Drug Evaluation and Classification Program

**Key Considerations**

- The Drug Evaluation and Classification (DEC) program is a 12-step systematic, standardized procedure widely used throughout the United States and Canada to evaluate suspected drug-impaired drivers.

- The DEC protocol provides a valid, reliable evaluation of impairment as a result of drug use.

- The general driving public and young drivers in particular need to know that the police can require a driver to submit to evaluation by a Drug Recognition Evaluator (DRE), which includes a requirement to provide a sample of urine, blood, or oral fluid for analysis.

- There is a need for more DREs to help counter the number of drivers on the roads who are adversely affected by drugs.

- There is also a need to train more officers in the recognition of the common signs and symptoms of drug use to increase the capacity to identify drivers whose driving is adversely affected by drugs.

- Roadside devices that screen oral fluid for drugs and laws that specify drug limits will not eliminate the need for the DEC program. Not all drugs can be screened for at roadside and there is not sufficient evidence to establish limits for every substance.

**The Issue**

Amendments to Canada’s drug-impaired driving laws were implemented in 2008 to assist police in the detection of drug-impaired drivers. A key feature of these amendments was the introduction of the Drug Evaluation and Classification (DEC) program. This brief provides information about the DEC program, its role in the enforcement of drug-impaired driving, and some of the issues that require attention to improve the efficiency and effectiveness of the program and help reduce crashes that are a result of drug-impaired driving.

**Background**

Driving under the influence of drugs has a long legal history in Canada. In 1925, it became a criminal offence to drive “under the influence of a narcotic.” In 1951, the offence was changed to “driving while impaired by alcohol or any drug.” But whereas establishing impairment as a result of the consumption of alcohol was assisted by extensive research on the effects of alcohol and the subsequent introduction in 1969 of evidential breath testing to determine blood alcohol concentration, comparable developments on impairment by drugs and drug testing have been considerably more challenging.
Almost four decades after the introduction of the breathalyzer, the DEC program was added to the Criminal Code of Canada in 2008 to facilitate the enforcement of drug-impaired driving legislation. The amendments gave police the authority to demand that a driver suspected of being impaired by a drug submit to an evaluation by a Drug Recognition Evaluator (DRE), an officer trained and certified to administer the DEC protocol. On the basis of the evaluation, the officer can demand the suspect provide a sample of blood, urine, or oral fluid for analysis of drug content. These amendments enhanced the detection and prosecution of drug-impaired drivers.

The DEC program originated in Los Angeles in the 1970s. At that time, peace officers were routinely arresting drivers who showed gross signs of impairment, but were not under the influence of alcohol. Field tests of impairment were combined with accepted medical knowledge of drug effects to devise a systematic and standardized procedure to detect driver impairment as a result of the use of drugs. The resultant 12-step protocol involves a series of psychophysical tests (e.g., walk and turn, finger to nose), eye examinations (e.g., pupil size, presence of nystagmus), a breath alcohol test, measures of temperature, blood pressure and pulse, interviews and other observations. Following the evaluation, the DRE forms an opinion about the suspect’s ability to operate a vehicle safely and which of seven classes of drugs is most likely responsible for the impairment (see sidebar). The final step of the evaluation is a demand for the suspect to provide a sample of blood, urine or oral fluid for analysis of drug content. Toxicological evidence of the use of a class of drugs consistent with the signs and symptoms observed by the DRE is an important piece of evidence required to link the observed signs and symptoms of impairment to the use of the specified category of drug.

Training in the DEC program requires successful completion of an intensive two-week program, followed by a written examination and the completion of 12 drug evaluations. Officers who meet the requirements are certified as DREs by the International Association of Chiefs of Police. Continuing education and completion of at least four evaluations every two years are required to maintain certification.

**What the Evidence Says**

Although based on known signs and symptoms of drug use, it is essential to demonstrate the extent to which the 12-step assessment procedure provides a valid, reliable and accurate means by which to identify persons who are impaired by different categories of psychoactive drugs. Both laboratory and field studies have examined the accuracy of evaluations conducted by police officers trained in the DEC program.

A small number of laboratory studies have measured the effectiveness of the DEC protocol. These studies involved the administration of a set dose of a common drug (e.g., amphetamine, marijuana, diazepam, cocaine, codeine) to volunteers who were subsequently examined by experienced DREs (Bigelow, Bickel, Roache, Liebson, & Nowowieński, 1985; Heishman, Singleton, & Crouch, 1996, 1998).

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1 In Canada, unless there is suspicion of alcohol use, a breath test is not administered.

### Drug Classes

- Central nervous system (CNS) depressants (sedatives, hypnotics)
- Inhalants (paint thinner, glue, nitrous oxide)
- Dissociative anesthetics (PCP, ketamine)
- Cannabis (marijuana, hashish)
- CNS stimulants (cocaine, methamphetamine)
- Hallucinogens (LSD, ecstasy, peyote)
- Narcotic analgesics (oxycodone, heroin, morphine)
In general, the results showed that officers were able to detect impairment and identify impairment associated with the class of drugs administered with a modest degree of accuracy (43% to 62%).

A review of these studies noted that in many cases subjects were assessed as not being impaired (Beirness, LeCavalier & Singhal, 2007). This assessment was likely the result of the relatively low doses of drugs administered. In addition, the time available for the evaluation was limited, not all 12 steps were included, and DREs were often instructed to indicate a drug class even if they were not as confident about their judgment as they would normally be in an actual field situation.

Although not as scientifically rigorous as experimental studies, field enforcement studies benefit from using evaluations of suspected drug-impaired drivers performed under real-world enforcement conditions. In these studies, the category of drug identified by the evaluating officer is compared with the drug category identified through toxicological analysis of a bodily fluid sample. A review of these studies found that DREs accurately identified the category of drug or drugs responsible for the observed impairment 75% to 90% of the time (Beirness et al., 2007).

The only Canadian study to assess the accuracy of the DEC program examined 1,349 drug influence evaluations and the results of toxicological tests to determine drug use. In 94.8% of cases, the drug category identified by the evaluating officer matched the drug category identified by toxicological analysis (Beirness, Beasley & LeCavalier, 2009).

The reliability of DRE evaluations — that is, the extent to which different officers would come to the same conclusion about the category of drug used if they were to evaluate the same subject — has also been assessed (Beirness, Beasley, & LeCavalier, 2008). For this study, a random sample of certified DREs were each sent the same set of 23 completed drug influence evaluation forms from existing police cases. All identifying information and the original DRE's opinion about drug category were removed. Overall agreement among DREs on the category of drugs used was 71.2%, indicating that if the same individual was evaluated by 10 different DREs, seven would come to the same conclusion about the category of drug used. Given the restricted information provided to the DREs participating in the study, the rate of agreement among officers was considered a conservative estimate of reliability.

Recent studies have also examined the predictive value of the signs and symptoms assessed as part of a DRE evaluation (Porath-Waller, Beirness, & Beasley, 2009; Porath-Waller & Beirness, 2010). These studies determined that a combination of clinical and psychophysical indicators included in the DEC evaluation was able to distinguish among and accurately predict the drug categories and drug combinations examined, thereby providing evidence of the validity of the tests in the DEC protocol.

Together, the research provides strong evidence that the signs and symptoms assessed using the 12-step DEC protocol provide a valid and reliable evaluation of impairment as a result of drug use.

**Current Status in Canada**

Statistics Canada reported that there were 72,039 impaired driving incidents in 2014, of which 2,786 (3.9%) were related to drugs (Perreault, 2016). Given that 8 to 10% of nighttime drivers test positive for drug use (Beirness & Beasley, 2010; Beirness, Beasley, & McClafferty, 2015) and that the percentage of driver fatalities involving drugs (43.7%) has been shown to exceed that involving alcohol (27.5%) (Woodall, Chow, Lauwers, & Cass, 2015), it would appear that a substantial proportion of drug-impaired drivers are going undetected.

Since the 2008 amendments to the *Criminal Code*, one of the major challenges to the DEC program has been training a sufficient number of officers across Canada to conduct evaluations of drivers suspected of being impaired by drugs. The training and certification program is intensive, demanding,
and requires commitment and dedication. Training also involves considerable expense, not the least of which is the loss of officers from active duty for the duration of training.

There are currently about 600 certified DREs in Canada. A needs assessment conducted in 2009 estimated that Canada requires between 1,800 and 2,000 DREs. This estimate was based on the experience with the DRE program in the United States, where it was determined that the optimum number of DREs in a state was about 6 per 100,000 population or about 3% of all police officers (LeCavalier & Beirness, 2009).

Another challenge has been getting DEC evidence accepted by the courts. Whereas the substantial body of evidence relating alcohol impairment to a breath alcohol reading of over 80 mg/dL has served to set a clear standard that is well accepted, the same degree of confidence has yet to be established for cases of impaired driving involving drugs. Unfortunately, the research evidence on drug impairment and the risks associated with different types of drugs, and the absence of per se limits for drugs has raised questions about the validity of the drug-related evidence presented in court.

Part of the challenge in proving drug-impaired driving pertains to the evidence of drug use. The final step in the DEC protocol is the collection of a sample of bodily fluid that is sent to the laboratory for analysis of drug content. The purpose of the toxicological analysis of the sample is to confirm that the subject has consumed the category of substance deemed by the evaluating officer to have caused the observed impairment. In Canada, it is common practice to collect a urine sample to send to the laboratory for analysis. Urine samples provide evidence of recent drug use, but not necessarily time of use. In some cases, metabolites of certain drugs can be detected in urine for several days after use. This persistence can raise questions about whether the substance detected was actually responsible for the impairment observed.

Blood is the preferred medium for evaluating the presence and concentration of drugs in the body. The collection of blood samples, however, also has challenges. First, the time delay between the arrest and the blood draw can have a substantial impact on the drug level. Second, blood samples must be drawn under the supervision of a qualified medical practitioner, usually at a hospital. Finally, there is no requirement for a physician to agree to collect a sample. The absence of a sample would undoubtedly compromise the strength of a case in court.

The implementation of the DEC program in Canada is still relatively new. Court challenges are anticipated following the introduction of virtually any new legislation, especially that which relies on unfamiliar types of evidence. Favourable court rulings and decisions are, however, becoming more commonplace. The issues are being resolved as criminal justice practitioners become more familiar with the intricacies of the influence of various types of drugs on driving performance and the nature of the evidence the DEC program provides.

### What Other Countries Are Doing

In the United States, the National Highway Traffic Safety Administration provides support to the International Association of Chiefs of Police to manage the DEC program. All 50 states have an active DEC program. In 2015, there were approximately 8,000 certified DREs in the U.S. who collectively recorded over 25,000 evaluations (International Association of Chiefs of Police, 2015). Police officers from other countries (e.g., United Kingdom, Germany, Australia, China, Guam and Hong Kong) have attended the DRE training course, but none of these countries has a formal DEC program.

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2 As of January, 2017; the number of certified DREs fluctuates as a result of ongoing training, retirements, promotions and transfers.
**Options for Improvement**

**Training and certification**

The anticipated legalization and regulation of cannabis for non-medical purposes will require a full complement of certified DREs to provide a strong enforcement presence to deter individuals who use cannabis from driving afterwards and to deal effectively with those who do. Further efforts are required to increase training to meet the need for DREs to conduct drug evaluations across Canada. The regulations to the *Criminal Code* of Canada clearly specify that the DEC program be used to facilitate the enforcement of drug-impaired driving in Canada. Training, certification and continuing education, as well as operational and administrative functions, require stable national and provincial/territorial funding at a level consistent with the magnitude of the problem and sufficient to substantially improve the safety of all Canadians. The DEC program in the United States should be examined as a model for potential implementation in Canada.

**New legislation**

Many countries have introduced specified limits for particular drugs, similar to the 80 mg/dL limit for alcohol. Per se limits have a general deterrent and could facilitate adjudication. Determining the value of such limits, however, requires further study (CCSA, 2016a).

DRE evidence is paramount in many drug-impaired driving cases. The drug influence evaluation provides evidence of the driver’s impairment and the category of drug most likely responsible for the observed impairment. The toxicological analysis of the bodily fluid sample reveals the type of drug or drugs in the suspect’s body at the time of the evaluation. If the drug found matches the category of drug identified by the DRE, establishing a legal presumption that the drug found was the cause of the observed impairment would help adjudicate the case.

Oral fluid drug screening at roadside has become commonplace in Europe and Australia. Roadside screening would help identify drivers who have used drugs recently and could be deemed sufficient grounds for further assessment by a DRE. Legislation would be needed to require compliance with a demand for an oral fluid sample and standards would need to developed for screening devices to ensure their accuracy (CCSA, 2016b).

All of these measures have the potential to enhance the enforcement and adjudication of drug-impaired driving laws. It should be noted, however, that these measures would complement but not replace the DEC program.

**Police training on drugs and driving**

Not all police officers need to be trained as DREs. At the very least, however, there should be a DRE available at all times to conduct evaluations. In addition, all patrol officers should be able to recognize the signs and symptoms of drug use and conduct a Standardized Field Sobriety Test (SFST) to assess driver impairment at roadside (Porath-Waller & Beirness, 2014). A brief training program on drugs and their effects can facilitate the identification of potential drug-impaired drivers who can then be referred to a DRE for a more formal evaluation. According to the International Association of Chiefs of Police, U.S. states that have implemented advanced drug-driving detection training have greatly increased the number of DRE evaluations conducted and drug-impaired driving charges laid (International Association of Chiefs of Police, 2014). Developing and implementing a similar program in Canada would serve to increase the number of DEC evaluations and help reduce the number of drug-impaired drivers on the roads.
Toxicology

The laws surrounding the drawing of blood samples need to be altered to make it easier to collect this vital evidence. Toxicology laboratories require support to increase their capacity to handle the workload created by the volume of samples and the demands for expert testimony in court.

Crown and judiciary education

Drug-impaired driving cases can present a number of challenges. Prosecutors and the judiciary may be unfamiliar with the types of evidence presented (e.g., DEC evaluations, toxicology results) and the types of impairment induced by different categories of drugs. An educational program developed and presented by experts in the field could serve to enhance understanding of the numerous issues and facilitate the adjudication of cases.

Public awareness

Drivers, especially young drivers, need to be aware that many types of drugs (illicit, prescription and over-the-counter) can impair one’s ability to operate a vehicle safely and police have the authority and the tools to assist in the detection of drug-impaired drivers. Drivers also need to understand that the nature of drug impairment can differ substantially from that caused by alcohol. Special targeted communications efforts using social media and other tools should be undertaken to enhance awareness among high-risk groups.
References


