

28 June 2019

Drug Driving Consultation
Ministry of Transport
PO Box 3175
WELLINGTON 6140

Tēnā koe

Re: Changes to the drug driver testing and enforcement system in New Zealand

Thank you for the opportunity to provide written feedback on this submission process.

Regional Public Health (RPH) delivers population and personal health services in the greater Wellington region. Our geographical area of service delivery spans Hutt Valley, Capital & Coast and Wairarapa DHBs. We deliver a range of population and personal health services, aiming to improve the health of communities throughout the greater Wellington region. In particular we focus on achieving equitable health outcomes for Māori, Pacific peoples, tamariki and young people, low income whānau and other people groups facing complex challenges.

We have a range of occupations working within RPH including: medical officers of health and public health physicians, public health advisors, public health analysts, health protection officers and public health nurses.

The following feedback to the discussion document provides our public health perspective and experiences in our region.

For additional advice or clarification on any of the points raised in our written feedback please contact:

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Nāku noa, nā

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Regional Public Health's view is that drug use is a health issue that impacts the wellbeing of whānau and communities across the greater Wellington region. Our goal is to reduce, or minimise, the potential harm that may result from the use of alcohol or drugs and promote wellness. The *Discussion Document: Enhanced Drug Impaired Driver Testing* consultation questions are answered below.

Drug driving is a serious but very complex issue. While there appears to be a desire for action to be taken against those who take drugs and drive, and the action may be seen as a deterrent to reduce the number of serious accidents caused by drug driving. The introduction of a system to prevent drug driving and penalise those who are already on the margins of society could impact on any possible future recreational and medicinal law reforms. Therefore, having a system that plays to the sensitivity of both sides of the issue is required.

Canada's legal enhancement around drug driver testing occurred in late 2017 and took place at the same time as the legislation that de-criminalised the use of cannabis. This included placing limits on cannabis THC (tetrahydrocannabinol) and therefore may be seen as reactive rather than proactive action. A reactive position, when weighed against the lack of accuracy of available drug testing (Attachment One), is not an ideal position to take. At this point there is no evidence for the efficacy or accuracy of Canadian drug testing other than numbers of drivers caught drug driving. There is nothing to suggest that the Canadian experience is a model upon which others should be based. New Zealand's position could be similar to that of Canada, as we have a private members bill for the legalisation of medicinal cannabis in 2019 and a referendum on marijuana law reform in 2020.

The current drug driving testing should be maintained until drug testing becomes more refined. Although police judgement of those who are impaired may be unreliable (Jeffrey R. Brubacher, 2018), impairment judgement testing alongside a graduated response may be a better outcome in regard to police resourcing.

RPH understands that drug driving can result in serious harm, however if a reduction in the number of drug drivers is socially desired, money and resourcing may be better spent on raising awareness. The *NZ Transport Agency* (NZTA) have shown that the majority of drivers, 65%, are unaware that it is illegal to drive when impaired by medication. Drivers need to be made aware that driving using drugs, or prescription medication, presents a serious risk to themselves and others.

QUESTION 1: Do you think that roadside drug screening is a good option for deterring drug driving and detecting drug drivers? Are there other options not mentioned in this Discussion Document?

Answer: No.

The general theory of deterrence relies on an assumption that people can and do make rational choices and can weigh the implications of being caught. The discussion document relies on this as an argument for roadside oral fluid testing in *Discussion Document* point 56. In reality, young people are known for making choices that mature adults would naturally avoid. Research shows that those most likely to drive under the influence of illicit substances are young males (Nicola J. Starkey, 2017). In addition, the moment a person starts to drink alcohol or use other drugs, their decision making process, or judgement, is becoming impaired and therefore they are unlikely to be fully able to make behavioural choices based on rational decision; and if intoxicated, fully unable.

Counter to general theory of deterrence, many studies have found that punishment experiences increase the likelihood of offending (Kerry Armstrong, 2018), best explained by a decision making bias known as the gamblers fallacy. The gamblers fallacy suggests that those who are caught committing a crime are more likely to repeat the behaviour soon after, rather than less. This is because they believe having been recently caught will lessen their chance of being caught again.

In a 2017 study conducted in Australia on the effectiveness of roadside oral fluid screening (Kerry Armstrong, 2018), the Classical Deterrence Theory constructs (certainty, severity and swiftness) were not significantly correlated with future drug driving likelihood.

RPH is concerned that taking a deterrent approach to drug driving may not work as well as it has for alcohol. There is little evidence that the theory of General Deterrence works unless there is testing of drivers at intense and visible levels.

QUESTION 2: Do you support oral fluid screening for roadside drug testing of drivers? Are there other options not mentioned in this Discussion Document that could be considered?

Answer: No.

Oral fluid screening has many technical challenges not well explored in the discussion document.

Current screening devices have poor sensitivity (likelihood of correctly identifying drug use), poor specificity (likelihood of correctly identifying those who have not used drugs) and therefore poor accuracy. THC as a marker of cannabis use is a particular issue, with a high rate of false positives (Attachment One) likely with currently available devices. The numbers presented in the discussion document are a pooled analysis of both device results and drug type. In reality, devices are often not comparable and vary widely on accuracy levels for the same drug, and then vary again depending on the drug being tested for. The numbers presented in the discussion document mask the accuracy issues with THC, the most common recreational drug detected in drivers, as the analysis has been pooled with drugs more accurately detected by oral fluid screening devices, such as opioids or benzodiazepines.

The DRUID Study (H. Schulze, 2012), cited in the discussion document in point 18, the ROSITA (A. Verstraete M. P., 2001) and ROSITA-2 (A. Verstraete E. R., 2006) studies reviewed a number of interventions for drug driving and made some key recommendations for device accuracy for drug screening. The projects recommended that devices should have a minimum sensitivity, specificity, and accuracy of 80% or higher for all drugs tested, with recommendations of 90-95% accuracy for some specific drugs. A 2019 systematic review of devices (S.C.D. Dobri, 2019), showed that none of the devices available meet these recommendations.

Devices vary greatly on time to analyse, meaning that the 3-5 minutes for completing an oral fluid screening test as stated in point 73, applies to only a limited range of devices. This limitation is likely to compromise accuracy further.

Cold weather (as would be common in New Zealand at a roadside screening location) affects the ability of some devices to detect and display a result (S.C.D. Dobri, 2019). The devices affected include those that provide a result within a five minute timeframe, this limits appropriate device choice, locations and times the devices could be used at the roadside.

Currently, the process outlined in the document for oral fluid screening is not achievable with the technology available and would result in significant compromise, negatively affecting a large number of drivers in New Zealand.

QUESTION 3: Is it reasonable to delay drivers by 3 to 5 minutes to administer a roadside drug screening test, in order to detect drug drivers and remove them from the road?

Answer: No. Apart from being unreliable, roadside drug screening would cause significant and undue delays to other motorists and a strain on police resource and time, both of which are currently unwarranted.

QUESTION 4: Is a presence-based, zero-tolerance approach to drug driving, where presence of a drug is sufficient for an offence, appropriate for New Zealand?

Answer: No.

As devices available do not meet internationally recognised standards for accuracy. The unintended effects on drivers who have not committed a crime would be disproportionate to the harm of drug driving, should a zero tolerance approach be put in place. There is a risk, that due to low device sensitivity, those who are false negatives missed by detection, will repeat the behaviour considering themselves unlikely to get caught in future. (Kerry Armstrong, 2018)

Also of concern is that the presence of a drug does not necessarily mean there is impairment, or that the driver poses a risk to other drivers. This could lead to criminalisation of offenders for what could otherwise be dealt with as a misdemeanour. Penalties could lead to disproportionate hardship for people and families on lower incomes. As stated in the *Discussion Document* points 34 to 40, Māori are more likely to be impacted by drug driving legislation. A zero-tolerance policy is unlikely to address the complexity around high rates of criminalisation for drug-related offences among Māori, and there is a high risk of increasing inequality with legislation such as this.

QUESTION 5: Should there be legal limits for some drugs?

Answer: No.

Currently, limits imposed in some countries for drugs are arbitrary, are not backed by scientific consensus, and do not have any correlation with impairment. (M. Asbridge, 2015)

QUESTION 6: If roadside drug screening was introduced, which of the three approaches discussed above do you prefer? Testing under the current 'good cause to suspect' criterion. Targeted testing following an incident or a driving offence. Random roadside drug screening, along the lines of the current breath alcohol testing model. Are there other approaches that should be considered?

Answer: RPH does not support roadside drug screening.

Until devices become available that meet the criteria for accuracy (Attachment One), roadside oral fluid screening will require further resources/follow-up tests to confirm accuracy, becoming resource intensive and time consuming. The current best practice would be continuing the use of the CIT to detect impairment when drug use is suspected.

QUESTION 7: If random drug screening was introduced, do you think it is a reasonable and proportionate response to the harm of drug driving? Are there circumstances in which it would be more or less reasonable?

Answer: No.

Random drug screening is not a reasonable or proportionate response to the harm of drug driving for several reasons:

- Current devices do not meet accuracy standards (Attachment One), putting a disproportionate burden on drivers that are committing no crime but will inevitably test false positive for drugs. (H. Schulze, 2012)
- Devices are not capable of providing results in a timely manner, which will result in detainment of drivers for an unreasonable amount of time. (S.C.D. Dobri, 2019)
- The cost of oral fluid testing is around 400-900 times that of alcohol breath testing (point 80). This would require a massive increase in expenditure on drug driving deterrence at this time to deliver the tests in the volume needed for general deterrence (points 56, 57 and 92). Estimated cost of achieving this would be \$6.7-15.2 million on the tests alone. With the current technology, this level of funding is likely to be more effectively used for alternative methods of reducing drug driving, such as education campaigns, or improved addiction services.

QUESTION 8: What criteria should be used to determine if a drug is included, or excluded, from drug screening?

A New Zealand study (Nicola J. Starkey, 2017) showed rates of cannabis use within three hours of driving at about 4% and overall illegal drug use at 5%. The study also reported higher use of strong opioids prior to driving of 10%.

Illicit drugs: RPH supports limited testing of known classes of drugs e.g. methamphetamine, cannabis THC, MDMA and cocaine (M. Asbridge, 2015). RPH notes that drug users could switch to synthetics, which change ingredients frequently, to avoid detection through standardised tests.

Prescription drugs: As noted in the *Discussion Document* (Points 122-124) prescription drugs are a significantly higher cause of driving impairment than illegal drugs. As stated in *Discussion Document* point 123, the lack of awareness that driving under the influence of some prescription drugs indicates a need to improve doctors, nurses and pharmacists information prior to enforcing penalties.

RPH would recommend the inclusion of prescription drugs such as opioids or benzodiazepines.

RPH does note that penalties for prescription users has the added complexity of drivers with disabilities or a psychiatric diagnosis are more likely to use medications that impair could increase inequalities.

QUESTION 9: What regulatory process should be used to specify the drugs that are identified for screening?

RPH recommends that drug screening should not occur at this time.

QUESTION 10: Should illicit and prescription drugs be treated differently?

Refer to Q.8. RPH notes that there are clear differences.

RPH would support the development of a dual regime that separated legal and illicit drugs.

QUESTION 11: Should there be a medical defence for drivers who have taken prescription drugs in accordance with a prescription from a medical professional?

RPH agrees that a medical defence should be available.

Refer to Q.8 and Q.14.

As discussed, doctors, nurses and pharmacists are key to informing clients regarding prescription drugs and their potential impairment and consequences when combined with alcohol. Health professionals will also be critical in any social marketing campaigns that are developed. A campaign would inform the public of penalties, the use of random testing or screening. A mass media campaign could talk to legal arguments and infringement on a person's rights.

In order to achieve a reduction in drug driving through screening, there would need to be a grace period for awareness raising. At present, the public at large are not generally aware of the serious implications of drug driving, especially prescription drugs, as it is not heavily publicised. The NZTA have shown that the majority of drivers are unaware that it is illegal to drive when impaired by medication as stated in the *Discussion Document* point 123.

RPH notes the reality of this situation and does not wish to endorse mixed messages that certain drugs are better or safer because they are licit.

QUESTION 12: If oral fluid testing was introduced in New Zealand, do you think there should be a requirement for a second drug screening test following a failed first test? Do you prefer another option for screening drivers?

Answer: No. RPH wishes to reaffirm its preference that the status quo should remain in place (Attachment One).

Any testing regime would have to provide a high level of certainty, clarity and surety that the ratio of false positives to true positives increases.

QUESTION 13: Do you think that drug driving offences should be confirmed with an evidentiary blood test? If not, what evidence should be required to establish an offence of drug driving?

RPH supports that blood testing would be appropriate confirmation of a drug driving under New Zealand law.

QUESTION 14: Do you think an infringement offence (an instant fine and demerit points) or a criminal penalty (mandatory licence qualification, fines and possible imprisonment) is appropriate for the offence of drug driving?

RPH recognises that infringement offences and criminal penalties would be imposed. However, RPH strongly supports three critical requirements:

1. Rehabilitation and support services are required. Improving access of these groups of people to evidence-based addiction services and education programs would be one way of achieving this.
2. That a social marketing campaign is developed to improve drug driving awareness.
3. That an equity lens is applied that considers factors such as ethnicity, economic position and possible consequences to individuals i.e. job loss.

QUESTION 15: Is there any other penalty or action in response to the offence of drug driving that you think should be considered?

RPH does not support the use of roadside oral fluid testing at this time, appropriate penalties for drug driving should be considered. As an activity that is a recognised risk, impaired drivers under the influence of drugs should be prevented from driving where possible.

As stated in Q.14, RPH would support the consideration of an equity model, regarding penalties that consider factors such as ethnicity, economic position and possible consequences to individuals i.e. job loss.

QUESTION 16: Do you think it is reasonable to penalise drivers who have used drugs, but may not be impaired?

RPH disagrees with this position. The burden of proofing impairment is difficult. Any action or penalty would be regressive and punitive. Any penalty imposed should be from an objective not subjective approach.

RPH would suggest, in such a case, the use of health promotion/information to inform the driver of possible impacts of this behaviour and/or available addiction services to assist and support.

QUESTION 17: Do you have anything else you would like to say about drug driving?

No further comments.

References

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- Kerry Armstrong, C. W. (2018). Deterrence of drug driving: The impact of the ACT drug driving legislation and detection techniques. *Transportation Research Part F: Traffic Psychology and Behaviour*, Pages 138-147.
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- S.C.D. Dobri, A. M. (2019). Are oral fluid testing devices effective for the roadside detection of recent cannabis use? A systematic review. *Public Health*, Volume 171, Pages 57-65.

Appendix One – Technical limitations on repeat oral fluid screening

As highlighted in Question 2, the sensitivity, specificity and accuracy limitations of devices are of great concern. A second salivary test with any device with low sensitivity and/or specificity does not guarantee that only true positives will result. The underlying prevalence of drug driving for that drug adds another layer of complexity, meaning that the ratio of false positives to true positives increases with low underlying prevalence.

Several scenarios are discussed below for two successive salivary tests with a theoretical device with a sensitivity of 60% and specificity of 90%, representative of the higher accuracy end of currently available devices for Cannabis (THC) the most commonly used illegal drug. (S.C.D. Dobri, 2019) (Nicola J. Starkey, 2017)

Two successive oral fluid tests does not reliably reduce inaccuracy

For 100 drivers screened with a drug driving rate of 10%:

Low sensitivity means screening will only pick up some of those who have drugs in their system. One salivary screen will pick up around 60% or 6 out of the 10 people drug driving in this scenario. 4 out of 10 people drug driving will falsely give negative readings and be missed. A second test to confirm the result would result in 2 of those drug drivers giving a false negative reading on the same machine and escaping penalties.

Low specificity means screening will give false positive readings for drivers who do NOT have the drug in their system. 9 in 100 drivers who are not drug driving will give a false positive reading in this scenario. A second test will result in one driver who is NOT drug driving being falsely identified as positive in 2 successive tests.

Result:

- One oral fluid test = 6/10 drug drivers caught and 9/90 sober drivers penalised
- Two oral fluid tests = 4/10 drug drivers caught and 1/90 sober drivers penalised

Prevalence of drug driving affects test outcomes

For 100 drivers screened with a drug driving prevalence of 5%:

Result:

- Two oral fluid tests with 5% drug drivers = 2/5 drug drivers caught and 1/95 sober drivers penalised

When the background prevalence of drug driving decreases, the sensitivity and specificity remain the same, but the ratio of correct positive results to false positive result changes. At 10% prevalence, 1 in 5 of your positive screens will be incorrect (20%). At 5% prevalence, 1 in 3 of your positive screens will be incorrect (33%). As the prevalence of use of the drug you are screening for decreases, the greater the impact of the low accuracy of the test on those who are not drug driving.