Introduction: In 2011, more than 40 thousand people were killed in Brazilian roads by traffic accidents. Alcohol and other drug use are pointed out as major contributing factors to this outcome, because their use encourages the driver to take risk decisions. The situation is even worse among truck drivers who are responsible for the distribution of goods in the country. In October 2011, a Brazilian law was implemented banning the production, dispensing and importation of anfepramone, fenproporex and mazindol, which are amphetamine-based drugs for therapeutic purposes (as anorectic medicines). Although the consumption of psychoactive drugs by truck drivers is considered a great cause of concern in Brazil, the scientific evidence on this issue is still scarce. This study has been designed to estimate the extent of alcohol and other drug (amphetamine, cocaine and cannabis) use by truck drivers who travel on interstate highways in the State of Sao Paulo (Brazil), as well as identify the use of amphetamines among these drivers after the implementation of such law.

Materials and Methods: The collection of data was performed in rest areas of three different highways in the State of Sao Paulo during 2012. Truck drivers (n = 427) were approached and invited to participate in the study and asked to answer voluntarily a structured questionnaire regarding alcohol and other drug use, sociodemographic and occupational information, as well as provide a urine sample for toxicological analysis. All participants signed the informed consent form. A headspace-gas chromatography/flame ionization detector (GC-FID) method was used for alcohol determination and other drug screening was performed by immunoassay for cocaine, cannabinoids and amphetamine metabolites. The samples with positive results were confirmed by gas chromatography-mass spectrometry (GC-MS).

Results: All drivers were men with a mean age of 36.4 years (SD=6.54) and the most of them were married/cohabiting. The mean years of education reported was 8.5 (SD=1.92). Most of the drivers have worked more than 12 years as a truck driver and 80% reported working more than 8 hours a day, with very little time of rest. Of the 427 drivers, 30 (7.0%) had positive results for the drugs tested: 6 for amphetamines, 12 for cocaine and 6 for cannabinoids. There were six positive cases for multiple drug use (4 positive cases for cocaine plus cannabinoid and 2 drivers used cocaine in combination with amphetamine). Regarding the use of alcohol, 21 (4.9%) samples were positive, with an average of 0.6 g/L (varying from 0.13 to 1.26 g/L).

Discussion and Conclusions: The findings from this study indicate a high use of alcohol and other drugs amongst truck drivers in Sao Paulo highways. Furthermore, amphetamines still remains as a stimulant drug commonly used by truck drivers in the roads of Sao Paulo State, despite high risk of traffic accidents attributed to them and the new law which banned this kind of drug from the market. Therefore, preventive measures are necessary to better promote traffic safety among truck drivers, and competent authorities enforce current laws against the consumption of amphetamines by drivers in Brazilian road.

Keywords: Truck drivers, Drugs, Alcohol, Cocaine, Cannabinoids, Amphetamine