



REPORTER

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

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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,

As I write this report to you, I realise that it mainly is a review of work that we have in progress to bring change and innovation to ICADTS. I would also like to use it to draw your attention to some important future ICADTS activities that you may be able to include in your diaries.

You will be very, very pleased to learn that we are intending to launch the new look on the ICADTS Web site in time for the executive meetings being held in Washington, DC, in association with the Transportation Research Board (TRB) annual meeting in January, 2015. We are completing the design of a new and expanded site that you will find easy to access. It will contain interesting and current research information and policy developments. In particular, it will be a way to communicate easily with the members of the expert working groups and allow expert working groups to share their deliberations with members and ask for your input and information about your associated research and policy work.

We plan for the new site to include access to all the conference papers, abstracts, and key words since the ICADTS conference program began. This has been the culmination of an enormous endeavour, painstakingly undertaken by numerous people over many years. It required the collection of all the old and original proceedings and this was finally completed by Paul Marques. CARRS-Q, with the support of Barry Watson, agreed to be the host institution for the enormous task of converting these materials to web-based accessible files. Finally, each paper has been checked, edited, and formatted for inclusion in the master file by Navid Tahir. This has been a most important endeavour and we very much look forward to sharing the details with you in the next Reporter.

Those who will be coming to TRB Annual Meeting this January should plan to attend the session on "Impaired Driving in Low and Middle Income Countries: Challenges and Opportunities for Progress." The session will draw strongly on input from ICADTS members and their associates in Brazil, Malawi, China, Ghana, and Viet Nam.

Another interesting issue for alcohol, drugs and traffic safety that will be emerging in the not-too-distant future is the impact of the "smart" car technology on the way people drive. An article by ICADTS member Ian Faulks on this pertinent issue has been published this month in a current issues outlet.

<https://theconversation.com/self-driving-cars-will-not-help-the-drinking-driver-31747>

Finally, just a reminder to put T2016 in your diaries. It will be excellent to meet together in Brazil.

Regards to all,

Mary Sheehan, ICADTS President ■

PILOT STUDY OF ALCOHOL SENSOR AT SWEDISH PORT



Sweden has long been a forerunner in the fight against drink driving. In 1999, the country was one of the first EU member states to introduce alcohol interlocks as part of rehabilitation programmes for drink drivers. In 2013, Sweden went a step further and ran a pilot project to introduce a fast-moving automated 'Alco Gate' at the Port of Gothenburg.

Sweden is the safest European country for road safety, with just 27 road deaths per million inhabitants in 2013. Despite the impressively low overall number of deaths, drink driving remains one of the main road safety priorities. The Swedish Transport Administration has set a target on drinking and driving for 2020 that 99.9% of drivers should be sober. In 2009, the proportion was estimated to be 99.7%.

Sweden has been a leader in the uptake and use of alcohol interlock technology. Since their introduction in Sweden in 1999, alcohol interlocks have been mainly used as a complementary measure within rehabilitation programmes for first time high level and recidivist offenders as well as for quality assurance in private companies in commercial transport. The Swedish Government committed to have 75% of governmental vehicles equipped with the technology by 2012. So far around 80,000 alcohol interlocks are installed in Sweden on commercial vehicles. In addition, since the end of 2012, all vehicles used for school transport must also be fitted with alcohol interlocks.

Ports have long-been considered as environments at high risk for drink driving. In 2012, more than 3 million vehicles arrived in Swedish ports from across a maritime border. Government figures suggest that the drink driving rate around ports is three times the national estimated proportion of drink drivers.

In response to this problem, the alco-gate pilot project was carried out between August and December 2013 in the port of Gothenburg. The alco gates exploit similar technology to alcohol interlocks in the installation of checkpoints for all trucks and buses entering Sweden via ferry. The purpose was to enforce drink driving controls along the maritime borders of the country and make sure that no driver coming to or from Sweden was under the influence of alcohol.

The alco gate appears to be an effective and direct measure to tackle drink driving among professional drivers. In the context of limited resources for police enforcement, alco gates offer a complementary tool to achieve a high level of drink driving enforcement at high-risk sites. Drivers entering the country via ferries are required to blow into a breathalyser linked to a gate before being able to enter the country. The automated-control process takes only a few seconds for each driver and checks have no impact on the traffic flow. The objective of the trial in the long run would be to provide a test environment for the future roll out of permanent alco gates in all Swedish ports.

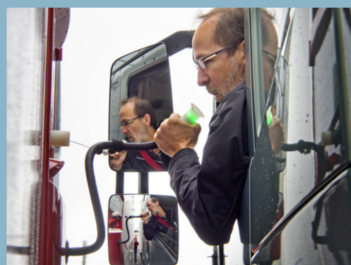
Before the pilot project started, all alcohol checks were conducted by the national police, Swedish customs, and the coast guard. During these checks, the usual screening instruments were used and normal procedures were followed. Before the installation of the alco gate in the port, out of 1,900 drivers, 20 were found to be driving under the influence of alcohol.

From August to December 2013 in the port of Gothenburg a total of 8,745 drivers were checked at the alco gate, 10 of whom were reported for suspicion of drunk driving or aggravated drunk driving. These drivers had received clear information in advance, both on board the ferry and in the booking terminal in Gothenburg.

Drivers of passenger cars were also checked; out of 2,294 drivers, 7 were found to be under the influence of alcohol. This group had not received any information about the alco gate beforehand.

The evaluation showed that this new technology could be an effective complementary measure for drink driving enforcement in Sweden. Among the positive outcomes:

- Clear information was provided to drivers travelling on ferries on the alco gate installation in the port, thus providing a deterrent effect.
- No negative impact on the traffic flow was recorded.
- The technology used for the trial (that does not require the driver to touch the device with their mouth) is innovative and potentially expands the potential for interlock technology.
- Public opinion in Sweden responded positively to the trial. ■



Source: European Transport Safety Council. For more information, go to http://etsc.eu/wp-content/uploads/2014_06_smart_factsheet_alco_gate_sweden.pdf

U.S. GAO REVIEWS IGNITION INTERLOCK EFFECTIVENESS AND IMPLEMENTATION

United States Government Accountability Office
Report to the Chairman, Committee on Commerce, Science, and Transportation, U.S. Senate

June 2014
TRAFFIC SAFETY

Alcohol Ignition Interlocks Are Effective While Installed; Less Is Known about How to Increase Installation Rates

GAO-14-559

The U.S. Government Accountability Office (GAO) reviewed evidence of the effectiveness of ignition interlock devices for alcohol-impaired driving offenders and issues related to the underuse of this strategy in states. In particular, they examined the effects of a grant program established in 2012 for states that adopt and implement mandatory alcohol ignition-interlock laws for all convicted DWI offenders. The National Highway Traffic Safety Administration (NHTSA) estimated that between 15 and 20 percent of offenders arrested for DWI actually install ignition interlocks. Many factors contribute to low installation rates. For example, some states lack the resources to monitor offenders to ensure they install ignition interlocks; other states require that offenders pay fees and penalties to be eligible to install ignition interlocks and return to driving with interlocks. State ignition interlock programs vary in terms of how they are designed, but little research exists on which specific interlock program characteristics—such as monitoring or length of installation—could improve the effectiveness of interlock programs. NHTSA is currently conducting studies on factors that could help states improve installation rates or otherwise improve the effectiveness of their interlock programs. NHTSA expects these studies to be completed by 2015. NHTSA has offered a variety of technical assistance, research, and education to help states establish and improve their ignition-interlock programs, as well as implement the ignition interlock grant program.

The full report can be viewed at <http://www.gao.gov/assets/670/664281.pdf>. ■

RURAL VS. URBAN CRASHES IN THE USA

The U.S. National Highway Traffic Safety Administration (NHTSA) has released a fact sheet contains statistics on motor vehicle fatal crashes in urban and rural areas based on data from the Fatality Analysis Reporting System (FARS). In 2012, there were 30,800 fatal crashes resulting in 33,561 fatalities. Rural areas accounted for 53 percent (16,443) of the fatal crashes and 54 percent (18,170) of the fatalities as compared to urban areas that accounted for 46 percent (14,263) of the fatal crashes and 46 percent (15,296) of the fatalities. According to the 2010 rural and urban population data from the Census Bureau, 19 percent of the U.S. population lived in rural areas, however, rural fatalities accounted for 54 percent of all traffic fatalities in 2012.

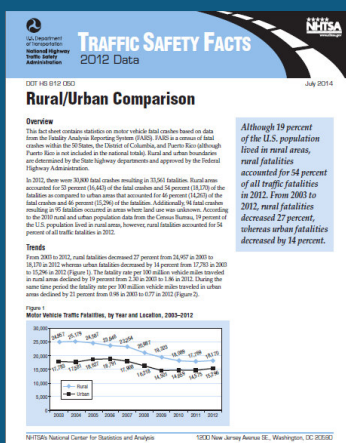
In 2012, there were 10,322 people killed in alcohol-impaired driving crashes. Rural areas accounted for 55 percent (5,724) of these fatalities as compared to 44 percent (4,573) in urban areas. Data has also shown that over the 10 years from 2003 to 2012, alcohol-impaired-driving fatalities decreased by 21 percent nationwide. In rural areas alcohol-impaired-driving fatalities decreased by 25 percent while urban areas showed a 16-percent decrease.

To view the full fact sheet, go to <http://www-nrd.nhtsa.dot.gov/Pubs/812050.pdf>. ■

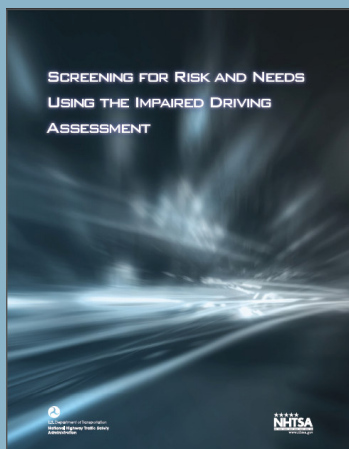
SCREENING TOOL FOR IMPAIRED-DRIVING OFFENDERS

In recent years, greater efforts have been made to enhance assessment practices for those offenders convicted of DWI in order to increase the identification of predicting which offenders are most likely to continue to drive impaired from those who are less likely to engage in this behavior. Under a cooperative agreement with the National Highway Traffic Safety Administration, the American Probation and Parole Association (APPA) have prepared a report on their development of a screening tool, Impaired Driving Assessment (IDA) to identify a DWI offender's risk of engaging in future conduct of impaired driving, and to help determine the most effective community supervision that will reduce such risk.

The APPA identified several major risk areas of DWI recidivism. An individual's past behavior stood out across multiple risk areas. This included prior DWI and non-DWI involvement in the justice system and prior involvement with alcohol and other drugs. In addition, resistance to and non-compliance with current and past involvement in the justice system was identified as a major risk area. Mental health and mood adjustment problems were found to be a risk area as well. This supports prior research on DWI recidivism that has established its causal factors to be a combination of alcoholism or addiction and the risky decision-making process of high-risk drivers—individuals who lack appropriate levels of restraint or self-control to resist the impulsivity of driving drunk.



SCREENING TOOL FOR IMPAIRED-DRIVING OFFENDERS (CONTINUED)



All of these identified areas informed the inclusion of certain items on the development of the IDA. Self-report items include 34 questions designed to measure both retrospective and current perceptions of conditions related to mental health and mood adjustment, alcohol and other drug involvement and disruption, social and legal non-conformity, and acknowledgment of problem behaviors and motivation to seek help for these problems. An evaluator report component includes 11 questions that provide information around the individual's past DWI and non-DWI involvement in the judicial system, prior education and treatment episodes, past response to DWI education and/or treatment, and current status with respect to community supervision and assignment to education and/or treatment services.

Scales developed from these items were found to have statistically significant relationships with probation failure.

To view the full report, go to:

[www.nhtsa.gov/staticfiles/nti/pdf/812022-Screening for Risk and Needs.pdf](http://www.nhtsa.gov/staticfiles/nti/pdf/812022-Screening_for_Risk_and_Needs.pdf). ■

STUDY OF DRINKING AND DRIVING AMONG U.S. COLLEGE STUDENTS

College students leaving at-risk drinking environments are at particular risk for harm from drinking and driving. A recent study assessed the transportation decisions of 7,500 individuals as they left drinking establishments near a large, public university in the southeastern United States. Across 3 years and 72 nights, researchers outside local drinking establishments recruited passersby who agreed to provide their planned transportation method for returning home and their blood alcohol concentration (BAC) from a police-quality breathalyzer. The results indicated that the majority of students were reaching high levels of intoxication. Indeed, the average BAC of drinking participants was .0979 g/dL. More than 50% of the participants reported that they were planning to walk home. Approximately one-quarter of the participants planned to use a designated driver. Fewer than 5% of the participants were unsure about how they were going to get home. Significant differences in BAC were observed as a function of the anticipated method for returning home. Contrary to several previous studies, individuals with designated drivers did not have higher BACs than most other individuals. The BACs of self-reported drivers were of particular concern. Although 36.7% of drivers were completely sober, the average BAC of drinking drivers was .061 g/dL. Furthermore, 39.8% of drivers with BACs over .08 g/dL believed that they were under the legal limit to drive. The results suggest that intervention efforts should focus on promoting safe and completely sober designated drivers.

To paper is available for download at:

<http://trb.metapress.com/content/603k215566117153/?p=16d398b57f7d49fabe839fcb355e5d35&pi=8>. ■

MALE COLLEGE STUDENTS

Male college students in the United States are much more likely to drive after smoking marijuana than to drive after drinking, a new study finds. Researchers at the University of Massachusetts, Amherst, found 44 percent of college men said they drove after smoking marijuana in the previous month, compared with 12 percent who said they drove after drinking.

“We definitely need to think about how to help students understand that marijuana is risky to use before you drive,” lead author Jennifer Whitehill told HealthDay. “These are young, inexperienced drivers, and marijuana does increase crash risk.”



MALE COLLEGE STUDENTS (CONTINUED)

The study found 9 percent of college women said they have driven after smoking marijuana, but 35 percent said they rode with a drugged driver. The study, which appears in *JAMA Pediatrics*, found for every 1 percent increase in the number of friends who use marijuana, there is a 2 percent increase in the risk of riding with a driver who has been smoking marijuana. The study included 315 students from two large state universities. Among males, 30 percent said they had used marijuana in the previous month, and 67 percent said they drank alcohol. Among females, 13 percent said they used marijuana in the previous month, and 64 percent said they drank alcohol.

In an editorial accompanying the study, Mark Asbridge of Dalhousie University in Halifax, Canada, said there does not seem to be the same stigma for drugged driving that is associated with drunk driving. “We’ve got to think about the kind of techniques that were effective for drinking and driving and how they might be applied here,” he said. He called for strict laws against driving under the influence, strong law enforcement efforts, and a public education campaign. ■

ALCOHOL CONSUMPTION, HELMET USE AND HEAD TRAUMA IN CYCLING COLLISIONS IN GERMANY

A recent study examined which cyclist and cycling-accident characteristics are associated with alcohol consumption and helmet use in Germany and to identify risk factors related to head trauma sustained in cycling accidents. The source used for the present analysis was the database of the German in-depth accident study (GIDAS). All cyclists who had been involved in a road accident between 2000 and 2010 and submitted to an alcohol test were selected. Logistic regression analyses were carried out to evaluate various aspects: alcohol consumption, helmet use, head trauma, and cyclist/accident characteristics. Female riders were less likely to have consumed alcohol (OR=0.23, 95% CI: 0.08-0.66); cyclists who did not wear a helmet were more likely to have consumed alcohol (OR=2.41, 95% CI: 1.08-5.38); cyclists who were not responsible for the collision were less likely to have consumed alcohol than those who were partially responsible for the accident (OR=0.22, 95% CI: 0.08-0.61). Cyclists involved in collisions with another vehicle, motorised or not, had a lower risk of suffering a head injury compared with those involved in single-vehicle accidents (OR=0.27, 95% CI: 0.12-0.62, and OR=0.08, 95% CI: 0.03-0.22, respectively). The authors concluded that the prevention or limiting of alcohol consumption among cyclists and the corresponding testing of cyclists must be improved. Training initiatives on helmet protection should be encouraged.

Source: Orsi C, Ferraro OE, Montomoli C, Otte D, Morandi A. *Accid. Anal. Prev.* 2014; 65C: 97-104. ■

ALCOHOL HANGOVER AND IMPAIRMENT AMONG APPREHENDED DRIVERS

A study carried out recently by the Norwegian Institute of Public Health, Division of Forensic Sciences in Oslo, Norway examined how driver impairment during the hangover phase after alcohol ingestion might affect traffic safety. The study investigated the prevalence and the concentrations of the two ethanol metabolites, ethyl glucuronide (EtG) and ethyl sulphate (EtS), in blood, indicating very recent alcohol intake, among apprehended drivers, in which no psychoactive substances, including alcohol, were detected. The aim was also to study these findings in relation to the impairment observed in these drivers.

Blood samples, drawn from suspected drunk or drugged drivers, were analysed for a broad repertoire of psychoactive substances, with a clinical test for impairment (CTI) being performed at the same time. One-hundred-and-forty-six cases, in which no psychoactive substances were detected, and where a valid CTI was performed, were analysed for EtG and EtS, in blood. The prevalence and the concentrations were related to the conclusions of the CTIs.

ALCOHOL HANGOVER AND IMPAIRMENT AMONG APPREHENDED DRIVERS (CONTINUED)

EtS and EtG were detected in a total of 19 of the 146 cases (13%). Among the "impaired" drivers, EtG and EtS were detected in 16 cases (18%), while among "not impaired" drivers; they were detected in 3 cases (5%). There were significantly more detections of EtS (and EtG) among the impaired group of drivers compared with the not-impaired drivers ($p = 0.030$), and the concentrations of both EtG ($p = 0.027$) and EtS ($p = 0.026$) were significantly higher in the group of impaired drivers compared with the not-impaired drivers. There was a statistically significant positive correlation between the concentrations of EtG (Spearman's $\rho = 0.170$, $p = 0.041$) and EtS (Spearman's $\rho = 0.189$, $p = 0.022$) and the degree of impairment.

The higher rates of detections of EtG and EtS in impaired compared to not impaired drivers as well as the positive correlation between concentrations of EtG and EtS and the degree of impairment, indicate that hangover symptoms may be relevant for traffic-safety.

Source: Høiseth G, Fosen JT, Liane V, Bogstrand ST, Mørland J. Traffic Injury Prev. 2014. ■

NEW DATE CONFIRMED FOR T2016

Within about two years, delegates from different parts of the world will participate in the first ICADTS Conference to be held in South America - in the beautiful city of Gramado, Brazil. As part of an effort to place ICADTS closer to where it is much needed, T2016 is being prepared with care to cover the many aspects of drunk and drugged driving, road safety and policymaking around the issue, in an atmosphere that will combine science with leisure. Conference organizers have already confirmed the new date – **October 16-19**, in order to avoid a potential conflict with election dates that will occur in the beginning of October, 2016. The scientific committee is being formed, and the general structure of the Conference has been already designed. One of the new elements is a pre-conference course for new attendants, aimed at students and professionals from the region who will be in touch with the subject for the first time. Please pass the news around, and if you are willing to participate, **save the date!** ■



21st International Council on Alcohol,
Drugs and Traffic Safety Conference

T2016

Gramado/Brazil

*Save
the date*

October 16-19, 2016



www.icadts.nl | Serrano Resort Convention Center | www.t2016.org

UPCOMING EVENTS

Washington, DC

January 11-15, 2015

Transportation Research Board 94th

Annual Meeting

<http://www.trb.org/AnnualMeeting2015/AnnualMeeting2015.aspx>

Chicago, IL

March 15-17, 2015

Lifesavers 2015

<http://www.lifesaversconference.org/>

Washington, DC

May 26-29, 2015

Society for Prevention Research

<http://www.preventionresearch.org/2015-annual-meeting/>

Denver, CO

June 16-19, 2015

Society for Epidemiological Research

48th Annual Meeting

<http://www.epiresearch.org/index.php>

San Antonio, TX

June 20-24, 2015

38th Annual Research Society on

Alcoholism Scientific Meeting

<http://www.rsoa.org/2015meet-indexAbs.htm>

Brisbane, Australia

August 2-5, 2016

6th International Conference on Traffic & Transport Psychology

<http://icttp2016.com/>

Gramado, Brazil

October 16-19, 2016

T2016

www.T2016.org

ICTTP2016

The Sixth International Conference on Traffic & Transport Psychology, 2-5 August 2016, Brisbane Convention & Exhibition Centre, Queensland, Australia. Website: <http://icttp2016.com>, Email: icttp2016@qut.edu.au

DETAILS:

As the global population rises, economies become progressively motorized, and “the office” moves increasingly into fleet vehicles, providing safe and efficient transport systems is vital. Technology and engineering can provide part of the solution, but the complete answer can only come through understanding and guiding the behaviour of transport network users.

The quadrennially held international ICTTP conferences have achieved a long-standing and highly-regarded reputation as the leading international meeting in the field of traffic and transport psychology.

ICTTP2016 will be a global forum at which all those involved in traffic and transport psychology, human factors, cognition and behaviours, road safety research, policy, education, enforcement and injury prevention, can meet with researchers, academics, and professionals to discuss and present on the latest work being undertaken in these areas. The conference is expected to attract 300-350 delegates from around Australia and overseas, including academics, researchers and practitioners in the areas of public health, law, medicine, economics, law enforcement, public policy, education, human factors and psychology. ICTTP2016 is being hosted by Queensland University of Technology's (QUT) Centre for Accident Research and Road Safety – Queensland (CARRS-Q) and Griffith University's School of Applied Psychology.

With a theme of “Taking Traffic and Transport Psychology to the World”, the conference themes will provide an invaluable opportunity for a broad range of presentations, workshops, symposia and discussion, with a particular focus on geographic regions where road safety action is needed most. The following keynote speakers have been confirmed to date: Prof David Strayer, Professor of Cognition and Neural Science at the Department of Psychology, University of Utah, USA; Prof Kazumi Renge, President-elect, IAAP Division 13 (Traffic and Transportation Psychology), Japan; A/Prof Samuel Charlton, Chairperson of the School of Psychology, University of Waitako, New Zealand, A/Prof Teresa Senserrick, TARS, University of NSW, Australia; and Acting Assistant Commissioner Michael Keating, Road Policing Command, Queensland Police Service, Australia. ■



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

The **REPORTER** is published quarterly by ICADTS, with support from the U.S. National Highway Traffic Safety Administration. This publication is available free upon request. Contents may be reproduced with attribution.

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