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REPORTER

The Newsletter of The International Council on Alcohol, Drugs & Traffic Safety

ISSUE HIGHLIGHTS

WWW.ICADTS.ORG

The International Council on Alcohol, Drugs & Traffic Safety (ICADTS) is an independent nonprofit body whose only goal is to reduce mortality and morbidity brought about by misuse of alcohol and drugs by operators of vehicles in all modes of transportation.

MESSAGE FROM THE ICADTS PRESIDENT

Dear Council Members and Colleagues,

I am very pleased to have the opportunity to bring you up to date with the latest activities of your Executive Board.

You may be aware that the Foundation and Executive Boards meet twice yearly. There is always one meeting that is linked with the very large Transportation Research Board [TRB] conference in Washington in January. The second meeting is usually associated with a relevant conference held outside the USA. In the year before the Tri-annual conference this is usually held in the country that will be hosting the next conference and in those meetings the issues that are arising as part of the planning for the conference are the focus.

This year we met in May in Poland in conjunction with the annual *Fit to Drive* conference, which focuses on key emerging issues in road safety management. It is always of great interest to learn the research that is taking place in other international areas. ICADTS does not have many members from the eastern European region and the conference gave the opportunity to meet with other people working in the field. We were very interested to learn of local road safety initiatives from Ilona Butler of *Instytut Transportu Samochodowego, Poland*. We also had the opportunity to promote the conference in Brazil [T2016] and encourage colleagues to attend.

We held an associated symposium for the Board members attending the Warsaw meeting to present on the issues for research and policy that are of current interest in their work. Topics covered in the symposium included aspects of ignition interlock programs, toxicology, and driver performance measures. One of the areas covered in the symposium was drugs and driving, especially in light of the emerging legalisation of cannabis in the USA. ICADTS members will be attending the August Transportation Research Board workshop examining the traffic safety issues related to cannabis with the aim of identify best practices research needs.

The main focus of the Board meeting was further development of the ICADTS strategic plan. The Board is discussing important areas for the further evolution and development of ICADTS, including such topics as expansion of membership to parts of the world currently not actively involved in ICADTS, recruitment of young members, improved electronic communication and collaboration among members, and other issues. We will send you more information about our deliberations in future issues of the Reporter.

Regards,
Mary Sheehan, ICADTS President ■

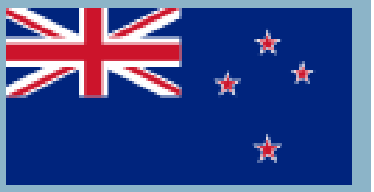
IGNITION INTERLOCK SYMPOSIUM SEEKS NOMINATIONS FOR BARRY SWEEDLER AWARD BY AUGUST 1

Barry Sweedler, former ICADTS President and friend and colleague to many road safety professionals, passed away in 2009. In honor of Barry's contributions to improve traffic safety, the **Barry Sweedler Award** is conferred upon one recipient each year to support their participation in the Alcohol Interlock Symposium. The successful nominee will receive a stipend of $2,000 to support travel and attendance.

Eligible candidates are new to the symposium; have shown leadership through their work to support, promote, strengthen, expand and/or advance the use and delivery of these devices; and have encouraged cooperation across agencies and built partnerships. Candidates can include researchers, practitioners, advocates, and professionals working in the field of alcohol ignition interlocks.

This year's symposium is scheduled for August 17-19 in Washington, DC.

To nominate a candidate for the Barry Sweedler Award, please contact **Susan Harrod** (susanh@tirf.ca) or **Robyn Robertson** (robynr@tirf.ca) at the Traffic Injury Research Foundation (TIRF) **no later than August 1, 2014**.■



THE EFFECTS OF MODERATE ALCOHOL CONCENTRATIONS ON DRIVING AND COGNITIVE PERFORMANCE DURING ASCENDING AND DESCENDING BLOOD ALCOHOL CONCENTRATIONS

A recent study carried out in New Zealand examined the effects of alcohol on the driving and cognitive performance of drivers at various times after consumption of alcohol. Participants' estimates of their impairment were poorly related to their actual BAC levels. Various aspects of driving and cognitive performance worsened during the period when subjects' BAC was descending. The study authors concluded that drivers are not good at judging their fitness to drive – even after drinking only moderate amounts of alcohol. They suggest that this finding may be an important focus for public education regarding alcohol and driving.

Source: Starkey NJ, Charlton SG. Hum. Psychopharmacol.. 2014; ePub(ePub): 10.1002/hup.2415 ■

HIGHER ALCOHOL TAXES REDUCE IMPAIRED DRIVING CRASHES IN ESTONIA

A recent study examines the association between alcohol excise tax rates and alcohol-related traffic crashes in Estonia. Monthly time series of crashes involving drunken motor vehicle drivers from 1998 through 2013 were regressed on real average alcohol excise tax rates while controlling for changes in economic conditions and the traffic environment.

A strong statistically significant ($p<0.01$) negative relationship was found between the real average alcohol excise tax rate and alcohol-related traffic crashes. A one-unit increase in the tax rate is associated with a 1.6% decrease in the level of crashes per 100,000 population involving drunken motor vehicle drivers. No similar association was found in the case of non-alcohol-related traffic accidents.

The authors conclude that the level of alcohol-related traffic crashes in Estonia has been affected by changes in real average alcohol excise taxes during the1998-2013 period. Therefore, in addition to other measures, the use of alcohol taxation is warranted as a policy instrument in tackling alcohol-related traffic accidents.

Source: Saar, I. *Traffic Injury Prevention, 2014* ■

DRINK DRIVING AND HELMET USAGE BY MOTORCYCLISTS IN HANOI, VIETNAM

The ICADTS/World Bank Fellows from Vietnam, Luog Hong Tran and Hoa Thanh Vu, have written a report based on their work at CARRS-Q in Brisbane, Australia. It provides an overview of alcohol and traffic safety issues in Hanoi, Vietnam, with special emphasis on motorcycles – which make up more than 90% of road traffic in Vietnam. The increased number of motor vehicles in Vietnam has been accompanied by a rapid increase in alcohol consumption, especially beer. In the past ten years, the Vietnamese beer market has grown between 9 and 11% each year. Even more rapid increases are anticipated in the next few years. Studies of crashes in Vietnam find that 60% of patients admitted to an emergency department as a result of a traffic crash had a BAC over .08. In a study at one hospital, head injuries were more frequent in alcohol related crashes than in crashes not involving alcohol. This may indicate a lack of helmet wearing by impaired drivers. The authors identified a number of issues that contribute to the alcohol related crash problem, including the easy availability of alcohol even to underage buyers, heavy promotion of alcohol and the relatively low price. Moreover, there is a lack of government regulation of alcohol availability and price and a lack of enforcement of those regulations that do exist. At the same time, police lack manpower and equipment to enforce drinking and driving laws. Despite the preponderance of motorcycles in traffic, the punishment for driving a motorcycle under the influence is much lower than for driving a car.

With regard to helmets, helmet use laws were implemented in 2007 but there is little enforcement of the laws and the quality of helmets is not well regulated. There is a lack of reliable data on both drinking and driving and helmet usage.

The report includes a number of recommendations for improvement of traffic safety in Vietnam with respect to both alcohol and helmets. For more information, contact CARRS-Q at carrsq@qut.edu.au. ■

U.S. DEPARTMENT OF TRANSPORTATION REPORTS ON IMPAIRED-DRIVING RECIDIVISM AND LOOK-BACK PERIODS

TRAFFIC SAFETY FACTS
Research Note

DWI Recidivism in the United States: An Examination of State-Level Driver Data and the Effect of Look-Back Periods on Recidivism Prevalence

In 1995, the National Highway Traffic Safety Administration estimated that one-third of all drivers arrested or convicted of driving while intoxicated (DWI) were repeat offenders. A recent study was conducted to update the 1995 estimate, and it determined that since 1995 the proportion of recidivism among drivers arrested for DWI has decreased from 31% to 25%, a decline of 19%. The analysis explored emerging trends of recidivism based on data regarding arrests, convictions, and license suspensions. This study also examined the extent to which recidivism prevalence differs based on the look-back period used by the State (i.e., the period of time DWI offenses remain on driver records as prior offenses).

Since 1995, the number of DWI arrests has decreased by an estimated 25% (from 1.6 million in 1992 to 1.2 million in 2011). DWI arrests are also no longer the most common arrest category in the United States. DWI arrests now rank fifth behind property crime (1.6 million arrests), drug abuse violations (1.5 million arrests), larceny-theft (1.3 million arrests), and assaults (1.2 million arrests) (FBI, 2011). Although DWI arrests have decreased, DWI repeat offenders are still believed to make up a sizeable proportion of DWI arrests. Historically, drivers with prior DWI convictions have been overrepresented in fatal crashes, and the risk elevates for drivers with multiple DWI convictions.

The statistics on recidivism are affected by the look-back period operating in a given state, that is, how long an impaired driving offense stays on the driver record. These look-back periods range from as little as five years in some states to lifetime or 100 years in others. When comparing the recidivism estimates by look-back period, the weighted means for the longer look-back periods (10 years or more) were higher than shorter look-back (less than 10 years). This trend occurred in all measures of recidivism: previous arrests (27% versus 17%), previous convictions (32% versus 24%) and previous license suspensions (35% versus 21%).

U.S. DEPARTMENT OF TRANSPORTATION REPORTS ON IMPAIRED-RIVING RECIDIVISM AND LOOK-BACK PERIODS *(CONTINUED)*

The prevalence of DWI recidivism is important in that it can improve the allocation of resources expended to reduce DWI. If only a small number of DWIs are responsible for a relatively large percentage of impaired driving trips and crashes, then from a policy and programmatic perspective one would like to devote considerable effort implementing specific deterrent programs targeting these repeat offenders. However, if most crashes and impaired driving trips are due to drivers without prior offenses then a general deterrence approach would be indicated. The allocation of resources between these two complimentary approaches should be informed by data on recidivism rates.

A number of interventions have been implemented over the past 20 years that are designed to reduce recidivism among DWI offenders. Some of these interventions are applied judicially; others through administrative action. They include DWI courts, alcohol ignition interlocks, vehicle and license plate sanctions, and various forms of close supervision of DWI offenders. Some or all of these interventions may have played a role in the reduction of DWI recidivism over the past 20 years.

To see the full report, go to http://www.nhtsa.gov/stat...cidivism_in_USA-tsf-rn.pdf.■

U.S. DEPARTMENT OF TRANSPORTATION RELEASES REPORT ON BREATH-TEST REFUSALS

Breath alcohol concentration (BAC) test refusals by suspected impaired drivers are a challenge for impaired driving enforcement and prosecution. Periodically, the United States National Highway Traffic Safety Administration (NHTSA) reports on refusal rates. This information can be useful to States and local jurisdictions. It enables them to track changes over time and compare their rates to other States and the Nation as a whole. NHTSA developed previous estimates for 1987, 2001, and 2005.

Some highlights from the recent report:

- The mean BAC test refusal rate in 2011 was 24 percent, compared to 22 percent in 2005, 25 percent in 2001, and 19 percent in 1987.
- The median BAC test refusal rate in 2011 was 18 percent, compared to 17 percent in 2005, 18 percent in 2001, and 14 percent in 1987.
- The range of State BAC test refusal rates in 2011 was 1 percent to 82 percent, compared to 2 percent to 81 percent in 2005, 5 percent to 85 percent in 2001, and 1 percent to 72 percent in 1987.

Many States were supportive of research to develop and test strategies to address the challenges they cited. Some States offered recommendations that were specific to their laws and testing procedures.

- States noted that refusal rates will remain high if the sanctions for failing a BAC test (i.e., by exceeding State *per se* thresholds) are more severe than those for refusing to submit to a test. States recommended that the license suspension periods for first and repeat refusals should be at least as severe as those for exceeding the State *per se* levels (.08 or higher BAC).
- Some States practice forced blood testing for offenders who refuse to submit to a breath test (e.g., by obtaining a warrant following a breath test refusal). States recommended that law enforcement agencies in these States should ensure that forced blood test results are recorded as a refusal (carrying longer suspension terms), and not confused for and recorded as a test-compliant offender who could receive a shorter suspension term.

To view the full report, go to http://www.nhtsa.gov/staticfiles/nti/pdf/Breath_Test_Refusal_Rates-811881.pdf ■


TRAFFIC SAFETY FACTS
Research Note

Breath Test Refusal Rates in the United States – 2011 Update

PROCEEDINGS OF THE 13TH ANNUAL ALCOHOL INTERLOCK SYMPOSIUM RELEASED

The Traffic Injury Research Foundation (TIRF) has released the proceedings of the 13th Annual Alcohol Interlock Symposium, hosted by TIRF, an independent, charitable road safety research institute based in Ottawa Canada, in partnership with the Finnish Transport Safety Agency (Trafi). The event took place in Helsinki, Finland in 2012. More than 130 participants representing 21 countries participated.

The theme of the symposium was "Alcohol Interlocks as a Traffic Management Tool", in order to acknowledge the contribution of both commercial and offender interlock programs. Given the European focus of the Symposium, this theme emphasized the fact that interlocks are versatile and not limited to usage with offenders. Devices can effectively be used in a pro-active approach to manage traffic safety among company fleets, taxis, school buses and government-owned vehicles as was evident from presentations at the Symposium. This approach is different from offender programs in that the goal is not necessarily to rectify a drink driving problem but rather to demonstrate a commitment to safety. A key objective of the event was to draw upon lessons learned with regard to offender-based and commercial programs, and to broaden understanding of alcohol interlocks as a flexible road safety tool in different environments.

The proceedings report much progress in the field of alcohol interlocks since the 2011 Symposium. Some of the new developments and advances include:

- New countries, including Greece, Columbia, Brazil, Chile and Mexico, have either expressed interest in the use of interlocks to better improve traffic safety and/or have already begun to use interlocks.
- There has been considerable growth in the number of alcohol interlocks installed in European countries in commercial markets..
- Several countries have made significant progress to strengthen their programs include the Netherlands, Norway and Sweden.
- Alcohol interlocks also continued to be a focus of research in Europe. In Germany, research on the cost-benefits of interlocks from an offender perspective has been published, In Finland, research has been published on the adoption of alcohol interlocks and its effects in professional transport. A second study has investigated the effects of alcohol interlocks on drink driving offenders.
- In Canada, there was continued growth in the use of interlocks, most notably in British Columbia and Alberta with the inclusion of first offenders in these programs. Nova Scotia is continuing its outcome evaluation of its unique interlock program, in which treatment is a major component, and the results of this evaluation are expected in 2014.
- In the United States the number of installed interlocks grew approximately 14% between June 2011 and June 2012, increasing from 243,000 up to almost 279,000. It was also anticipated that this rate of growth would continue with the passage of MAP 21 – the new Federal Transportation Bill which removed all restrictions on interlocks as a sanction for convicted drunk drivers and offers grants to states that pass and enforce all-offender interlock laws.
- In Australia, a National Policy Group was formed to encourage greater consistency in programs across Australia. Installations have grown with an estimated 10,000 interlocks installed as a result of some 11,000 drink drive convictions each year.

The proceedings include papers on a variety of topics and conclude that strong political leadership is imperative to make interlock programs a priority and a reality across jurisdictions worldwide. The symposium underscored the importance of law enforcement as an effective and essential component of interlock programs both to manage drivers within a jurisdiction but also across jurisdictions.

PROCEEDINGS OF THE 13TH ANNUAL ALCOHOL INTERLOCK SYMPOSIUM RELEASED *(CONTINUED)*

A series of presentations at the symposium demonstrated the success of Finland's experience and what can be accomplished with leadership, communication and coordination across government organizations, and the incorporation of interlock activities and priorities into existing practices. Of equal importance, the government in Finland has placed a strong focus on evidence-based approaches as illustrated by their pursuit of evaluation to help them shape and improve existing interlock operations. Such follow up to increase knowledge and understanding of program effects serve to further advance the field.

Many jurisdictions report common implementation challenges. These experiences have provided insight into the many facets and complexities associated with implementation of alcohol interlocks in different environments. For example, many jurisdictions have struggled with the use of driver licence codes such that law enforcement can readily identify interlock-restricted drivers.

Ultimately, international symposium provided the field with greater understanding of potential opportunities to strengthen alcohol interlock programs and continue to make programs more robust for more populations of drivers.

To view the full document, go to:
http://www.tirf.ca/publications/PDF_publications/13th_Annual_Interlock_Symposium_Proceedings_4.pdf
■

NEW BOOK RELEASED ON DRIVER ASSESSMENT IN GERMANY

A new book has just been published which provides a compendium for the assessment of fitness to drive. For more than 60 years the medical-psychological assessment of drivers in Germany has contributed substantially to traffic safety. This book provides the first opportunity to access information about the German system in English. It enables a large number of experts to get access to the concept of using the measurement of driver characteristics to assist in the determination of whether a driver's license should be reinstated. At the same time the principle of using diagnostic information in this decision-making process can balance the more repressive sanctions and penalties applied to initiate behavior change.

The multidisciplinary approach in German testing of driver fitness synthesizes psychological, medical and toxicological know-how for the purpose of testing results which fulfill the requirements of individual justice. The idea of interdisciplinary assessment offers methods with helpful modules that will enable government agencies around the world to help protect their citizens against the harmful consequences of mobility. This helps achieve a balance between safety and mobility.

The book is written and informed by contributions from leading academics and clinicians with long established expertise in the field. A number of these are members of ICADTS including the Past President, Wolf Nickel. Over the years much of the work developed by the writers has been considered by peers as presentations at the tri-annual ICADTS scientific conference. ICADTS also has supported associated expert working groups and the dissemination of relevant reports. Current ICADTS President Mary Sheehan wrote the foreword to the book.

The book is titled: *Assessment of Personal Resources for Safe Driving: The Principles of Medical Psychological Assessment in Germany*. Authors are Jürgen Brenner-Hartmann, Thomas Wagner, Frank Musshoff, Hannelore Hoffman-Born, Sabine Löhr-Schwaab, and Joachim Seidl. For more information, see the publisher's website at www.kirschbaum.de. ■

PREVALENCE OF ALCOHOL AND OTHER DRUGS AND THE CONCENTRATIONS IN BLOOD OF DRIVERS KILLED IN ROAD TRAFFIC CRASHES IN SWEDEN

A recent retrospective study in Sweden used a forensic toxicology database (TOXBASE) to evaluate the concentrations of alcohol and other drugs in blood samples from almost all drivers killed in road-traffic crashes in a 4-year period (2008-2011) The study was possible because over 95% of drivers killed on the roads in Sweden are autopsied providing reliable information about the use of alcohol and/or other drug before the crash.

The mean age of all victims (N = 895) was 48 ± 20 years, and the majority were male (86%). In 504 drivers (56%), the results of toxicological analysis were negative. These victims tended to be older; mean age (± SD) 47 ± 20 years, than alcohol positive cases (35 ± 14 years) and illicit drug users (34 ± 15 years). In 21% of fatalities, blood-alcohol concentration (BAC) was above the statutory limit for driving (0.2 g/L), although the median BAC was appreciably higher (1.72 g/L). Illicit drugs (mainly amphetamine and cannabis) were identified in ~7% of victims, either alone (2.5%), together with alcohol (1.8%) or a prescription drug (2%). The psychoactive prescription drugs identified were mainly benzodiazepines, z-hypnotics and tramadol, which were found in the blood of 7.6% of crash victims.

The high median BAC in fatally-injured drivers speaks strongly towards alcohol-induced impairment as being responsible for the crash. Compared with alcohol, the prevalence of illicit and psychoactive prescription drugs was fairly low despite a dramatic increase in the number of drug-impaired drivers arrested by the police after a zero-tolerance law was introduced in 1999.

Source: Ahlner J, Holmgren A, Jones AW. Scand. J. Public Health 2013; ePub(ePub): ePub 10.1177/1403494813510792■

PREVALENCE OF ALCOHOL AND DRUGS AMONG CAR AND VAN DRIVERS KILLED IN TRAFFIC CRASHES IN NORWAY

A recent study examined the prevalence of alcohol and drugs in blood samples collected from car and van drivers killed in traffic crashes in Norway during the time period from 2001 to 2010. Blood samples (n = 676, 63% of all killed drivers) were analyzed for alcohol, psychoactive medications, and illicit drugs. The cutoff limits for positive results were set according to the new legislative limits under the Norwegian Road Traffic Act. The results were assessed in relation to sex and age, time of day and day of week, and single- versus multiple-vehicle and all investigated vehicle accidents.

Alcohol or one or more drugs was detected in samples from 40.2 percent of all investigated drivers, with 28.7 percent showing blood concentrations of at least 5 times the legislative limits. Among the single-vehicle crashes, alcohol or drugs was found in 63.8 percent of the cases, with 49.1 percent showing blood concentrations of at least 5 times the legislative limits. Alcohol was detected in 25.3 and 49.1 percent of samples from all investigated drivers and among drivers killed in single-vehicle crashes, respectively. Psychoactive medications were found in 14.4 and 17.7 percent and illicit drugs in 14.1 and 19.2 percent, respectively. The most commonly detected group of medications was benzodiazepines, and amphetamines and tetrahydrocannabinol were the most commonly detected illicit drugs. The prevalence of alcohol alone was highest among drivers under the age of 25, and the combination of alcohol with other drugs was highest among drivers under the age of 35. Drivers between the ages of 25 and 54 showed the highest prevalence of medications and/or illicit drugs without the presence of alcohol. The highest prevalence of alcohol or drugs was found among drivers killed in single-vehicle accidents on weeknights (83.8%) and on weekend nights (89.3%).

UPCOMING EVENTS

Washington, D.C.
August 17-19, 2014
Alcohol Interlock Symposium
www.interlocksymposium.com

Munich, Germany
September 5-6; 2014
Gemeinsames Symposium der Deutschen Gesellschaft für Verkehrsmedizin e. V. (DGVM) und der Deutschen Gesellschaft für Verkehrspsychologie e. V. (DGVP)
http://www.verkehr-symposium.de/

Surfers Paradise, Queensland, Australia
September 18-19, 2014
Occupational Safety in Transport
http://ositconference.com

Munich, Germany
October 12-15, 2014
58th Annual Conference of the Association for the Advancement of Automotive Medicine (AAAM)
www.aaam.org

Gramado, Brazil
October 2-5, 2016
T2016
www.T2016.org

To view past issues of the REPORTER please visit: http://www.icadts.nl/reporter/reporter.html

PREVALENCE OF ALCOHOL AND DRUGS AMONG CAR AND VAN DRIVERS KILLED IN TRAFFIC CRASHES IN NORWAY *(CONTINUED)*

The findings confirm that a large number of fatally injured drivers, in particular among drivers involved in single-vehicle crashes, had concentrations of alcohol or drugs above the new legislative limits introduced in 2012. In many cases, concentrations of at least 5 times the limits were found. The proportion of drivers killed who tested positive for alcohol or other drugs did not change during the study period; however, the total number of drivers killed per year decreased by about 20 percent. Some changes were also observed with regard to the types of benzodiazepines and amphetamines detected during the 10-year study period.

Source: Christophersen AS, Gjerde H. Traffic Injury Prev. 2014; 15(6): 523-531. http://www.tandfonline.com/doi/abs/10.1080/15389588.2013.848981#.U7nWOfldWSo ■

MARK YOUR CALENDARS FOR T2016

The International Council on Alcohol, Drugs and Traffic Safety (ICADTS) will be hosting T2016 on October 2-5, 2016 in Gramado, Brazil. ICADTS has been organizing these triennial conferences since 1950 and this will be our first in South America. The ICADTS conferences are the premier international meetings on impaired driving and attract scientists and policy makers from around the world. It has a particular commitment and mission to support and stimulate students and early scholars in this important field. We recognize that while there have been significant improvements in reducing the impact of alcohol and other drugs on traffic safety in highly motorized regions it presents a high and challenging danger for countries where motorization is still increasing. We believe that holding T2016 in Brazil will be an important stimulus for policy development in the South American continent. We particularly look forward to meeting new colleagues from this exciting and diverse region and expanding our network of friends and co-workers in this important field.

Committees are already working, and the initial planning for the conference will be available soon. For more information, go to www.t2016.org. We hope to see you in Gramado! ■

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