



Mandatory Alcohol Screening

Key Messages

- Mandatory alcohol screening (MAS) was introduced in Canada on December 18, 2018.
- MAS allows police officers to demand a breath sample from a driver in the absence of having a reasonable suspicion that the driver has consumed alcohol.
- Although there are concerns about potential *Charter of Rights and Freedoms* violations, MAS has the potential to enhance deterrence and reduce the incidence of impaired driving.
- The magnitude of the impact of MAS will depend on how it is implemented.
- MAS should be subject to a comprehensive process and impact evaluation.

The Issue

The use of breath tests to assess the extent of alcohol use by drivers has become a standard procedure in the enforcement of impaired driving laws in many countries around the world. Over the past four decades in Canada, if a police officer had a reasonable suspicion that a driver had consumed alcohol, they could demand the driver provide a sample of breath for analysis using an approved screening device (ASD). Changes to the *Criminal Code* of Canada in 2018 removed the requirement for the officer to have suspicion of alcohol use as the basis for demanding an alcohol test. Hence, on December 18, 2018, mandatory alcohol screening (MAS) became law in Canada, giving police the authority to demand a breath test of any driver, even in the absence of suspicion or cause.

When used as part of a year-round intensive enforcement campaign supported by an ongoing program of public awareness, MAS is believed to increase the perceived and actual probability of drinking drivers being apprehended, both of which are key factors in general deterrence.¹ Increased deterrence is expected to have a demonstrably positive impact on the prevalence of drinking and driving, and alcohol-related crashes. However, in both Canada and the United States, MAS is often dismissed as a violation of the right to freedom from unwarranted search and seizure. The successful implementation of MAS in Canada will have to balance the potential reduction in deaths and injuries against an apparent infringement of rights.

Background

Breath alcohol testing was introduced in Canada in 1969. In the mid-1970s, alcohol screening devices were approved for use by the police at roadside. If a police officer has a “reasonable suspicion” that a driver has consumed alcohol, the officer can demand the driver provide a breath sample using an ASD. ASDs are set to indicate “Warn” at a blood alcohol concentration (BAC) between 50 and 100 mg/dL and “Fail” at BACs over 100 mg/dL. In most jurisdictions in Canada, a



“Warn” reading can result in a short-term (24 hours to seven days) licence suspension; a “Fail” reading leads to a trip to the station for an evidential breath test and possible criminal charges.

Although the threshold for suspicion is not high (e.g., the smell of alcohol or an admission of drinking is usually sufficient), police officers vary considerably in their ability to detect the signs and symptoms of alcohol use. For example, in a study where researchers collected voluntary breath samples immediately downstream from a police checkpoint, it was determined that the police failed to detect more than 50% of drivers with a BAC in excess of 80 mg/dL and more than 90% of drivers with BACs greater than 50 mg/dL.² Rather than discrediting the work of the police, this observation merely illustrates that the detection of alcohol can be a difficult task, particularly in a brief interaction at the side of the road. Nevertheless, if an impaired driver escapes detection at a roadside alcohol checkpoint, it serves to reinforce the behaviour and increases the likelihood of its reoccurrence. A more efficient and effective means of detection would undoubtedly prove beneficial. MAS is one such approach.

What the Evidence Says

Several studies have shown a positive impact of MAS, also known as random breath testing in some countries. The majority of the evidence comes from Australia where MAS has been commonplace since the 1980s. These studies reported initial reductions in fatal and serious crashes of up to 48% associated with MAS up to one year after its introduction. Sustained annual reductions in serious crashes averaged about 25%. Among the various studies that have been done, the outcome measures vary somewhat and can include all crashes, serious crashes, fatal crashes or single vehicle night-time crashes (a surrogate measure of alcohol-involved crashes).³ Rarely is there a direct measure of alcohol involvement, suggesting that MAS might be a general traffic safety measure and not necessarily specific to alcohol-impaired driving.

After the introduction of MAS in Finland in 1977, the number of drinking drivers on the road, as assessed by roadside surveys, decreased by 58%.⁴ A report from Ireland indicates a 19% reduction in overall traffic fatalities in the first year following the introduction of MAS in 2006.⁵ Subsequent years show continued declines in overall fatalities.

Despite the shortcomings of some of the research and the lack of evidence specifically related to crashes involving a drinking driver, the overall weight of the evidence shows that an intensive program of MAS, supported by a comprehensive communications strategy, can have a profound, beneficial impact on road crashes.

The impact of MAS programs is presumed to be a consequence of a combination of general deterrence and enforcement. The increased perceived and actual probability of being detected by the police if one has been drinking serves as a deterrent. In addition to an extensive program of MAS, the deterrent effect requires a high-profile communication and publicity campaign informing the general public about the likelihood of detection. Both elements of the program must be continuous and intensive.⁶

Limitations

In evaluating the evidence on the impact of MAS, several caveats must be considered. None of the studies employed a control group, but simply compared crash numbers before and after the introduction of MAS. The lack of an external control group is important because MAS was introduced in Australia during the 1980s, a decade during which every industrialized nation, including Canada, experienced unprecedented reductions in the number of alcohol-related crashes. Different countries took different approaches to deal with the alcohol-crash problem (e.g., new legislation, enhanced enforcement, more severe sanctions or intensive awareness campaigns) and all witnessed



substantial reductions in the magnitude of the problem. Hence, it can be assumed that a portion of the impact of MAS can be attributed to other factors. Nevertheless, the impact of MAS in Australia still appears to have contributed to larger decreases than those experienced in other countries.

Most of the research studies also rely on measures of all crashes, all serious crashes or single vehicle night-time crashes to assess the impact of MAS. These are all indirect measures of alcohol-involved crashes and make it difficult to conclude with confidence that MAS had a direct impact on alcohol-related crashes. However, this would argue in favour of MAS being a general road safety countermeasure that has an impact on all drivers, regardless of whether they have been drinking.

Gaps

Although not always stated explicitly, it is often implied that introducing MAS in Canada would reduce crashes on a magnitude similar to that seen in Australia. This reduction would require that MAS be implemented in Canada in a manner comparable to that in Australia. In Australia, at least one-third of all licensed drivers are breath tested in a year. In New South Wales, the optimal level of testing was deemed to be in excess of the 6,300 breath tests conducted per day. Indeed, to avoid a constant decay in the deterrent effect of MAS, it has been suggested that the level of testing should be equivalent to one test per licensed driver per year.⁶ This level of testing represents a substantial commitment. In Ontario alone, testing one-third of licensed drivers would involve conducting in excess of three million breath tests per year, the equivalent of over 8,200 tests per day; testing every licensed driver once a year would require 25,000 tests per day. To achieve this number of tests would require a serious investment of resources. Even if cost-benefit analyses project a net social and economic benefit, the financial commitment would be substantial and would require an allocation of substantial resources.

In reviewing the reported impact of MAS in Australia, it must be pointed out that impaired driving is not necessarily a criminal offence in Australia but is most often dealt with as a traffic violation. In Canada, impaired driving (including driving with a BAC over 80 mg/dL and refusing to provide a sample for analysis) is a criminal offence that carries significant penalties, including a criminal record. The procedures and requirements for evidence are more stringent when investigating a potential criminal offence, but it is unknown how this might affect implementation of MAS in Canada.

Australian police achieve a high number of breath tests simply by asking every driver they stop to provide a breath sample. Tests are conducted while drivers are seated behind the wheel of their vehicles. This procedure deviates significantly from procedures used in Canada and might run counter to standards of police practice. In Canada, for officer safety, any driver required to provide a breath sample is removed from his or her vehicle and placed in the police car. This procedure allows the officer to record basic information (date, time, location, driver name, driver's licence number and date of birth) and note signs of impairment. It also provides a sufficient period of time to clear any residual alcohol from the mouth to guard against the possibility of a contaminated sample. The entire procedure requires at least 15 minutes, well beyond the "few seconds" reported for the process in Australia. To achieve a rate of testing deemed necessary to observe benefits comparable to those documented in Australia, Canadian police practices would have to be altered.

Few would dispute the fact that MAS would present obvious violations of the *Canadian Charter of Rights and Freedoms*, in particular Section 8 (unreasonable search or seizure), Section 9 (arbitrary detention) and possibly Section 10 (right to counsel).^{*} Lawful implementation of MAS would require the Supreme Court to determine that such an infringement of individual rights is demonstrably

* Currently, drivers required to provide a breath sample at roadside are not afforded the opportunity to consult legal counsel.



justifiable in a free and democratic society (Section 1): that is, that the violation of rights is minimal, relative to the benefits achieved. Ultimately, these are questions for the courts to decide.

What Other Countries Are Doing

Although Australia is often viewed as the originator of MAS and its MAS program has the highest international profile, other countries such as Finland and Sweden have allowed MAS since the late 1970s. Currently, most countries in Europe allow mandatory breath testing and often also allow mandatory oral fluid testing for drugs.

In the United States, random or mandatory breath testing is readily dismissed as a clear violation of the freedom from unlawful search and seizure. Opponents also point out that most states already have “implied consent” laws. These laws state that, as a condition of driver licensing, drivers agree to provide a sample of bodily fluid for alcohol testing when requested by the police. Implied consent laws, however, are not equivalent to MAS. A police officer must still have reasonable grounds to require a preliminary breath test. In fact, implied consent laws actually serve to provide the driver with a choice: refuse the test and face certain licence suspension or submit to the test, possibly fail, and face criminal prosecution.

Options

A consideration of MAS or mandatory breath testing would be incomplete without a discussion of potential alternatives. If the primary effect of MAS is to increase the perceived and actual probability of detection, this increase can be accomplished by enhancing the frequency and intensity of alcohol checkpoints, known in different provinces as Reduce Impaired Driving Everywhere (R.I.D.E.), CounterAttack or CheckStop. Although efforts have been made to expand checkpoints beyond the traditional Christmas season, the probability of a driver encountering a checkpoint remains relatively small. Increasing the number of checkpoints would undoubtedly be beneficial, but unless the increase is substantial, the benefit would likely be minimal.

More efficient and effective checkpoints require enhanced training for police officers in the detection of impaired drivers. Although most people can identify a severely intoxicated individual, the signs and symptoms associated with low to moderate levels of alcohol consumption can be more subtle. Training programs are available to enhance officers’ ability to recognize, identify and articulate indicators of alcohol use among drivers.[†] Combining more intensive alcohol checkpoints with enhanced officer training could improve the effectiveness of existing programs.

The use of passive alcohol sensors is another option.⁷ The technology has been available for many years and is essentially the same as that employed in ASDs, but in a different package. These portable, hand-held instruments detect the presence of alcohol in the ambient air surrounding the driver, but do not require the driver to actually blow directly into the device. The mere presence of alcohol, however, is sufficient to provide the officer with the reasonable suspicion of alcohol use necessary to make a demand for a breath test on an ASD. Passive sensors are in use by many police departments in the United States, where they are considered an aid in the detection of alcohol or “an extension of the officer’s nose.” The procedure is virtually transparent to the driver and only takes a few seconds. Because drivers are not considered to have ownership of their expired breath, use of a passive sensor does not constitute unreasonable search or seizure. The passive sensor is not

[†] An example is the Advanced Roadside Impaired Driving Enforcement (ARIDE) program available from the National Highway Traffic Safety Administration, Washington.



considered to provide direct evidence of alcohol use, only a reasonable suspicion sufficient to proceed with further testing.

Another option is to mandate breath tests for all drivers involved in a crash, regardless of severity. As part of the investigation of the crash, drivers involved would be required to provide a breath sample even if they are deemed not to be at fault. This approach could also be expanded to include drivers cited for a traffic violation.

Passive alcohol sensors, testing drivers involved in crashes, more intensive checkpoints and enhanced training are options that could provide a reasonable compromise between the need to increase the perceived and actual probability of detecting impaired drivers and the desire to protect individual rights and freedoms.

-
- 1 Homel, R. (1990). Random breath testing and random stopping programs in Australia. In R. Wilson & R. Mann (Eds.), *Drinking and driving: Advances in research and prevention* (pp. 159–202). New York, N.Y.: Guilford Press.
 - 2 Wells, J.K., Green, M.A., Foss, R.D., Ferguson, S.A., & Williams, A.F. (1997). Drinking drivers missed at sobriety checkpoints. *Journal of Studies on Alcohol*, 58, 513–517.
 - 3 Henstridge, J., Homel, R., & Mackay, P. (1997). *The long-term effects of random breath testing in four Australian states: A time series analysis*. Canberra, ACT: Federal Office of Road Safety.
 - 4 Dunbar, J., Penttila, A., & Pikkariainen, J. (1987). Drinking and driving: Success of random breath testing in Finland. *British Medical Journal*, 295, 101–103.
 - 5 Road Safety Authority. (2007). *Road safety strategy 2007–2012*. Ballina, Ireland: Author. Retrieved from www.rsa.ie/documents/road%20safety/rsa_strategy_eng_s.pdf. See also www.rsa.ie/en/RSA/Road-Safety/Our-Research/Deaths-injuries-on-Irish-roads/.
 - 6 Homel, R. (1993). Random breath testing in Australia: Getting it to work according to specifications. *Addiction*, 88, 27S–33S.
 - 7 Foss, R.D., Voas, R.B., & Beirness, D.J. (1993). Using a passive alcohol sensor to detect legally intoxicated drivers. *American Journal of Public Health*, 83(4), 556–560.

