



REPORTER

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

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We are entering a busy time for ICADTS and we want to make sure that our members and associates stay on top of these important activities.

Two ICADTS meetings are rapidly approaching. First is the regional conference in Prague, September 1-4 of this year. This promises to be a very interesting conference with wide participation from Eastern Europe as well as other countries around the world. See the article below and for more information, go to <https://www.cdv.cz/icadts-en/>.

The second meeting is in just over a year. On August 18-21, 2019, our colleagues in Edmonton, Alberta, Canada will welcome us to T2019. See the article in this issue for updates. Over the next few months, the call for abstracts will go out and it's none too soon to start making travel plans. Go to <https://t2019.org/> for the latest news.

The election of new members of the ICADTS Executive Board will take place soon. ICADTS members will receive a ballot via email and should be sure to vote. If you are a member and have changed your email address, please contact our Secretary, Jim Fell at fell-jim@norc.org. The new Executive Board will take office in September at the meeting in Prague.

Warm regards to all,

Kathryn Stewart
ICADTS President

CONVERGENCE OF SAFETY: LOOKING FORWARD TO T2019

The question of safety often arises after a tragic event occurs, lives are lost and extensive efforts are then made to understand the root cause and identify solutions. As we work towards improving traffic safety it is becoming evident that there is an overlap of work that is being done in various fields of safety that directly or indirectly impact traffic safety and overall safety. This convergence of work may slowly be moving towards a north star of a holistic safety culture. Is it time to spend greater efforts and resources on alignment and prioritization of safety initiatives to create a holistic global safety culture?

As we continue to learn and apply the fundamental ethical imperative of Vision Zero, that no one should die or be seriously injured in a motor vehicle collision, there is a natural transfer of expectations to more and more if not all aspects of safety. Vision Zero is a global safety initiative brought to us by Sweden. This paradigm shift in thinking resonates well in the Occupation, Health and Safety world where increasing safety expectations drive responsibility and accountability to look at a future where no one dies or is seriously injured on the job. What is often a tongue and cheek comment at safety meetings about, "oh we should go for vision zero" creates the catalyst for change, first through thought and then through action.

This convergence of thought and action has a strong affinity to safety. It is safe to talk about safety, no one in good conscious can disagree that safety is important and when considered in reference to family, it is always most important. Traffic safety drives home this point over and over when not one person suggests there is any other number than zero for how many people should die in preventable collisions. If we asked this question in other areas of our lives, for example at home, at work, or on holidays, would the answer be different?

www.icadtsinternational.COM

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.



T2019 (Continued)

The multi-modal world of transportation adds more and more complexity to the question of safety as expectations shift to more healthy and innovative alternatives to personal vehicle travel. Urban density affords pedestrians easy access to shops, local pubs and bars, and coming soon to Canada, cannabis retailers. Similarly, protected bike routes offer quicker access to greater distances in a safer environment. All of these changing environments and evolving transportation modes need to be taken into account as we consider what "traffic safety" means. When we add this together with new modes, such as car share and autonomous vehicles, totally new considerations must be addressed. We can only adopt these newer modes of transportation - and new styles of living - when safety is guaranteed.

As autonomous and connected vehicles increase in use, safety is inherently built into algorithms which make split second decisions based on prioritization of all known situations. Machine learning can be added to increase knowledge and capacity to improve safety. The advances in space travel continue to cascade new safety innovations across all spectrums of society including traffic safety. At the current pace of how people, technology and transportation are changing, the convergence of safety will continue to be accelerated. Perhaps this is an opportunity for ICADTS to strategically align with and grow with the new intertwining efforts on safety and safety culture? T2019 provides opportunities for discussions and presentations that will allow us to comprehend and strategize for this new environment.

Gerry Shimko and Laura Thue

COME TO PRAGUE IN SEPTEMBER!

The Břevnov Monastery,
Prague



In a few short months, ICADTS partners with the Czech Transport Research Centre and the Ministry of Transport of the Czech Republic to host an important conference at the Břevnov Monastery in Prague. The theme of the conference is ***Current trends and challenges in alcohol, drugs and traffic safety***. The conference includes a stimulating program of keynote speakers along with oral and poster presentations on the latest research in drugs, alcohol and traffic safety.

The content of the conference promises to be interesting and useful. The setting will provide a beautiful and interesting background for the scientific work. The Břevnov Monastery includes beautiful gardens and a brewery. Of course, the city of Prague is a world-class destination full of historic sights and fascinating culture.

The conference is open for all experts, researchers and stakeholders from the areas of public health and safety, traffic and transport psychology, law, medicine, economics, law enforcement, public policy, education, pharmacology, toxicology, forensic science, human factors, and alcohol intervention and rehabilitation.

A pre-conference workshop on "THC and its influence on fitness to drive" will take place on September 1 followed by the formal conference opening on September 2. The program will conclude at midday on September 4.

A variety of interesting and historic tours and activities are planned as part of the conference – including a tour of the monastery brewery and a Prague sightseeing tour.

Further details on submitting abstracts and conference registration are on the conference website: <https://www.cdv.cz/icadts-en/>

Editors:
Kathryn Stewart
Email: Stewart@pire.org
James Fell
Email: fell-jim@norc.org
www.icadtsinternational.com
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IT TAKES A COMBINATION OF INITIATIVES TO BE SUCCESSFUL IN A COMMUNITY



In 2013, the community of Redlands, California, USA, created an initiative using evidence-based strategies to deter driving under the influence (DUI), underage drinking and driving, public intoxication and alcohol-related calls for service. The initiative, called “Responsible Redlands” included adopting a social host and a deemed approved local ordinance, using minor-decoy and shoulder tap operations, increasing sobriety checkpoints and saturation patrols, conducting responsible beverage service (RBS) training, using identification (ID) scanners to spot false IDs and a publicity campaign to urge neighbors to report loud drinking parties. The objective of the study was to determine if the initiatives were carried out as planned and assess any impacts that may have occurred due to the combination of initiatives. Analysis compared statistics before (2007-2012) and after (2013-2014) the intervention start date on five outcome measures: DUI arrests; underage drinking violations, public intoxication violations, alcohol calls for service, and place of last drink (POLD) data from alcohol violators. Responsible Redlands Initiatives appeared to be carried out as planned. There was a statistically significant decrease in DUI arrests for drivers 21 and older pre-intervention to post-intervention ($p < .001$), in alcohol-related calls for service ($p < .001$), in loud music calls for service ($p = .06$) and in public intoxication citations ($p < .001$).

“Responsible Redlands” interventions were associated with several significant decreases in outcome measures pre-intervention to post-intervention. Communities that consider these initiatives in combination (social host and deemed approved ordinances; minor-decoy and shoulder-tap operations; DUI checkpoints and saturation patrols; RBS training; use of ID scanners and a public information campaign to report loud drinking parties) can expect to experience potential decreases in alcohol-related harm.

The study, entitled: “**Evaluation of a Combination of Community Initiatives to Reduce Driving While Intoxicated and Other Alcohol-Related Harms**” (2018), was conducted by **James C. Fell, Erin Tanenbaum & Devi Chelluri**, and appears in *Traffic Injury Prevention*, Vol. 19, No. S1, S179-S181.

EVALUATION OF THE EFFECTIVENESS OF STATE ALCOHOL IGNITION INTERLOCK LAWS

A recent study carried out for the Insurance Institute for Highway Safety in the U.S. examined the relative effectiveness of different types of ignition interlock laws. Alcohol ignition interlocks require a negative breath test to start a vehicle’s engine, and 45 U.S. states have mandated some form of interlock law for drivers convicted of driving while intoxicated (DWI).

Differences in three interlock laws were evaluated by comparing alcohol-impaired passenger vehicle drivers involved in fatal crashes between 2001–2014 in the United States across state and time. State/time differences unrelated to interlock laws were controlled for by fitting a Poisson model. The exposure measure was the number of passenger vehicle drivers in fatal crashes that did not involve impaired drivers. Laws requiring interlocks for drivers convicted of DWI covered: repeat offenders, repeat offenders and high-BAC offenders, all offenders, or none.

The number of states with all-offender interlock laws during the study period went from three in 2001 to 22 in 2014, and the number of states with any of the three laws increased from 19 to 45. All-offender laws were associated with 16% fewer drivers with 0.08+ BAC involved in fatal crashes, compared to no law. Repeat-offender laws were associated with a nonsignificant 3% reduction in impaired drivers, compared to no law. Repeat and high-BAC laws were associated with a significant 8% reduction in impaired drivers in fatal crashes, compared to no law.

Study authors concluded that laws mandating alcohol ignition interlocks, especially those covering all offenders, are an effective impaired driving countermeasure that reduces the number of impaired drivers in fatal crashes.

Source: *State alcohol ignition interlock laws and fatal crashes*, [Eric R Teoh, James C Fell, Michael Scherer, Danielle E R Wolfe, Insurance Institute for Highway Safety, March 2018.](#)



MORTALITY FROM ROAD CRASHES IN THE U.S.: A COMPARISON WITH LEADING CAUSES OF DEATH IN 2015

The University of Michigan's Sustainable Worldwide Transportation published a study comparing the fatalities per population from road crashes with fatalities per population from five leading causes of death (heart diseases, cancer, lung diseases, strokes, and Alzheimer's disease) and from all causes. The comparisons were made for each U.S. state. The data, applicable to 2015, came from the Centers for Disease Control and Prevention, and the National Highway Traffic Safety Administration.

The main findings are as follows:

1) In the United States, there were 10.9 fatalities from road crashes per 100,000 population, as compared with 197.2 from heart diseases, 185.4 from cancer, 48.2 from lung diseases, 43.7 from strokes, and 34.4 from Alzheimer's disease. The highest fatality rate from road crashes was in Wyoming (24.7) and the lowest in the District of Columbia (3.4).

2) In the United States, fatalities from road crashes represented 1.3% of fatalities from all causes. The highest percentage was in Wyoming (3.0%) and the lowest in Rhode Island (0.4%).

3) In the United States, fatalities from road crashes corresponded to 5.5% of fatalities from heart diseases, 5.9% of fatalities from cancer, 22.6% of fatalities from lung diseases, 25.0% of fatalities from strokes, and 31.7% of fatalities from Alzheimer's disease.

4) Fatalities from road crashes as a percentage of fatalities from other causes of death varied greatly among the states. For example, fatalities from road crashes as a percentage of fatalities from Alzheimer's disease ranged from 96.0% in Wyoming to 9.9% in Rhode Island.

To see the entire report, go to <http://umich.edu/~umtriswt/PDF/SWT-2018-3.pdf>

YOUNG ADULTS RIDING WITH IMPAIRED DRIVERS

A new study indicates that riding with an impaired driver is prevalent among emerging adults, with 33 percent of recent high school graduates reporting the risky behavior at least once in the previous year. The study also indicated that young adults one or two years after high school graduation are more likely to ride with a driver impaired by marijuana than a driver who is impaired by alcohol. The research is one of the first to ask about what specific substance was used by the driver and who the driver was.

The researchers used data from Waves 4 and 5 of the NEXT Generation Health Study, collected in 2013 and 2014. Young adults were asked about a variety of health topics. Questions included, "During the last 12 months, how many times did you ride in a vehicle driven by someone who had been drinking alcohol?" The question was repeated for marijuana use and illicit drug use. The answer "at least once" was given by 23 percent of respondents for a marijuana-impaired driver, 20 percent for an alcohol-impaired driver, and 6 percent for a driver impaired by other illicit drugs.

The participants were also asked who the impaired driver was that they rode with: a friend or relative about the same age, an unknown or little-known person around the same age, an older relative, an older known adult, or an unknown older adult. The risk of riding with an impaired driver was significantly higher for peer drivers than for older adult drivers (21 percent vs. 2.4 percent for marijuana, 17 percent vs. 4 percent for alcohol, and 5.4 percent vs. less than 1 percent for illicit drugs). The study also indicated that riding with an impaired driver in the past was associated with an increased risk of subsequent riding with an impaired driver.

The takeaway from the research is that early and frequent riding with an impaired driver leads to more of this behavior in the future. And when that impaired driver is a peer, it's more likely that their passengers will eventually become impaired drivers themselves.

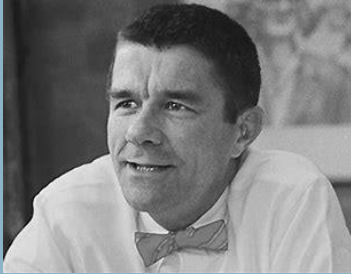
The study can be found at: Li, K., Ochoa, E., Vaca, F. E., & Simons-Morton, B. (March 2018). Emerging adults riding with marijuana-, alcohol-, or illicit drug-impaired peer and older drivers. *Journal of Studies on Alcohol and Drugs*, 79(2), 277-286. doi:10.15288/jsad.2018.79.277



ROBERT VOAS: AN APPRECIATION AND CORRECTIONS

Editors' note: In the last issue of the Reporter, we included a tribute to Bob Voas on the occasion of his "retirement." Brian O'Neill has contributed additional information about Bob's career and some corrections to the previous article.

William Haddon



Robert Voas



Even though Bob is 13 years older than me (and I am old!), in many respects we are contemporaries, our vehicle and highway safety career paths began at about the same time and crossed on many occasions. Bob joined the National Highway Safety Bureau (NHSB), the predecessor to the National Highway Traffic Safety Administration (NHTSA) in 1968, when vehicle and highway safety had only recently become science-based, as opposed to the folklore-based approach that had dominated for almost 70 years.

Bill Haddon, who was appointed as the first head of NHSB in 1967 was one of the key catalysts for this paradigm change, and so Bob was in at the beginning. After the 1968 election, Haddon who was a political appointee, left NHSB and joined the Insurance Institute for Highway Safety (IIHS) in 1969. I joined IIHS a few months later, so Bob and I were both new to the field at about the same time.

After a career of about 13 years, Bob retired from NHTSA and joined PIRE, a public health research organization, and IIHS funded several of Bob's alcohol-related research programs at PIRE. Later there was another overlap in our careers, when in 2010 I joined the PIRE board, where I served for 8 years.

There is no question that Bob had a distinguished and productive career in highway safety, predominately in the area of impaired driving. But, there are a number of incorrect claims in the ICADTS newsletter tribute to him. He did not co-author the 1968 Alcohol and Highway Safety Report to Congress.¹ This was a 182-page seminal document, and it was authored by Bill Haddon and edited by Ben Kelley, not by someone who was brand new to the field. Nor did he work with Bob Borkenstein on the development on a standard for breath testers, in fact Borkenstein and myself as members of the National Safety Council's Committee on Alcohol and Other Drugs headed that effort and Bob was not involved.

Similarly, the claim that Bob discovered the first portable electronic breath testers in 1969, and that they were later used in the Alcohol Safety Programs (ASAPs) is not correct, such devices did not exist until many years later. In the early 1970s the only portable breath testing devices that were available were tubes containing alcohol-sensitive reagents that subjects blew into and then changed color if alcohol was in their breath. There was a need for better portable alcohol detectors because the chemical reagent tube devices had large numbers of false positives and negatives,² but portable electronic devices came quite a few years later.

A related, but also incorrect claim, is that Bob "proposed the development of a passive alcohol sensor (PAS) that did not require the suspect's cooperation." The idea for, and development of, a PAS built into a police flashlight was initiated at IIHS in the mid-1980s. Ian Jones and myself worked with Dr. Tom Parry, the founder of Lion Labs in Wales, to produce working PAS devices³ (by this time the Lion Labs' fuel cell alcohol detection technology had been incorporated into hand-held devices).

None of these corrections are intended in any way to reduce the importance of Bob's 50+ year career in highway safety (and impaired driving in particular). He made many significant contributions on issues such as the effectiveness of alcohol-interlocks, underage drinking laws, methodologies for roadside surveys for alcohol and other drugs, the effectiveness of sobriety checkpoints, evaluations of passive alcohol sensors in the field, etc., etc. His list of publications related to impaired-driving is long and a testament to his significant contributions to an important field.

Brian O'Neill (like Bob, still not fully retired)

¹ He and John Lacey did author much later the 2006 NHTSA "Report on Alcohol and Highway Safety: A Review of the State of Knowledge."

² "An evaluation of some qualitative breath screening devices for alcohol." O'Neill, B. and Prouty, R. W. Proceedings of the 15th Annual Conference for Automotive Medicine, 1972.

³ "The development and evaluation of a passive alcohol sensor." Jones, Ian S. Proceedings of the 30th Annual Conference of the American Association for Automotive Medicine, 1986.

UPCOMING EVENTS

International Conference on Urban Traffic Safety

July 9-12, 2018

Edmonton, Alberta

<https://www.urbantrafficsafetyconference.com/>

Alcohol Interlock Symposium

19-21 August 2018

Austin, Texas USA

www.interlocksymposium.com

ICADTS Regional Conference *Current trends and challenges in alcohol, drugs and traffic safety*

1-4 September 2018

Prague, Czech Republic

<https://www.cdv.cz/icadts-en/>

Deutschen Gesellschaft für Verkehrsmedizin (DGVM) Deutschen Gesellschaft für Verkehrspsychologie (DGVP)

28-29 September 2018

Saarbrücken, Germany

www.verkehr-symposium.de

The International Traffic Medicine Association World Congress

30 October – 1 November 2018

Curitiba, Brazil

<http://itma-congress-2018.com/en.html>

T2019

18-21 August 2019

Edmonton, Alberta Canada

www.t2019.org

To view past issues of the Reporter, go to <http://www.icadtsinternational.com/pages/icadts-reporter.php>



ALCOHOL POLICY INFORMATION SYSTEM ANNOUNCES UPDATES ON ALCOHOL AND RECREATIONAL CANNABIS LAWS

The Alcohol Policy Information System (APIS), a project of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), announces policy updates. Highlights include changes to underage drinking and retail sales laws in some U.S. states and changes in state taxation rates and pricing policies on alcoholic beverages.

Updates on laws on recreational cannabis sales included legalization in three additional states (California, Massachusetts, and Nevada).

These and other changes to current APIS policy topics are now posted to the site found at:

<https://alcoholpolicy.niaaa.nih.gov/> .

EFFECTS OF ALCOHOL ON PERFORMANCE IN AUTOMATED VEHICLES

German researchers carried out a study of driving simulator performance among drivers at different levels of alcohol consumption to examine the effects of alcohol in automated vehicles. Automated driving systems are getting pushed into the consumer market, with varying degrees of automation. Most often the driver's task will consist of being available as a fall-back level when the automation reaches its limits. These so-called take-over situations have attracted a great body of research, focusing on various human factors aspects (e.g., sleepiness) that could undermine the safety of control transitions between automated and manual driving. However, a major source of accidents in manual driving, alcohol consumption, has been a non-issue so far, although a false understanding of the driver's responsibility (i.e., being available as a fallback level) might promote driving under its influence. In this study 36 drivers were exposed to different levels of blood alcohol concentrations (BACs: placebo vs. 0.05% vs. 0.08%) in a high fidelity driving simulator. The effect on take-over time and quality was assessed. The results point out that a 0.08% BAC increases the time needed to re-engage in the driving task and impairs several aspects of longitudinal and lateral vehicle control. For 0.05% BAC, there was only a non-significant trend of worsening compared with the alcohol placebo condition.

Katharina Wiedemann, Frederik Naujoks, Johanna Wörle, Ramona Kenntner-Mabiala, Yvonne Kaussner, Alexandra Neukum, Effect of different alcohol levels on take-over performance in conditionally automated driving, *Accident Analysis & Prevention*, Volume 115, 2018, Pages 89-97, <https://doi.org/10.1016/j.aap.2018.03.001>.

ICADTS MEMBERSHIP DUES 2017

Message from the ICADTS Treasurer

There have been some difficulties with the ICADTS PayPal account for the past year. As a result of this, we were not able to collect your ICADTS dues during that time. Fortunately, we have worked out a solution which enables us to collect the membership dues through our website either by Paypal, Mastercard, Visa, and Eurocard.

If you are an ICADTS member, but you did not receive an e-mail from the treasurer for paying the 2017 membership dues, we would like to ask you to use the following link to pay your dues and enter your current email address at the purchase details/description area on the PayPal page:

<http://icadtsinternational.com/pages/pay-dues.php>. If you have any questions, please contact me at sjoerd.houwing@cbr.nl.

Thank you!

Sjoerd Houwing, ICADTS Treasurer