Toxicology References

Textbook

Chapter 7 of *Forensic Evidence in Canada, Second Edition*

Criminal Code

253. (1) Every one commits an offence who operates a motor vehicle or vessel or operates or assists in the operation of an aircraft or of railway equipment or has the care or control of a motor vehicle, vessel, aircraft or railway equipment, whether it is in motion or not,

(*a*) while the person's ability to operate the vehicle, vessel, aircraft or railway equipment is impaired by alcohol or a drug; or

(*b*) having consumed alcohol in such a quantity that the concentration in the person's blood exceeds eighty milligrams of alcohol in one hundred millilitres of blood.

(2) For greater certainty, the reference to impairment by alcohol or a drug in paragraph (1)(a) includes impairment by a combination of alcohol and a drug.

258 (3) If a peace officer has reasonable grounds to believe that a person is committing, or at any time within the preceding three hours has committed, an offence under section 253 as a result of the consumption of alcohol, the peace officer may, by demand made as soon as practicable, require the person

(*a*) to provide, as soon as practicable,

(i) samples of breath that, in a qualified technician's opinion, will enable a proper analysis to be made to determine the concentration, if any, of alcohol in the person's blood, or

(ii) if the peace officer has reasonable grounds to believe that, because of their physical condition, the person may be incapable of providing a sample of breath or it would be impracticable to obtain a sample of breath, samples of blood that, in the opinion of the qualified medical practitioner or qualified technician taking the samples, will enable a proper analysis to be made to determine the concentration, if any, of alcohol in the person's blood; and

(*b*) if necessary, to accompany the peace officer for that purpose.

(3.1) If a peace officer has reasonable grounds to believe that a person is committing, or at any time within the preceding three hours has committed, an offence under paragraph 253(1)(*a*) as a result of the consumption of a drug or of a combination of alcohol and a drug, the peace officer may, by demand made as soon as practicable, require the person to submit, as soon as practicable, to an evaluation conducted by an evaluating officer to determine whether the person's ability to operate a motor vehicle, a vessel, an aircraft or railway equipment is impaired by a drug or by a combination of alcohol and a drug, and to accompany the peace officer for that purpose.

(3.2) For greater certainty, a peace officer may make a video recording of an evaluation referred to in subsection (3.1).

(3.3) If the evaluating officer has reasonable grounds to suspect that the person has alcohol in their body and if a demand was not made under paragraph (2)(*b*) or subsection (3), the evaluating officer may, by demand made as soon as practicable, require the person to provide, as soon as practicable, a sample of breath that, in the evaluating officer's opinion, will enable a proper analysis to be made by means of an approved instrument.

(3.4) If, on completion of the evaluation, the evaluating officer has reasonable grounds to believe, based on the evaluation, that the person's ability to operate a motor vehicle, a vessel, an aircraft or railway equipment is impaired by a drug or by a combination of alcohol and a drug, the evaluating officer may, by demand made as soon as practicable, require the person to provide, as soon as practicable,

(*a*) a sample of either oral fluid or urine that, in the evaluating officer's opinion, will enable a proper analysis to be made to determine whether the person has a drug in their body; or

(*b*) samples of blood that, in the opinion of the qualified medical practitioner or qualified technician taking the samples, will enable a proper analysis to be made to determine whether the person has a drug in their body.

(4) Samples of blood may be taken from a person under subsection (3) or (3.4) only by or under the direction of a qualified medical practitioner who is satisfied that taking the samples would not endanger the person's life or health.

(5) Everyone commits an offence who, without reasonable excuse, fails or refuses to comply with a demand made under this section.

Charter of Rights and Freedoms

8. Everyone has the right to be secure against unreasonable search or seizure.

9. Everyone has the right on arrest or detention
(a) to be informed of the reasons therefor;
(b) to retain and instruct counsel without delay and to be informed of that right;
…

Caselaw

R. v. Stellato, [1993] O.J. No. 18 (Ont.C.A.)

13 The court noted in *Smith* that if Parliament had intended to proscribe any impairment, however slight, it could have done so. On the other hand, if Parliament had intended to proscribe impaired driving only where accompanied by a marked departure from the norm, it also could have done so. With all due respect to those who hold a contrary view, it is my opinion that the interpretation of s. 253(a) which was advanced in *Winlaw, Bruhjell* and *Campbell* is the correct one. Specifically, I agree with Mitchell J.A. in Campbell that the Criminal Code does not prescribe any special test for determining impairment. In the words of Mitchell J.A., impairment is an issue of fact which the trial judge must decide on the evidence and the standard of proof is neither more nor less than that required for any other element of a criminal offence: courts should not apply tests which imply a tolerance that does not exist in law.

14 In all criminal cases the trial judge must be satisfied as to the accused's guilt beyond a reasonable doubt before a conviction can be registered. Accordingly, before convicting an accused of impaired driving, the trial judge must be satisfied that the accused's ability to operate a motor vehicle was impaired by alcohol or a drug. If the evidence of impairment is so frail as to leave the trial judge with a reasonable doubt as to impairment, the accused must be acquitted. If the evidence of impairment establishes any degree of impairment ranging from slight to great, the offence has been made out.

Note: The Supreme Court of Canada in a brief judgment dismissed the accused's appeal (see [1994] S.C.J. No. 51)

R. v. Graat, [1982] 2 S.C.R. 819

The trial judge accepted the opinion evidence of two police officers that the appellant's ability to drive had been impaired by alcohol and convicted him under s. 234 of the Criminal Code. …

The question whether a person's ability to drive was impaired by alcohol is one of fact, not of law, and non-expert witnesses may give evidence as to the degree of a person's impairment. The guidance of an expert is unnecessary. The value of opinion will depend on the view the court takes in all the circumstances. The judges, however, should not consider the opinion of police officers in a preferential way merely because they may have extensive experience with impaired drivers. Here, the non-expert evidence was correctly admitted. The witnesses all had an opportunity for personal observations. They were not deciding a matter for the court to decide as the weight of the evidence is entirely a matter for the judge who could accept all or part or none of their evidence.

R. v. Bernshaw, [1995] 1 S.C.R. 254

Per La Forest, Sopinka, Gonthier, McLachlin and Major JJ.: Where a police officer believes on reasonable and probable grounds that a person has committed an offence pursuant to s. 253 of the Code, the officer may demand a breathalyzer. Section 254(3) of the Code requires that the police officer subjectively have an honest belief that the suspect has committed the offence and objectively there must exist reasonable grounds for this belief. Parliament has set up a statutory scheme whereby a screening test can be administered by the police merely upon entertaining a reasonable suspicion that alcohol is in a person's body. A "fail" result may be considered, along with any other indicia of impairment, in order to provide the

police officer with the necessary reasonable and probable grounds to demand a breathalyzer. A "fail" result per se, however, may not provide reasonable and probable grounds. Where there is evidence that the police officer knew that the suspect had recently consumed alcohol and expert evidence shows that the subsequent screening test would be unreliable due to the presence of alcohol in the mouth, it cannot be decreed, as a matter of law, that both the subjective and objective tests have been satisfied. The requirement in s. 254(3) that reasonable and probable grounds exist is not only a statutory but a constitutional requirement as a precondition to a lawful search and seizure under s. 8 of the Canadian Charter of Rights and Freedoms.

If the scientific evidence establishes a high degree of unreliability when certain conditions prevail, and if a police officer knows, for example based on his or her training, that the resultant screening device will provide inaccurate results where a suspect has consumed alcohol within the 15 minutes prior to administering the test, we cannot, as a matter of law, tell a police officer that his honest answer as to his belief that there were no reasonable and probable grounds is wrong.

While the screening test should be administered as soon as possible, the fact that there is a two-hour limit for the breathalyzer test suggests that a 15-minute delay would not offend the provision nor the scheme of s. 254 of the Code. The statutory provisions must allow the time required to take a proper test. Under s. 254(2), the police officer is specifically entitled to demand a breath sample which enables a proper analysis of the breath. This flexible approach is in accord with the purpose of the statutory scheme and ensures that a police officer has an honest belief based on reasonable and probable grounds prior to making a breathalyzer demand. Waiting 15 minutes is permitted under s. 254(2) of the Code when this is in accordance with the exigencies of the use of the equipment. It strikes the proper balance between Parliament's objective in combating the evils of drinking and driving, on the one hand, and the rights of citizens to be free from unreasonable search and seizure.

While there were several other potential indicia of impairment in this case aside from the evidence provided by the screening test, the police officer apparently did not form a belief based on reasonable and probable grounds until after administering the roadside screening test. Assuming this to be the case, he was entitled to rely on the "fail" result of the screening test, however, since there was no evidence with respect to the timing of the accused's last drink. Thus, it is too speculative to assert that the screening device result was unreliable. Where the particular screening device used has been approved under the statutory scheme, the officer is entitled to rely on its accuracy unless there is credible evidence to the contrary.

R. v. Grosse, [1996] O.J. 1840 (Ont.C.A.)

The accused was charged with driving "over 80". The Crown could not rely upon the statutory presumption of the alcoholic content at the time of the offence pursuant to s. 258(1)(c) of the Criminal Code as delays associated with permitting the accused to consult counsel resulted in the two breathalyzer tests being done outside the two-hour time limit. The Crown called a forensic toxicologist to provide an opinion about the accused's blood alcohol content at the time of the offence. The expert stated that, when concluding that the accused's blood alcohol content exceeded 80 milligrams per 100 millilitres of blood, his opinion was "entirely dependent" on the assumption that the accused had not consumed large amounts of alcohol shortly prior to being arrested. This type of drinking is often referred to as bolus drinking. The expert testified that the accused would have had to consume the equivalent of nine ounces of 40 per cent alcohol in the half-hour before he was stopped if the explanation for the blood alcohol content was bolus drinking. There were no

containers of alcohol in the car, the accused did not have a strong odour of alcohol on his breath when he was stopped, and the evidence did not indicate that the accused had just left a drinking establishment. The accused did not testify. The trial judge convicted the accused, calling "preposterous" the defence submission that the opinion of the expert should be disregarded on the basis that the Crown had failed to prove the absence of bolus drinking shortly prior to his arrest.

The summary conviction appeal court judge allowed the accused's appeal. Apparently that court held that the Crown was required to prove that the accused had not engaged in bolus drinking. (The oral reasons for the summary conviction appeal have been lost so more detail about those reasons is not available.) The Crown appealed.

Held, the appeal should be allowed.

The absence of bolus drinking was a pivotal assumption in the expert's opinion. Therefore, the Crown had to prove the lack of bolus drinking or the expert's opinion could not be accorded any weight. The Crown's submission, which essentially amounted to creating a new common law presumption that the accused should be presumed not to have engaged in bolus drinking, is rejected. When the Crown cannot rely upon the presumption in s. 258(1)(c) of the Criminal Code, it must call evidence to prove the absence of bolus drinking in the ordinary way.

The trial judge held that the burden was on the Crown to prove the facts upon which the expert's opinion depended. He refused to reject the expert's opinion, describing the theory that the accused had engaged in bolus drinking as preposterous. Whether or not the Crown had proved the assumptions upon which the expert's opinion was based was an issue of fact for the trier of fact. The summary conviction appeal court judge was required to determine whether the trial judge could reasonably have reached the conclusion that the accused was guilty beyond a reasonable doubt. While there was not a great deal of evidence to support the assumption of no bolus drinking, there was sufficient evidence that it could not be said that the trial judge's decision was unreasonable. In view of the circumstantial evidence supporting the conclusion that the accused had not engaged in bolus drinking, and the accused's unique position to offer an explanation, the trial judge was entitled to draw an adverse inference from the accused's failure to testify as to such an unusual drinking pattern. The summary conviction appeal court judge exceeded the ambit of factual review permitted under s. 686(1)(a)(i) of the Code and thereby erred in law in overturning the findings of fact of the trial judge.

See also:

R. v. Bulman, [2007] O.J. No. 913 (Ont.C.A.)
R. v. Gettins, [2003] O.J. No. 4758 (Ont.C.A.)

R. v. Paszczenko; R. v. Lima, [**2010] O.J. No. 3974 (Ont.C.A.)**

Appeal by the Crown from a decision allowing Paszczenko's appeal from conviction. Appeal by Lima from the dismissal of his conviction appeal. Both Paszczenko and Lima were convicted of driving with a blood alcohol level exceeding the legal limit. Paszczenko was arrested after a single vehicle accident at the scene of which he exhibited indicia of impairment. He later gave two breath samples both showing he had a blood alcohol level of 120. Samples for breathalyzer testing were not taken within two hours of Paszczenko's alleged offence. The Crown tendered expert evidence from a toxicologist projecting Paszczenko's blood alcohol level at between 130 and 180 at the relevant time. The expert's

projections were based on assumptions that no bolus drinking had occurred prior to the accident, that no alcohol was consumed after the collision, using an assumed rate of elimination of alcohol from the blood, and a plateau at the lower blood alcohol level estimation. The appeal court, in allowing Paszczenko's conviction appeal, concluded there was no evidentiary basis for the trial judge's reliance on the assumption concerning the plateau. In a separate incident, Lima was stopped while driving his car in an unusual fashion. He exhibited indicia of impairment. Breathalyzer tests were administered outside the two-hour window because Lima required Portuguese-speaking duty counsel. Lima registered readings of 110 and 100. The Crown again provided expert evidence Lima would have had a blood alcohol level of between 110 and 160 at the relevant time, the expert relying on the same assumptions. The trial judge found by inference from the arresting officer's evidence that there was no alcohol in Lima's car and that Lima had no access to alcohol after his arrest. He noted there was no evidence that Lima just left a drinking establishment when he was stopped. He rejected the defence argument that the signs of intoxication observed were evidence of bolus drinking. The judge in Lima's case accepted that the expert could rely on the assumptions about elimination rate and the plateau in the absence of a challenge by Lima. The appeal court was satisfied that the assumptions were matters within the toxicologist's expertise upon which the judge was entitled to rely. The court also noted that it was entitled to take judicial notice of this fact, accepted by another court in a previous decision.

HELD: Appeal by Crown allowed; appeal by Lima dismissed. Paszczenko's conviction was restored. The judge properly rejected the bolus drinking defence in Lima's case. Given the indicia of impairment that Lima exhibited at the scene of his arrest, it was unreasonable to suggest that his blood alcohol level was at that time below the legal limit but on the way up due to bolus drinking. There was ample support in authoritative forensic science and law for the conclusion that the assumptions about elimination rate and the plateau were assertions of scientific knowledge, which did not need to be specifically proven. Specifics of the assumptions, such as the exact quantity of alcohol consumed that could give rise to the bolus drinking defence, were not necessary.