

A POSITION PAPER ON DRUG-DRIVING

DRIVING UNDER THE INFLUENCE
OF PSYCHOACTIVE DRUGS

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A collaboration
paper between



Doctors for
Road Safety

MALTESE
ASSOCIATION OF
PSYCHIATRY



Foundation for Social
Welfare Services
Here for you



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1. INTRODUCTION

There are several factors which impact adversely the ability to drive safely and responsibly. The commonest of these factors include driving while distracted usually by the use of mobile phones, driving using excessive speed, and driving under the influence of alcohol and/or drugs. This paper will be addressing the latter.

Illicit drug use has increased significantly over the past several years¹. Illicit drugs which are in common use include cocaine and cannabis amongst others. Both have been associated with road crashes. Data has shown that there is a relationship between increased availability of cannabis and road traffic accidents and fatalities².

In Malta, the use of cannabis for personal consumption was legalised in 2021. Concerns were raised by the organisations which have compiled this report, that legalisation would impact society in various ways, one of which might be the worsening of safety on our roads. The year 2022 was the worst on record for Malta in terms of road fatalities. In 2023, a series of high-profile road crashes resulting in deaths have been allegedly linked with the use of drugs and alcohol.

With this background, the main stakeholder organisations involved in psychoactive* drug management and rehabilitation, and road safety, got together to produce this Position Paper on drug-driving. The aim of this intentionally succinct paper is to establish the position of the collaborating organisations at this point in time with regard to this very relevant and actual issue. The secondary aim is to stimulate discussion amongst partners and decision makers on the subject matter, and hopefully help formulate policies and actions to curb abuse and improve road safety.

*the terms psychoactive and psychotropic may be used interchangeably for the purposes of this document.

2. WHAT IS DRUG-DRIVING?

Drug-driving is driving a vehicle while impaired due to the influence of the intoxicating effects of recent psychoactive substance use. This may include use of illicit drugs or even abuse of prescription psychotropic drugs. It can make driving a car unsafe. Just like driving under the influence of alcohol, drug-driving may result in road traffic crashes, serious injuries, and death.

3. DOES DRUG-DRIVING RESULT IN IMPAIRED DRIVING?

Different psychoactive drugs work on different areas of the brain, resulting in different effects on driving skills. Cannabis for instance is referred to as a 'depressant' drug in that it affects the central nervous system, slowing down the messages between the brain and the body (see point 3).

Cocaine/amphetamines are considered as 'stimulant' drugs that can result in aggressive or reckless driving. Certain prescription medicines, such as benzodiazepines and opioids, can also

result in drowsiness, dizziness, impair cognitive function and result in road crashes. The co-ingestion of alcohol together with psychoactive drugs results in a higher risk of road crashes³.

4. DRIVING UNDER THE INFLUENCE OF CANNABIS

Cannabis use results in impaired judgment, poor motor coordination and reaction time and studies have found a direct relationship between the blood level of tetrahydrocannabinol (THC- the principal psychoactive constituent of cannabis) and impaired driving ability.^{4,6}

Blood THC levels collected from occasional smokers during driving in laboratory-controlled simulator test (8.2 and 13.1ng/ml) resulted in a Standard deviation of lateral position (SDLP) (Figure 1.) equivalent to 0.05% and 0.08% blood alcohol concentration (BAC) respectively, with these being the most common alcohol legal driving limits globally. Blood samples were collected between 0.5 to 1.3 hours post inhalation of low (THC 2.9%) and high (6.7%)-THC vaporized cannabis over 10 minutes.⁶

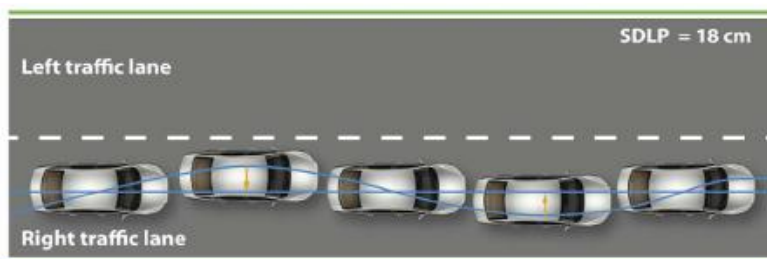


Figure 1: SDLP, also known as the “weaving” of the car is the measured distance from the centre of the lane that a driver drifts. It is important to note that SDLP is not directly validated to predict crash risk but is an objective measure of the continuous behaviour during driving.

5. WHAT IS THE COMBINED EFFECT OF ALCOHOL AND CANNABIS ON DRIVING?

Combining alcohol with cannabis resulted in an additive effect on SDLP in this laboratory-controlled study. Whilst cannabis was associated with an increase in SDLP, alcohol also affected lane departures/minute and maximum lateral acceleration.⁶ (Figures 2 and 3)



Figure 2: Lane departure is defined as the edge of vehicle crossing a lane boundary per minute allowed for normalization across drive events.

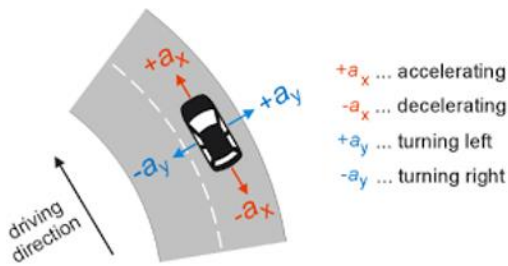


Figure 3: Lateral acceleration is the acceleration created when a vehicle corners that tends to push a vehicle sideways.

6. HOW COMMON IS DRUG-DRIVING?

The role of drug-driving in road crashes has been overshadowed by the significance of alcohol-impaired driving. Since the middle of the 20th century, alcohol has been the most important factor for drivers involved in fatal crashes.⁷

The European driving under the influence of drugs, alcohol, and medicines (DRUID) project conducted roadside surveys in 13 countries across Europe, in which blood or oral fluid samples from 50 000 drivers were analysed, revealed that illicit drugs were present in 1.9%, and psychoactive medicines in 1.36 %. Illicit drug-driving varied across EU countries from 0.2 to 8.2%.⁸

In the United States, data from the Substance Abuse and Mental Health Services Administration's National Survey on Drug Use and Health (NSDUH) indicated that in 2018, twelve million (4.7%) US residents reported driving under the influence of cannabis in the past 12 months and 2.3 million (0.9%) reported driving under the influence of illicit drugs other than cannabis.⁹

In Australia, alcohol-related road traffic deaths have been decreasing (2006-2016) whilst a simultaneous increase in road traffic fatalities associated with psychoactive substances has been recorded¹⁰.

We could not find any published studies on this subject in Malta.

7. WHAT DO THE CURRENT LAWS OF MALTA HAVE TO SAY ABOUT DRIVING UNDER THE INFLUENCE OF ILLICIT DRUGS?

Traffic regulation Ordinance Cap. 65

For the purpose of this Ordinance, "drug" includes any intoxicant other than alcohol.

Article 15A. (*this article defines impaired driving either through drink or drugs*)

(1) No person shall drive or attempt to drive or be in charge of a motor vehicle or other vehicle on a road or other public place if he is unfit to drive through drink or drugs.

2) For the purposes of this article, a person shall be deemed to be unfit to drive if his ability to drive properly is for the time being impaired.

Currently, Article 15H of this legislation puts Alcohol and ‘drugs’ on the same level with regards penalties with a fine of (€1,800) for first conviction or imprisonment not exceeding six months, or to both. In the case of a second or subsequent conviction, to a fine of not less than (€3,000) or to imprisonment not exceeding one year, or to both such fine and imprisonment. Whilst the rest of the law deals with alcohol concentrations (breath, blood and urine), no further mention of any test for any other “drug” or intoxicant is mentioned.

Lastly, in the case of alcohol, article 15C of the same legislation requires the enforcement agency (police officers or wardens) to “reasonably suspect that a person is driving or attempting to drive or is in charge of a motor vehicle or other vehicle on a road or other public place and has alcohol in his body” before proceeding to test for presence of alcohol in the body. This prevents police officers from carrying out spontaneous spot checks and roadblocks. The removal of this pre-requisite for roadside testing for alcohol is a matter of ongoing debate, and it follows that this will also be true of random roadside drug-testing.

Motor Vehicles (Driving licences) Regulations S.L.65.18 ¹¹

The eighth schedule to the above regulations defines by law the minimum standards of physical and mental fitness for driving a power-driven vehicle.

Driving licences shall not be issued to or renewed for applicants or drivers who are dependent on psychotropic substances or who are not dependent on such substances but regularly abuse them, whatever category of licence is requested.

12. Regular use:

(a) Group 1: *(drivers of vehicles of categories A, B and B+E and subcategories A1 and B1 - Motorcycles and Cars)*

Driving licences shall not be issued to, or renewed for, applicants or drivers who regularly use psychotropic substances, in whatever form, which can hamper the ability to drive safely where the quantities absorbed are such as to have an adverse effect on driving. This shall apply to all other medicinal products or combinations of medicinal products which affect the ability to drive.

(b) Group 2: *(drivers of vehicles of categories C, C+E, D and D+E and subcategories C1, C1+E, D1 and D1+E – Large goods and passenger vehicles)*

The competent medical authority shall give due consideration to the additional risks and dangers involved in the driving of vehicles covered by the definitions of this group.

8. WHAT ARE THE AREAS WHERE OUR LEGISLATION MAY BE IMPROVED?

The following points are not addressed in the current legislation:

1. Defining drug-impaired driving by law, based on a specified level of any psychoactive substance in the blood, urine or oral fluid is currently absent from Maltese laws.
2. There is currently no difference in the Maltese law between cannabis-impaired driving and a cannabis-positive driver.
3. There is currently no mention of any increase in penalty with regards to co-ingestion of psychoactive substances with alcohol.

9. WHAT ARE THE REGULATORY OPTIONS FOR ADDRESSING DRUG-DRIVING?

International policies to reduce drug-driving have often been modelled on those that have proven effective in reducing alcohol-impaired driving over the past 40 years¹².

Therefore, they have included: roadside testing of probable impairment, using either:

- (a) a test of behavioural impairment (also known as a Field Sobriety Test)
- or
- (b) an Oral Fluid Test administered by a police officer at the roadside.

10. WHAT IS AN ORAL FLUID TEST?

The oral fluid test is also known as an Approved Drug Screening Equipment (ADSE) and is used for looking for the presence of illicit drugs. Most tests would usually check for amphetamines, opioids, benzodiazepines THC and cocaine. It can be applied at the roadside and involves taking a sample of saliva that checks for the presence (but not the amount) of such substances (Figure 4). If the test is positive, the driver would need a blood level test of the substance as happens in most EU jurisdictions.



Figure 4: An example of an Oral fluid test

A. SUMMARY STATEMENT AND RECOMMENDATIONS

Drug-driving is driving a vehicle while impaired due to the intoxicating effects of recent psychoactive substance use. It can make driving a car unsafe. Just like driving under the influence of alcohol, drug-driving may result in road traffic crashes, serious injuries, and death.

The use of psychoactive drugs can result in impaired driving skills, leading to an increased risk of road traffic crashes. It is important to note that the most common psychoactive drugs involved in driving crashes are often taken for recreational purposes, although prescription drugs such as benzodiazepines and opioids can also impair driving skills.

Recent studies have shown that drug-driving is a common problem in Europe. Studies conducted in the United States have shown an increase in road traffic fatalities related to cannabis use since commercialization started in some states. It is important to note that alcohol-related road traffic deaths remained stable in the US (2000-2018), while in Australia, they have been decreasing (2006-2016). However, in both cases, there has been a simultaneous increase in road traffic fatalities associated with psychoactive substances. By contrast, it is noteworthy that no major study on drug-driving has ever been conducted in Malta.

Additionally, the concomitant use of alcohol with psychoactive drugs further increases the risk of road traffic crashes. However, it is concerning that there is currently no mention in Maltese law of any increase in penalty with regards to the use of psychoactive drugs combined with alcohol. Furthermore, there is also no mention in Maltese law of any specific substance level in the body fluids that is deemed acceptable while driving. This lack of a defined limit leaves room for uncertainty and inconsistency when it comes to enforcing regulations related to drug-driving.

Another worrying aspect is that there is currently no available road-side test in Malta for any illicit drug (excluding alcohol) that causes impairment in driving. This lack of testing capability makes it challenging to detect, deter and prove drug-impaired driving effectively, thus hinders enforcement.

These gaps in legislation and regulation may contribute to the continued prevalence of drug-driving in Malta. The absence of comprehensive local research restricts our understanding of the extent of the problem and limits the development of effective strategies to address drug-impaired driving in the country.

Given these concerns, the stakeholder organisations Doctors for Road Safety, Maltese Association of Psychiatrists and The Foundation for Social Welfare Services, urge the Maltese authorities to take immediate action to address drug-driving and enhance road safety, and recommend the measures below.

Recommendations

- 1) Establish clear guidelines regarding **acceptable substance levels** in the body fluids while driving, based on scientific evidence and international best practices.
- 2) Invest in the deployment and implementation of **road-side tests** capable of detecting impairment caused by illicit drugs to improve enforcement efforts.
- 3) Allocate resources for conducting a **comprehensive study on drug-driving in Malta**, including an assessment of the prevalence and impact of drug-impaired driving on road safety.
- 4) Enhance **training and presence of enforcement officers** on Maltese roads. All enforcement officers should be provided with the necessary training and enabled to conduct **random roadside assessments** using field sobriety tests effectively.
- 5) Introduce urgently a legal framework to enable **random testing for psychoactive substances**. (This recommendation is in line with the National Drug Policy 2023-2033, Actions 8 and 15)¹³.
- 6) We strongly recommend the **concomitant use of a breathalyzer test for alcohol** alongside any roadside drug test.
- 7) Review and update existing legislation to incorporate **penalties** for the use of psychoactive drugs combined with alcohol, reflecting the increased risk to road safety.
- 8) **Random screening of professional drivers:** to reinforce road safety standards, we recommend the implementation of random drug screening programs for professional drivers such as cabdrivers, school bus drivers, coach drivers and drivers of heavy machinery. These screenings should aim to detect the presence of psychoactive drugs in their systems, ensuring that those responsible for transporting passengers are not impaired while on duty.

By taking these steps, we can better protect the lives of road users and create safer roads for everyone in Malta in relation to the use of drugs and driving. It is crucial that we address drug-driving as a serious issue and work together to ensure the well-being of our community. These measures are also in line with the Government's commitment towards a Vision Zero strategy.

References

1. United Nations Office on Drugs and Crime (UNODC) World Drug Report 2022
2. Rocky Mountain High Intensity Drug Trafficking Area program. The Legalization of Marijuana in Colorado: The Impact: Volume 6, September 2019. *Mo Med*. 2019;116(6):450
3. European Monitoring Centre for Drugs and Drug Addiction. Drug use, impaired driving and traffic accidents. Second Edition. 2014
4. Lenné MG, Dietze PM, Triggs TJ, Walmsley S, Murphy B, Redman JR. The effects of cannabis and alcohol on simulated arterial driving: Influences of driving experience and task demand. *Accid Anal Prev*. 2010;42(3):859-866.doi:10.1016/j.aap.2009.04.021
5. Hartman RL, Huestis MA. Cannabis effects on driving skills. *Clin Chem*. 2013;59(3):478-492. doi:10.1373/clinchem.2012.194381
6. Hartman RL, Brown TL, Milavetz G, et al. Cannabis effects on driving lateral control with and without alcohol. *Drug Alcohol Depend*. 2015;154:25-37. doi:10.1016/j.drugalcdep.2015.06.015
7. Romano E, Voas RB. Drug and alcohol involvement in four types of fatal crashes. *J Stud Alcohol Drugs*. 2011 Jul;72(4):567-76
8. European Monitoring Centre for Drugs and Drug Addiction. Driving Under the Influence of Drugs, Alcohol and Medicines in Europe - findings from the DRUID project Luxembourg: Publications Office of the European Union
9. Azofeifa A, Rexach-Guzmán BD, Hagemeyer AN, Rudd RA, Sauber-Schatz EK. Driving Under the Influence of Marijuana and Illicit Drugs Among Persons Aged ≥ 16 Years - United States, 2018. *MMWR Morb Mortal Wkly Rep*. 2019 Dec 20;68(50):1153-1157
10. Schumann J, Perkins M, Dietze P, Nambiar D, Mitra B, Gerostamoulos D, Drummer OH, Cameron P, Smith K, Beck B. The prevalence of alcohol and other drugs in fatal road crashes in Victoria, Australia. *Accid Anal Prev*. 2021 Apr;153:105905
11. Laws of Malta. Subsidiary Legislation 65.18. Motor Vehicles (Driving Licences) Regulations
12. Compton, R. (2017a), Marijuana-impaired driving: a report to Congress, National Highway Safety Transport Administration, Washington, DC, available at <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf>
13. National Drug Policy 2023-2033. Ministry for Social Policy and Children's Rights. Malta June 2023

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