IAS consultation response to Roads Policing Review Call for Evidence

About IAS

The Institute of Alcohol Studies (IAS) is an independent institute bringing together evidence, policy and practice from home and abroad to promote an informed debate on alcohol's impact on society. Our purpose is to advance the use of the best available evidence in public policy decisions on alcohol. For more information please visit www.ias.org.uk.

Please note: IAS responses to this consultation are written from the perspective of alcohol's impact on issues of road safety.

Question 1: Why do you think road casualties have remained fairly constant since 2010?

As road casualties in Great Britain have failed to improve since 2010, so have drink-driving casualties, remaining at between 12–14% of all road casualties. This makes them a factor in the lack of improvement seen in all road casualties.[1] Therefore, reducing drink-driving is an effective way to lower overall road deaths.

Drink-driving casualties have plateaued since 2010 in large part because advancements made in general road safety in previous years have slowed, and in some areas declined, most notably in enforcement and public awareness. This has been a drag on possible improvements, which may be down to three main factors:

1. diminishing levels of targeted enforcement (our analysis of Freedom of Information responses from police constabularies revealed that both the number of officers and breath tests conducted on England's roads fell by a quarter in a five-year period to 2015/16);[2]
2. declining awareness of road safety campaigns (an assessment of *THINK!* road safety campaigns commissioned by the Department for Transport in 2016 found that spontaneous awareness of road safety advertising fell from two thirds in 2005 to one in four people in 2015);[3] and
3. a reluctance to make legislative changes to deal with the persistent rate of alcohol-related road casualties – polls conducted by Alcohol Health Alliance UK, the Institute of Advanced Motoring and BRAKE have found consistently high levels of support for a lower legal drink drive limit (between 70% and 77%).[4] Furthermore, a Populus poll commissioned by the Royal Society of Public Health also found that among those who had admitted to drink-driving, two thirds said they would stop doing so if the limit was lowered.[5] However, when pressed on the issue, the government has repeatedly stated that it has 'no immediate plans to lower the drink drive limit in England and Wales'.[6]

Question 2: What does the evidence suggest has the most impact on reducing deaths on the road?

In drink drive terms, a hallmark of road safety legislation since the first *Act* in 1967 has been the punitive measures for those who breach the drink drive limit, as a precautionary measure and deterrent against risky behaviour on the part of motorists. In the UK, if a driver is found to be over the drink drive limit, and/or driving while impaired by alcohol, they can receive a maximum penalty of six months in prison, an unlimited fine and an automatic driving ban of at least one year. If a driver kills someone while under the influence of alcohol, they can be charged with causing death by careless driving while under the influence of drink or drugs (Section 3A of the *Road Traffic Act 1988* (as amended by the *Road Traffic Act 1991*, section 3)), which carries a maximum penalty of 14 years in prison and an unlimited fine.

This has historically been followed by strict enforcement, usually testing those who exceeded the speed limit.[7] However, a Transport Committee report noted that the decline of roads policing activity had 'led directly to increasing traffic violations on the UK's roads' by the mid-2000s.[8]

Evidence from abroad suggests that stricter enforcement matters too. Research from the United States of America has demonstrated how the loss of officers can see an increase in all road traffic deaths and casualties[9] and research exploring Australian breathalyser activity saw the introduction of road side breath testing reduce fatal crashes and injuries.[10] Similarly, evaluation of Australian drink-driving enforcement campaigns has found them to be 'effective in reducing serious crashes during high alcohol hours.'[11]

Taken in sum, a 2018 World Health Organization report concluded that there is sufficient support for 'using sobriety checkpoints to reduce drink–driving harms'.[12] In light of research such as this, it is unsurprising that the UK has seen no statistically significant improvement in drink-driving fatalities or causalities in half a decade, when the policy lever of enforcement remains under-utilised.

Question 3: What evidence-led initiatives demonstrate what could be done to help reduce road traffic casualties?

One evidence-led initiative that could help to reduce road traffic casualties would be to reduce the drink drive limit, which a Public Health England evidence review found to be 'equally effective at reducing drink-driving across all drivers, including those who drive with the highest BACs'.[13]

The drink drive limit currently stands at 80 milligrams of alcohol per 100 millilitres of blood in the UK (except Scotland), compared to 50mg among most European nations.

A higher drink drive limit raises the risks of fatal collision. Research published by the NICE Centre for Public Health Excellence indicated that drivers with a BAC of between 20mg/100ml and 50mg/100ml have at least a three times greater risk of dying in a vehicle crash. This risk increases to at least six times with a BAC between 50mg/100ml and 80mg/100ml.[14] Observational studies including nearly 3,000 crashes have shown that the risk of a road traffic crash begins at a BAC of 40mg per 100ml of blood.[15]

A lower BAC limit would act as a deterrent towards those drivers who may consider having an alcoholic drink before getting behind the wheel. The National Police Chiefs' Council

(NPCC) claims there is some evidence to show that a reduction in the limit to 50mg per 100ml would save 64 lives a year.[16]

Furthermore, when Scotland lowered its drink drive limit from 80mg to 50mg/100ml in December 2014, Police Scotland data revealed that within the first nine months, offending fell by 12.5% compared with the same period the previous year.

Other international examples of the positive effects of lowering the drink drive limit are listed below:

Figure 1 Studies evaluating the effect of lowering the legal blood alcohol concentration limit to 50mg of alcohol per 100ml of blood [17]

Study	Results
Noordzij (1994)	Percentage of drivers with BACs > 50mg from roadside surveys decreased from more than 15% in the years before the 50mg limit to 2% in the first year and then levelled off at 12% for 10 years after the law change.
Mercier-Guyon (1998)	Alcohol-related RTC fatalities decreased from 100 before the limit was lowered to 64 (a reduction of 36%) in 1997 right after the law change in the French Province where the study was conducted.
Bartl and Esberger (2000)	Found 10% decrease in alcohol-related RTCs. Lowering the legal BAC-limit from 80mg to 50mg in combination with intense police enforcement and reporting in the media leads to a positive short-term effect.
Henstridge, Homel and Mackay (1995)	Queensland experienced an 18% reduction in fatal crashes and a 14% reduction in serious crashes associated with lowering the BAC limit to 50mg. New South Wales showed an 8% reduction in fatal cases, a 7% reduction in serious crashes and an 11% reduction in single-vehicle-night-time crashes associated with lowering the BAC limit to 50mg.
Smith (1988)	8% reduction in night-time serious injury crashes and a 6% reduction in night-time property damage crashes associated with lowering the limit from 80mg to 50mg. This finding was partly the result of increased enforcement.

Other evidence-led interventions that would support the implementation of a lower limit (and discussed in greater detail elsewhere in our response) are:

- Better enforcement of the drink-driving law through breath-testing
- Mass media drink-driving campaigns, including through alcohol labelling
- Increased use of technology such as alcohol interlocks to prevent reoffending

Question 4: Can you provide examples or empirical evidence demonstrating a relationship between road traffic law enforcement and compliance with road traffic law?

There is evidence that a noticeable lack of presence among law enforcement officials can lead to the emergence of more ‘adventurous’ attitudes about drink-driving. A poll held by pricing comparison site Confused.com earlier this year showed that a large number of drivers share potentially dangerous views on drink-driving that could have been acted upon

during the pandemic-induced national lockdown. They ranged from one in twenty (5%) believing it was fine to drive over the limit when the roads were quieter during the lockdown, to a quarter (24%) of drivers admitting that they drive after a drink because they don't 'feel drunk', and a third (33%) of drinking pub goers planning to drive to their favoured drinking establishment, equivalent to 5 million drivers.[18] Another survey of 16,700 people over 50 years of age – by Drink Wise Age Well – found that drink-driving was commonplace amongst higher risk drinkers: 30% reported that they had driven when they thought they were over the legal alcohol limit in the last 12 months.[19]

Question 5: Can you provide any examples or empirical evidence identifying a causal relationship between enforcement and road collision casualty numbers?

There is convincing, high quality evidence that breath testing has a substantial effect on the number of road collisions. In 2001, a systematic review of 23 natural experiments showed that breath testing reduces all crashes by roughly 20% for selective testing and 18% for random testing.[20]

Figure 2 The effects of breath testing on road traffic crash outcomes: summary effects

	Random breath testing	Selective breath testing
Outcome	Median change (range) [i]	Median change (range) [i]
Fatal injury crashes	-22% (13,36%)	26% and 20% decrease
Fatal and nonfatal injury crashes	-16% (11,20%)	-20% (5,23%)
Other crashes	26% and 15% decrease	-24% (13,35%)
All crashes	-18% (13,22%)	-20% (13,27%)

Furthermore, a 2009 meta-analysis of 40 natural experiments has shown that breath testing at checkpoints reduces crashes involving alcohol by 17% at a minimum, and all crashes, independent of alcohol involvement, fall by 10% to 15%.[21]

Question 6
Can you provide any evidence or examples that road traffic enforcement can disrupt or detect other (non-motoring) criminality?

We do not have a response to this question.

Question 7: What else alongside enforcement (such as education or examples of use of technology and signage) has been evidenced to increase compliance?

In July 2019, the Government published a policy paper setting out the actions it intends to take towards 2021 to improve road safety.[22] This document highlighted that 'there has been little change in the number of reported fatalities on British roads since 2010', and so set out new initiatives that were needed to reduce the number of deaths on the roads, including the

use of alcohol ignition interlocks (also named alcolocks) as part of drink drive offender rehabilitation programmes.

There is international evidence that alcohol ignition interlocks can reduce drink-driving reoffending when they are used in conjunction with other interventions. The Dutch alcohol interlock rehabilitation scheme which ran from 2011 to 2015 was found to be twice as effective as other sanctions at reducing recidivism, and the effects continued after participation in the scheme, according to new research by the Dutch Ministry of Justice research centre (WODC). According to the researchers, 4% of those who followed the programme were re-convicted of a drink-driving offence within two years, compared to 8% for a control group who faced other sanctions.[23]

In the last two years, interlock schemes have been introduced in Spain (for people carrier vehicle drivers), Belgium, France and Lithuania (for high-level and repeat offenders).[24]

Question 8
How have improvements in design and technology of vehicles (such as collision avoidance systems) impacted upon road safety?

We do not have a response to this question.

Question 9
In respect of commercial vehicles can you provide any evidence or examples that current levels of enforcement by police and/ or DVSA and the sanctions that follow are an effective deterrent to encourage compliance?

We do not have a response to this question.

Question 10
If not, can you provide any evidence or examples of how enforcement or sanctions could be changed to achieve improved compliance?

We do not have a response to this question.

Question 11
Can you provide evidence or examples of where enforcement of road traffic law can benefit congestion management and air quality?

We do not have a response to this question.

Question 12
Is there evidence to show how prosecutions contribute to road safety?

We do not have a response to this question.

Question 13
Can you provide evidence or examples (in particular the use of technology) of what could be done to better enable and equip those charged with enforcing traffic laws?

We do not have a response to this question.

Question 14: Can you provide evidence of existing approaches to enforcement or available technologies that could inform the future shape of road traffic enforcement by police and other agencies?

On one level, there are existing, effective policies for reducing drink-driving that are not currently happening in most parts of the UK, notably random breath testing, graduated licences, and lower alcohol limits for drivers (including zero alcohol limits for novice and professional drivers).

On another level – as mentioned in Question 8 – innovations such as alcolocks can also help to reduce recidivism rates. This has been demonstrated worldwide.

For instance, a Cochrane review of 11 controlled trials initially, expanded to include 15 further trials and observational studies, showed consistent large reductions in re-arrest rates following installation of an interlock device. However, following removal of the device, re-arrest rates returned to levels similar to the comparison groups, suggesting that ignition interlocks are only effective while installed.[25]

An Australian cost-benefit analysis estimated that ignition interlocks could prevent between approximately 100 to 400 road fatalities and approximately 600 to 2,500 serious injuries per year, with a range in benefit-cost ratios of 0.6:1 to 3.4:1 depending on the effectiveness level, discount rate and economic life of the vehicle figure applied.[26]

It has been said that alcolocks represent an important alternative to licence suspension for drivers and their families, and we should monitor the eventual outcome of the trial of alcohol interlocks offered to previous offenders that is currently being conducted by Durham Constabulary.[27] Similarly, one way of informing the future shape of road traffic enforcement would be to look beyond alcolocks as a penalty for criminal behaviour and towards becoming a standardised instrument of road safety, like seatbelts. If made a requirement for all novice drivers (who are most likely to be the youngest drivers on our roads, and who in turn, are most likely to breach our current drink drive limits) and professional drivers, rather than just those who have committed offences, then one could shift the burden of ensuring a driver stays below the drink drive limit from the police on to the driver. An interlock device could ultimately be used as one of several necessary pre-ignition procedures for any motor vehicle journey.

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[6] Hansard (February 2020), 'Written Answers - Department for Transport: Driving under Influence' <https://bit.ly/3ijwjWV>
[7] House of Commons (October 2006), Transport Committee Roads Policing and Technology: Getting the right balance – Tenth Report of Session 2005–06, Ev29 <https://publications.parliament.uk/pa/cm200506/cmselect/cmtran/975/975.pdf>
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