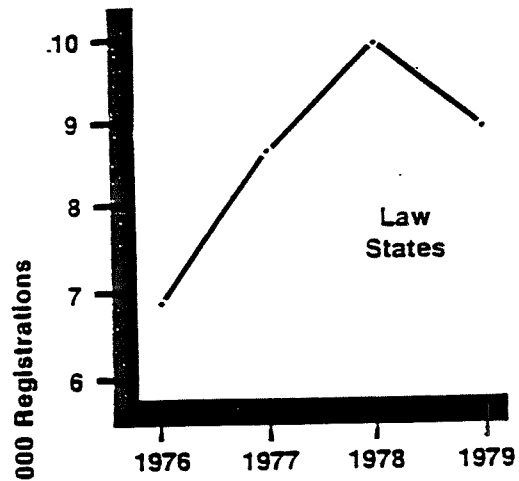
Pathology  
Etiology

out of Fatality  
 By Presence and  
 ce of Helmet Laws

— Law States 1976-79  
 -- Repeal States 1976-79

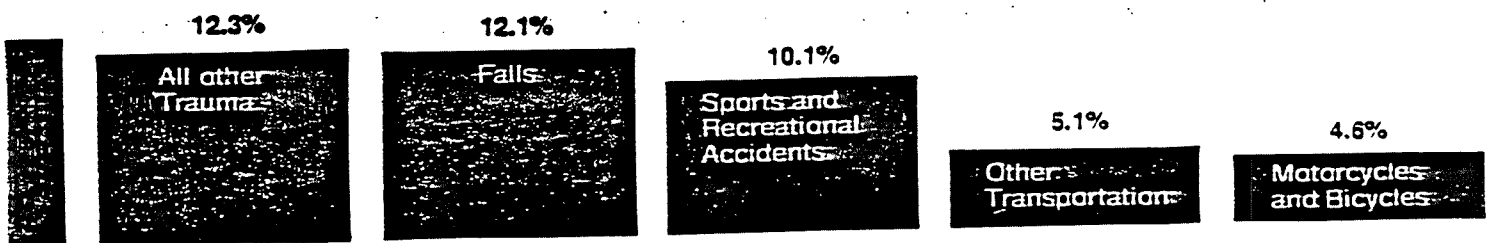


**FIGURE 3**



**FIGURE 4**

Causes of Head and Spinal Injuries, 1979



(continued from page 3)

roads." (VIII-3) This implies that motorcyclists should accept helmet laws because of their high social burden potential. But as Table 2 shows, the rate of head injuries to non-helmeted riders is less than the rate for unrestrained auto occupants.

**Table 2  
FATAL AND NON-FATAL INJURIES BY BODY LOCATION**

|                | Unhelmeted<br>Motorcyclist, %* | Unrestrained Auto<br>Driver, %** |
|----------------|--------------------------------|----------------------------------|
| Head           | 24.9                           | 39.6                             |
| Face           | 6.1                            | Not Listed                       |
| Neck           | 4.3                            | 7.7                              |
| Chest          | 2.7                            | 12.7 (thorax)                    |
| Abdomen        | 2.3                            | 2.7                              |
| Pelvis         | 2.6                            | Not Listed                       |
| Back           | Not Listed                     | Not Listed                       |
| Extremities    | 46.6                           | 37.3                             |
| TOTAL          | 36.6                           | 40.0                             |
| Head/Face/Neck | 31.0                           | 47.3                             |

\*Helmet Report (V-3) Average of Colorado, Oklahoma, South Dakota studies

\*\*National Crash Severity Study 1979. Unpublished, by National Center for Statistics and Analysis, NHTSA.

While rates of head injury are even less for motorcyclists than for auto drivers, there is little outcry for compulsory seat belt laws by NHTSA. Why, then, do only motorcyclists require self-protection laws?

### THE EFFORT TO VILIFY MOTORCYCLISTS AS IRRESPONSIBLE CITIZENS

In the Helmet Law Report NHTSA claims injured motorcyclists neglect hospital and medical costs: "A sizeable portion of these expenses go unpaid." (VI-12) While the Report claims 32.2 percent of the bills remain unpaid, it does not specify what portion of that amount is due to unhelmeted riders and contains no comparison to the unpaid social burden imposed by injured automobile drivers. (VI-9) Consequently, we cannot determine if injured motorcyclists neglect payments to the extent necessary for NHTSA to argue a helmet law, especially in view of NHTSA's failure to press for seat belt laws. This entire section of the Helmet Law Report is a slur against motorcyclists and is irrelevant to the question of helmet use.

### AN UNSUPPORTED DISMISSAL OF VOLUNTARY HELMET USE

While convinced of the inadequacies of NHTSA's data and reasoning, AMA agrees that under almost every circumstance riders should wear helmets — but voluntarily. But NHTSA concludes that voluntary helmet use campaigns are ineffective: "voluntary helmet use promotion programs are extremely unlikely to achieve high rates of helmet use found in helmet law states and voluntary use programs, which at the present time are only marginally effective, will be the most expensive programs ever initiated for motorcyclists." (I-4)

Expense is a curious motive for discouraging voluntary helmet use programs. Compared to NHTSA's single attempt to promote voluntary helmet use through the limited distribution of a pamphlet denouncing the major complaints voiced by motorcyclists about helmets,

almost any cost could be considered expensive. Prior to the Helmet Law Report NHTSA had spent essentially no money on voluntary helmet use programs.

Voluntary helmet use programs need not be expensive. Specifically, NHTSA failed to acknowledge the results of the voluntary use campaign conducted in Maryland by the Motorcycle Safety Foundation. As described in the Foundation's newsletter, "MSF On The Move," and in its report on the Maryland Voluntary Helmet Use Campaign November, 1979, voluntary helmet use increased from 50 to 55 percent after repeal of the state's helmet law to as high as 68 to 82 percent immediately after the campaign. Safety messages were mailed to motorcyclists urging them to use helmets and common sense. The program cost \$9,000, or just a dime for each of the 87,000 registered motorcycles in the state. The rate of voluntary use of helmets for the initial period examined exceeded that of voluntary seat belt use by 400 percent. It should be noted that since the campaign's end, the rate has returned to something under 60 percent, lower than during the campaign, but higher than NHTSA's observations of 50 percent in Colorado, Kansas and South Dakota, where voluntary use campaigns have not been conducted.

NHTSA acknowledges in the Helmet Law Report that it has funded a study by Applied Science Associates (ASA)<sup>5</sup> to "develop educational materials and strategies to encourage voluntary use of safety helmets." NHTSA prejudices the results on the basis that such messages have been "quite unsuccessful in other highway safety efforts, such as seat belt usage." (VII-3) Though the findings of the study were available when the Helmet Law Report was submitted, NHTSA did not highlight them, perhaps because they undermined the agency's history of declarations against the viability of voluntary helmet use programs.

In its survey of over 10,000 randomly selected motorcyclists, ASA determined that they possess distinct but independent attitudes. One of these groups of attitudes was statistically isolated and called "resistance to regulation." The ASA study described this attitude as suggesting "that a campaign to increase voluntary helmet use, rather than a re-introduction of helmet laws, would be prudent at this time. Additionally it would appear that the source selected to deliver safety messages should not be directly associated with a regulatory agency."<sup>5</sup>

Thus, it may be wise for NHTSA to fund private development of voluntary helmet use materials because of this "resistance to regulation," and to reduce this backlash in the motorcycle community by relaxing its law-only stand.

The ASA study also addressed NHTSA's claim, "many young riders consider it macho not to wear a helmet." (VIII-3) The study shows only 1.4 percent of the respondents agreed with the statement, "Helmet usage is a sign of cowardice," while 88.4 percent expressed strong disagreement. Only 3.2 percent of the surveyed riders thought the "wind in the hair" argument was a reason for not wearing helmets. That NHTSA would place credence in the "macho" argument prior to ASA's having an opportunity to explore that concept is just one indication of why NHTSA lacks credibility among motorcyclists.

Furthermore, when AMA asked NHTSA how it arrived at this belief, NHTSA replied in a letter that it was based on staff opinion of how motorcyclists perceive themselves. Again, we see assumptions which reveal more about NHTSA's attitudes than about the subject at hand.

## **MOTORCYCLISTS GENERALLY DISAPPROVE OF HELMET LAWS**

NHTSA lists ten studies to support its statement, "random surveys which measured motorcyclists' opinion generally reported a substantially lower portion of motorcyclists (than members of the general public) which favor helmet laws 40 to 81 percent." (IV-24) The Helmet Law Report concludes motorcyclist opinion is "about equally divided" on helmet laws. (IV-24)

However, several of the studies can hardly be described as "random." The Idaho study surveyed motorcyclists *after* they had been in accidents. The Virginia study, claiming 81 percent of motorcyclists favored helmet laws, explained its methodology nowhere in its fifty pages.

Ironically, the NHTSA-funded ASA study, which was conducted randomly over a large sample of riders, revealed that 77.9 percent of motorcyclists did not want helmet laws. Those results parallel two surveys AMA has made of its members which revealed that an average of 74.8 percent of them were against helmet laws. Clearly, NHTSA's claim that motorcyclists favor helmet laws is false.

## **NHTSA'S CONTRADICTIONARY POSITIONS**

It is ironic that NHTSA calls seat belt laws "politically unfeasible" because of drivers' opposition, while the agency maintains helmet laws are the answer to motorcycle safety. This is the case even though, while motorcyclists overwhelmingly disapprove of helmet laws, 400 percent more riders use helmets voluntarily than auto operators use seat belts.

Concern over head injuries should apply not just to motorcyclists, but to automobile occupants as well. The Helmet Law Report attempts to indicate that head injuries are an over-represented cause of motorcyclist fatalities, especially if the rider is unhelmeted. (V-3) While the Report again offers no comparison, Table 2, contrasting types of injuries to unhelmeted motorcyclists to those of unrestrained automobile operators, reveals head injuries alone constitute a smaller proportion for motorcyclists than for automobile operators.

NHTSA's contradictory positions stem from voluntary use rates of safety devices. Seat belt use, as mentioned, recently dropped to an all-time low of 11.9 percent, while voluntary helmet use remains at over 50 percent. With this consideration, it is hard to understand why NHTSA has not suggested mandatory helmet laws for automobile occupants.

## **AMA'S CONCLUSIONS AND RECOMMENDATIONS**

This commentary began by criticizing NHTSA for its historical misuse of data to support its preconceived ideas. This criticism applies specifically to the Helmet Law Report. When Congress asked NHTSA to report on

the effect of repealing helmet laws, it was asking for preordained conclusions. Politically, NHTSA had no other choice.

It may be noted, however, that since the publication of the Helmet Law Report, NHTSA may be acting in accord with its own data in the ASA study showing the unpopularity of helmet laws and the popular demand for rider education and improved licensing. The agency has recently published program papers directing states to adopt comprehensive motorcycle safety programs, including rider education and improved licensing. AMA sees this orientation as a farsighted, acceptable move toward motorcycle safety.

AMA agrees that the disturbing increase in motorcycle fatalities should be addressed. Congress should be applauded for the concern that prompted the Helmet Law Report. However, it should not accept NHTSA's recommendations regarding helmet laws for only one group of road users experiencing increases in fatalities. Rather, Congress should look at how it addressed the central question in 1975. It concluded then that the choice to enact helmet laws should be left to the states.

AMA agrees with the Helmet Law Report that the development of comprehensive motorcycle safety programs in the states has not kept pace with the growth of motorcycle use. (VIII-5) AMA believes NHTSA's singular dogmatic reliance on helmet laws for so many years caused that failure. Based on that record, it would be unwise to reinstate NHTSA's power to require helmet laws.

AMA encourages voluntary use and agrees with NHTSA's statement, "Safety helmet use is an important safety measure, but it is only one element of a comprehensive motorcycle safety program. Each state should have a motorcycle program which encompasses rider education, operator licensing, enhanced vehicle and rider conspicuity, vehicle standards, vehicle inspection, motorist awareness of motorcyclists, and helmet use. (VIII-5)

AMA therefore recommends that NHTSA abandon its campaign for reinstatement of unpopular helmet laws; that NHTSA truly cooperate with private organizations to develop high quality voluntary use educational materials; that NHTSA work with speed, diligence, and leadership to create a nationwide uniform system of meaningful and accurate motorcycle data — data NHTSA acknowledges does not exist; and that NHTSA aid the states in establishing rider training and licensing programs and other necessary aspects of effective motorcycle safety programs.

### **FOOTNOTES**

- <sup>1</sup>The General Accounting Office has recently made similar allegations (refer to GAO Report CED-80-87, July 28, 1980)
- <sup>2</sup>Paulrud, S.P. and Kehl, S.E. "An Evaluation of Washington State's Motorcycle Safety Laws Effectiveness." State of Washington Department of Motor Vehicles, April 1976, p. 11
- <sup>3</sup>Utah Department of Public Safety "Analysis of Motorcycle Safety in Utah." Utah Highway Safety Division, November, 1975, p. 8
- <sup>4</sup>Letter from O'Malley to AMA, June 19, 1980
- <sup>5</sup>DOT Contract No. DOT HS-8-02090.
- <sup>6</sup>Thackray, Richard M. and Green, John C.T. "Development of Safety Helmet Educational Materials." Proceedings, International Motorcycle Safety Conference, Motorcycle Safety Foundation, May, 1980, p. 444



GARY WINN SENT THIS LETTER TO ALL THE MEMBERS OF THE SENATE PUBLIC SAFETY COMMITTEE. ABATE SENT COPIES OF IT TO ALL SENATORS.



P.O. Box 141, Westerville, Ohio 43081

Telephone (614) 891-2425 Telex 245392



January 23, 1985

Georgia Senate  
State Capitol  
Atlanta, Georgia 30334

I have recently read the Senate Public Safety Committee Report on the Motorcycle Helmet Law Repeal (HB 723; Jackson). The report is fairly comprehensive, but fails short of being an objective analysis of the issue at hand. I would like to share with you three criticisms.

First, the report states in the introduction (page 1, paragraph 3) that "from 1976 to 1979, motorcycle fatalities rose nationally by 46%". In fact, motorcyclist fatalities continued to rise through 1980, totalling a 58% increase, something that should have concerned every professional in highway safety. The committee report attempts to infer that the increase was due to motorcycle helmet law repeals. In fact, this is not the case: fatalities in repeal states did go up, but, according to a statistical study performed by our staff, fatalities also increased in helmet law states. Georgia, increased 114%, in full presence of a helmet law. If the report is correct (that helmet laws are associated with fatalities) then, the presence of Georgia's helmet law could be responsible for the observed increase in deaths. The point to be made is that fatalities have gone up until about 1980, and then have gone down since then in helmet law and non helmet law states alike. It is patently incorrect, and indeed presumptuous, to assume that any single cause can have these observed results.

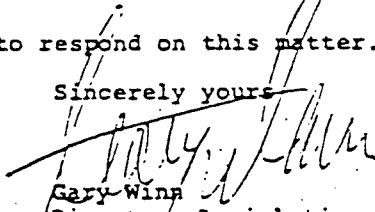
The committee report also highlights selected studies showing states with increases in fatalities, but it is equally easy to show helmet-law states that had similar astounding increases in full presence of helmet laws, such as in your own state. The committee report does not highlight any helmet law fatality increases. As we have repeated in committee hearings for this bill, it is unwise to use any statistical data that supports only one side and fails to indicate what happened on the other side during the same period.

Next, the committee report states on page 2 that "the Supreme Court upheld mandatory helmet-use laws in 1978". In fact, the Supreme Court refused to overturn helmet-use laws on five occasions, most recently in 1976 (Simon vs. Sargent). Indeed the high court never has elected to hear these cases at all, but only affirmed the lower court's decision.

Finally, the committee report fails to properly characterize this association's position on motorcycle helmets. On page 10, the report says, "The AMA requires helmet use in all sanctioned racing events." While this is true, it is incomplete and ambiguous. It is also true that those rules are made by racers, who democratically choose them on rules committees. The AMA membership at large (non-racers) overwhelmingly rejects helmet laws and approves voluntary helmet use. It is unfair to posture this Association's position as is stated in the committee report. In fact, those who make the rules for racers and non-racers alike decide for themselves, much like the slogan, "Let those who ride decide."

Thank you for the opportunity to respond on this matter.

Sincerely yours

  
Gary Winn  
Director, Legislative Affairs  
Government Relations

State of Wisconsin  
1978 Study of Motorcycle Accident Victims

Background: Senate Bill #49 (Helmet Law Repeal) passed by Assembly and then was vetoed by Governor Schreiber. Assembly overrode Governor's veto and repeal became effective March 19, 1978. Governor directed DOT to produce study of helmet use to resolve controversy.

|                                       | Helmet Worn                              | No Helmet Worn                             |
|---------------------------------------|--|--|
| Fatalities Due to Head Injury<br>Only | 29.4%<br>(of All Helmeted<br>Fatalities) | 28.9%<br>(of All Unhelmeted<br>Fatalities) |
| Head Injuries                         |  |  |
| Incapacitating Injury                 | 37.93%                                   | 40.68%                                     |
| Non-incapacitating Injury             | 45.62%                                   | 44.75%                                     |
| Possible Injury                       | 16.45%                                   | 14.56%                                     |

State of Wisconsin  
 Dept. of Transportation  
 Division of Motor Vehicles  
 4802 Sheboygan Avenue  
 Madison, Wisconsin 53702

## Follow-up on Repeal of Helmet Laws.

Contrary to predictions repeal of helmet laws has not been accompanied by an increased mortality among motorcyclists. Before reviewing the statistics of the last seven years let me briefly mention some helmet advocates and pertinent pronouncements.

A recent Motorcycle Safety Foundation pamphlet states "... head injuries account for the majority of motorcycle fatalities ..." A conclusion from a Conference of the American Medical Association in Washington, D.C., April 14, 1977 was "... the cyclist increases enormously his chances of lessening injuries and staying alive if he wears a helmet." To those august voices may be added the American Association of Automotive Medicine, the U.S. Department of Transportation, the Medical Society of the State of New York and such individuals as John J. Dowling, M.D., M.P.H., Nassau County Commissioner of Health, John D. States, M.D., Professor of Orthopedics, University of Rochester, and Charles F. Livingston and Joan Claybrook both of the National Highway Traffic Safety Administration. Quoting the last a leading newspaper editorial in 1980 said "the death toll has soared 46 per cent in the last four years as 28 states have repealed or relaxed those laws... a motorcyclist who chooses not to wear a helmet triples the risk of fatal injury in an accident. That's a fact borne out by national statistics..."

Over the last few years statistical analyses of motorcycle accidents and fatalities have been shunned by all of the above persons and organizations. The tumultuous and harmonious chorus has yielded to a sepulchral taciturnity. None has sought to uphold or rather, to rescue, his credibility.

A gigantic experiment has been underway since 1976. Each year 50 states have churned out data which have been collated by the Motorcycle Safety Foundation and the American Motorcyclist Association. I cannot believe these and other organizations have not already added up the figures and compared accidents and fatalities in helmet states with those in repeal states. Having solemnly worshipped at the Altar of the Safety Helmet they undoubtedly find the results somewhat embarrassing.

The public should no longer be content to accept preliminary studies and small selective samplings as scientifically valid in demonstrating the

consequences of riding without a helmet. The time has passed when so-called authorities may freely and recklessly predict tragic possibilities and thousands of unnecessary deaths following repeal of helmet laws.

Let's look at the overall picture of what has happened with abandonment of helmet-wearing by a substantial minority of motorcyclists.

It may be assumed that close to 100 per cent of road-riding motorcyclists wear a helmet in the helmet states and one is still used by 40 to 60 per cent of motorcyclists in repeal states. The data include all 50 states and the District of Columbia from January 1, 1977 to Dec. 31, 1983. Excluded are those years when a state repealed its helmet law on a date other than Jan. 1, since it is not known how many accidents and fatalities occurred before and how many after the repeal date. The figures were provided by the states and are available to all; the arithmetic is mine and is I believe correct.

During the 7 year period in the repeal states there were 22,574,544 motorcycle registrations, 684,343 reported accidents and 19,556 fatalities. For the helmet states the respective figures are 13,619,393 registrations 484,559 reported accidents and 12,004 fatalities.

Using 1 million registrations as a common denominator there were in repeal states 30,315 reported accidents and 866 fatalities compared with 35,579 reported accidents and 881 fatalities in helmet states. The U.S. Department of Transportation believes that accidents are under-reported in helmet wearers. Nevertheless these figures indicate that accidents are substantially (14.8 per cent) more common in the helmet states, which is what experienced motorcyclists have suspected for years.

The fatality rates per million registrations are probably not significantly different during this 7 year span in the two groups.

The 1983 figures however indicate a distinct disadvantage to wearing a helmet. In the repeal states there were 3,627,690 registrations, 102,164 reported accidents and 2,749 fatalities compared with 1,856,862 registrations, 66,257 reported accidents and 1,647 fatalities in the helmet states.

On the basis of 1 million registrations there were in the repeal states in 1983 28,162 reported accidents and 758 fatalities compared with 35,682 reported accidents and 887 fatalities in the helmet states.

A gradual decline in motorcyclist fatalities in relation to registrations has occurred since 1978.\* This decrease is probably attributable to educational efforts on the part of the Motorcycle Safety Foundation and the American Motorcyclist Association together with the widespread campaign against driving while intoxicated.

It is conceivable from the statistics reported herein that the mandatory use of helmets may militate against the downward trend in accidents and fatalities.

Motorcycling remains dangerous and lethal. The inexperienced, the unwary, the poorly coordinated and those impaired by alcohol and/or drugs are particularly vulnerable. A helmet offers little protection but probably contributes to the likelihood of an accident, the main reasons being discomfort and fatigue, especially in hot weather, diminished peripheral vision, the appearance of anonymity and a false sense of security, all of which have been reported by motorcyclist groups but denied by those who promote helmet use.

Mandatory helmet laws have plainly failed to reduce the carnage on the highways. It remains for licensing procedures, education and training of motorcycling tyros to improve the record.

*A. Ranald Mackenzie*

A. Ranald Mackenzie M.D.

Past President, Motorcycling Doctors Association.

51 Moneola Ave.

Point Lookout, N.Y. 11569

SECTION II

ARGUMENTS AGAINST S.B. 156

The Public Burden Theory

## ARGUMENTS AGAINST S.B. 156

### The Public Burden Theory

CLAIM: Society pays the cost of motorcycle accidents victims because motorcyclist themselves pay only a small percentage of their medical bills.

FACT: This is false and misleading because our health insurance system is designed to assure that no person, regardless of medical need, has to pay more than a fraction of the total costs.

Motorcyclist contribute fully and fairly to their own health care costs and the costs of others. Not only in health insurance premiums, but motorcycling and its industry "gives" far more in economic benefits, taxes and other contributions than it has been falsely charged with "taking".

The average motorcyclist in Kansas rides approximately 7 months a year and travels 5,000 miles as compared to the average automobile owner who drives for 12 months and averages 12,000 miles. Yet, with the differences in time and mileage, the motorcyclist must have the same insurance as an automobile owner.

In 1980, South Dakota was studied by the National Highway Traffic Safety Administration. By their (NHTSA) own admission the "helmet use variable was not found to have a statistically significant relationship with cost estimates or (the) days disabled variable".

ABATE of Kansas, due to the aforementioned reasons, would very much appreciate your "NO" vote on S.B. 156.

SECTION III

ARGUMENTS AGAINST S.B. 156

Constitutional Issues



## COURT DECISIONS

In the case of THE PEOPLE OF THE STATE OF ILLINOIS vs Donald Fries, Supreme Court of Illinois, May 28, 1969, the court stated, "The limited question presented is whether the authority of the State, acting under its police powers, permits the regulation of the person of a motorcyclist by requiring the wearing of protective headgear. Appellant has argued that the statute should be struck down as legislation against a class. Indeed, the legislature has made a classification among the operators of motor vehicles, but a classification of one sort or another is frequently essential to regulatory legislation, including quasi-criminal statutes. The critical query is whether or not the classification is unreasonable and invidious. Our statute requires both the operator and each passenger on a motorcycle to wear protective headgear. In the case of a passenger it is clear that the "protective headgear" serves no function of safeguarding the motoring public. The helmet would presumably prevent cranial injuries or lessen their severity for the wearer, but its effect on other motorists is most obscure. The appellant, however, was operating the motorcycle when arrested. In order to determine the purpose and function of the statute in regard to an operator, the entire statutory plan must be considered. The subsection immediately following that under which the appellant was charged sheds light on the legislative intent. That subsection reads as follows: "In addition, the operator of a motorcycle and every passenger thereon shall be protected by glasses, goggles or a transparent shield." There is a distinct possibility that flying insects or wind-blown objects could strike the operator and cause him to lose control of his motorcycle. Legislation intended to protect persons in other vehicles from the danger created by a motorcycle out of control is within the police power of the State. The Illinois statute contains 2 requirements; "protective headgear" and a transparent shield of goggles. The question of the constitutionality of a requirement that a motorcyclist wear goggles or that the vehicle be equipped with a transparent shield is not before us. Such a provision is meant to insure that an operator's vision will not be impaired and that the public safety will not be jeopardized. When we consider both of these sections together, the legislative intent becomes clear. The manifest function of the headgear requirement in issue is to safeguard the person wearing it--whether it is the operator or a passenger-- from head injuries. Such a laudable purpose, however, cannot justify the regulation of what is essentially a matter of personal safety. We express no opinion on the requirements of subsection (b) and have referred thereto merely for purposes of accurately construing the legislative intent of subsection (a) under which the appellant was charged. We hold that portion of the statute under which appellant was convicted to be beyond the police power of the legislature, in violation of section 2 of Article II of the Constitution of the State of Illinois and of the XIV amendment of the Constitution of the United States, and therefore unconstitutional. Accordingly that conviction is reversed."

COURT DECISIONS (cont.)

The Attorney General of New Mexico, Boston E. Witt, stated "In New Mexico, a municipality may adopt an ordinance to provide for the safety preserving the health, promoting the prosperity, improving the morals, order, comfort and convenience of the municipality and its inhabitants, provided the ordinance is not inconsistent with the laws of New Mexico. Does this statute authorize the adoption of the proposed ordinance? We do not think so. The Constitution of New Mexico, Article II, Section 4, guarantees to men the right to seek and obtain safety and happiness. This section means that each person may seek his safety and happiness in any way he sees fit so long as he does not unreasonably interfere with the safety and happiness of another. It cannot be questioned that requiring a motorcycle rider to wear a helmet will render him less likely to be injured. However, if a motorcycle rider chooses to pursue his personal happiness by riding without a helmet it cannot be said that his choice will injure his fellow man. Therefore, the adoption of the proposed ordinance as it stands is an unconstitutional restriction upon a persons civil liberty, for the ordinance seeks to restrict his liberty when such restriction will not result in a benefit to the public at large or tend to preserve the safety of the community. It must be pointed out that since the evil sought to be remedied is the protection of the youthful rider the municipality might Constitutionally require all motorcycle riders under a certain age to wear safety helmets, so long as the grouping does not include adults. This would be a valid exercise of the power of parents patrie, which is the inherent right of the state to safeguard its future by protecting its youth. However, as the ordinance now stands it would be applicable to adults as well as children and would therefore be unconstitutional if adopted."

\*\*\*\*\*

The Attorney General of Oklahoma stated, "The basic premise that man is the captain of his own ship and the master of his fate has long been followed. The 19th century English philosopher, John Stewart Mill well stated this maxim in his essays. This is consistent with the time-honored legal maxim: "Sic utere tuo ut alienum non laedas." (So use your own that you do not injure that of another.) This doctrine has long been followed in state and federal law and has been the basis for a number of recent decisions involving helmet laws. The argument of an enforcement problem cannot be urged to sustain the legislation now under consideration. The only theory left then for declaring the present helmet law constitutional is to find some direct relationship between it and the public health, safety and welfare. There are reported cases found dealing with the constitutionality of helmet laws. Four of these cases arose in New York with two deciding in favor of constitutionality and two deciding against. In an April 30, 1968 decision, the Court of Appeals of Michigan declared their helmet unconstitutional. The Court of Appeals in Louisiana declared that state's helmet requirement for motorcyclists

to be unconstitutional on March 4, 1968. In conclusion, 47 O.S. Supp. 1968, S40-105 (g) has a relationship to the protection of the motorcyclist from himself, but not to the public health, safety and welfare. It is, therefore, the opinion of the Attorney General that Section 40-105 (g) of Title 47 only requiring all operators and riders of motorcycles to wear a crash helmet while operating a motorcycle is unconstitutional since it has no relationship to the general public health, safety and welfare. Having answered your first question in the negative, your second question becomes moot."

\*\*\*\*\*

## **Illinois Dumps Helmet Law**

The Illinois House Transportation Committee has defeated a proposed helmet law for motorcycle riders and passengers.

According to Vernon Hanks, legislative affairs director for United Motorcyclists of Illinois (UMI), an independent motorcyclists' rights group, "The Transportation Committee members were clearly unhappy with the introduction of mandatory helmet-use legislation, since a 1969 State Supreme Court decision ruled a

previous Illinois helmet law unconstitutional."

A UMI release said research provided Hanks "documented the 1969 court decision that a mandatory helmet law was 'beyond the police powers of the state,' according to both the Federal and State Constitutions."

Hanks is quoted as saying, "Illinois is doing a lot of things right when it comes to motorcycle safety, and the accident facts reflect that." □

\*\*\*\*\*

## **Judge rules against Nevada lid law**

A district court in Nevada has declared unconstitutional the only full adult helmet law in a Western state. This marks the first time in at least eight years that a state-level court has ruled against a mandatory helmet-use law.

District Judge Donald Mosley indicated he would not object to a helmet law for youths, but declared an adult law violates the defendant's constitutional right to free choice. The judge cited the Ninth Amendment to the U.S. Constitution, which states, "The enumeration in the Constitution of certain rights shall not be con-

strued to deny or disparage others retained by the people." According to Judge Mosley, the helmet law is an unjustifiable infringement on one's rights.

Nevada's helmet law has been a continual source of controversy, with repeal or modification bills introduced in each session of the Legislature since the law was enacted. One such bill reached the governor's desk in 1977, but was met with a veto.

The ruling probably will be appealed, and we can expect to see repeal legislation introduced when the Legislature convenes January 21.

\*\*\*\*\*

COURT DECISIONS (cont.)

The Helmet Law position paper by the Kansas Head Injury Association states: "At least five times the United States Supreme Court has refused to overturn decisions which sustained the constitutionality of helmet laws." That statement implies that the Supreme Court as upheld the constitutionality of helmet laws. This is not the case. In fact, the Supreme Court has refused to hear these cases so the constitutionality of helmet laws remains in question.

\*\*\*\*\*

ABATE of Kansas Inc., all other state ABATE organizations, the American Motorcyclist Association, the Motorcycle Safety Foundation and the majority of motorcyclists throughout the country are not opposed to motorcycle helmets. We are opposed to mandatory helmet laws though. ABATE of Kansas holds to the belief that we, the motorcyclists, should retain the right to decide what riding apparel to wear. Mandatory helmet laws are an unwarranted governmental infringement upon individual rights and freedom of choice.

Over 100 years ago, John Stuart Mill stated in his essay "On Liberty":

"The only purpose for which power can be rightfully exercised over any member of a civilized society, against his will, is to prevent harm to others. His own good, either physical or moral, is not sufficient warrant."

ABATE of Kansas, due to the aforementioned reasons, would very much appreciate your "NO" vote on S.B. 156.

## ACKNOWLEDGEMENTS

ABATE of Kansas would like to thank the ABATE organizations of the other states, the Motorcycle Safety Foundation, the American Motorcyclists Association, Road Rider Magazine, Ted Oakes, and many other motorcycle rights organizations and individuals in helping to compile the information in this position paper.

This position paper was written and edited by George R. Blevins, President, 1985 Board of Directors, ABATE of Kansas, Inc., in behalf of ABATE members throughout the state and nation.

STATEMENT OF THE KANSAS MOTORCYCLE INDUSTRY COUNCIL  
IN OPPOSITION TO  
SENATE BILL 156

The Kansas Motorcycle Industry Council ("KMIC") is a voluntary association representing most of the major motorcycle dealers in the State of Kansas. The KMIC members are business men and business women from across the state who have made substantial investments in businesses engaged in the sale and repair of motorcycles. The KMIC does not oppose helmet usage, but historically opposed and continues to oppose proposed legislation which would force adult riders to wear a helmet at all times.

At the outset it should be emphasized that this is not a new issue. The proponents of a mandatory helmet law provide no new arguments. The Kansas legislature has previously studied this issue in great detail and rejected mandatory helmet legislation.

The KMIC would respectfully suggest that the focus on mandatory helmet usage is misdirected. Rather, the legislature should be studying how to prevent collisions involving motorcycles. Attached hereto is a letter from Owen Ayres, Secretary of the Wisconsin Department of Transportation to the Chairman of the legislative committee considering a mandatory helmet law. Although a study had been done indicating helmets reduced head injury to some extent, Secretary Ayres requested the legislature not pass a mandatory law, but rather aim the states resources and

ATT. ④  
2/28/85

attention to a driver education program for drivers of motorcycles and other types of vehicles. Also attached hereto is a letter from Dr. A. Ranald Mackenzie, founder and first president of the Motorcycling Doctors Association which also points out that emphasis should be placed upon efforts to reduce the incidence of accidents and not a mandatory helmet usage.

The Rocky Mountain Regional Spine Injury Center has compiled data on the various causes of head and neck injuries. The results are shown on the graph which is attached. The first observation which jumps out at you is that more than 10 times the head injuries occur to motor vehicle operators than motorcycle riders. The number of such injuries are twice as large from sports and recreational accidents. Clearly, if reducing head injuries at all costs was a justifiable legislative endeavor, requiring automobile drivers to wear helmets would be far more effective. If we required all those who play basketball, who engage in swimming and driving, who are recreational skiers and those who enjoy other recreational and sports activities to wear helmets we would, apparently, reduce head injuries in greater amounts than by passage of S.B. 156. The KMIC does not advocate such legislation. The KMIC simply desires to point out that, even if it were possible it is simply not the function of the legislature to try and remove from our world all of the risks that are inherent in it. Personal freedoms should not be sacrificed in a reaction to the emotion and sympathy of the injuries of an unfortunate few.

Randall J. Forbes  
Kansas Motorcycle Industry Council



State of Wisconsin \

DEPARTMENT OF TRANSPORTATION



November 24, 1981

OFFICE OF THE SECRETARY

Room 1208 Hill Farms State Office Bldg.  
4802 Sheboygan Avenue  
P. O. Box 7910  
Madison, WI 53707  
Telephone 266-1113

Representative Cletus Vanderperren  
Chairman, Highway Committee  
Room 23 North, State Capitol  
Madison, WI 53702

Dear Representative Vanderperren:

I am writing in regard to Assembly Bill 831 which, if enacted, would reinstate the mandatory motorcycle helmet law for all cycle operators and passengers. This bill is tentatively set for hearing on December 3 before your Assembly Highways Committee.

Although the Department strongly supports the use of helmets and other safety gear for cyclists, we do not support its mandatory reenactment at this time. The reasons are set forth in the recent study "Wisconsin Motorcycle Helmet Law — A before and after study of helmet law repeal."

Generally, the study found motorcycle helmets to be effective in reducing head trauma in accidents. However, a startling finding was that even those riders who wore helmets suffered head injuries in one out of four accidents. Clearly, this indicates that even with mandatory helmet laws, we would suffer far too many injuries and deaths. It was the Department's conclusion that efforts should focus on preventing the accident from happening in the first place, through widely available rider training and education of the "other" motorist about the rights of motorcycle riders in traffic.

To summarize briefly, Wisconsin's mandatory law was repealed in March, 1978. That year, motorcycle deaths rose substantially, and a major effort toward motorcycling safety was initiated at the request of the Department Secretary. These programs are detailed in the attachment.

A note-worthy aspect of this comprehensive program was an "Equal Rights" program aimed at educating the general public about the rights of motorcycles and mopeds, to help reduce the number of cycle fatalities resulting from collisions with other vehicles. During the time period in which the "Equal Rights" program has been in effect, multi-vehicle fatal accidents have declined from about 60% to approximately 44% this year. This would seem to indicate that the program has had a beneficial effect.

Permanent state funding of a comprehensive Motorcycle Safety Program — previously funded from federal programs — was approved as part of the current budget. We will hold a public hearing December 11 on our proposed rules for making grants to local groups and governmental entities to provide motorcycle training. We are also in the final stages of choosing a new motorcycle skill test.

We believe the need for a comprehensive motorcycle safety program is clear, and that it should include: (a) beginner rider training; (b) improved skill testing; (c) public awareness of cycles and their rights; (d) voluntary helmet and (e) an alcohol abuse program.



We find support for this concept in other states. California, which has the largest motorcycle population in the nation, has never had a motorcycle helmet law. Illinois, which has the second highest number of registered cycles, had a mandatory helmet law for a brief period until it was ruled unconstitutional by their Supreme Court. In surveying other states, based on motorcycle registration, we find that one-third have no helmet requirements, one-third require helmets for operators and passengers under 18 years of age, or if operating with an instruction permit, and one-third require helmets for every-one.

I have enclosed a leaflet that was mailed to all motorcyclists with their registration renewal notice in April of this year. It includes a message from the Governor stating that he is not in favor of a mandatory helmet law.

It is our sincere belief that a comprehensive motorcycle safety program, such as the one which we are in the process of implementing in Wisconsin, will pay off in enhanced motorcycle safety. We hope that the Legislature will give this program a chance to succeed without a mandatory helmet law. Such a law would undoubtedly create animosity among motorcyclists and dealers and probably prove to be counter-productive over a period of time.

We will have representation at the hearing that may be called upon to provide any additional information your committee may desire.

Sincerely,



Owen Ayres, P.E.  
Secretary

QA:ej

Attachments

cc: Governor Lee Sherman Dreyfus  
Members of the Assembly Highways Committee  
Authors and Sponsors of AB 831  
Motorcycle Safety Advisory Council

June 4, 1981

### Wisconsin's Motorcycle Safety Program

The Wisconsin Motorcycle Safety Program to date can best be described in a chronological order. It goes something like this:

- The Wisconsin Department of Transportation has recognized the popularity of mopeds and cycles, along with their energy saving abilities. The department has stated in its, "State Transportation Policy Plan," that we are committed to better education, voluntary use of helmets and promoting the use of efficient forms of transportation, including cycles.
- In October of 1979 with cycle fatalities up to 112, Secretary Jackson, of the Department of Transportation became concerned. He ordered an ongoing Motorcycle Safety Program to help reduce the accident involvement of cycles and mopeds.
- As the result of the Secretary's concern a special in-house group was put together made up of representatives from the Highway Safety Office, Transportation Information Office, Driver Control, Motor Vehicle personnel, and others concerned with motorcycle safety. Several of the people who serve on this committee are cycle enthusiasts themselves. This group started meeting at least monthly and many times twice a month to discuss progress, new ideas, etc.
- A Motorcycle Safety Conference Workshop was held in Madison during February of 1980 involving riders, dealers, enforcement and safety minded people during which we listened to their problems and ideas.
- An Equal Rights brochure is being mailed to all licensed drivers with their renewal notices.
- Posters depicting equal rights for mopeds and cycles have been distributed throughout the State and have become so popular that we had to reorder.
- Radio and TV spots were produced and are being seen and heard.
- A new motorcycle written test has been instigated this Spring based on the new manual.
- A new motorcycle skill test is being experimented with at our LaCrosse exam station. This is the Skill Test that the Motorcycle Safety Foundation has developed and is being used within the Country in various jurisdictions. The test has been expanded to include another exam crew.
- The new regular driver's manual, includes a section dealing with cycle information and questions will be asked during the written test of all regular driver applicants dealing with motorcycle and moped recognition and rights.

- We sent out a survey to approximately 10,000 randomly selected cyclists to get their feedback. We received over half of them in return and the UW system is currently doing the statistical analysis for us. We do know what the average motorcyclist looks like.
- Another motorcycle workshop was held in Wisconsin Rapids on September 27, which was put together by local people.
- Federal grants were awarded to Tomah authorities, a group of people who put on the cycle training in both Madison and Milwaukee, and a grant has been given to the Vocational Technical School people to instigate motorcycle driving instruction in approximately 10 of their districts.

For Calendar 1981 our planning is going as follows:

- A brochure entitled, "Sharing the Roadway," is being mailed out with most vehicle registration certificates starting in February. This brochure emphasizes the sharing of the road and how a four wheel vehicle and a two wheel vehicle have to react differently during various common day-to-day driver maneuvers.
- We have prepared a voluntary use your helmet safety flier that is included in most the motorcycle registration certificates that go out.
- We had another state-wide work group held in Madison in February to get feedback on how we are doing, what we propose, how they reacted to it, and obtained ideas on how to improve the program.
- We have selected a Motorcycle Safety Coordinator. This person should be on board as soon as the budget is passed by the legislature. Hope July of this year.
- We have been in contact with the American Motorcyclist Association, the Motorcycle Safety Foundation, and the Motorcycle Dealers Association in our planning and execution.
- We are continuing our Equal Rights program this year.
- Car and truck bumper stickers have been printed depicting our, "Equal Rights," theme.
- We have helmet stickers emphasizing sharing.
- We are going to encourage local cycle clubs to work with their members employers to see if parking lots at office buildings, factories, etc. could be used during off-hours for beginning motorcyclists to practice.

- Currently \$2.00 of every motorcycle registration fee is deposited in the Department of Natural Resources Conservation fund for cycle recreational areas. We have just not been too successful in getting these going. We have met with the American Motorcyclist Association, Department of Natural Resources, the Motorcycle Dealers Association representative and have come up with a plan to share the \$2.00 motorcycle recreation fee. We have drafted the necessary legislation and have included it as part of our budget proposal. In essence, we are proposing that \$1.50 of the \$2.00 be set aside within DOT to set up a motorcycle safety, awareness and an educational program. We would be able to issue grants for motorcycle education for example. The fifty remaining cents of the \$2.00 fee would be deposited in the Conservation fund for the maintenance and upkeep of the parks that are coming on line. We propose that the over 2 million dollars that have been collected for the past years remain in the Conservation fund for use for local assistance in developing more parks.

The legislative Joint Finance Committee has agreed to the above, but cut funding to \$147,000 per year with nothing additional to DNR. The proposal is contained within the budget bill.

**ALEXANDER RANALD MACKENZIE, CH.M., M.D., F.A.C.S.**

**DIPLOMATE, AMERICAN BOARD OF UROLOGY**

**744 EAST PARK AVENUE  
LONG BEACH, N. Y. 11561**

**TELEPHONE: 516-431-0240**

January 23, 1982

Mr. Rick Davis  
K.M.I.C., Secretary/Treasurer  
4806 South Topeka Avenue  
Topeka, Kansas 66609

Dear Mr. Davis:

At the inaugural meeting of the Motorcycling Doctors Association in Independence, MO in August 1977 the assembled motorcyclists, all physicians or dentists, unanimously condemned the existence of mandatory helmet laws. At each subsequent annual meeting this position has been endorsed.

It is regrettable that the growing mass of data compiled by the American Motorcyclist Association, the personal reports of various surgeons here and in the U.K. and the recent disclosures of the Wisconsin Dept. of Transportation all of which show the inefficacy of helmets in reducing the incidence and mortality rate of head injuries have escaped the attention of some state legislators. Happily the present N.H.T.S.A. has terminated the misleading and costly practice of publicizing highly selective data on this subject so that soon we may see a more fruitful and less emotional approach to the problem of reducing the accident rate among motorcyclists.

The three most important factors contributing to motorcyclist accidents, injuries and fatalities are 1. Motorist unawareness, 2. Motorcyclist inexperience and 3. Alcohol and drugs in road users.

Attention to those factors by state and federal legislators should be immeasurably more rewarding than the year-in year-out obsession with the wearing of helmets.

Yours sincerely,



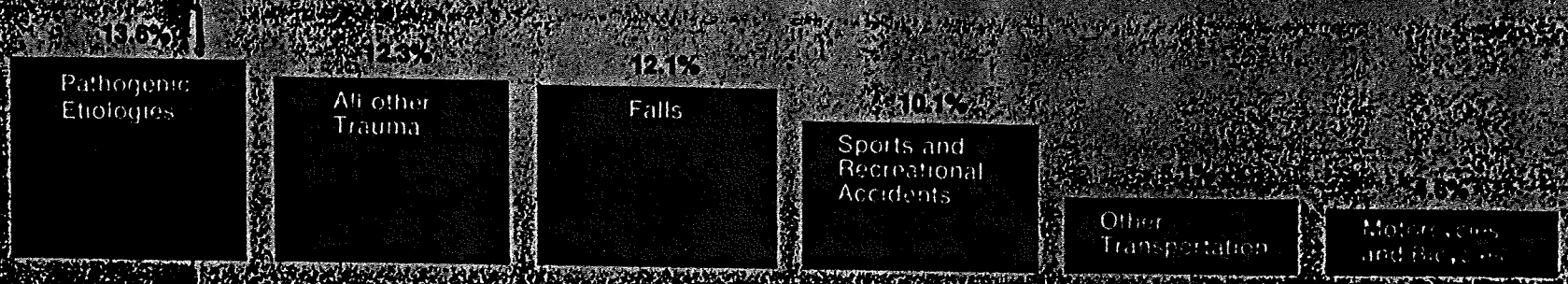
A. Ranald Mackenzie M.D.  
Founder and first President,  
Motorcycling Doctors Association

P.S. Present President: Robert C. Colvin, M.D.  
333-A North State Street  
Newburgh, Indiana 47630

**FIGURE 4**

**Causes of Head and Spinal Injuries, 1979**

Motor vehicles  
not including  
motorcycles



Kansas Motorcycle Registrations and Fatalities  
 from  
 Safety Department, Safety Coordinating Section  
 Kansas Department of Transportation  
 Topeka, Kansas

| <u>Year</u>   | <u>Registrations</u> |       | <u>Registration<br/>Percentage Change</u> | <u>Fatalities</u> |    |
|---|----------------------|-------|---|-------------------|----|
| 1963  | 13822                | =     | ----                                      |                   |    |
| 1964  | 16112                | =     | +16.6%                                    |                   |    |
| 1965  | 21881                | =     | +35.8%                                    | 20                |    |
| 1966  | 28015                | =     | +28.0%                                    | 19                |    |
| Helmet law passed<br>effective July 1, 1967<br>for all ages.              | 1967                 | 31538 | =   | +12.6%            | 14 |
|   | 1968                 | 34336 | =   | +8.9%             | 30 |
|   | 1969                 | 39835 | =   | +16.0%            | 19 |
| Helmet law repealed<br>effective July 1, 1970<br>for over 21 yrs. of age. | 1970                 | 53847 | =   | +35.2%            | 24 |
|   | 1971                 | 74525 | =   | +38.4%            | 30 |
| Helmet law passed<br>effective July 1, 1972<br>for all ages.              | 1972                 | 88894 | =   | +19.3%            | 22 |
|   | 1973                 | 99499 | =   | +11.9%            | 42 |
|   | 1974                 | 92354 | =   | -7.2%             | 46 |
|   | 1975                 | 90329 | =   | -2.2%             | 38 |
| Helmet law repealed<br>effective July 1, 1976<br>for over 16 yrs. of age  | 1976                 | 86789 | =   | -3.9%             | 47 |
|   | 1977                 | 84502 | =   | -2.6%             | 55 |
|   | 1978                 | 81944 | =   | -3.0%             | 53 |

**THE WICHITA EAGLE**  
 June 7, 1974 Page 5A  
**Cycle Fatalities  
 In Kansas Almost  
 Double in Year**

TOPEKA (AP)  
 Motorcycle fatalities in 1973 were almost double the number in 1972 despite a downward trend in total traffic fatalities.

The safety department of the Kansas Highway Commission said there were 42 motorcycle fatalities in 1973 compared with 22 in 1972.

ATT. (5)  
 2/28/85

## HELMETS FOR BICYCLE RIDERS

WASHINGTON, DEC. 7 — The Safety Helmet Council of America announced today the initiation of plans for development of standards and criteria for manufacturing safety helmets for bicycle riders. "Even before the energy crisis, the increase in bicyclists pointed to the need for safety headgear," Richard G. Babbitt, SHCA president said. "Now that bicycles may become more a means of transportation than recreation, it places special emphasis on protecting the riders."

Babbitt said some state and federal officials have begun discussing the possibility of making the wearing of helmets compulsory for bicycle riders on main streets and highways where traffic is heavy. There are currently some 80 million bicycles in use today and it has been predicted that the 100 million mark will be reached in 1975.

"Members of the Safety Helmet Council have been the leaders in the development of headgear for motorcycle riders," Babbitt said, "and we are going to do the same for the bicycle riders."

58 FAMILY HEALTH JANUARY 1979

### RIDING FOR A FALL

"Fasten your seat belts" is a warning with a familiar ring. Now, "Put your helmet on" is the new watchword from Virginia, where almost everybody rides horses—and where a lot of riders end up trotting themselves into the University of Virginia hospital emergency room. Their commonest complaint: a bump on the head.

All too often American equestrians have to be hospitalized for concussion, skull fracture or post-traumatic amnesia after falling from a horse, crashing into a branch or getting kicked in the head. But the rare few who wear the right kind of protective helmet do not have such serious injuries. Neither, say the Virginia doctors, do British and Scandinavian riders who wear headgear regulated by national riding associations. Without similar regulations, U.S. riders will have to use horse sense and protect their skulls voluntarily. ■

JANUARY, 1979/MONEYSWORTH (5)

# CRASH HELMETS URGED FOR AUTOMOBILE PASSENGERS

DETROIT—The use of crash helmets could trim the number of fatal head injuries that occur in traffic accidents even when seat belts are used, a highway safety researcher reports.

James O'Day, reporting on a study by the University of Michigan Highway Safety Research Institute, said the voluntary use of protective headgear should be considered along with other safety equipment in cars.

"When someone is killed in an automobile accident, most often it is the head that is injured," O'Day said. "If you are going to protect the head, you should look at something that fits the occupant rather than trying to pad all the hard objects in the world."

The study focused on 94 traffic deaths in which seat belts or shoulder harnesses were worn to determine the nature and the source of the fatal injury. O'Day claimed. More than half of the deaths resulted from head injuries.

O'Day said while most of the crashes were so severe that they were considered unsurvivable, 10 deaths occurred in "relatively non-severe" crashes. Eight of the 10 involved head injuries.

"Of these 10 crashes, only one would not have had the chance of survival increased by use of both head protection and full restraints," the report said.

The researchers said improved head protection could involve more padding on the interior of the car, "although the

amount of padding required might be so great that forward visibility would be impaired. An alternative approach would be to protect the head itself with an appropriate helmet."

The report fell short of recommending legislation requiring helmets for car occupants, "particularly in the wake of the legal arguments which have resulted from mandatory motorcycle-helmet laws."

"But we do suggest that some further analysis of the protective ability of helmets be studied and that voluntary wearing of some form of headgear would be in order," the report said.

"I think if helmets were made comfortable enough and attractive enough, maybe people would use them," O'Day said.

ATT. (6)  
2/28/85