Table of Contents
Fall 2003

Volume 51  Number 4

A Positive Bounce for DE? ........................................... 2
Allen Robinson, Ph.D., ADTSEA Executive Director

Greetings From the New President ............................... 2
Randall R. Thiel, Ph.D., President ADTSEA

Editors Notes .......................................................... 2
John W. Palmer, Ph.D., Editor

Rethinking The Issue ................................................. 3
Gary Bloomfield, Ph.D., Retired Washington State TSE Director

Is it an Accident or Is it a Crash? ............................. 4
Maurice E. Dennis, Texas A&M University,
Center for Alcohol & Drug Education Studies

National Survey of Drinking and Driving Attitudes
and Behaviors, 2001 ................................................. 5
Maurice E. Dennis, Texas A&M University,
Center for Alcohol & Drug Education Studies

Abstracts and Research Findings ............................. 9, 10, & 11

Editorial Advisory Council

Maurice E. Dennis, Ph.D.
Director, Center for Alcohol
and Drug Education Studies
Texas A&M University

Ron Hales, Ph. D.
Retired Professor
Central Washington
University

Allen Robinson, Ph.D.
Director, IUP Highway Safety
Center
Indiana Univ. of Pennsylvania

Richard D. Ellis, Ed.D.
Professor Emeritus
University of the State of
New York-Albany

Raymond Ochs, Ed.D.
Coordinator, Traffic
Safety Institute
Eastern Kentucky
University

Dale O. Ritzel, Ph.D.
Director, Center for Injury
Control
Southern Illinois University
A Positive Bounce for DE?
Allen Robinson, Ph.D.  CEO ADTSEA

The new school year is well underway and the summer of 2003 is history. Before we forget the great summer of 2003, let’s stop for a minute and thank those who made it possible.

The ADTSEA Conference in Charlotte, NC was indeed the best program we have ever had. Sam Houston, our past ADTSEA President is to be commended for such an excellent program. The general session speakers were tremendous, even though one was a little long. The excitement from the sessions was felt throughout the conference. The division meetings all had critical topics for for everyone of our members. Thanks Sam, for a job well done. The North Carolina Host Committee was also outstanding. A special thanks to Chuck Lehning, Karl Logan and those great folks on the committee.

The NSSP Conference in Salt Lake City was a continued success. Jan Meeker continues to do an excellent job working with youth in traffic safety. Thanks Jan, for your efforts to reach the youth of our country. Also congratulations to Jan on her recent marriage. The Utah Host Committee provided an excellent opportunity for our youth to experience an adventure in the Rocky Mountains and guided us through an excellent program. The Utah Office of Highway Safety was very helpful with logistics and sponsored our closing banquet in the rotunda of the state capitol.

October 28-29, 2003 found many of your officers, staff and ADTSEA members at the Forum on Driver Education and Training conducted by the National Transportation Board in Washington, DC. The NTSB usually conducts public hearings where each person testifying is under oath. In a public forum there is less conformation and more

(continued on page 12 under bounce)

Greetings From the New President
Randall R. Thiel, President ADTSEA

My name is Randy Thiel and I am the Alcohol Traffic Safety Consultant with the Wisconsin Department of Public Instruction. As your 2003/2004 ADTSEA President I will strive to keep my messages short and to the point. Therefore, in this first message I wish to share some goals that I have set for myself and some challenges I extend to you.

First, I’d like to extend a special thanks to Past President Kal Kelliher, for a job well done as our 2002/2003 ADTSEA President. Over the years I have become friends with Kal and have enjoyed working with him this past year as I served as President-Elect. I also wish to extend a very special thanks to Sam Houston. Sam served as the Program Chair for the Charlotte Conference. Sam certainly helped put together a fantastic program. And finally, to all who served on the North Carolina Host Committee, a very special “THANKS.” You certainly extended some outstanding southern hospitality.

Though it’s just been a month since the ADTSEA Conference, I know that Kal Kelliher has been busy trying to line up a speaker or two. So to Kal and all the Division Chairs for the 2004 Portland Conference, we certainly appreciate all the efforts and time you will be providing to ensure another great ADTSEA event.

The 2003 ADTSEA Conference in Charlotte focused on being informed, inspired and involved. I’m quite certain that those who attended the conference left with a great deal of information, hopefully inspired to try some new things in their respective programs, and hopefully with a desire to become more involved in ADTSEA!

In late August, I was asked to go to New Orleans to attend the Governors Highway Safety Association as a representative of ADTSEA. As I sat and listened to what the Governors’

(continued on page 11 under Randy)

Editor’s Notes
John W. Palmer, Ph.D.

What a marvelous experience it is to have an abundant amount of information to share with our members! A big thank you to all of you who responded to my appeal to submit articles and material for our two publications. Keep up the good work.

Drugs and driving are back on the front burner. Allen was included with the big hitters at the launch of the “Steer Clear of Pot” initiative. The “National Survey of Drinking and Driving Attitudes and Behaviors” reminds us that persistence is need to hold on to the progress that has been made in reducing alcohol impaired driving. The most startling factoid from the survey is that drinking drivers under the age of 21 report consuming on average about twice as much alcohol as those over 21 (5.1 drinks v. 2.6). Alcohol impaired driving remains a bigger problem than all the other drug impaired driving problems combined.

It is hoped that both Gary Bloomfield’s and Maury Dennis’s articles will trigger discussion and hopefully some thoughtful dialogue and more written expressions of opinion on how driver education should be funded and how best to describe highway transportation system failures.
Rethinking The Issue
By
Gary J. Bloomfield, Ph.D.
Retired State Traffic Safety Education Director
Office Superintendent of Public Instruction, State of Washington

This summer my wife and I celebrated our 38th wedding anniversary. We had a delightful 5 days together in Seattle and Victoria, Canada. But this is not a story about our celebration rather it is an article on what my wife and I observed while eating dinner at a waterfront restaurant in Seattle. It changed my way of thinking about what direction our State Traffic Safety Education Association and perhaps other state associations should be spending their energies on. Let me try and explain.

For the last several years the Washington Traffic Safety Education Association members have worked hard at trying to restore state dollars for high school students who enroll in a school district program. It has been a very noble effort especially when state tax dollars have been short. They should be proud of the efforts and strides made, but we live in different times and we need to start thinking in new ways. When high school traffic safety education lost its original funding source and was transferred into the state general fund, funding for the program was in real jeopardy. The handwriting was on the wall and it was only a matter of time before it would be gone.

Now that funding for the statewide program has been eliminated I believe it is time to put the emphasis in a different direction. Teenagers have access to money for those things and activities they believe are important to them. My eyes were really opened while having our anniversary dinner in a posh eating establishment on the Seattle waterfront. Every item on the menu was a la Carte and our bill was over $100.00 for just a basic meal with no extras like dessert (I like desserts), coffee, or even a glass of wine.

This particular night was also the high school prom night for many of the local high schools in the area. They began arriving at the restaurant and I thought I was at the Golden Globes, Tony Awards and the Oscars all in one night. The teenagers arrived in stretch limousines, new 2003 automobiles, horse drawn carriages, and yes even in Yachts. Now that was a sight to see as the teenage girls in their formal gowns stepped out of the boat and walked up the ramp in heels. The only thing missing that evening was the red carpet.

The valet parking attendants were having a field day as each new 2003 vehicle either rented or owned was driven away at $10.00 an hour to an adjacent lot. As we watched the parade of the teenage rich and famous wannabe’s I began thinking what would a night like this cost?

The girls were beautiful in their formal gowns, shoes, and hair that was braided, beaded and flowered. Matching jewelry that glistened in the evening sunset reflected their youth and innocence. The young men were handsome in their tuxedoes each one different and more colorful than the next, followed by black polished shoes and snazzy cummerbunds. The young teenage lads were paying for the dance, dinner with drinks (non-alcoholic, so I was told), transportation, corsage, their tux and all accessories. The teenagers and all their elegance surrounded us to the point that my wife and I almost felt underdressed. I talked with some of them when they were not talking on their cell phones and they said they were spending between $600 and $900 dollars each for just one night of bliss and celebration. Some were even looking forward to their graduation trip to Hawaii or Mexico and yes even a cruise to Alaska. Not all the teenagers were graduating seniors, as some were underclassmen either dating a senior or attending the junior prom.

To re-check my perceptions I went over later to a school parking lot at one of the local high schools where I live. My perceptions were reinforced as the student parking lot was full of cars newer than most of the teachers and administrators automobiles. In addition the traffic safety education vehicles parked in the lot were an embarrassment due to age, looks and style. Yes, teenagers have access to money for those activities and things they believe are important to them.

We need to take a lesson from all this and also from the business community who market teenagers and advertise products and services in teenage magazines, on radio, television and in newspapers. The businesses know the teenagers have access to dollars and they also like to spend it on services and products they just have to have and appear to be important to them.

The state legislators know teenagers and their families will also come up with the cash too. Student fee’s for all school activities and sports are now becoming a common thing for every high school. Traffic Safety Education in the high school is no longer perceived as a course of instruction but rather as a before and after school activity. The perception is high school teenagers have access to dollars and making choices in life on what to spend their money on is part of growing up.

My suggestion is that state associations with the help of ADTSEA need to start thinking of a marketing plan on why taking a traffic safety education course from their local high school is best for them and the smart thing to do. Perhaps association energies should be spent on promoting high school driven education rather than going after state reimbursement tax dollars when the perception is that it is not needed. If parents want only the best for their teenagers they need to be convinced the high school is the best place to learn. I am not aware of any student fee that is yet equivalent to a prom night and all its elegance. If the high school traffic safety education vehicle is older than 5 years and your local driving school has new cars you are going to lose students. Parents want their sons and daughters to be trained in the best and safest equipment and are willing to pay for what is

(Rethinking continued on page 9)
Is it an Accident or Is it a Crash?

By: Maurice Dennis
Texas A&M University, Center for Alcohol & Drug Education Studies

The term “accident” has become an endangered species in safety circles. This article examines the reasons for not using this term and provides a possible alternative definition of “accident”.

In recent years the term “accident” has fallen into disfavor with many in the safety field. In fact the National Highway Traffic Safety Administration (NHTSA) and state departments of transportation prohibit, or at least strongly discourage, using “accident” in any programs they sponsor. What are the reasons for such a stance?

The prime reason I have discovered is the belief that “accident” promotes the concept that traffic crashes are events which are outside human influence or control. There is a desire to show that such events are not Acts of God, unavoidable or unpredictable (Judy Allen, personal communication July 02, 2003).

Those supporting terms other than accident feel that use of this word works against bringing all resources to bear on the problem. Are these legitimate concerns? In the final analysis, it depends on the definition of “accident”. Unfortunately there are numerous definitions of this term. Webster’s Dictionary provides several definitions: one is: “an event occurring by chance or arising from unknown causes.” If this definition is accepted, then using “accident” to describe traffic crashes is inappropriate as rarely are the causes random or unknown. Webster’s also, however defines accident as “an unfortunate event resulting from carelessness, unawareness, ignorance or a combination of causes”. Use of this definition casts traffic collisions in a different light as all of the components of the definition fit most collisions. What definitions does safety literature use for accident? One older safety textbook (Fundamentals of Safety Education) uses the following definition, “an unplanned act or event resulting in injury or death to persons or damage to property” (Strasser et. al. 1973). The authors stress that the key to the definition is the concept of “unplanned”. Thygerson (1992) refers to a National Safety Council definition in his book Safety : “That occurrence in a sequence of events which usually produces unintentional injury, death, or property damage.” He states that two factors are essential: suddenness of events and damage from physical energy. Given that there are numerous definitions of the term “accident” and considerably misunderstanding about its use, what are the possible substitutes? The NHTSA and others suggest use of the terms “crash”, “collision”, or “incident” when possible. Are these terms adequate and appropriate substitutes? To decide this it is necessary to first define each of these terms. The dictionary definition of crash is: “to break violently or nosily or to damage an airplane in landing”. It is interesting that “crash” has also come to mean:

* Attending a party uninvited
* To sleep
* A sudden stock market decline
* To conduct a program very quickly (crash course).

While the “break violently” definition normally works relatively well for motor vehicle “crashes”, it does not fit when a person spills boiling water on themselves, drowns because of falling out of a boat, or unintentionally ingests a drug to the point of death, etc. The same could be said for “collision” which is defined as “to come together with a solid impact”. The term “incident” is even more vague and does not convey any sense of intent, damage, or cause.

What then is the answer? At least two choices seem available. The first of these is to seek, as is recommended (in same cases required) by the NHTSA, National Safety Council and others) to eliminate or at least severely reduce using “accident”. As has been previously discussed, using other terms has a number of limitations.

The other alternative is to use a definition of “accident” which not only describes what has happened, but why it has happened. This can be done by drawing from the several definitions previously described and incorporating their useful concepts into one workable definition. One such definition is: “an unplanned, unintended event which produces death, injury or property damage preceded by an unsafe act or unsafe condition.”

If death, injury or property damage is planned or intended, it can under no definition be considered an accident. The latter portion of this definition is very important as it stresses that the death, injury or property damage did not result from an Act of God, was unavoidable, outside of human control or influence, unpreventable, unpredictable, or any other of the ideas which prompted moves to avoid use of “accident”. All safety professionals should stress that driving while impaired by alcohol or other drugs, speeding, running red lights, failing to wear safety belts, boating without proper floatation devices, having improper lighting on stairs, failing to wear protective eye protection when using power tools, etc. are unsafe acts or conditions. Proper use of safety equipment and education can do much to reduce death, injury or property damage.

In summary, like it or not, the term “accident” is embedded in our language and culture. It is the responsibility of those in safety education to do a better job of educating people about the term, rather than seek euphemisms for it.

References

Allen, Judy, Personal Connection, July 2, 2002


NATIONAL SURVEY OF DRINKING AND DRIVING ATTITUDES AND BEHAVIORS, 2001
Traffic Tech Number 280 June 2003

Since 1991, the National Highway Traffic Safety Administration (NHTSA) has conducted a nationally representative telephone survey every two years to measure the current status of attitudes, knowledge, and behavior of the general driving age public about drinking and driving. These surveys track the nature and scope of the drinking-driving problem (see TRAFFIC TECHS 89, 135, 192, 242). The Gallup Organization conducted interviews with a national sample of 6,002 persons age 16 or older in the United States between November 3 and December 23, 2001. The findings suggest that despite the public’s continued concern about drinking and driving, progress in a number of key areas has slowed.

Drinking and Driving Behavior

About 22% of the driving age public has driven a motor vehicle within two hours of consuming alcoholic beverages in the past year, about the same as in 1995. Males are more than twice as likely to have driven within two hours of drinking as are females (32% vs. 14%). Adults age 21 to 29 are the most likely to be drinker-drivers (37% males and 20% female) driving within two hours of alcohol consumption. Drink-drivers made between an estimated 809 million and 1 billion driving trips within two hours of consuming alcohol in the previous year. This is a decrease of about 5% from the 1999 estimate. On average, the drink-drivers consume 2.6 drinks within the two hours prior to driving. When the amount of alcohol, timing of drinks, and weight and gender of the drinker are taken into consideration, 2.6 drinks relates to an average blood alcohol concentration (BAC) of .03. About 5% are estimated to have a BAC of .08 or higher. This calculated BAC is slightly lower in 2001 than the .04 estimated in 1999, but is similar to 1995 and 1997 estimates. Drinker-drivers under age 21 consume an average of 5.1 drinks prior to driving. While 16-20 year olds make only about 3% of all drinking-driving trips their BAC levels are nearly three times that of legal age drinkers.

Problem Drinkers

Problem drinkers were defined as having consumed five or more drinks on four or more days in a month, or eight or more drinks on at least one day in a typical month, or who answered yes to two or more CAGE questions (“Have you felt you should cut down on your drinking? Have people annoyed you by criticizing you about your drinking? Have you felt bad or guilty about your drinking? Have you had a drink first thing in the morning to steady your nerves or get rid of a hangover?”). Overall, about 11% of the drinking public over age 16 can be classified as problem drinkers. Problem drinkers make up 27% of past year drinking-drivers, accounting for about 46% of all trips in 2001 where driving occurred within 2 hours after drinking. On their most recent drinking-driving trip, problem drinkers were estimated to have a calculated BAC of about .05 compared to .02 for other drinking-drivers.

Attitudes Toward Drinking and Driving

A majority (62%) of persons of driving age believe that they, themselves, should not drive after consuming two or more alcoholic beverages. Nearly all respondents (97%) said that drinking and driving is a threat to their personal safety, which is consistent with past surveys.

Prevention and Intervention of Drinking and Driving

Half of drivers (50%) 16 or older who consume alcoholic beverages report at least one occasion where they refrained from driving when they thought they might have been impaired. This is more prevalent among persons under age 30. Most of these persons rode with another driver (63%). The proportion of persons age 16-64 who have ridden with someone in the past year who they thought may have had too much alcohol to drive safely has declined significantly from about 15% in 1991 to 12% in 2001. About one-third (32%) of persons of driving age have been with a friend who may have had too much to drink to drive safely, including half of those under age 30.

Most of these (80%) tried to stop the friend from driving and were successful in preventing the impaired person from driving about 75% of the time. One-third (33%) of those 16 or older have ridden with a designated driver in the past year, with those aged 16-29 most likely (54%), about the same as in the past two surveys. About four in ten drivers (41%) have acted as a designated driver in the past year, consistent with 1999 levels. Designated drivers were reported to have consumed less than one-quarter of one alcoholic drink, on average, prior to driving.

Enforcement

About 1% of the driving age public report being arrested for impaired driving in the past two years. Males under age 30 were most likely to have been arrested (2%). Drinking-drivers are twice as likely, and problem drinkers were four times more likely, to have been arrested for drinking-driving violations. Most drivers believe that once convicted of impaired driving for a first offense, drivers will receive a fine (46%) and/or a suspended or restricted license (41%). Only 20 percent think the person will go to jail. They generally feel that an impaired driver is more likely to have a crash than to be stopped by police, an increase since 1999. They feel that about 44% will get in a crash while the police will stop about 32%.

Penalties for Impaired Driving

Seven out of ten (71%) feel that drinking-driving penalties should be much (43%) or somewhat more (27%) severe than they are now. Drinking-drivers are much less likely to want penalties to be more severe. About one in three (32%) have seen a sobriety checkpoint in the past year, a significant increase from 1995 and consistent with 1999. About 18% have been through a checkpoint themselves at least once. A majority (62%) feels that sobriety checkpoints should be used more frequently, maintaining support consistent with 1993, but lower than 1995 to 1999.

(continued on next page as Blood Alcohol Concentration)
Blood Alcohol Concentration (BAC) Levels
Over four of five (83%) have heard of blood alcohol concentration levels, but only 27% can correctly identify the legal BAC limit for their state. Those living in .08 BAC states are more likely to correctly know their state’s legal limit. More than eight of ten (88%) of those who currently reside in .08 states believe that the limit should remain at .08 or be made stricter, while 53% of those in .10 states feel that their state should lower the limit to .08. About six in ten (61%) feel that all or most drivers would be dangerous at the BAC limit in their state.

Crash Experience
One in six (16%) persons of driving age were involved in a motor vehicle crash as a driver in the past two years. Drinker-drivers (19%) were more likely to have been in a crash than other drivers. Alcohol involved in about 2% of all reported crashes, and in 4% of crashes by male drivers.

HOW TO ORDER
For a copy of National Survey of Drinking and Driving Attitudes and Behaviors, 2001, write to the Office of Research and Technology, NHTSA, NTI-131, 400 Seventh Street, S.W., Washington, DC 20590 or send a fax to (202) 366-7096. Marvin Levy, Ph.D., was the contract manager for this project. U.S. Department of Transportation National Highway Traffic Safety Administration 400 Seventh Street, S.W., NTI-130 Washington, DC 20590

REDUCING UNDERAGE DRINKING: A COLLECTIVE RESPONSIBILITY

Reducing underage drinking requires a cooperative effort from all levels of government, alcohol manufacturers and retailers, the entertainment industry, parents, and other adults in a community, says a new report from the National Academies’ Institute of Medicine and National Research Council. The report proposes a comprehensive strategy to curb underage drinking, a problem that costs the nation an estimated $53 billion annually, due in part to losses stemming from traffic fatalities and violent crime.

2002 U.S. HIGHWAY FATALITY STATISTICS

Highway fatalities in 2002 reached the highest level since 1990 while crash-related injuries hit an all-time low, according to data released by the U.S. Department of Transportation’s National Highway Traffic Safety Administration (NHTSA). Though overall fatalities increased to 42,815 in 2002 from 42,196 in 2001, the fatality rate per 100 million vehicle miles traveled (VMT) remained at 1.51, a historic low. According to Federal Highway Administration estimates, VMT increased in 2002 to 2.83 trillion, up from 2.78 trillion in 2001. NHTSA earlier estimated that highway crashes cost society $230.6 billion a year, about $820 per person.

Table 3
BAC Distribution of Fatally Injured Drivers in 15 States 1998

<table>
<thead>
<tr>
<th>BAC</th>
<th>% of Fatally Injured Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>.01-.04</td>
<td>10</td>
</tr>
<tr>
<td>.05-.09</td>
<td>11</td>
</tr>
<tr>
<td>.10-.14</td>
<td>16</td>
</tr>
<tr>
<td>.15-.19</td>
<td>24</td>
</tr>
<tr>
<td>.20-.24</td>
<td>20</td>
</tr>
<tr>
<td>.25-.29</td>
<td>13</td>
</tr>
<tr>
<td>.30-.34</td>
<td>4</td>
</tr>
<tr>
<td>.35-.39</td>
<td>1</td>
</tr>
<tr>
<td>.40+</td>
<td>1</td>
</tr>
</tbody>
</table>

Changes in collision rates among novice drivers during the first months of driving

Daniel R. Mayhew, Herbert M. Simpson and Anita Pak
Traffic Injury Research Foundation, 171 Nepean Street, Suite 200, Ottawa, Ont., Canada K2P OB4

Abstract
As a group, young drivers have crash rates that far exceed those of older, experienced drivers. But even among teenagers there are age-related differences; crash rates decline consistently and dramatically with each yearly increase in age. A more precise understanding of how crash rates decline within the teenage group might provide insights into when experience is most influential. To address this issue, this study examines month-to-month changes in collisions among new drivers. It was found that crash rates drop most dramatically during the first 6 months of driving. Involvement in certain types of crashes—e.g. run-off the-road, single-vehicle, night, weekend—declines more rapidly. The findings suggest that novices improve their driving in a relatively short period of time. A graduated driver licensing system is identified as an effective method for ensuring that this development takes place in a more forgiving environment.

Accident Analysis and Prevention, September 2003, vol. 35, no. 5, pp. 683-691(9)
Elsevier Science
Introduction: (Nature of the Problem)
Problems related to motor vehicle operation by persons under the influence of alcohol are not a new phenomenon. I examined several traffic safety publications from the 1930’s and 1940’s and found the following:

1. Drivers who drink at all are a menace to all other road users and should not be allowed to drive again for a considerable period, to emphasize the weight of their faults, whether an accident has resulted or not. (Hollingsworth, 1940)

2. While little is known scientifically about the relation of driving deficiencies to amounts of alcohol in the blood, the tests made thus far seem to indicate that amounts exceeding one-tenth of one per cent are accompanied by marked driving inadequacies, especially in matters of backing and avoidance of obstacles. (Stoeckel, et al 1936)

3. It is impossible to ascertain how many drivers and pedestrians who are involved in accidents were actually under the influence of alcohol at the time of the accident. Of one thing we may be certain – and that is that the available accident figures are all far too low. (Stoeckel, et al, 1936)

4. It is not the driver who is stumbling drunk or in an advanced stage of inebriation who kills and cripples. Your reactions, your perception, your attitude are all changed after one or two drinks. The great majority of drivers in a drunken condition go to sleep or get off the highways before an accident occurs. (Hollingsworth, 1940)

5. Any BAC less than .15% is inadequate evidence of intoxication and requires further support (Sportsmanlike Driving, 1947)

6. One favorite method of evasion is to persuade the prosecutor to agree to change the charge to a less serious offense with the understanding that the offender will thereupon plead guilty, pay a small fine and thus avoid a trial. (Stoeckel, et al, 1936)

7. There is imperative need of a standard by which the varying degrees of incapacity for operating a car occasioned by drinking can be measured. (Stoeckel, et al, 1936)

8. Drivers are safer when the roads are dry, but the roads are much safer when the driver is dry. (Hollingsworth, 1940)

Fortunately we have learned a great deal about the nature of the problem in recent years. The NHTSA has issued an excellent publication “Alcohol and Highway Safety 2001”. (Jones and Lacey, 2001) Chapter 2 of this publication provides an overview of the alcohol crash problem. Findings reported there include: (See Table 1, 2, and 3 on page 6)

The data presented here is only a cursory overview of what is reported, and while the authors final conclusion “alcohol related crashes are a much smaller societal problem at the millennium than they were 20 or even 10, years ago”, the number of alcohol related crashes is still unacceptable.

Research:
Much research has been conducted in the last 20 years which sought to evaluate the effects of varying BAC’s on driving related abilities. One of the most comprehensive was headed by Dr. Herb Moskowitz entitled, “A Review of the Literature on the Effects of Low Doses of Alcohol on Driving-Related Skills.” (Moskowitz, 2000) In this publication, 112 research articles were reviewed. His conclusions are listed in Table 4.

(See Table 4 on the next page)
Table 4
Moskowitz Study Conclusions

Alcohol impairs driving at any level above zero

Significant impairment was found in the majority of studies at .05%

Performances are affected at different BAC’s some at .01% and others at .06%

All drivers are affected by .08% or less

Specific areas he reviewed included (See Table 5)

<table>
<thead>
<tr>
<th>Domain</th>
<th># of Studies</th>
<th>BAC at which affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided Attention</td>
<td>1</td>
<td>.009 .07 .09</td>
</tr>
<tr>
<td>Driving Skills</td>
<td>25</td>
<td>.009 .07 .09</td>
</tr>
<tr>
<td>Perception</td>
<td>12</td>
<td>.049 .07 .09</td>
</tr>
<tr>
<td>Psychomotor Tasks</td>
<td>18</td>
<td>.069 .06 .07</td>
</tr>
<tr>
<td>Reaction Time – Choice</td>
<td>15</td>
<td>.069 .07 .09</td>
</tr>
<tr>
<td>Tracking</td>
<td>11</td>
<td>.059 .07 .09</td>
</tr>
<tr>
<td>Vigilance</td>
<td>9</td>
<td>.039 .05 .08</td>
</tr>
<tr>
<td>Visual Functions</td>
<td>19</td>
<td>.049 .07 .08</td>
</tr>
<tr>
<td>Drowsiness</td>
<td>6</td>
<td>.019 .03 .05</td>
</tr>
</tbody>
</table>

* At least 50% found effect
** At least 80% found effect

Divided Attention: Simultaneous performance of two or more tasks such as tracking, visual search and detection of auditory stimuli. (driving examples: traffic, cell phone, eating.)

Driving Skills: Actual driving, simulated driving, simulated flight, motorcycle simulator.

Perception: Detection of visual and/or auditory stimuli, time estimation, traffic hazard perception, anticipation time.


Reaction Time: Choice or Complex: Choice reaction time, choice reaction time with auditory distraction.

Tracking: Pursuit tracking and critical tracking. (Lane maintenance)

Vigilance: Vigilance - Alertness

Visual Functions: Contrast sensitivity, depth perception, smooth pursuit

Drowsiness: Multiple sleep latency test; repeated test of sustained wakefulness.

A very comprehensive study was also conducted by Dr. Moskowitz to determine driver characteristics and determine BAC effects upon actual driving performance. The prime finding was that performance on driving skills which involved complex decisions and fine motor skills was impaired by at least a BAC of .04. (Dennis, 2002) (See table 7.)

Table 5
Behavioral Areas Studies

Table 7
Mean Decline in Complex Driving

<table>
<thead>
<tr>
<th>Exercise</th>
<th>BAC</th>
<th>Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>.04</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>.07</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>.10</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

Summary:
The findings presented here represent those of many research efforts throughout the world. Driver educators should use this information to seek to help the students they teach to understand and prevent problems caused by illegal and unsafe use of alcohol.

The first step in such a process is for teachers to become thoroughly grounded with correct information. Many myths or partial truths still exist. Driver education instructors should attend in-service training sessions and read research literature to be sure the information they are presenting is accurate.

References:


continued on next page
from page 8


Rethinking from page 3 perceived as the best.

In a time when state tax dollars are scarce and high school traffic safety education is no longer considered an academic course of instruction, but an activity taught before and after school we need to devote our energies to marketing the program. Perhaps the new direction for our associations should be to promote and advertise why taking traffic safety education in a public high school is the best instruction for the new driver. Competition for students along with students working, going out for sports and enrolled in other club activities at school make the marketing of high school traffic safety education a real challenge but doable. I am betting some real creative ideas and innovative marketing schemes are out there that would be fun to implement. Thanks for listening and I hope you think it over and come up with some great ideas.

NEW JERSEY LAW ADDRESSES SLEEP-DEPRIVED DRIVERS

New Jersey has adopted a law, believed to be the first of its kind, that imposes jail time and fines for sleep-deprived drivers who cause a fatal accident.

GUIDANCE ON:
ADDRESSING COLLISIONS WITH TREES IN HAZARDOUS LOCATIONS


ADDRESSING HEAD-ON COLLISIONS

TRB’s National Cooperative Highway Research Program (NCHRP) Report 500 – Guidance for Implementation of the AASHTO Strategic Highway Safety Plan Volume 4: A Guide for Addressing Head-On Collisions provides strategies that can be employed to reduce the number of head-on crashes on two-lane roads.

DISTRACTIONS IN EVERYDAY DRIVING
http://gulliver.trb.org/news/blurb_detail.asp?id=1720

All drivers engage in some kind of distracting activity while they are driving, according to research funded by the AAA Foundation for Traffic Safety and performed by the University of North Carolina Highway Safety Research Center.

5: A Guide for Addressing Unsignalized Intersection Collisions provides strategies that can be employed to reduce the number of unsignalized intersection collisions.

MODEL DRIVER SCREENING AND EVALUATION PROGRAM

The National Highway Traffic Safety Administration’s Office of Research and Traffic Records has released the final technical report on its study examining the feasibility as well as the scientific validity and utility of performing functional capacity screening with older drivers. The report has been published in three parts - Volume I: Project Summary and Model Program Recommendations, Volume II: Maryland Pilot Older Driver Study, and Guidelines for Motor Vehicle Administrators.

OPTIMIZING TRAFFIC SIGNAL PHASES FOR SAFETY

An article in the July-August 2003 issue of the Center for Transportation Research and Education at Iowa State University’s Technology News provides findings on research into the safety benefits that can be derived from optimizing traffic signal phasing.

GUIDANCE FOR ADDRESSING RUN-OFF-ROAD COLLISIONS

Abstracts from the Journal of Safety Research
2003 Vol. 34, No.3

Adolescent driver risk taking and driver education: Evidence of a mobility bias in public policymaking

Pierro Hirsch Université de Montréal, 4575 Hutchison, Montreal, Quebec, Canada H2V 4A1

Problem: Road traffic injury is the leading cause of death among adolescents in high-income countries. Researchers attribute this threat to driver risk taking, which driver education (DE) attempts to reduce. Many North American authorities grant DE graduates earlier access to unsupervised driving despite no evidence of this being a safety benefit. This theoretical article examines risk taking and DE in relation to an apparent mobility bias (MB) in policymaking. Method: The MB is defined, the history and sources of driver risk taking are examined, and the failure of DE to reduce collision risk is analyzed in relation to a potential MB in licensing policies. Discussion: The author argues that DE’s failure to reduce adolescent collision risk is associated with a MB that has produced insufficient research into DE programs and that influences public policymakers to grant earlier licensure to DE graduates. Recommendations are made regarding future research on DE and risk taking, coordinated improvements to DE and driver licensing, and a plan to reduce collision risk by encouraging parental supervision after adolescent licensure. Impact on Industry: Research on adolescent driver risk taking would have direct applications in DE curricula development, driver’s license evaluation criteria, graduated licensing (GDL) policies, as well as other aspects of human factor research into the crash-risk problem.

A neglected risky behavior among children and adolescents: Underage driving and injury in New South Wales, Australia

Lawrence T. Lam Royal Alexandra Hospital for Children, Locked Bag 4001, Westmead, NSW 2145, Australia

Problem: Among different causes of injury, roads and traffic-related incidents contributed most to all child deaths. The majority of childhood and adolescent traffic-related deaths are young people killed as pedestrians or bicyclists. Underage driving is a particular risky behavior much neglected. This study aimed to describe some characteristics related to motor-vehicle crashes and crash-related injury in which the vehicle was driven by a young person who was under the legal age of obtaining a learner license in New South Wales, Australia. Methods: Data used in this study were made available from the Roads and Traffic Authority of NSW for the period between 1996 and 2000. Crash information was collected and reported by NSW police at the scene of these motor-vehicle crash incidents. Results: There were 526 crashes involving an underage driver recorded within the study period. The majority (79.5%) of these underage drivers were males with slightly more than half (58.0%) aged 15 years, and nearly 30% aged 14 years. Among these, 83.6% involved the driver of the vehicle being killed or injured. Among the injured or killed passengers, 128 (73.6%) were nonadult passengers under the age of 18 years. Seventy of these crashes occurred while the car was in pursuit by police. The adjusted relative risk of injury to at least one occupant in the vehicle should a crash occur for female underage drivers was two times (OR=2.01, 95% CI=1.27–3.20) as compared to male underage drivers. Discussion: Underage driving poses a serious problem in terms of crash outcomes. Experimental driving and late-night outings for adolescents should be discouraged. Well-designed studies are required to further investigate the relationship between underage driving and on road risk-taking behavior among licensed adolescents. Impact on industry: Data obtained from this study indicate that adults, particularly parents, should discourage underage adolescents from experimenting driving and should actively cultivate a positive attitude toward driving.

New Zealand drivers study: Developing a methodology for conducting a follow-up study of newly licensed drivers

Dorothy Begg, Rebecca Brookland, Jason Hope, John Langley and John Broughton Injury Prevention Research Unit, Department of Preventive and Social Medicine, University of Otago, P.O. Box 913, Dunedin, New Zealand

Problem: In recent years, there has been a significant reduction in traffic crash injury among young people, but they continue to be overrepresented in the traffic crash statistics. To improve this situation, sound scientific evidence is needed to develop effective policies and programs. Method: The aim of the proposed study is to provide this evidence by examining early driving and driving-related experiences of newly licensed drivers as they progress through the learner-, restricted-, and full-license stages of the graduated licensing system and to determine the impact of these experiences on subsequent negative traffic-related outcomes (risky driving behavior, injury traffic crashes, noninjury traffic crashes, infringements, convictions). Given the size and complexity of the proposed study, a comprehensive pilot study was undertaken to determine the feasibility of conducting a New Zealand-wide cohort study of newly licensed drivers. Results: This article describes the pilot study process and the methodology that has been developed for the New Zealand-wide study.
Rand from page 2

highway safety representatives have planned for their highway safety priorities, I recall specifically hearing three areas where driver education teachers and programs of instruction should be involved.

In fact, I believe Dr. Allen Robinson shared these same three in his message in our last Chronicle, which were: Efforts and initiatives to prevent underage drinking, underage and participation in the Driver Education education and instructors could help provide parents with knowledge and resources to improve the quality of supplemental driving experiences they provide to their child.

Some Goals

As President for this 2003/2004 year, here are a couple of goals I have set for myself (and maybe a challenge or two for you):

  begin to consider some long-range ADTSEA planning.  What’s in place should ADTSEA be faced with having to again consider new Administrative and management arrangements?  I believe it would be in the Association’s best interest to have a plan that allows for a smooth transition of the administration and management of ADTSEA, regardless of who is President or on the Board of Directors.

  We are very fortunate in having the relationship we do with IUP, and having Dr. Robinson serving ADTSEA as its CEO and Executive Director. Dr. Robinson has been instrumental in obtaining several projects that have helped ADTSEA maintain a national recognition in driver and traffic safety education.

  A personal goal is to be the best I can possibly be. ADTSEA has a long and rich list of individuals who served as President. Each brought something unique to ADTSEA during their term as President. I will serve you and the Association with sincere dedication and commitment. I am confident that we, the ADTSEA Executive Board and Board of Directors will work hard to serve ADTSEA.

  A Personal Challenge to each of you is also to be the best you can be. The influence you have on your students is tremendous. It means so much more when we “walk the talk”. Do you always buckle-up?

  A simple individual membership challenge to myself is to recruit at least two new ADTSEA members between now and the Portland Conference.

  My membership challenge to each of you is for you to recruit at least one new ADTSEA member for this 2003/2004 year. A rather simple challenge, yet imagine what this would do to our membership numbers!

  I’m certain this year will have its share of challenges, but with every challenge, it seems new opportunities are presented. I’m certain the next few months will be filled with some very unique opportunities, and I’m honored to be able to serve you and our association. I’ll do my best!

  Best of Luck on a Great Year!

Support your local chapter of the

NSSP

Great Simulators

- Fully Interactive
- Over 400 Exercises
- Complete Curriculum Provided
- Crash Avoidance, Night, Rain, Fog
- Portable, Rugged Design
- 5-Speed and Auto Transmissions
- 1 and 3 Screen Versions Available
- Doubles as a Computer Workstation
- Web and Network Ready
- Backed by Over 25 Years Experience

Only $350
Per month

**Lease Rate WAC

Great Prices!

800.843.4764

www.simulatorsystems.com

TULSA   ATLANA   PHOENIX
exchange of information. The stated purpose of the Forum is to discuss the effectiveness of driver education and what can be done to improve it. Our hope is that national attention to the needs of driver education will result in greater national and state support for quality driver education programs.

Dr. Jim Nichols, “formerly of NHTSA”, and I began the Forum by discussing the history of driver education. This included what driver education should be and how driver education should be evaluated. ADTSEA has developed for NHTSA three documents that define: what driver education content should be; how driver education should be delivered and the outcomes we should expect from driver education. Unfortunately, too many people take the easy road in driver education and provide less quality programs due to insufficient funds, inadequate curriculums and poorly trained teachers.

Throughout the existence of driver education, the only acceptable evaluation has been a reduction in fatalities when comparing trained and untrained drivers. Driver education is the only countermeasure that uses fatalities in this manner to demonstrate effectiveness. This form of evaluation must be changed. It is not possible to effectively measure driver education programs using official driving records. The information provided through this source is simply inadequate. We must use self-reported accidents, surveys, sampling techniques and agreed upon standards for successfully completing driver education.

Other panels at the NTSB forum included state driver education supervisors, professional associations, such as ADTSEA, international groups, driver education teachers and students and private associations. ADTSEA Teacher of the Year, Debbie Cottonware and the NSSP Student of the Year, Kayla Craddock, were on the panel consisting of driver education teachers and students. Randy Thiel represented ADTSEA on the associations’ panel. On the state supervisor panel, ADTSEA members Dave Huff, John Harvey, Greg Lantzy and Beth Weaver-Shepard presented their views on state administration of driver education.

When the formal proceeding of this National Forum on Driver Education and Training are available, we will share this with all of our members. This should be a critical document for the future of driver education.

A second topic for this issue of the Chronicle deals with driver licensing. Let’s not fool ourselves, students come to our driver education programs so that they can obtain a drivers license. This is and must be an integral part of our program. Graduated Driver Licensing with driver education is essential to deal with the two leading causes of teen crashes: inexperience and lack of maturity.

We must always consider ways to better prepare students and meet the needs of our community. I have heard a lot of talk about the role driver education should or should not play in relation to driver licensing. While this is a very delicate and detailed issue, let me simply state the following: The more driver education is integrated into the driver licensing process, the better. We have an obligation to better train and support our new drivers than ever. We also have an obligation to better support the community in which we teach. All driver education teachers should be as much a part of the licensing process, as they are the education and training process. Each state has different needs and requirements. You need to explore how your program can better support driver licensing needs and services in your state.

As we begin 2004 we are looking to a new future for driver education. Help prepare yourself by attending the NSSP Conference in Seattle, Washington and the ADTSEA Conference in Portland, Oregon. The dates and registration information are on the back cover of the Chronicle. Help strengthen our association by getting one new member to join. Be involved! Participate!

---

**AMERICAN DRIVER AND TRAFFIC SAFETY EDUCATION ASSOCIATION**

**Affiliated State Associations**

- **Connecticut**
- **Georgia**
- **Hawaii**
- **Idaho**
- **Illinois**
- **Iowa**
- **Kansas**
- **Kentucky**
- **Maine**
- **Maryland**
- **Michigan**
- **Minnesota**
- **Missouri**
- **Montana**
- **Nebraska**
- **New Hampshire**
- **North Carolina**
- **North Dakota**
- **Oregon**
- **Pennsylvania**
- **South Carolina**
- **Tennessee**
- **Texas**
- **Utah**
- **Vermont**
- **Virginia**
- **Washington**
- **West Virginia**

---

**States trying to shift the decline in driver’s education**

**By Fred Bayles**

**USA TODAY**

**Schools are updating training that teens need for the road**

This is a must read for all Driver educators. The full article can be found at [http://www.usatoday.com/usatoday/20030922/5520850s.htm](http://www.usatoday.com/usatoday/20030922/5520850s.htm)
2001-2003 ADTSEA Officers and Board of Directors

Executive Committee

Dr. Randall Thiel, Wisconsin  
President
Elizabeth Weaver Shepard, Idaho  
President-Elect
Kal Kelliher, Georgia  
Past President
Fred Nagao, Hawaii  
Senior Director
Carol Hardin, Virginia  
Secretary Treasurer
Jan Meeker, Hawaii  
NSSP Liaison
Lonnie Smith, Illinois  
Corporate Representative

Board of Directors

NORTHEAST  
Dennis Royal, New Hampshire  2005  
Gary Scott, Kansas  2005
Lindsay Townsend, Vermont  2004  
James Gibb, Missouri  2004

SOUTHEAST  
Ed Jones, Florida  2005  
Mark Dolbeer, Oregon  2005
Robyn Hagler, Alabama  2004  
Debbie Cottonware, Montana  2004

NORTH CENTRAL  
Frank Gruber, Illinois  2005  
Larry Woodruff, California  2005
Duane Mettler, Minnesota  2004  
Fred Nagao, Hawaii  2004

SOUTHWEST

ADTSEA Corporate Members

ADTSEA numbers its’ Corporate Members among its’ most valuable assets. Our relationship is one in which the Association and the individual Corporate Members seek to provide counsel, assistance, and service to one another whenever possible. Additionally, the Corporate Members make financial contributions without which the Association would be far less effective.

- Allstate Insurance Company
- Apperson Education Products
- American Automobile Association
- Cingular Wireless
- Delmar Publishers
- Defensive Driving.Com
- Doron Precision Systems, Inc.
- Ford Motor Co.
- General Motors
- General Learning Communications
- Glencoe (MacMillan/McGraw-Hill)
- Inflexxion
- Interactive Driving Systems, Inc.
- Interactive Enterprises
- Event Solutions International
- Ohio Safe-T-Brake
- National Association of State Motorcycle Safety Administrators
- National Road Safety Foundation
- Prentice Hall
- Propulsion International, Inc.
- Raydon Corporation
- Rubber Manufacturers Association
- Simulator Systems International
- State Farm Insurance Companies
- Tell-My-Mom.com, Inc.
- Toyota Motor Sales, U.S.A., Inc.
USE NEW

RAYDON ADD

IN

FACING

INSIDE FRONT

COVER

DIGITAL COPIES ARE ON THE ZIPDRIVE
INTERACTIVE DRIVING SYSTEMS

ADD

FACING

TOC

PAGE

ONE
AAA
ADD
FACING
REAR
COVER
DORON
ADD
REAR
COVER

(REMEMBER TO ROTATE ADD DESIGN...)

TWO CAMERA READY DESIGNS ARE AVAILABLE...