CANNABIS & DRIVING

International Council on Alcohol, Drugs & Traffic Safety

1: Introduction

What is the aim of this fact sheet series?

The aim of this fact sheet series is to review the scientific evidence on cannabis and driving to provide objective information and inform the development of legislation to manage cannabis-impaired driving. The International Council on Alcohol, Drugs & Traffic Safety (ICADTS) aims to address road safety, with a focus on preventing and reducing traffic crashes caused by driving under the influence of cannabis. This approach demands a different approach from *drug control* strategies designed to reduce illicit cannabis use in the general population.

In jurisdictions where cannabis is entirely illicit, drug control might be prioritized over road safety. That is, a positive result on a biological test may result in a penalty for driving under the influence, regardless of the degree of impairment. However, as an increasing number of jurisdictions no longer prohibit cannabis use, we need to develop effective road safety policies that distinguish between cannabis-impaired driving and the prior use of cannabis only. This is especially pertinent with the increasing use of cannabinoid products as prescription medicines (i.e., medical cannabis).[1,2]

What do we mean by *cannabis*?

Cannabis refers to products including and derived from the flowering and fruiting tops of the Cannabis sativa plant. These herbal and resinous products have many names, including marijuana, sinsemilla and hashish. Cannabis sativa comprises over 140 unique cannabinoids, but scientific knowledge of them is limited.[3] The quantity of each cannabinoid can vary greatly depending on plant variety and growing technique. The two most abundant of these are the non-psychoactive tetrahydrocannabinolic acid (THCA) and cannabidiolic acid (CBDA). When these cannabinoid acids are decarboxylated through heating, such as smoking, vaporizing, or baking into edibles, they are converted into the psychoactive compounds tetrahydrocannabinol (THC) and cannabidiol (CBD).[4,5]

Although CBD can be considered psychoactive, there is no evidence that CBD impairs *when consumed alone*. It is unclear whether the sedative effect of CBD would help generate impairment when cannabis is consumed in combination with alcohol or other drugs. According to a recent systematic review and meta-analysis, consumption of THC can impair driving ability.[6] Limited evidence indicates that consumption of CBD does not appear to impair driving ability.[7,8] *Driving under the influence of cannabis* should therefore be interpreted as *driving under the influence of THC*. This is an important consideration with respect to impaired driving legislation as low-THC cannabis and CBD products are increasingly promoted globally for their supposed *wellness* properties.[9,10]

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About ICADTS

The International Council on Alcohol, Drugs & Traffic Safety (ICADTS) is an independent not-for-profit 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 transport.

To accomplish this goal, the Council sponsors international and regional conferences to collect, disseminate and share essential information among professionals in the fields of law, medicine, public health, economics, law enforcement, public information and education, human factors and public policy.

Acknowledgements

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