

Vigilance at the Wheel study (2007 and 2010)



In 2007-2008 and again in 2010, MEDES conducted two studies on the effects of taking medication (“Medico-Medication”) and then consuming cannabis (“Medico-Cannabis ”), on performance and behaviour while driving.

To do this, driving performance was evaluated and compared in two ways:

- * first under experimental conditions on a simulator that reproduces vehicle driving situations,
- * then under actual driving conditions on a section of motorway.

Driving under simulated conditions was tested on the premises of the Space Clinic, which has a simulator that reproduces vehicle driving situations. Actual driving was tested on a motorway section in Bordeaux.

The study sponsor was the Marseille Public Hospital System (APHM). MEDES coordinated the implementation of the “simulated driving” part of the study.

Study objectives

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“Medico-Medication”

This study aimed to evaluate the effects, in a healthy subject, of a single dose of a drug from the class of benzodiazepines (highly likely to induce sleep), on the ability to drive in simulated and actual conditions.

* **“Medico-Cannabis”**

The aim of this study was to describe accurately and objectively the effects of cannabis consumption on performance and behaviour while driving. It was the behavioural effects of cannabis, particularly drowsiness and slower reactions, that led to a study of their impact in terms of driving vehicles.

Expected benefits of these studies

The purpose of this research is to better assess the real impact on driving of taking medication from the class of benzodiazepines or consuming cannabis, and to improve investigation methods for testing such substances in the field of road health and safety.

In the longer term, it is conceivable that these experimental procedures could be proposed for the routine testing of any drug with a potentially deleterious effect on driving. The ultimate goal of this research is to improve the quality of road safety and reduce the risk of traffic accidents related to consumption of "pharmacologically" active substances. Hopefully, this will help reduce the human and financial costs of accidents.