Evolution of drug abuse in drivers: a French retrospective analysis of about 9000 cases over a 13-year period

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Background
All studies concerning drug addiction show that consumption is becoming more common in the general population. This is true whatever the class of drugs of abuse (DOA): cannabinoids, cocaine derivatives, opiates and amphetamines. Consequently, the proportion of drivers under the influence of a drug has also significantly increased in the past years.

Methods
The study took place in a French laboratory in charge of research of drugs of abuse in drivers. We retrospectively analyzed all forensic cases involving drivers which measured either cannabinoids, cocaine derivatives, opiates or amphetamines, between 2003 to 2016. The following information was obtained: date of sampling, age, sex, “situation” (driver, passenger, pedestrian, cyclist, dead or alive), the requested measurements and results of the analyses.

Results
8847 cases were collected. Between 2003 to 2016, the proportion of positive cannabis cases increased from 30% to 77%. Within the positive results, 90% were found to be under the influence (THC positive). Driver fatalities tested positive to cannabis fluctuated between 10 to 20%. About 2% were positive to cocaine in 2003, more than doubling to 6% in 2016 (20% had metabolites plus cocaine). In 2016, 4% were positive to amphetamines (50% of amphetamine or MDMA) where previously it was only 1%. Opiates related cases remained stable (5-10%) over the 13-year period.

Conclusions
This retrospective study over the past 13 years shows that, nowadays, about 3 out of 4 drivers screened are positive to one DOA or another. This illustrates that the consumption of DOA is becoming more common place and trivialized.