

# REPORTER

It's been 10 years since the European Union's research project on Driving Under the Influence of Drugs,

Alcohol and Medicines, known as the DRUID project, was completed. The project looked at experimental studies, epidemiological studies, enforcement, classification of medicines, driver rehabilitation, withdrawal of driving license, and dissemination and guidelines. Since DRUID, the EU has largely ignored the issue of driving under the influence in their strategic research agenda. However this may be about to change. The General Secretariat of the Council recently issued the EU Drugs Strategy 2021-2025 that provides the overarching political framework and priorities for the European Union's drugs policy for the period 2021-2025. The Strategy aims to protect and improve the well-being of society and of the individual and to protect and promote public health. Part of the strategy is the identification of strategic priorities, such as the prevention of drug use and raising awareness of the adverse effects of drugs. More in particular the strategy states that "Focus should be given to the prevention of drug-impaired driving and accidents caused by drug-impaired persons. In particular, awareness raising is required to highlight the risks of driving while impaired by drugs. This area requires further research and development to identify and evaluate effective policy and operational responses, including the development of more accessible roadside testing methods for drug detection." It's a promising sign that the EU has placed the issue of driving under the influence back on its agenda and it will be of interest to see how this change in strategy spells out in action plans and whether we can anticipate a successor of DRUID. Hopefully, more information on the renewed EU strategy can be

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

## **MESSAGE FROM THE ICADTS PRESIDENT**

#### Dear ICADTS members,

shared at the T2022 meeting.

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constitutional change has gone into effect and will be applied to the next election of board members that will take place this spring. We are very pleased that a number of excellent candidates have expressed an interest to serve on the ICADTS board and we will soon present the candidates to our membership. I'm convinced these candidates can bring new drive and leadership that will keep the ICADTS organization lively and healthy for the years to come.

As announced before, the Constitution and By-laws of ICADTS have been adjusted in order to increase

involvement of members of low and middle-income countries as well as young scientists. This

Finally, the call for symposia for <u>T2022</u> has been extended to early June 2021, so last minute proposals are still welcome!

Kind regards,

Jan Ramaekers President ICADTS



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.





#### **INTERNATIONAL SAFETY MEDIA AWARDS**

#### Drink driving awareness campaign



Entry Information Two 200 Aver Share Cargany Share Name Congenting Share Comp Fining Share This Entry © © © © © Archive of Pact Winners ICADTS welcomes the award received by one of our Board Members representing the company InOutCister, Lda, an organisation specialising in the area of Mobility, Sustainability and Human Factors in Road Scenarios.

With the film script conceived by Fátima Pereira da Silva, InOutcister **won 2nd prize (Silver Award) in the Short Video category at the world event: The International Safety Media Awards (Australia)**. In its seventh edition, the **International Safety Media Awards** was part of the **Virtual Pre-Conference Global Injury Prevention Showcase 2021**, which took place from 22 to 26 March, based in Australia. This recognition results from the evaluation of a world jury with highly recognised experts of different nationalities. The film focuses on raising awareness about the dangers of drinking and driving. Under the name Don't Drink and Drive, it is the result of awareness-raising activities carried out in Coimbra over a 4year period with more than 5,000 university students in the context of academic parties, as well as other actions carried out during parties on the dangers of driving under the influence of alcohol.

The film results from the initiatives led by Fátima Pereira da Silva in the company InOutCister, which had already received recognition from the European Commission and the European Road Safety Charter, in 2019, as one of the four projects elected and recognised as practices of excellence, receiving the Best Practices in the Excellence in Road Safety Awards in Brussels/October 2019.

Portugal is to be congratulated. Good practices regarding mobility and safety for all are valued worldwide. You can access here the links of the film: <u>http://isma-awards.org/drink-driving-awareness-campaign/;</u> <u>http://isma-awards.org/about-isma/;</u> https://www.worldsafety2022.com/showcase-virtual-program



#### MEETING OF THE EUROPEAN WORKPLACE DRUG TESTING SOCIETY

The 12th Biannual Meeting of the European Workplace Drug Testing Society (EWDTS) will take place between the 10th and 11th of June, 2021.

The atypical circumstances in which we live, lead world experts with experience in the field of drug testing in the workplace, as well as in the new challenges in the field of new technologies and new directions for a safe world (Safe Systems and Zero Tolerance), to gather in a webinar that will take place on 10 and 11 June.

The webinar programme includes: the presentation of the Wastewater Project; Air, Breath, Sweat and Oral Fluid Analysis in WDT, as well as the pandemic of impaired driving under the influence of alcohol (addressing zero tolerance with the new technologies inside the vehicle). The event is supported, among others, by the Gold Sponsors ACTS, Thermofisher and Eurofins.

To participate, you must register your interest by emailing: treasurer@ewdts.eu. The cost of attending the conference will be  $\notin$ 30 for EWDTS, IFDAT and IACFT members and  $\notin$ 40 for non-members.



Editors: Kathryn Stewart Email: <u>Stewart@pire.org</u> James Fell Email: <u>fell-jim@norc.org</u> www.icadtsinternational.com

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### MEDICATIONS AND RISK OF MOTOR VEHICLE COLLISION RESPONSIBILITY IN BRITISH COLUMBIA, CANADA

Many medications impair driving skills yet their influence on collision risk remains uncertain. A recent article by Jeffrey Brubacher and colleagues systematically investigated the risk of collision responsibility associated with common classes of prescription medications. The paper reported on a population-based case-control study analyzing linked driving and health records in British Columbia, Canada from Jan 1, 1997, to Dec 31, 2016. The study cohort included all drivers involved in an incident collision (defined as first collision after 3 collision-free years) that resulted in a police report. Based on police collision reports, the researchers classified drivers as responsible for the collision (cases) or not responsible (controls); drivers with indeterminate scores were excluded. The odds of collision responsibility in drivers with current prescriptions for medications of interest versus drivers without prescriptions were calculated. To explore whether risk of collision responsibility was related to medication effect or driver factors, the researchers compared risk in current medication users versus past users. To study whether drivers developed tolerance to medication effects, the researchers compared risk in new (first 30 days of a prescription) versus established users.

During the study period, 4,906,925 drivers had their driving licence linked to health records; of these drivers, 747,662 unique drivers were involved in 837,919 incident collisions between Jan 1, 2000, and Dec 31, 2016. A total of 382,685 drivers responsible for the collision (cases) and 332,259 drivers not responsible (controls) were included in the final analysis; 122,975 drivers with indeterminate responsibility were excluded. There was an increased risk of collision responsibility in drivers prescribed sedating antipsychotics (adjusted odds ratio [aOR] 1.35), long-acting benzodiazepines (aOR 1.30), short-acting benzodiazepines (aOR 1.25), and high-potency opioids (aOR 1.24). Among medications used for medical indications, the highest risk was seen in drivers prescribed neurological medications: cholinergic drugs (aOR 1.83), anticholinergic agents for Parkinson's disease (aOR 1.45), dopaminergic agents (aOR 1.20) and anticonvulsants (aOR 1.20). People currently taking benzodiazepines, non-sedating antidepressants, high-potency opioids, and anticonvulsants had increased risk compared with past users. No increased risk was found in new compared with established users of these drugs.

The authors concluded that drivers prescribed benzodiazepines or high-potency opioids are at increased risk of being responsible for collisions and this risk does not decrease over time. Several other classes of medications are associated with increased risk, but this association might be independent of medication effect. These findings can guide medication warnings and prescription choices and inform public education campaigns targeting impaired driving.

Source: Jeffrey R Brubacher, Herbert Chan, Shannon Erdelyi, Peter J Zed, John A Staples, Mahyar Etminan, Medications and risk of motor vehicle collision responsibility in British Columbia, Canada: a population-based case-control study, *The Lancet Public Health*, 2021

https://www.sciencedirect.com/science/article/pii/S246826672100027X?via%3Dihub

#### ROAD USER ATTITUDES AND BEHAVIOURS IN ABUJA, NIGERIA

The continuous increases in the numbers of road traffic crashes (RTC) over the years, especially in developing countries, have been a source of worry. The majority of the RTC are attributed to road user behaviours exhibited by the drivers. This study sets out to investigate the road user attitudes and behaviours in Abuja, Nigeria. A total of 1526 questionnaires were distributed, of which 321 questionnaires were completed and returned. The questionnaires tried to understand four major road user behaviours, namely use of seatbelts, drink driving, use of mobile phone while driving, and use of child restraints. The results after analysing the questionnaires showed that the majority of the road users in Abuja showed high non-compliance with the use of seatbelts, either when driving or when being driven. About 64% of the respondents admitted to not using seatbelts. Around one-third of Abuja road users admitted to drink driving. Road users who were married engaged in more frequent drink driving than road users who were single, and the association was statistically significant. A high percentage of Abuja road users admitted to using mobile phones while driving and 55.8% of the total respondents admitted to not using child restraints while driving. It is recommended that stricter enforcement of road safety laws should be undertaken and that the government should provide road safety agents with the right equipment (e.g., speed guns, breathalyzers) that would aid road safety agents to perform their duties effectively in order to curb the excessive bad road user behaviours in Abuja.

Source: Uhegbu UN, Tight MR. Sustainability 2021; 13(8): e4222.



#### **UPCOMING EVENTS**

COVID-19 effects on alcohol, drugs and road safety: Virtual Symposium 1 September 2021 www.icadtsinternational.co <u>m</u>

IFDAT 2021- 10th Annual International Forum for Drug and Alcohol Testing 19-21 September 2021 Salzburg, Austria www.ifdat.com

65<sup>th</sup> Annual Conference of the Association for the Advancement of Automotive Medicine, Indianapolis, IN October 19-22, 2021 https://www.aaam.org/annu al-conference-2/

T2022

28-31 August 2022 Rotterdam, The Netherlands <u>www.t2022.org</u>

## CHANGES IN ALCOHOL USE AND DRINKING AND DRIVING OUTCOMES FROM BEFORE ARREST FOR DRIVING UNDER THE INFLUENCE TO AFTER INTERLOCK REMOVAL

Half of the offenders convicted of impaired driving in the United States are sentenced to install alcohol ignition interlock devices (IIDs), which prevent them from starting their vehicles if they have been drinking. No research has yet explored offenders' patterns of alcohol consumption and driving under the influence of alcohol (DUI) from the time before the arrest to the time period after the IID is installed. A recent study aims to fill that gap in knowledge. Using the Timeline Follow-back interview procedure, the researchers assessed the daily drinking of 153 convicted DUI offenders' self-reported total alcohol consumption and rates of self-reported driving after drinking over 4 phases: before DUI arrest, between arrest and IID installation, during the phase on the interlock, and after the interlock is removed. Because information about behaviors in each period was not available for every participant, comparisons were made using paired-sample contrasts. Compared with before the arrest, total alcohol use decreased by 50% in the 4-month phase following arrest and before IID installation, though it did not change much afterward. The frequency of drinking and driving decreased sharply after the arrest (-82%), with further decrease upon installation of the interlock (-58%, p = 0.05). The frequency of drinking and driving after the IID was removed returned to preinstallation drinking and driving status (+58%, p = 0.01). The authors concluded that participants made significant adjustments to their drinking behavior by adhering to the traditional DUI driving restrictions in the post-arrest phase. Although installation of an IID was not associated with a significant change in drinking, it further reduced the frequency of drinking and driving. Evaluations of the IID experience should take into account information on an individual's drinking and DUI behaviors not only before the IID was installed, but before the individual was arrested.

Source: Voas, R. et al., Changes in Alcohol Use and Drinking and Driving Outcomes from Before Arrest for Driving Under the Influence to After Interlock Removal, March 2021, *Alcoholism Clinical and Experimental Research* 45(4). <u>10.1111/acer.14558</u>

# EVALUATION OF A REAL-WORLD VIRTUAL REALITY INTERVENTION TO REDUCE DRIVING UNDER THE INFLUENCE

Driving under the influence (DUI) increases the risk of crashes. Emerging technologies, such as virtual reality (VR), represent potentially powerful and attractive tools for the prevention of risky behaviours, such as DUI. Therefore, these technologies are embraced in prevention efforts with VR interventions primed to grow in popularity in near future. However, little is known about the actual effectiveness of such DUItargeting VR interventions. To help fill the knowledge gap, a recent study carried out by the Queensland University of Technology explored the effects of one VR intervention as delivered in the real world. Using pre and post test design, including an intervention group (n = 98) and a control group (n = 39), the intervention evaluation examined young drivers' (aged 18 to 25, no known history of DUI) intention and self-reported behaviour three months after the intervention as compared to the baseline. The results did not provide evidence for statistically significant effects of the VR intervention on self-reported DUI behaviour during the three months post intervention and DUI intention at three months post intervention. Such results might be due to the fact that the recruited participants generally self-reported little DUI behaviour, i.e. positively changing behaviour that is already positive is inherently challenging. Nevertheless, the results question the utility of funding the roll-out of arguably attractive technologies without a thorough understanding of their effectiveness in particular settings. To improve the potential for future positive outcomes of such interventions, the authors provide suggestions on how VR software might be further developed and, subsequently, leveraged in future research to improve the likelihood for behavioural change, e.g. by collecting, analysing and presenting objective driving performance data. Alternatively, future endeavours might focus on participants with known DUI history and examine the effects of the VR intervention for this particular higher-risk group.

Source: Vankov D, Schroeter R, Twisk D (2021) Can't simply roll it out: Evaluating a real-world virtual reality intervention to reduce driving under the influence. PLoS ONE 16(4): e0250273. https://doi.org/10.1371/journal.pone.0250273