# MARIJUANA-IMPAIRED DRIVING

FINDING WHICH DRIVERS ARE MARIJUANA-IMPAIRED

Unlike alcohol, marijuana's psychoactive component (THC) does not metabolize at a constant rate. While body fluid testing (blood, urine, saliva, etc.) can confirm use of marijuana, it cannot show level of intoxication, because:

- THC is stored in the body and metabolized at an inconsistent rate.

- chronic marijuana users, including medical marijuana users, will almost always test positive for THC, even weeks after any high has worn off, due to storage in body fat tissues. These levels often exceed standard THC per se levels (a fixed blood-plasma THC level often used as criteria for arrest, regardless of impairment, as is currently used with alcohol).

- THC body fluid levels vary depending on the mode of ingestion, even at the same dose.

### INTOXICATING EFFECT DURATIONS OF SMOKED VS. EATEN CANNABIS
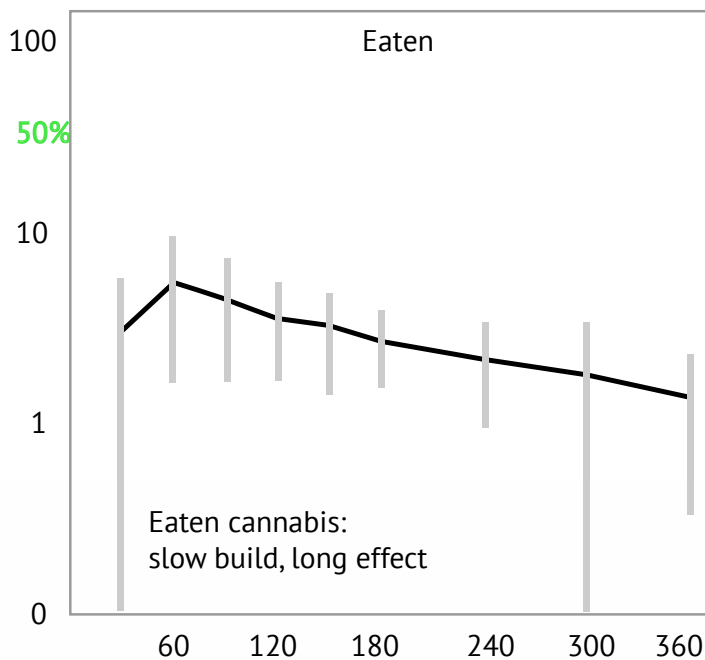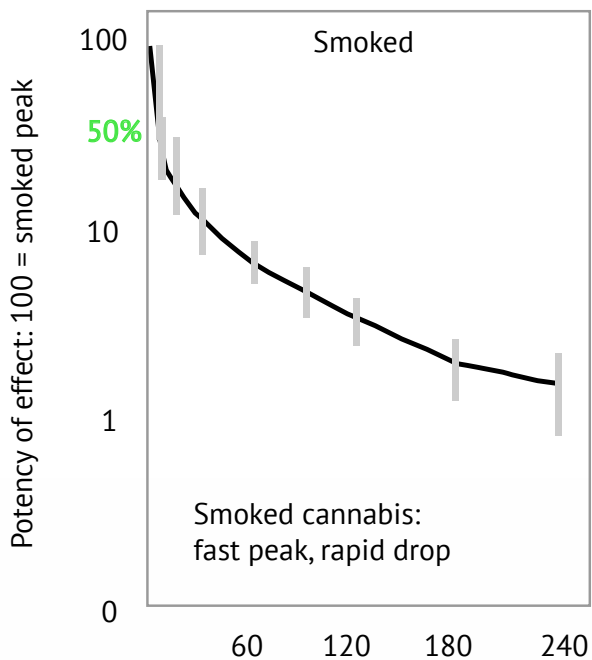
Source: Ohlsson, A. et al. "Plasma delta-9 tetrahydrocannabinol concentrations and clinical effects after oral and intravenous administration and smoking." *Clinical and Pharmaceutical Therapeutics*. Sep. 1980 28(3):409-416.

Moreover, performance deficit (impairment) peaks and continues long after blood plasma levels have crested and fallen below most per se standards, rendering them irrelevant to impairment. In a marijuana-legal environment, such per se standards are likely to release intoxicated drivers onto public roadways and also to incarcerate marijuana-positive drivers who are sober at the time of arrest.

TIME COURSE OF STANDARDIZED THC CONCENTRATION IN PLASMA, PERFORMANCE DEFICIT AND SUBJECTIVE HIGH AFTER SMOKING MARIJUANA

Subjective High

Performance Deficit (% baseline)

THC Concentration (ng/ml)

Percent of Peak

Time After Smoking (minutes)
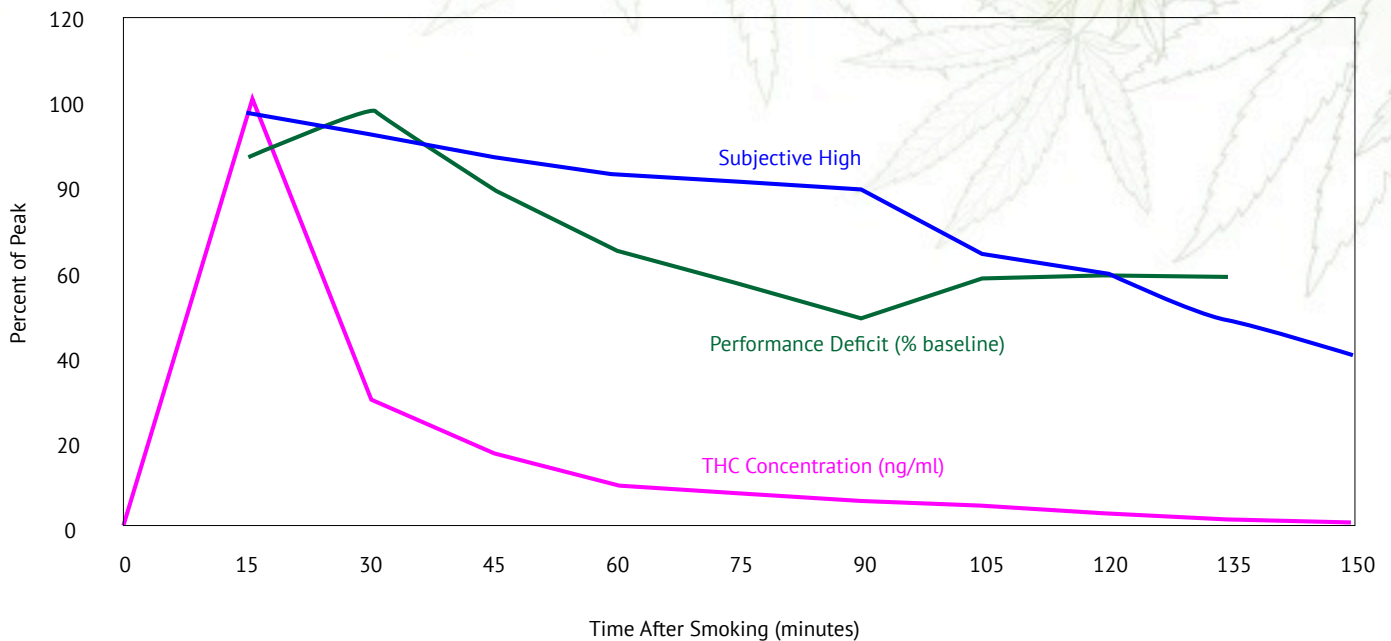
Source: National Highway Traffic Safety Administration. *Marijuana-Impaired Driving: A Report to Congress*. July 2017. Chart adapted from Berghaus et al. 1998, Sticht and Kaeferstein 1998 and Robbe 1994.

CRITERIA FOR MARIJUANA-IMPAIRED DRIVING ARRESTS

Instead, to ensure a just approach and roadway safety, arresting marijuana-impaired drivers should require:

- a drug assessment and positive toxicology screen of a biological sample to confirm presence of marijuana

- an assessment for impairment by marijuana by drug-recognition expert (DRE) or other trained officers, as is now done for other suspected drugged driving impairment.

WHAT IS A DRUG RECOGNITION EXPERT OFFICER?

DRE officers, available in all 50 states, conduct a field sobriety test to assess impairment, and examine a driver's physiological signs for markers unique to certain drug use, including marijuana. DRE officers consider the signs and symptoms of drug use and the driver's behavior to evaluate which drug is impairing a driver. Studies find DRE's accuracy rates to be from 94% to 96%. This ties an impaired driver's arrest to impairment, rather than body fluid level, which does not track with impairment level for marijuana.

RECOMMENDATIONS FOR AN IMPAIRMENT-BASED APPROACH TO MARIJUANA-IMPAIRED DRIVING

1. Avoid per se standards and conduct THC detection screenings rather than assessing blood plasma levels, which don't correlate to impairment.

2. Mandate evidence of drug impairment as the main criterion for arrest. This targets the true danger to the public without penalizing sober drivers with detectable levels of marijuana in their systems.

3. Prioritize law enforcement training in ARIDE/DRE and dashcams and bodycams for more accurate and corroborative identification and assessment of drug-impaired drivers, and to generate more useful data on marijuana-impaired drivers.

4. Prioritize cutting down current backlogs in toxicology laboratories so that justice for both impaired and unimpaired drivers is swift and fair. Rather than irrelevant and invasive testing of blood plasma levels, use quicker and less expensive marijuana detection screenings.

5. At the federal level, deschedule marijuana to encourage research into marijuana-impaired driving. This would remove obstacles to growing and procuring marijuana for research purposes. As well, the federal government should prioritize on-going NHTSA and university research on marijuana use and driving, and encourage development of reliable technology to aid in roadside impairment determination.

FOR THE FULL STUDY, SEE HTTPS://REASON.ORG/POLICY-STUDY/A-COMMON-SENSE-APPROACH-TO-MARIJUANA-IMPAIRED-DRIVING/