

Canada's New Drug-Impaired Driving Law: The Need to Consider Other Approaches

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Objective: The objects of this study were: To review the state of drug-impaired driving in Canada, particularly in light of the 2008 amendments to the *Criminal Code*, which authorized police to demand standardized field sobriety testing and drug recognition evaluations, and to consider whether alternative enforcement models would be more effective in terms of detecting and prosecuting drug-impaired drivers and thereby achieve greater deterrence.

Method: This article provides a review of survey data, roadside screening studies, and postmortem reports that indicate the prevalence of driving after drug use in Canada. It evaluates the *Criminal Code*'s 2008 amendments and their impact on charges and convictions for drug-impaired driving. It then reviews some alternative enforcement models for drug-impaired driving that have been adopted in other jurisdictions, particularly toxicological testing, and evaluates them against Canada's social, political, and constitutional framework.

Results: Survey data, roadside screening studies, and postmortem reports indicate that driving after drug use is commonplace and is now more prevalent among young people than driving after drinking. Unfortunately, the 2008 *Criminal Code* amendments have not had their desired effects. The measures have proven to be costly, time-consuming, and cumbersome, and are readily susceptible to challenge in the courts. Accordingly, the charge rates for drug-impaired driving remain extremely low, and the law has had minimal deterrent effects.

The review of alternative enforcement models suggests that a system of random roadside saliva screening, somewhat similar to the model used in Victoria, Australia, will be the most effective in terms of detecting and prosecuting drug-impaired drivers and most consistent with Canada's legal and constitutional system.

Conclusions: Canada should establish *per se* limits for the most commonly used drugs, enforceable through a system of screening and evidentiary tests. This will be more efficient and cost-effective and will result in more reliable evidence for criminal trials. Although this system will inevitably be subject to constitutional challenge, existing case law suggests that it should be upheld as a reasonable limit on constitutional rights.

Keywords: drugs, DUI, impairment, police

Introduction: Drug-Impaired Driving in Canada

Although traffic safety advocates have been appropriately focused on alcohol-impaired driving for many years, drug-impaired driving has recently emerged as an issue that demands serious attention. Canadian survey data, roadside screening studies, and postmortem reports indicate that the incidence of driving after drug use has increased during the last 20 years (Adlaf et al. 2005; Mann et al. 2010; Simpson et al. 2006; Young et al. 2011). Several provincial, regional, and national surveys indicate that many young people routinely drive after drug use (Asbridge et al. 2005; Patton et al. 2005; Poulin and McDonald 2007). Indeed, more young Canadians

report driving after using cannabis than after drinking (Paglia-Boak et al. 2011). For example, in a survey of grade 10 and 12 students in Atlantic Canada, 15.1% of the respondents reported driving within an hour of using cannabis during the past 12 months, whereas 11.7% reported driving within an hour of consuming 2 or more drinks (Asbridge et al. 2005).

Similarly, in the *Canadian Addiction Survey*, 39.8% of those aged 15–24 reported driving within 2 h of using cannabis during the past 12 months, compared to 20.9% who reported driving under the influence of alcohol (Flight 2007). In addition, the mean number of times that respondents admitted to driving under the influence of cannabis in the past year was 10, compared to 1.6 for alcohol. Several studies have suggested that the prevalence of driving after drug use is due to a lack of awareness about its risks, particularly in contrast to driving after drinking, and to a lack of fear of being charged and convicted for such behavior (Asbridge et al. 2005; Fischer et al. 2006; Patton 2001; Patton et al. 2005).

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These survey results are consistent with the roadside screening data. Based on samples collected in 1999 and 2000, Québec researchers found that 11.8% of the drivers who provided urine samples tested positive for one or more drugs (Dussault et al. 2002). In contrast, only 5.1% of the drivers providing a breath sample were positive for alcohol. The most commonly found drugs in the almost 6,000 urine samples collected were cannabis (6.7%), benzodiazepines (3.6%), opiates (1.2%), and cocaine (1.1%). Only 5.9% of the drug-positive drivers were also positive for alcohol (Dussault et al. 2002).

British Columbia undertook roadside screening programs involving 3 communities in 2008 (Beirness and Beasley 2010) and 5 communities in 2010 (Beirness and Beasley 2011). The latter study examined the prevalence of alcohol and drug use among drivers on Wednesday to Saturday evenings in June 2010. In that study, 9.1% of the samples were positive for at least one drug other than alcohol, of which the most frequently found were cannabis (4.5%), cocaine (2.3%), and opiates (1.2%) (Beirness and Beasley 2011). The authors noted that the vast majority of drivers who tested positive for cannabis had tetrahydrocannabinol (THC) levels that would “impair their ability to operate a motor vehicle safely” (Beirness and Beasley 2011, pp. 12–13). In comparison, 10.7% of drivers who provided a breath sample were alcohol-positive, but only 4% had a blood-alcohol concentration of 0.05% or more (Beirness and Beasley 2011). Though alcohol-positive drivers tended to be more prevalent on weekends and late at night, there was no significant variation in positive drug tests in terms of the day of the week or the time of day (Beirness and Beasley 2011).

The Canadian toxicology studies on fatally injured drivers reinforce the previously described patterns of driving after drug use (Mayhew et al. 2004; Mercer and Jeffrey 1995). In a large study of drivers fatally injured in Québec between April 1999 and December 2002, the deceased’s blood sample was positive for alcohol and/or drugs in 46.4% of the cases (Bouchard and Braut 2004). Alcohol alone was present in 21.7% of the samples, drugs alone were present in 13 percent, and alcohol and drugs were present in 11.7%. Thus, one or more drugs were found in almost a quarter of the cases. The most commonly found drugs were cannabis (13.1%), benzodiazepines (9.2%), cocaine (4.7%), and opiates (1.3%). Male drivers 16 to 24 years of age were overrepresented in terms of illicit drugs, and drivers 55 years of age and older were overrepresented in terms of licit drugs (Bouchard and Braut 2004).

A 2011 study involving almost 6,000 drivers from across Canada who were fatally injured from 2000 to 2007 found that 54.6% were positive for alcohol and/or drugs (Beasley et al. 2011). Alcohol alone was present in 21.9% of the cases, drugs alone were present in 18.5%, and alcohol and drugs were present in 14.2%. The most commonly found drugs were central nervous system depressants (17.3%), cannabis (16.6%), central nervous system stimulants (12.4%), narcotics (6.4%), and hallucinogens (1.1%) (Beasley et al. 2011). Two or more drugs were present in 41% of the drug-positive cases (Beasley et al. 2011). The high rates of polydrug use and drug use in conjunction with alcohol are concerning because the combined effects of these substances on driving performance may

be multiplicative. In the authors’ words, “These findings indicate that the extent of drug use among fatally injured drivers (33%) is comparable to that of alcohol use (37%)” (Beasley et al. 2011, p. 1). Drug-positive drivers were more prevalent during daytime hours (6 a.m. to 6 p.m.) and were spread relatively evenly across the days of the week (Beasley et al. 2011). This pattern suggests that it may not be appropriate to concentrate drug-impaired driving enforcement on weekend nights, an approach often used in enforcing the alcohol-impaired driving laws.

Finally, a recent study compared roadside survey results and data on fatally injured drivers to determine the relative risk of crash for drug-positive drivers in British Columbia (Beirness et al. 2013). The study found that drug use was associated with a 5.7 times greater likelihood of dying in a crash as compared to sober drivers (Beirness et al. 2013). Cannabis alone increased the risk of crash 5 times, but cannabis, if combined with alcohol, increased the crash risk 40 times (Beirness et al. 2013). Similarly, a meta-analysis published in the *British Medical Journal* in 2012 found that acute cannabis consumption doubled the risk of a fatal or serious injury crash and that crash risk increases with increased THC concentrations (Asbridge et al. 2012). This is consistent with previous research on relative risk of crash (Bedard et al. 2007; Blows et al. 2005; Ramaekers et al. 2004). Though most of the relative risk studies have focused on cannabis, there is a growing body of research on the relative risks associated with other drugs (e.g., Hargott et al. 2013; Lyckegaard et al. 2013; Wolff et al. 2013).

The research on drug-impaired driving is admittedly new relative to the research on alcohol-impaired driving. However, the convergence of survey data, postmortem reports, and relative risk studies suggests that drug-impaired driving is a significant traffic safety problem and that it is likely to increase in the coming years (DuPont et al. 2012). As described below, the enforcement of drug-impaired driving in Canada is minimal, which means that the law prohibiting this behavior is unlikely to have a significant deterrent effect.

Canadian Drug-Impaired Driving Enforcement

Background

Although drug-impaired driving in various forms has been a criminal offense in Canada since 1925, the police were not given any specific means of enforcing the law until 2008. Not surprisingly, drug-impaired driving charges were rarely laid during this period, even after the sharp increases in recreational drug use that began in the mid-1960s. As shown above, driving after drug use has become increasingly commonplace in Canada over the last 2 decades and now appears to be substantially more prevalent among young people than driving after drinking (Asbridge et al. 2005; Paglia-Boak et al. 2011). In response to these trends, Parliament amended the *Criminal Code* in 2008, adopting the American Standard Field Sobriety Test (SFST) and Drug Recognition Evaluation (DRE) protocols (International Association of Chiefs of Police [IACP] and NHTSA 2010; NHTSA 2006).

Unfortunately, the new drug-impaired driving law has proven to be very costly, time-consuming, and cumbersome to enforce and prosecute. Moreover, the cases that have proceeded to trial have been susceptible to legal challenge (e.g., *R. v. Perillat*, *R. v. Roszkoph*). As a result, the charge rate for drug-impaired driving in Canada has remained extremely low (Canadian Centre on Substance Abuse [CCSA] 2013; Statistics Canada 2013a). These shortcomings in the current law warrant considering other options. Several Western European and Australian jurisdictions have enacted *per se* limits for the most commonly used drugs, enforceable through a system of random roadside screening tests and, if a driver tests positive, more sensitive evidentiary tests. With modifications to meet the requirements of the *Canadian Charter of Rights and Freedoms* (the *Charter*), this approach may serve as a useful model for developing a more effective system for drug-impaired driving enforcement in Canada.

The Criminal Code Provisions Prior to the 2008 Amendments

Prior to the 2008 *Criminal Code* amendments, the prosecution of drug-impaired driving cases was typically based on the arresting officer's testimony regarding the accused's driving, behavior, demeanor, and statements. However, even when an accused was obviously impaired and there was evidence of recent drug use, it was still necessary in most cases to introduce expert evidence linking the accused's drug use and the effects of that drug to the impairment of his or her ability to drive. As one judge remarked, "the preferred practise [is] for the Crown to call expert medical or scientific evidence regarding the effects of drugs . . . the court cannot take judicial notice of the effects of various drugs" (*R. v. Roszkoph*, ¶18). This made drug-impaired driving an onerous and uncertain offence to prosecute. Indeed, a 2003 Federal Department of Justice report indicated that prosecuting a drug-impaired driving offence based on the observations of a nonexpert police officer (such as one on routine patrol) was "nearly impossible" (Canada, Department of Justice 2003, p. 4).

The 2008 Criminal Code Amendments

The increase in driving after drug use and difficulties in prosecuting these cases prompted Parliament to introduce two new enforcement measures in 2008. First, the police were authorized to demand that a driver submit to an SFST if they reasonably suspected that the driver had any drugs or alcohol in his or her body (*Criminal Code*, §254(2)(a)). This is a relatively low-threshold test, which is similar to the test for demanding that a driver submit to a roadside breath test on an approved screening device (*Criminal Code*, §254(2)(b)). The SFST includes the horizontal gaze nystagmus, walk-and-turn, and one-leg-stand tests. As with approved screening device tests, the results of SFSTs are not admissible as evidence of impairment but, rather, can only be used to screen drivers at roadside to determine whether there are grounds for demanding subsequent evidentiary breath tests or a DRE (*Criminal Code*, §254(3.1)).

Though the SFST has proven to be an accurate screening tool for assessing alcohol-related impairment of driving skills (Burns and Moskowitz 1977; Harris et al. 1980; Stuster 2001; Stuster and Burns 1998; Tharp et al. 1981), the limited research suggests that it is less accurate in assessing drug impairment (Stough et al. 2006). An Australian study reported that 84% of a high-dose cannabis group who were found to be impaired in driver simulator tests had failed the SFST (Tzambazis and Stough 2002). However, 38.5% of the high-dose cannabis group who were found to be unimpaired in driver simulator tests failed the SFST, suggesting that SFST may substantially overpredict drug impairment (i.e., only 61.5% of the drivers who were found to be unimpaired in driver simulator tests had passed the SFST) (Tzambazis and Stough 2002). In terms of the low-dose cannabis group, the SFST "correctly classified 100% of impaired drivers as impaired, but this occurred at the expense of falsely classifying most unimpaired drivers as also impaired" (Tzambazis and Stough 2002, p. 399). This problem of overpredicting drug impairment is reflected in other SFST studies involving a range of drugs (e.g., Jackson et al. 2000; Oliver et al. 2006). Despite these concerns and the need for more research, the SFST appears to be sufficiently accurate provided it is used solely as a screening tool for demanding DRE testing.

Second, the 2008 amendments established formal procedures for gathering evidence of drug use and impairment from suspected drug-impaired drivers. The police were authorized to demand a DRE from a driver who they had reasonable grounds to believe had, within the preceding 3 h, driven while impaired by a drug or a combination of drugs and alcohol (*Criminal Code*, §254(3.1)). The results of the DRE are admissible in evidence at trial, if the DRE was conducted in accordance with the requirements of the relevant regulations and the driver was afforded the right to counsel. Refusing to submit to an SFST or DRE "without a reasonable excuse" is a criminal offence which carries the same penalties as the impaired driving offences (*Criminal Code*, §254(5) and 255(1)).

Developed and used in the United States since the 1970s, the DRE is designed to determine whether an individual's ability to drive is impaired by one of 7 categories of drugs (central nervous system depressants, inhalants, dissociative anesthetics, cannabis, central nervous system stimulants, hallucinogens, and narcotic analgesics) (IACP 2013). The *Criminal Code*, §254(3.1), provides that DREs can only be conducted by an "evaluating officer," who must be accredited by the IACP (*Evaluation of Impaired Operation (Drugs and Alcohol) Regulations*, §1 2008). The process of training, certifying, and maintaining the certification of evaluating officers is rigorous and expensive. It has been estimated that the cost of training each evaluating officer in Canada is \$17,000 and that 800 officers have been trained (D. J. Beirness, e-mail communication, September 2012). However, with transfers and retirements, there were only 491 evaluating officers available to conduct DREs as of September 2012 (D. J. Beirness, e-mail communication, September 2012).

The DRE consists of 2 components, namely, a battery of tests and an analysis of bodily fluid. The first component entails 10 sets of physiological, balance, and divided attention tests, ending with the evaluating officer's written opinion as to

whether the suspect's ability to drive is impaired and, if so, by what category of drugs. If the officer concludes that the suspect is impaired, he or she may then demand a sample of blood, urine, or oral fluid for analysis (*Criminal Code*, §254(3.4)). A drug-impaired driving charge will only proceed to trial if the accused's bodily sample tests positive for the category of drug identified in the evaluating officer's report. It takes approximately 2 h in total to undertake the preliminary roadside SFST, transport the suspect to the police station, allow him or her to consult with counsel, and conduct the DRE. The DRE itself entails the collection of over 100 separate pieces of information (Porath-Waller et al. 2009).

Several laboratory and field studies of the DRE have been published (e.g., Heishman et al. 1996, 1998; Shinar and Schechtman 2005). The field studies are more relevant for our purposes, because they compare the evaluating officer's assessments in actual cases with the toxicological analysis of the suspect's bodily fluid. In general terms, the field studies indicate that DREs are very accurate in identifying drug presence but considerably less accurate in terms of the specific category of drugs present in the suspect's body. For example, a large American field study found that the evaluating officers correctly concluded that the suspects were drug positive in 84.1% of the cases but correctly identified the drug category in only 64.1% of the cases (Preusser et al. 1992). Other American field studies reported somewhat higher accuracy rates in terms of the presence of drugs and the category of drugs confirmed on testing (Adler and Burns 1994; Compton 1986; J. A. Smith et al. 2002).

The one study evaluating DRE assessments in Canada included drug-impaired driving suspects, as well as known and suspected drug users who voluntarily submitted to a DRE (Beirness et al. 2008). In terms of the drug-positive subjects, the evaluating officers correctly predicted the presence of drugs in 95.3% of the cases. However, the accuracy in predicting the drug category varied considerably (56.8% for depressants, 79.1% for cannabis, 85.8% for narcotics, and 92.6% for stimulants) (Beirness et al. 2008). The evaluating officers correctly concluded that no drugs were present in 80% of the cases in which the subjects tested negative (Beirness et al. 2008).

Even if the DRE is sufficiently accurate in identifying drug-positive suspects, it is of far less value in proving that the suspect's driving ability was in fact impaired by the drug found in his or her system. Most of the steps in the DRE focus on drug presence, not on the impairment of driving ability. It is only the 4 divided attention and balance tests (the walk-and-turn, the one-leg-stand, the finger-to-nose, and the Romberg balance tests) that directly assess the impairment of skills thought to be important for driving. Thus, in terms of assessing impairment, the DRE augments the divided attention and balance components of the SFST by adding the finger-to-nose and Romberg balance tests. Ironically, the reason that these latter 2 tests were not included in the SFST protocol was because they were less predictive of alcohol impairment than the walk-and-turn and one-leg-stand tests (Burns and Moskowitz 1977; Tharp et al. 1981). As previously discussed, research indicates that the SFST has a relatively high false-positive rate, particularly for cannabis. This false-positive rate may be acceptable as long as the SFST is used solely for screen-

ing purposes. However, the DRE's 4 divided attention and balance tests will generate serious legal challenges when introduced in criminal trials as proof that the accused's driving ability was impaired at the time of the arrest. These evidentiary problems have not gone unnoticed by the Canadian courts.

The SFST and the DRE in the Canadian Courts

The Canadian courts remain sceptical about the link between the presence of drugs in a driver's system and the actual impairment of his or her driving ability. In a recent Saskatchewan case (*R. v. Perillat*), the investigating officer smelled an "overwhelming odour" of marijuana coming from the accused's vehicle. The accused admitted to smoking marijuana 2¹/₂ h earlier and showed the officer the "roach" on her center console. The results of both the SFST and the DRE were indicative of marijuana use, which was confirmed by a urine test. However, at the accused's trial, the judge was not convinced that her ability to drive was actually impaired by marijuana. The judge explained:

But at its best, Constable Schaefer's evidence convinces me that the accused had used marijuana at some point prior to her being stopped at the police check stop that evening and that she still had some of it in her system at the time he did his Drug Recognition Evaluation on her at the police station. What his evidence does not convince me of is that at the time she was driving, her ability to operate a motor vehicle was impaired by marijuana.

Constable Schaefer's evidence does not explain the accused's test results and how they relate to the accused's ability to drive a motor vehicle or how they relate back to the time of driving. Without testimony on these points, I am left with many questions. For example, what signs of impairment would one expect to see in someone who has been using marijuana? How long after using marijuana would you expect to see these signs and how long would they last? Can the results of Drug Recognition Evaluation tests taken over one and one-half hours after the time of driving be reliably related back to the time the accused pulled into the check stop? Was the accused's performance in some of the tests just as consistent with someone who has poor balance or poor co-ordination as it was with someone who had used marijuana? (*R. v. Perillat*, ¶24 and 26)

In acquitting the accused, the judge also stressed the absence of any evidence that the accused had been driving in an erratic, improper, or impaired manner.

In contrast, the accused in *R. v. MacDonald* was convicted of drug-impaired driving. However, the trial was heard over 5 days and the judgment was reserved for almost 3¹/₂ months. The breadth and depth of the evidence that was required to obtain this conviction is also noteworthy. The judge accepted the arresting officer's testimony that the accused was speeding, swerved toward the centerline, and initially accelerated when the officer began the pursuit. The arresting officer's testimony was also accepted regarding a very strong odor of burnt marijuana emanating from the car, and the accused's bloodshot

eyes, fumbling in retrieving his documents, and placid demeanor. The extensive experience and qualifications of the evaluating officer and the forensic toxicologist who testified at trial were reviewed in detail. The evaluating officer and, to a lesser extent, the forensic toxicologist explained the purpose of the 12 elements of the DRE protocol, discussed the accused's performance on the various elements, and related this information to the impairing impact that recent marijuana use has on driving ability. The toxicologist reviewed the development of the SFST and the DRE and discussed at length the NHTSA studies and peer-reviewed papers that had been published on these two tests. The toxicologist also explained why the judge should discount a study that the defence had relied upon in challenging the accuracy of the DRE.

These cases and others that adopt a similar approach (e.g., *R. v. Sanclimenti* 2010; *R. v. Steeves* 2010; *R. v. Wakewich* 2010) do not augur well for drug-impaired driving prosecutions based on the DRE. Indeed, prior to the 2008 amendments, some courts had refused to admit expert DRE evidence on the grounds that it failed to meet the minimum standard of reliability (e.g., *R. v. Wood* 2007). Consequently, Canada's new law is unlikely to streamline drug-impaired driving prosecutions in Canada or assist the Crown in proving beyond a reasonable doubt that the accused's consumption of the drug in question had impaired his or her driving ability at the time of the arrest.

Drug-Impaired Driving Charges

Even with approximately 500 officers conducting DREs in Canada, there are few drug-impaired driving charges relative to the prevalence of driving after drug use. For example, only 1126 drug-impaired driving charges were laid in 2012, which constituted 1.88% of the total number of impaired driving charges (59,777; Statistics Canada 2013a). Unfortunately, there is no comparable conviction data, because drug and alcohol-related driving convictions are reported under a single heading (Statistics Canada 2013b). The CCSA (2013) has estimated that drivers make 15.6 million trips per year after using cannabis. Even if all 1,126 drug-impaired driving charges involved cannabis, a driver would have to make roughly 13,850 trips after using cannabis to be charged with a drug-impaired driving offense. In other words, a person could drive after using cannabis once a day for almost 40 years before he or she would likely be charged, let alone convicted. Admittedly, these 15.6 million trips include many individuals who were not impaired by cannabis at the time of driving; on the other hand, this estimate excludes those who were impaired by other drugs.

The Canadian experience with DRE is not dissimilar to that in the United States, where it has been estimated that each qualified officer performed an average of only 5.5 evaluations in 2009 (DuPont et al. 2012).

Alternatives to the DRE

In addition to the behavior-based enforcement approach used in Canada and most American states (Governors Highway

Safety Association 2013), drug use can be detected through the testing of blood, oral fluid, or urine. Ideally, the testing protocol for drugs in Canada would parallel the existing *Criminal Code* breath-testing provisions for alcohol. That is, preliminary screening would be conducted at roadside, with further evidentiary testing conducted at the police station after the accused had been afforded the right to counsel. However, testing for drug impairment is considerably more complex than testing for alcohol impairment. First, unlike alcohol, drugs cannot be easily detected on a driver's breath but must be identified through oral fluid, blood, or urine. Testing such bodily fluids is more time-consuming, intrusive, and costly than breath testing. Second, not all drugs necessarily or consistently cause impairment (Beirness et al. 2010; Compton et al. 2009; Ogden and Moskowitz 2004). Third, the nonactive metabolites of some drugs stay in a driver's system long after their impairing effects have worn off (Ogden and Moskowitz 2004). Finally, though there is a broad consensus on the impairing impact of alcohol at various BAC levels, views differ regarding the specific level at which many of the drugs impair driving ability (e.g., Compton et al. 2009; Grotenhermen et al. 2007; Wolff et al. 2013). Consequently, the scheme for enforcing alcohol-impaired driving cannot simply be adopted for drug-impaired driving.

In the sections below, we outline the 2 main approaches to enforcing drug-impaired driving law based on bodily fluid testing: zero tolerance and *per se* limits. We then examine these alternatives in light of Canada's social and constitutional framework, as well as their implications for impaired driving enforcement. Our discussion is limited to illicit drug use. Though the use of prescription drugs by drivers is also an issue that merits serious attention, it presents an entirely separate set of considerations that are beyond the scope of this article. For instance, some prescription drugs improve the ability to drive (e.g., antiseizure medication for epileptics). Other prescription drugs may be abused either by the patient or by someone who obtains the drugs illegally. These issues warrant a more fulsome discussion than we can provide here.

Zero Tolerance

In some jurisdictions, it is an offense to drive with any amount of a specified drug in one's system (the "zero tolerance" approach). At least a dozen American states have adopted this approach (Lacey et al. 2010). For example, Arizona's zero tolerance law applies to a long list of prohibited and controlled substances, encompassing both illicit and prescription drugs, as well as inhalants like glue and varnish. The criminal sanctions include imprisonment for up to 6 months, a \$2500 fine for a first offense, and a driving suspension of 90 days to one year (Lacey et al. 2010).

When combined with chemical testing, zero tolerance laws have been shown to increase charge rates for drug-impaired driving (Lacey et al. 2010). In Wisconsin, for example, arrests for drug-impaired driving increased from 3.4% to 5.2% of total impaired driving arrests after the 2003 implementation of a zero tolerance law. Both police and prosecutors report that zero tolerance laws have made it easier to prosecute drug-impaired driving cases and that most suspects plead

guilty (Lacey et al. 2010). These laws provide a clear message and can be enforced objectively by police without extensive specialized training. However, though these laws have increased charge rates and expedited prosecutions, they did not streamline or “appreciably change” the police processing of impaired driving suspects: the police still need both “probable cause” to stop the vehicle and sufficient evidence of drug impairment to arrest the driver before they can demand chemical testing (DuPont et al. 2012; Lacey et al. 2010).

Further, a zero tolerance approach may not garner much public or political support in Canada, given that individuals may test positive for a drug even though their ability to drive is not impaired. The public is already deeply divided on the cannabis possession offense (Angus Reid 2012; Forum Research 2013), and the Liberal Party of Canada and its leader have recently called for its repeal (Berthiaume and Fekete 2012; P. Smith 2013). Moreover, the courts may view a zero tolerance law not as a traffic safety measure but rather as a backdoor attack on cannabis possession that offends the *Charter*. Though random stopping and questioning of drivers for legitimate traffic safety purposes has been upheld under the *Charter* (*R. v. Hufsky* 1988; *R. v. Ladouceur* 1990; *R. v. Orbanski*; *R. v. Elias* 2005), Canadian courts have rejected police attempts to use these broad traffic enforcement powers as a pretext for gathering evidence of other offences (*R. v. Doell* 2007; *R. v. Houben* 2007; *R. v. Mellenthin* 1992).

Per Se Limits

Given the potential political and legal problems with a zero tolerance law in Canada, it may be preferable to establish criminal *per se* limits for specific, commonly used illicit drugs, based on the levels at which the driving ability of most drivers would be impaired. This approach focuses on the degree to which an individual’s ability to drive is impaired by a drug, rather than on its mere presence. There is already considerable research on an appropriate *per se* limit for cannabis (Wolff et al. 2013). For example, after reviewing the research on the impairing effects of cannabis on driving skills and the relative risk of crash for cannabis-positive drivers, an international working group indicated that a THC level of 7–10 ng/mL (blood serum) had roughly the same impairing effects as a 0.05% blood alcohol concentration (Gronterhermen et al. 2007). Although it should be relatively easy to establish an appropriate *per se* driving limit for cannabis, considerably more research is required to establish *per se* limits for the other commonly used drugs that can impair driving ability (DuPont et al. 2012; Knoche 2013).

Enforcing Zero Tolerance or Per Se Limits

It is not enough to prohibit driving with a set amount of a drug in one’s body. As with alcohol-impaired driving, police need the authority and means to conduct toxicological drug tests on drivers. Several European countries (Beirness et al. 2010) and Australian states have introduced random roadside

screening for specified illicit drugs. In these jurisdictions, the police typically have authority to demand that any driver take an oral fluid test at roadside. If the driver tests positive, he or she will then be required to undergo additional, evidentiary testing. Like random breath testing (RBT), which also exists in these jurisdictions, random drug screening allows the police to test a large number of drivers in a relatively short period of time. For drivers who test negative, there is only a modest delay and slight inconvenience.

For example, in the Australian state of Victoria, the police are authorized to randomly demand an oral fluid screening test from any driver at roadside. If the driver tests positive for any amount of a targeted drug (methamphetamine [speed], THC, or MDMA [ecstasy]), he or she is required to accompany police to a testing vehicle where a second oral fluid sample is taken. The second sample is tested by a specially trained and qualified police officer. If the second sample also tests positive for a targeted drug, it is sent to a laboratory for confirmatory analysis, and the driver is immediately prohibited from driving for a specified time. The driver will only be charged if the laboratory analysis confirms the presence of a targeted drug. If the second oral fluid test is negative, the driver will be released, after a total detention of approximately 15 min. Preliminary analysis of Victoria’s drug-testing framework has shown positive results (Boorman and Owens 2009). The legislation in Victoria has provided a model for similar legislation in some of the remaining Australian jurisdictions (Thompson 2011).

The approach in Victoria would need to be modified to be consistent with Canada’s legal and social framework. First, Victoria’s zero tolerance approach is, as noted, unlikely to be a viable option in Canada. Consequently, the *Criminal Code* would have to be amended to include *per se* limits for specified illicit drugs. Second, Canadian police are not generally equipped with roadside testing vehicles, so suspected drug-impaired drivers would need to be taken to a police station for evidentiary testing. Moreover, drivers would need to be informed of and allowed to exercise their constitutional right to legal counsel before evidentiary testing took place. (*Charter*, §10(b); *R. v. Therens* 1985; *R. v. Thomsen* 1998).

Finally, the current Canadian law does not allow for the random roadside screening of drivers for either alcohol or drugs (*Criminal Code*, §254(2)). The authors have elsewhere assessed the need for RBT legislation in Canada and addressed the inevitable *Charter* challenges that it would generate and will not repeat that discussion here (Solomon, Chamberlain, Abdoullaeva, and Tinholt 2011; Solomon, Chamberlain, Abdoullaeva, Tinholt, and Chiodo 2011). In regard to random drug screening, it is worth noting that the Canadian courts have never found the random screening procedures routinely used at Canadian airports, border crossings, courtrooms, and other government facilities to violate the *Charter* (Solomon, Chamberlain, Abdoullaeva, Tinholt, and Chiodo 2011). In our view, the case for random drug screening is as compelling as the case for RBT. Indeed, there may be less opposition to drug screening than to RBT, given that the random roadside drug screening tests would target drugs that are illegal to possess.

Conclusion

The 2008 enactment of SFST and DRE legislation gave the police specific powers to investigate drug-impaired driving, albeit 83 years after the initial criminal prohibition was enacted. However, the cost of training evaluating officers and maintaining their certification is high, and the processing of drug-impaired driving suspects is complex, technically exacting, and time-consuming. The Canadian courts appear to require detailed expert evidence on the 12 steps in the DRE, the qualifications of the evaluating officers, and the relationship between the drug in issue and the accused's ability to drive at the time of arrest. Perhaps of greater concern is the extremely low charge rate for the drug-impaired driving offences. A similar assessment has led several leading American traffic safety experts to call for the enactment of *per se* drug-impaired driving laws (DuPont et al. 2012).

Though there will be challenges in attempting to develop and enforce *per se* drug limits, these are not insurmountable. The accuracy and affordability of roadside oral fluid tests has improved and will likely continue to do so (DuPont et al. 2012). Research has intensified on the impairing effects of the various drugs and the traffic safety risks they pose, and a broader consensus is emerging on appropriate *per se* limits for some of the most frequently used drugs (Blencowe et al. 2011; Bosker et al. 2013; Grotenhermen et al. 2007; Walsh et al. 2008; Wolff et al. 2013).

The shortcomings in Canada's current drug-impaired driving law warrant considering other options. As indicated, several Western European and Australian jurisdictions have enacted drug-impaired driving laws based on *per se* limits and random roadside screening tests followed by more sensitive evidentiary tests, if warranted. With modifications to comply with the *Charter*, this approach may serve as a useful model for developing a more effective system of drug-impaired driving enforcement in Canada, especially for the most commonly used illicit drugs. The initial *per se* drug limits may need to be set at relatively high thresholds and introduced incrementally, in keeping with advances in drug-impaired driving research and the cost and accuracy of oral fluid testing. Though reliance on the SFST and DRE protocols will need to continue in regard to some drugs, it should wane over time as the drug testing technology improves.

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