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**AT THE HEART  
OF THE MATTER,  
NZ DRUG  
FOUNDATION.**  
Te Tūāpapa Tarukino o Aotearoa

## **New Zealand Drug Foundation submission on enhanced drug impaired driver drug testing**

Submitted to the Ministry of Transport on 26 June 2019

## Tēnā koe

In this submission we propose that the focus of testing for drug driving should be on impairment rather than simply the presence of drugs.

We believe that all drugs that can cause impairment, including medications, need to be in the frame. Further we suggest that enforcement alone is not the answer and that substance-impaired driving requires a multi-faceted approach.

Finally while oral-fluid testing devices have the potential for identification of substance-impaired drivers, we consider oral-fluid testing should not be supported as the basis for random testing at this time.

Our submission is structured to address the key aims of the discussion paper, Enhanced Drug Impaired Driver Testing, May 2019:

- **PART ONE** We discuss issues for substance impaired driving.
- **PART TWO** We answer the specific questions in the discussion paper.

Thank you for considering our submission.



Ross Bell

Executive Director

The Drug Foundation is a charitable trust. We have been at the forefront of major alcohol and other drug debates for 30 years, promoting healthy approaches to alcohol and other drugs for all New Zealanders.

## **PART ONE – Issues for substance impaired driving**

### **A note on language**

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1. In this submission, the terms ‘psychoactive substance’ and ‘substance’ are used instead of ‘drug’. This is to underscore that the problem of substance impairment extends beyond that caused by the controlled drugs classified under the Misuse of Drugs Act.
2. There are many substances capable of inducing a psychoactive effect other than alcohol. They include: medicines used with or without a prescription, such as benzodiazepines, opiates, ADHD and anti-psychotic medicines; legal and illegal image- or performance-enhancing substances; illegal stimulants such as MDMA and methamphetamine; illegal depressants such as cannabis and GHB; illegal opioids such as heroin; hallucinogens such as LSD, magic mushrooms; and the many hundreds of new psychoactive substances that are often categorised as synthetic cannabinoids or cathinones.

### **Substance impaired driving is a concern for road safety in New Zealand**

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3. The New Zealand Drug Foundation considers it unacceptable that in the last five years road deaths have risen by around 50 percent. While impairment from fatigue and alcohol are likely to be the leading forms of impairment affecting driving, impairment from other substances, legal and illegal are likely to also have contributed to the rise.
4. A New Zealand study found that cannabis, opioid-based pain killers and benzodiazepines are associated with increased crash risk and are often taken within three hours of driving.<sup>1</sup> An overseas meta-analysis considered amphetamines, analgesics, anti-asthmatics, anti-depressives, anti-histamines, benzodiazepines, cannabis, cocaine, opiates, penicillin and zopiclone and found small or moderate increases in accident risk associated with most of them.<sup>2</sup>
5. A contribution to reducing road deaths can be made by deterring people from driving after consuming a psychoactive substance and removing substance impaired drivers from the road. These objectives must be consistent with the

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<sup>1</sup> Starkey, NJ and SG Charlton (2017) The prevalence and impairment effects of drugged driving in New Zealand. *NZ Transport Agency research report 597*. 105pp.

<sup>2</sup> RuneElvik (2013) Risk of road accident associated with the use of drugs: A systematic review and meta-analysis of evidence from epidemiological studies. *Accident Analysis & Prevention* Volume 60, November 2013, Pages 254-267

National Drug Policy and must not unjustifiably limit rights under the Bill of Rights Act.

## **Substance impaired driving is more complex than driving under the influence of alcohol**

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6. Many medicines, and many other illegal and legal substances can have significant negative effects on driving ability. However, compared to alcohol, the impact of these substances is more difficult to assess. Compounding the difficulty, the effect on driving ability can be much greater when substances are taken in combination with alcohol or other substances.
7. A recent University of Waikato study found that of those who admitted taking substances and driving, 42.6 percent reported that they drove after taking cannabis, 28.2 percent after taking illegal stimulants and 25.5 percent after taking strong painkillers. Fifty percent reported 'drugged driving' once a week or more in the last 12 months while taking anti-depressants, sedatives or Ritalin.<sup>3</sup>
8. In Europe, roadside surveys analysing blood or oral fluid samples from 50,000 drivers showed that alcohol was present in 3.48 percent of the samples, illegal drugs in 1.9 percent, medicines in 1.36 percent, combinations of drugs or medicines in 0.39 percent and alcohol combined with drugs or medicines in 0.37 percent. After alcohol, the most frequently found substance among injured drivers was THC (tetrahydrocannabinol) followed by benzodiazepines. Among drivers killed in accidents, benzodiazepines were the most frequently found.<sup>4</sup>
9. The World Health Organisation has developed the following simplified table summarising the effect of various drugs.<sup>5</sup>

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<sup>3</sup> *The prevalence and impairment effects of drugged driving in New Zealand*, University of Waikato, Starkey, N and Charlton, S, 2017.

<sup>4</sup> European Monitoring Centre for Drugs and Drug Addiction (2012) *Driving Under the Influence of Drugs, Alcohol and Medicines in Europe — findings from the DRUID project* Luxembourg: Publications Office of the European Union 2012 — 57 pp. — 21 x 29.7 cm ISBN 978-92-9168-564-6 doi: 10.2810/74023

<sup>5</sup> WHO. (2016) *Policy Brief: Drug use and Road safety*

Drug Class	Drug	Drowsiness	Cognitive Functions	Motor Balance	Mood	Lateral Vehicle Control	Time Estimation	Balance
Illegal Drugs	Cannabis	✓	✓	✓	✓	✓	✓	✓
	Cocaine		✓	✓	✓			
	Amphetamines		✓	✓	✓		✓	✓
	MDMA		✓		✓			✓
	Hallucinogens		✓	✓	✓		✓	✓
Prescription Drugs	Benzodiazepines	✓	✓	✓		✓		✓
	Opioids	✓	✓	✓	✓	✓		✓
	Other depressants	✓	✓	✓	✓	✓	✓	✓
New Psychoactive substances	Synthetic cannabinoids	✓	✓	✓	✓	✓	✓	✓
	Synthetic cathinones		✓	✓	✓			

10. Because alcohol is water soluble, goes through the body quickly and is exhaled in predictable amounts, breath alcohol levels have strong correlations with impairment for most people. Our blood alcohol concentration (BAC) laws are considered justifiable because of this strong correlation with impairment.
11. Unfortunately, no parallel tests or devices exist for other substances, despite on-going scientific efforts. Science has not, so far, found reliable threshold levels for the presence of other substances in the body that can give a reasonable assurance of impairment.

### **The focus should be on impairment – not the presence of a drug in the system**

12. The presence of a substance or its metabolites in a driver's blood, urine, hair or oral fluid does not mean they are driving while impaired. This is because the window period for these tests do not correlate with the duration of impairment. This presents the risk that drivers are held to be at fault, even though they are not impaired.
13. The National Drug Policy requires a proportionate response to minimise drug-related harm. A driver who is not impaired, even if a substance is detectable in their body, does not represent a risk to road safety and should not be punished for driving.
14. The opposite case is also a concern for safety on the roads. Drivers who are impaired may not be caught by the testing. Resources and technology limits testing to a very small number of substances out of the hundreds of substances which may impair motorists
15. We believe that New Zealand's current response to driving while substance impaired is basically sound and could be expanded. It is based on firstly establishing that a driver is impaired and cannot drive safely, and secondly that the driver has qualifying substances present in their blood.

16. The first of these elements is the most critical: if a driver is impaired for whatever reason they should not be driving. We therefore believe that the current compulsory impairment test (CIT) regime should be retained. It is currently the best tool we have to identify drivers who are impaired by substances other than alcohol.

### **All substances that can cause impairment, including medications, must be targeted**

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17. Over 200 drugs prescribed in New Zealand come with the warning “Do not drive or operate machinery if affected, may cause drowsiness.” Surveys of New Zealand drivers have found the substances most commonly taken within three hours of driving are strong painkillers, antidepressant medication, anti-nausea medication, cannabis and anti-anxiety medication. Many of these can impair driving, especially in combination with other substances or alcohol.<sup>6</sup>
18. While it is acknowledged that many health conditions require prescription medicines, the fact that the substance is prescribed provides no justification for putting other road users at risk.
19. Focusing on some substances to the exclusion of others does not lead to safe roads. Nor is it equitable, as some substances are used more by different sectors of society. A focus on cannabis rather than benzodiazepines, as proposed, may result in an undue and disproportionate number of charges for Māori and lower socio-economic groups.

### **Dealing with substance impaired drivers needs a multi-faceted approach**

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20. It is important that deterrent-based approaches are not considered in isolation, but rather form part of a multi-faceted approach to improve road safety and change entrenched “at-risk” driving behaviours.
21. The World Health Organization has commented that “there is insufficient evidence on the effectiveness of legislation to limit or prohibit drug-driving to establish best practice criteria.”<sup>7</sup>
22. Deterrence is essential to keep our roads safe, but roadside saliva testing employed in isolation is unlikely to offer a magic bullet for the problem of road accidents and fatalities. It is important to look beyond these approaches to

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<sup>6</sup> Starkey, NJ and SG Charlton (2017) *The prevalence and impairment effects of drugged driving in New Zealand*. NZ Transport Agency research report 597. 105pp.

<sup>7</sup> WHO (2018) *Global Status Report on Road Safety*. WHO Geneva.

- identify ways of increasing drivers' awareness of the importance of safety and to create lasting behavioural change.
23. In fact, the whole way that we approach the subject of driving while impaired should be reconsidered. Ideally, we would tackle all kinds of impairment - from alcohol or other substances, or from other causes such as fatigue or hunger - in a single strategy.
  24. One option would be to use existing approaches such as the CIT driver screening regime more extensively, in a way that Police would feel comfortable with. Options may include testing of some drivers at checkpoints, when carrying out scheduled breathalyser testing. We would also like to see a focus on investigating, or designing, new technologies to test for impairment.
  25. Medical practitioners and pharmacists could be required to ensure that patients prescribed psychoactive medicines know when they must not drive. They should give advice on how to manage the risk of impairment. We recommend standardised packaging and warnings for all medications with risk of impairment.
  26. An integral part of the response must also be to improve the pathways for offenders to drive unimpaired in future. This might include providing alternative transport options for those on medication, or ensuring those with substance use issues receive help.

### **Oral fluid testing devices have potential for road-side screening but need further development**

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27. A 2012 study found that roadside oral fluid testing devices did not achieve a target value of 80% sensitivity, specificity and accuracy for all the individual substances tested.<sup>8</sup> A 2017 Canadian study of oral fluid screening showed good results for THC, cocaine, methamphetamine and opioids but poorer results in the detection of benzodiazepines and amphetamines.<sup>9</sup>

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<sup>8</sup> European Monitoring Centre for Drugs and Drug Addiction (2012) *Driving Under the Influence of Drugs, Alcohol and Medicines in Europe — findings from the DRUID project* Luxembourg: Publications Office of the European Union 2012 — 57 pp. — 21 x 29.7 cm ISBN 978-92-9168-564-6 doi: 10.2810/74023

<sup>9</sup> Douglas J. Beirness & D'Arcy R. Smith (2017) An assessment of oral fluid drug screening devices, *Canadian Society of Forensic Science Journal*, 50:2, 55-63, DOI:10.1080/00085030.2017.1258212. <https://doi.org/10.1080/00085030.2017.1258212>.

28. More recent testing of the DDT5000 oral fluid testing device found fairly large proportions of false-positive or false-negative results compared to drug concentrations in blood.<sup>10</sup>
29. It is very likely that the accuracy and reliability of oral fluid testing devices will improve over time. When it does, they may play a useful role in screening drivers for the presence of some substances. However, CIT procedures would still be needed as part of those tests, to determine impairment, and blood tests would be needed for evidentiary purposes.

### **Oral fluid testing devices do not detect all drugs**

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30. A Canadian assessment of oral fluid drug screening devices noted that there are many potentially impairing substances used by drivers that are not detected well by existing oral fluid screening devices, including benzodiazepines. Others are not included in the oral fluid screening device test panel, such as synthetic cannabinoids, dissociative anaesthetics, and cathinones.<sup>11</sup>
31. While this does not necessarily rule out the use of such devices, the policy responses need to consider any potential unanticipated consequences. For example, motorists may switch to using more harmful substances, in order to avoid being caught. For example, they may use synthetic cannabinoids rather than cannabis.

### **We would prefer to see limited resources go towards increased alcohol testing**

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32. The time taken to carry out a road-side oral fluid test is claimed to be around 5 minutes. This is at the lower end of test times quoted in the literature but even if a test could be done every 5 minutes, Police will only be able to screen 10 drivers for every 100 drivers it can screen for alcohol.
33. Targeting driving while impaired by alcohol or fatigue should be a higher priority, since the risk and share of injuries is higher for alcohol. Any increase in substance impaired driving enforcement should not be at the expense of measures targeting these.

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<sup>10</sup> Hallvard Gjerde, Grethe Brennhovd Clausen, Espen Andreassen, & Håvard Furuhaugen (2018) *Evaluation of Dräger DrugTest 5000 in a Naturalistic Setting*. *Journal of Analytical Toxicology*, 2018;42:248–254 doi: 10.1093/jat/bky003

<sup>11</sup> Douglas J. Beirness & D'Arcy R. Smith (2017) An assessment of oral fluid drug screening devices, *Canadian Society of Forensic Science Journal*, 50:2, 55-63, DOI:10.1080/00085030.2017.1258212. <https://doi.org/10.1080/00085030.2017.1258212>.

## **Random oral fluid testing for substance impaired driving will be problematic**

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34. There are some good reasons for supporting random roadside oral fluid testing. Firstly, a greater number of drivers who are driving under the influence of substances will be apprehended. Secondly, there should be a related deterrent effect.
35. Against this there are strong reasons for not supporting random roadside testing for drugs.
36. The Attorney General ruled that it is contrary to the Bill of Rights.<sup>12</sup> Although random alcohol breath checks are currently allowed, the science is much stronger on the links between blood-alcohol and impairment and so there is a stronger case for alcohol testing. Oral fluid testing does not measure impairment and so the test cannot be justified on those terms. Also it does not test for all drugs.
37. It should also be borne in mind that the time taken for the test is likely to be at least ten times that for a breath alcohol test. Drivers who are not impaired may accept a 30 second delay in their journey to take a breath test for alcohol, whereas delays of 5 – 15 minutes could be seen as unreasonable. This could produce a backlash for police, exposing them to ill-feeling and possibly affecting their ability to effectively enforce driving laws as a result.
38. Finally, it is noted that a Bill to introduce random testing for substance impaired drivers was voted down in Parliament in October 2018.
39. While the Drug Foundation would have liked to support random oral fluid testing as a way to keep our roads safe, until such time as the technology improves we advise caution. We recommend that before drivers are given an oral saliva test, there be good cause to suspect impairment – whether because an accident has taken place, or because the driver has in some other way exhibited cause for concern.

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<sup>12</sup> Report of the Attorney General under the New Zealand Bill of rights Act 1990 on the Land Transport (Random Oral Fluid Testing) Amendment Bill.

## **PART TWO – Answers to specific questions**

### **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?**

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40. Yes, but only if the screening can provide an accurate and reliable test. Unfortunately, the oral fluid testing method proposed here is not accurate, reliable or fast enough to be a good option for New Zealand at this point. From a road safety perspective, it is very concerning that it can only test for a small number of the substances that New Zealanders use.
41. If drug screening is implemented despite its serious limitations, each positive result must be followed by both an impairment test and a blood test, to ensure accurate and fair outcomes.
42. A much better option than oral fluid testing would be to expand and improve roadside impairment testing, which can test for impairment from any substance.
43. We understand that Police find impairment testing difficult in some circumstances (such as late at night, on rural roads for example). We would therefore like to see resources directed to researching alternative impairment tests that could be carried out at the roadside, both safely and quickly.
44. We also note that any new regime must form part of a comprehensive deterrence programme including public information and media campaigns, enforcement, wellness and resiliency programmes and drug treatment.

### **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?**

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45. In principle oral fluid screening could be useful as a means of screening more drivers at the roadside and potentially reducing the number of crashes, injuries and deaths on the road. However, this would require devices to be developed that have high levels of accuracy and cover a wide range of substances.
46. A major requirement is that safeguards are in place to ensure that no one is prosecuted based on the fluid testing alone. This means ensuring that a positive oral fluid screen result is always followed by an impairment test and blood testing.
47. Oral fluid screening tests could only ever become a partial solution. Oral fluid tests do not screen for all substances, meaning they will miss some drivers who have taken substances that may cause impairment. Nor do they determine that the driver is in fact impaired, which is the principal concern for road safety. We

would prefer resources to be directed towards developing more efficient and effective impairment testing.

### **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?**

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48. It is not clear that delays will be as small as 3 to 5 minutes using current technology. Overseas reports on the time taken to complete an oral fluid test suggest that it could take 10 - 15 minutes to complete the process which includes the collection of the sample and the analysis of it after collection.<sup>13</sup>
49. Since the majority of drivers pulled over for a random screening test will not be substance impaired, the longer the test takes, the more difficult it becomes to justify under the Bill of Rights Act.
50. We are not convinced that the likely delay to drivers stopped to undertake a random oral fluid drug test would be seen to be reasonable by the general public. A screening test conducted on the basis of 'good cause to suspect' is far more likely to seem reasonable in the circumstances.

### **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?**

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51. No. If a substance is detectable in the body but not causing impairment there is no justification for this to constitute a driving offence. People with health conditions requiring medication at levels that do not create impairment as well as other people who use these substances who are not impaired would be unjustly punished in this scenario.

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

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52. It is practically impossible to set limits at which impairment from a substance would be certain. The point at which consumption creates a risk of danger to road users will be arbitrary and could vary depending on the particular

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<sup>13</sup> Douglas J. Beirness & D'Arcy R. Smith (2017) An assessment of oral fluid drug screening devices, Canadian Society of Forensic Science Journal, 50:2, 55-63, DOI:10.1080/00085030.2017.1258212. <https://doi.org/10.1080/00085030.2017.1258212>

substance, interactions with other substances, the body characteristics of the user, and any tolerance that the user may have for the substance. More research is needed in this area.

**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?**

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53. We are not supportive, at this time, of random roadside oral fluid drug testing. The emphasis must be on identification of impaired drivers. For this reason there should be good reason to suspect that the driver is impaired before testing for the presence of a substance. An incident or some driving offence may meet the criteria for ‘good reason to suspect’ that the driver is impaired by a substance.
54. As in our answer to question three, there are concerns over the length of delay that will be imposed on drivers (not to mention their passengers) most of whom will not have used a substance, and whether this can be justified under the Bill of Rights Act.
55. We therefore support testing under the current ‘good cause to suspect’ criterion. It may be possible to conduct random screening for alcohol and if, after a negative alcohol screening result, there is good cause to suspect the driver of drug driving, to then conduct an oral fluid test. A positive test result would then need to be followed by an impairment test and blood test.

**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?**

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56. Our concerns about random drug screening are outlined above. With current technology it is not reasonable or proportionate. If random drug screening was quicker, could show impairment and could test for a wider range of substances, both legal and illegal, there may be a better case to be made.

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

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57. All substances capable of causing impairment should be included in a proportionate and just screening process. This includes controlled drugs, medicines and new psychoactive substances.
58. If it is necessary to restrict the number of substances tested for cost reasons, the substances chosen must be those most likely to cause an accident in New Zealand, based on available evidence. This may include both prevalence of its use and impact on driving. The legal status of the substances tested should be irrelevant to this choice.
59. Under this test, we would expect to see some prescription medicines in the top ten.

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

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60. See answer to Q8. The Drug Foundation would like to be assured that regulatory processes are proportionate and just, but does not have a view on a particular process.

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

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61. No – substances should be treated based on their potential for impairment, not whether they are legal or illegal.

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

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62. No – the issue is about preventing risks to other road users. People who are prescribed drugs must be informed as to whether it is safe to drive after they have taken them, and should be made aware of the laws against drug driving. This could involve educating or requiring medical practitioners and pharmacists to ensure that patients prescribed certain medicines are given advice on how to manage the risk of impairment and know when they should not drive. In addition there should be public education and social marketing campaigns to raise awareness among the general population.

**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?**

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63. If a second screening test was more sophisticated it may be useful. More importantly, before any charges for offences are laid there must be a positive impairment test as currently required and a subsequent confirmatory blood test.

**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?**

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64. Yes, and an impairment test.

**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?**

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65. Penalties imposed on drivers as a result of substance impaired driving should be aligned, where possible, to penalties imposed for excess blood alcohol levels. This is based on the presumption that a prosecution will only be brought in the case of an impairment being identified.

66. We are strongly opposed to charging people based on the simple presence of substances in their saliva, without further proof that they are impaired while driving. However if this is the approach taken, an infringement offence would be more appropriate than a criminal penalty.

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

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67. The Drug Foundation does not have a good knowledge of effective penalties – but civil penalties such as demerit points and licence suspension, as well as non-custodial punishments should all be considered. There should also be realistic options aimed at stopping future offending such as offers of treatment services.

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

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68. No. The road safety concern is driving while impaired, not the mere fact of being on medication or having consumed recreational substances.

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

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69. Driving under the influence of substances is only one aspect of the broader road safety concerns related to drivers not fully focussed on the task. Other aspects include: alcohol and caffeinated drink mixes, tiredness, emotional or mental impacts, multi-tasking (such as texting or looking for something in the vehicle). All these should be part of a comprehensive driver improvement strategy.

### **FINAL RECOMMENDATIONS**

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- 70. That the focus for substance impaired driving should be on impairment.
- 71. That all substances, including medications, that can cause impairment need to be targeted.
- 72. That substance impaired driving requires a multi-faceted approach.
- 73. That oral-fluid testing devices, while having the potential for identification of some substance impaired drivers, are not supported as the basis for random testing at this time.