

Involvement of drugs in Queensland drivers using toxicological investigation

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Abstract

The increased crash risk associated with driving after using illicit drugs is well documented. There is also growing awareness of the risk associated with driving after taking prescribed medications. In Australia, all prescribed medications that have the ability to impair judgement and motor functioning, and consequently affect driver performance, are dispensed with a warning label. However, research indicates that almost one in four Australian drivers ignore such warning labels and continue to drive after use. In Queensland, approximately 25,000 roadside drug tests using saliva analysis are undertaken by the Queensland Police Service annually. Roadside saliva analysis currently tests for the presence of delta-9-tetrahydrocannabinol (THC), methylamphetamine (MA), and methylenedioxyamphetamine (MDMA), with positive samples confirmed by Queensland Health Forensic and Scientific Services (QHFSS). In circumstances where a police officer detects signs of driver impairment but may not have access to a saliva testing instrument, he or she may choose to obtain a blood sample. These samples are analysed by QHFSS and the results are reported back to Queensland Police Service. The aims of this research are threefold: the first aim is to provide a preliminary overview of the most frequently detected drug types from the blood samples; the second aim is to summarise the characteristics of drivers who returned a positive drug result via blood sample; while the third aim is to provide a preliminary comparison of drivers who tested positive to the presence of THC, MDMA and/or MA via roadside saliva test versus blood analysis. The QHFSS provided a Certificate of Analysis for each blood specimen obtained in Queensland for the period 1 January 2011 to 15 September 2012. Characteristics of the driver and the circumstances surrounding the blood sample requirement were added to the dataset. A preliminary analysis has been previously undertaken for those drivers who tested positive to THC, MDMA and/or MA via roadside saliva analysis and the findings will be summarised for the purpose of comparison to the blood sample results. During the period there were 1,824 blood samples received from QHFSS of which 1,773 were included in the analysis. At least one licit or illicit drug and/or alcohol was found in 93% of the sample. The two most prevalent illicit drugs detected were THC and MA whilst the most frequently detected prescribed medications were morphine and nordiazepam. The implications and directions for future research will be discussed.