

## Influence of alcohol on the vigilance levels for a driving test

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**ABSTRACT:**

In order to determine the maximum alcohol to remain sufficiently vigilant during a driving, sixty (60) male volunteers divided into two groups of thirty, including a control group and an experimental group previously submitted to acute consumption of alcohol, were chosen and participated in a driving test. Each subject shall drive a vehicle on a straight track for 500 meters with a circular terminal after 80 meters, enabling him to return to the starting point. The speed was imposed by an instructor and obstacles (balls) may be set to arise on the way. Ten centimeters were added on the side edges of the vehicle to plot the width of the road ahead. Thus, any excess of the lateral edges is a lateral error and any ball reached, arising in front of the driver, is a frontal error. The test is performed each hour for five consecutive hours. The results indicated that the number of errors increases with speed, the side that errors outnumber frontal errors and the acceptable blood alcohol for driving test would be 0.3 g of alcohol per liter of blood. Thus, the state should reduce the permitted blood alcohol, currently at 0.8 g / l, at a rate less than or equal to 0.3 g / l. The state must also equip the police forces of devices adapted to make systematic control.

**Keywords:**

Alertness, Alcohol, Acute consumption, Errors.