The Accuracy of Evaluations by Drug Recognition Experts in Canada

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The objective of this paper is to illustrate the accuracy with which police officers trained as Drug Recognition Experts (DREs) can identify the category of drug(s) ingested by persons believed to be under the influence of a drug.

In Canada, driving while one's ability to do so is impaired by alcohol or a drug is a criminal offence. Drivers are required to provide a breath sample for analysis of alcohol content or face a charge of refusal, which is equivalent to that of impaired driving. However, drivers suspected of being impaired by drugs only submit to a drug evaluation voluntarily. They can refuse to participate with consequences. Recently introduced amendments to the Criminal Code (Bill C32) would require drivers to submit to a drug evaluation by a DRE and to provide a sample of bodily fluid for analysis.

The Drug Evaluation and Classification (DEC) program was introduced into Canada in October 1995. At that time, 24 police officers from the Vancouver area of British Columbia were trained in the techniques. Twelve years later, 254 police officers across Canada have been trained as Drug Recognition Experts (DREs).

Copies of all drug evaluations completed by DREs in Canada are submitted to the Canadian DRE coordinator along with the toxicology report on the fluid sample. These reports were examined to determined the accuracy with which the category of drug(s) believed to be involved based on the evaluation by the DRE matches that found as a result of toxicological analysis of the fluid sample from the individual.

In total, 1,349 case files were available for analysis. Stimulants were the most common drug, being listed on 47% of toxicology reports. Cannabis was found in 38% of samples followed by narcotic analgesics (34%). Dissociative anaesthetics, hallucinogens, and inhalants were detected infrequently. Overall, DREs judgments about the class of drug(s) involved matched the drug(s) detected by the toxicological analysis in 96% of cases. The paper will present measures of sensitivity, specificity, the false alarm rate and miss rate for all drug categories combined as well as for the most commonly found substances.

From the analysis of DEC cases on file, it is concluded that drug evaluations conducted by DREs in Canada are extremely accurate.

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