

Road Safety Factsheet

October 2018

Drinking and Driving Factsheet

In 2016, figures show that 230 people were killed and there were over 9,000 casualties in total in drink drive accidents¹. Although the level of drinking and driving has dropped dramatically over the last three decades, over 200 people are still killed in drink drive accidents every year. Despite 30 years of drink drive education and enforcement, over 70,000 people are still caught drink driving annually.

Often it is an innocent person who suffers, not the driver who is over the drink drive limit. In 2016, 100 pedestrians were killed or seriously injured by drink drivers, as were 390 car passengers. 40 children were killed or seriously injured by drink drivers that year².

In 2017, 325,887 roadside breath tests were carried out by the police, of which 44,893 drivers or riders (14% of those tested) failed or refused to take the test.³

Clearly, there is still much to do to prevent drink drive accidents, deaths and injuries.

Lower Drink Drive Limit

The maximum blood alcohol limit in England, Wales and Northern Ireland is 80mg of alcohol per 100ml of blood (80mg/100 ml). In Scotland, it was lowered to 50mg/100ml blood on 5 December 2014. In Northern Ireland, the limit is the same as in England and Wales, but there are plans to lower it.

The 80mg/100ml limit was based on evidence that the likelihood of a road accident rises sharply at and above that level. However, the evidence also showed that most drivers are impaired and their risk increases below this limit.

In 2010, the then Government commissioned Sir Peter North to conduct the North Review of Drink and Drug Driving Law⁴. RoSPA gave evidence to the Review⁵ and called for a lower limit, based on evidence that:

- Drivers with a blood alcohol level of between 50mg and 80 mg are 2 – 2.5 times more likely to be involved in an accident than drivers with no alcohol, and up to 6 times more likely to be involved in a fatal crash⁶
- In 2000, the Government's Road Safety Strategy⁷ estimated that reducing the limit to 50mg could save 50 lives and prevent 250 serious injuries each year. A later examination of the figures suggested it could save 65 lives each year and prevent 230 serious injuries.⁸
- An International review⁹ of the impact of introducing or lowering limits found that they resulted in fewer drink drive accidents, deaths and injuries.

Road Safety factsheet: Drinking and Driving

The North Review commissioned new research by the Centre for Public Health Excellence¹⁰ into the likely effects of lowering the drink drive limit, which indicated that the number of lives saved by a lower limit would be much greater than previous estimates.

The North Review concluded:

A reduction to 50 mg/100 ml would undoubtedly save a significant number of lives. In the first year post-implementation, estimates range from at least 43 to around 168 lives saved – as well as avoiding a larger number of serious injuries – a conservative estimate is 280 although as many as almost 16,000 has been modelled. It is estimated that the impact of any lowering in the blood alcohol limit will actually increase over the first few years of implementation with an estimate of up to 303 lives annually saved by the 6th year.

Sir Peter North recommended that the limit be lowered to 50 mg of alcohol per 100 ml blood.

The estimates in the North Report of the number of lives that a lower limit would save do not include Scotland, which account for about 7% of drink drive-related casualties in Great Britain, so the overall number of lives saved would be even greater.

Unfortunately, in 2011 the British Government decided not to lower the limit as they concluded that improving enforcement is likely to have more impact on the most dangerous drink-drivers, than lowering the drink drive limit, which they did not believe would be cost-effective¹¹.

It did accept many of the report's other recommendations, including:

- removing the right to opt for a blood test when an evidential breath test result is less than 40% over the limit. Sometimes the delay in obtaining a blood test meant that the alcohol in a driver's body had fallen below the limit even though they were above the limit when they took the roadside breath test. This meant that some drivers who had been drinking and driving 'got away with it'.
- streamlining the procedure for testing drink-drivers in hospital
- closing a loophole used by high risk offenders to delay their medical examinations (sometimes the loophole has allowed high risk offenders to regain their licence at the end of their disqualification period before they have taken and passed the mandatory medical examination that high risk offenders are required to take).
- approving portable evidential breath testing equipment for the police so they can conduct evidential breath tests at the roadside.

Scotland

On 3 July 2012, powers to set the drink drive limit in Scotland were transferred to the Scottish Parliament, and subsequent Scottish Government proposals to lower the drink drive limit to 50mg of alcohol per 100 ml of blood were supported by the majority (79%) of people in Scotland¹².

The drink drive limit in Scotland was lowered to 50mg per 100ml of blood on 5 December 2014.

During the subsequent four week Drink Drive campaign 17,504 drivers were tested by Police for alcohol, 351 of whom were over the new limit or refused to take the test. This was a 19% reduction on the same period the previous year. However, fewer breath tests were carried out, so it is not yet clear whether the lower drink drive rate was due to the new limit or to less enforcement¹³.

Of those caught drink driving, 20 drivers were detected between the new 50mg limit and the previous limit of 80mg of alcohol per 100ml of blood.

[A recent study conducted by Strathclyde University explored whether reducing the BAC limit improves road safety. The study compared road safety in Scotland to the rest of the UK, where the drink drive limit remains at 80mg per 100ml of blood. The study involved calculating monthly fatality and accident rates per 100,000 people for every month from 2009 to 2016 for each region of the UK. This shows fatality and accident rates for Scotland and the rest of the UK for the 24 months leading up to the lowering of the limit as well as the 24 months following the change in the BAC limit. The data showed that the lower BAC limit had little effect on accidents and fatalities¹⁴.](#)

In Northern Ireland, the Department of the Environment has consulted on proposals to lower the drink drive limit in Northern Ireland¹⁵. The proposals included a lower blood alcohol limit of 50mg/100ml for most drivers and even lower limit of 20mg/100ml for learner and inexperienced drivers and for those who drive for a living. These changes are set to go ahead, but a date has not yet been confirmed. RoSPA supports the Northern Ireland's plans to lower the drink drive limit.

RoSPA also believes that the limit should be reduced in England and Wales.

A Lower Legal Limit for Young Drivers

RoSPA does not believe that a lower drink drive limit of young or novice drivers is a practical option, partly due to the difficulties in enforcing a separate limit for a specific group of drivers, which would require the Police to be able to check the driver's age (or licence status). This would be difficult as drivers are not required to carry their driving licence in Britain.

There is also a risk that young drivers who are subject to a lower drink drive limit may be more likely to drink and drive when they reached the age at which they became subject to the higher limit for other drivers because they thought that they could then 'drink more and drive'.

accidents don't have to happen

Road Safety factsheet: Drinking and Driving

However, lower drink drive limits for novice drivers have been introduced in some countries (as part of their wider Graduated Driver Licensing Systems) with evaluation studies showing that this results in fewer alcohol related fatalities in this age group.

Northern Ireland is going to introduce a limit of 20 mg of alcohol per 100 ml of blood for learner and novice drivers, which will provide evidence for the practicality and effectiveness of this option in the UK.

Road Safety factsheet: Drinking and Driving

Alcohol and medicine

There are also dangers of mixing alcohol with medicine. Some medicines can react with alcohol, including many medications that can be purchased over the counter without a prescription such as herbal remedies. Alcohol, like some medicines, can make you feel sleepy, drowsy or lightheaded. Drinking alcohol while taking these medicines can intensify these effects, meaning it can be more difficult to concentrate or perform mechanical tasks¹⁶.

Therefore, it is advised that you ask your pharmacist if you have any questions about how the medicine or the medicine combined with even a small amount of alcohol could affect your ability to drive safely.

Enforcement

RoSPA is concerned about the inconsistent pattern of breath testing in Great Britain. The level of breath testing has varied over recent years. In the late 1990s around 800,000 roadside breath tests were conducted each year; this fell to 534,000 in 2003 but then started rising again. By 2009, it had risen to over 814,000 tests. Unfortunately, the number of breath tests in 2010 fell substantially to just over 733,000. In 2017, this fell to 325,887, representing a 15% fall when compared with figures in 2016³. The level of breath testing also varies significantly across the country.

In 2017, 7 breath tests were conducted per 1,000 population across England and Wales. The rate for Wales (13 per 1,000 population) was almost twice that for England (7 per 1,000 population). There was a large variation in the number of tests carried out per 1,000 of the population by individual police forces, from 3 per 1,000 population in Greater Manchester to 13 in North Yorkshire³. The amount of enforcement also varies throughout the year. In December 2017, police officers stopped over 98,000 vehicles and administered over 91,000 breath tests¹⁷.

Effective enforcement of the drink drive laws is essential, and should be high profile and highly visible in order to enhance its deterrent effect. Drivers should perceive that if they choose to drink and drive there is a strong chance that they will be detected and prosecuted and that the penalties will be severe.

Wider Police Powers Breath Test without Prior Suspicion

The Police can stop any driver for any reason, but they cannot require a breath test without a suspicion that the driver has consumed alcohol, or has committed a traffic offence or been involved in an accident. RoSPA believes that the Police should have the power to require a breath test without needing any other reason; this would increase drivers' perception of the risk of being caught without necessarily placing additional demands upon police resources. It would allow the police to target their resources at areas and times where they would be most effective, for instance at locations where it is reasonable to assume drinking may have taken place.

This may be opposed on the grounds that it erodes civil liberties, but drink drivers also erode the civil liberties of everyone else. Drink driving is such a serious offence that it justifies giving the Police wider powers.

Random Breath Testing (RBT)

Giving the Police powers to require breath tests without prior suspicion that a driver has been drinking would also provide the power to conduct Random Breath Testing. This has been widely adopted in Australia and helped to reduce drink driving, although it tends to be resource intensive. A 2005 review of the effectiveness of random breath testing in the state of Queensland demonstrated that higher levels of random breath testing reduced the frequency of drink driving and alcohol related collisions¹⁸. Coupled with the power to implement intelligence-led breath testing, Random Breath Tests would be a powerful deterrent tool.

Research suggests that highly visible random breath testing (for general deterrence) combined with targeted random breath testing that is not clearly visible is the most effective¹⁹. The proposals to change drink drive laws in Northern Ireland included giving police the power to set up drink drive checkpoints where they would be able to stop any driver for the purpose of giving them a breath test¹⁵.

Penalties for Offenders

Sentencing policy for convicted road traffic offenders should complement and support other road safety measures, such as education and training to produce better, safer drivers who are less likely to re-offend. For road safety purposes, the aim of sentencing should be to change the attitudes and behaviour of the individuals being sentenced and of the wider driving public.

The UK's penalties for drink driving are considerably more stringent than most other countries. However, the effectiveness of laws and penalties depends to a large extent on the perceived and actual level of enforcement. The penalties are stringent enough to act as a significant deterrent, provided that people think there is a strong chance they will be caught if they drink and drive. If people do not think they will get caught, the level of penalties is largely irrelevant. An increase in breath testing and more consistency across the country would improve the effectiveness of drink drive laws.

Disqualification Periods

RoSPA supports the courts having the power to impose a driving ban as part of bail conditions, where a defendant might commit a further drink-drive offence whilst on bail. The immediate confiscation of the driving licence of drivers who have failed an evidential breath test and who are high risk offenders would be another way of reducing the likelihood that such people would drive while waiting for their case to come to court. A further measure would be to ensure that where an offender is imprisoned as well as disqualified from driving, the disqualification period does not begin until they have been released from prison.

Immediate Licence Confiscation

The immediate confiscation of the driving licence of drivers who have failed an evidential breath test and who are high risk offenders would be another way of reducing the likelihood that such people would drive while waiting for their case to come to court. However, since drivers do not have to carry a licence in this country, it is difficult to see how this could be enforced.

Seizing Vehicles of Repeat Drink Drive Offenders

In Scotland, the 2010/11 Christmas/New Year Drink Drive campaign included, for the first time, seizing the vehicle of repeat drink drive offenders²⁰. During the campaign, four drivers had their cars forfeited, and a further 24 had their cars seized pending consideration by the Court. RoSPA believes that this is a significant additional deterrent, and should be adopted throughout the UK.

High Risk Offenders Scheme

RoSPA supports the High Risk Offenders Scheme and would like to see it publicised more widely. It is quite right that repeat offenders are given ever more stringent penalties, including imprisonment where appropriate. The High Risk Offenders Scheme is an important part of the drink drive regime. In addition to a longer disqualification, higher fine and possible imprisonment, offenders must prove that they do not have a drink problem and are fit to drive before their licences are returned. They should be required to take an extended driving test at the end of their disqualification before being able to regain their driving licence.

Drink Drive Rehabilitation Courses

Wider use should be made of sanctions designed to change offenders' behaviour, such as rehabilitation courses and re-testing. RoSPA supports the use of rehabilitation courses. Some drink drivers have an overall alcohol problem, which is not effectively addressed through enforcement and sentences. Offenders who have completed a Rehabilitation course are less likely to re-offend than those who have not²¹. Around 60,000 drivers attend a drink drive rehabilitation course each year, but only about half of them complete the course.

In November 2011, the Driving Standards Agency published a consultation paper²² on proposals to improve Drink-Drive Rehabilitation courses and to encourage more training providers to become involved in delivering the courses, improving access to the scheme for offenders in areas with high incidences of drink-driving.

The government's Strategic Framework for Road Safety²³ includes a commitment to make DDRS courses mandatory for disqualified drink-drivers.

Alcohol Ignition Interlock Devices (Alcolocks)

Some countries require Breath Alcohol Ignition Interlock devices to be fitted to convicted offenders vehicles. They are designed to prevent a car engine from starting if the person who breathes into the device has been drinking alcohol. There is some evidence that they are effective in discouraging re-offending while the order is in force, but that re-offending occurs once the restriction is removed.

A small trial of an alcohol ignition interlock programme in Britain²⁴ in which alcolocks were fitted to the vehicles of convicted drink drive offenders found that almost half (43%) of the participants failed to complete the 12 months programme. However, the devices did detect, and therefore, prevent many occasions in which a participant tried to start their car with alcohol in their system, including 328 occasions when the level of alcohol was above the drink drive limit.

The main problems reported by participants included being over the interlock limit the morning after drinking, delay in starting the car due to the time taken for the interlock to warm-up, and difficulties with rolling re-tests during a journey. Many of the participants indicated that the devices made them at least think seriously about their drinking, if not help change their drinking patterns outright.

A similar alcohol interlock programme in Finland was evaluated in 2013. It was found that despite the low participation rate, alcohol interlocks used by the offenders detected at least 12,000 instances of driving while under the influence of alcohol. Interlock users also reported that they drank less or less often, or switched from stronger drinks to milder ones. One tenth of those who took part in the programme had stopped drinking altogether, and said that the alcohol interlock device had motivated this decision.

Almost all of those who took part reported that the biggest benefit of the programme was that they could continue driving. The negative aspects mentioned by those who took part included concerns related to inconvenience, safety and negative perceptions that other people may have of them¹⁷.

Road Safety factsheet: Drinking and Driving

Education and Publicity

There is no doubt that the publicity and education campaigns conducted since the late 1970s have changed public knowledge and attitudes about drinking and driving. Long-term publicity is essential, supported by education programmes for school children and drivers and trainees.

A lower limit would be even more effective in saving lives and preventing injuries if it was supported by substantial, sustained publicity to ensure that the public are aware of the new limit and what it means in terms of their own behaviour. A law can only act as a deterrent if people are aware of its existence and meaning.

Particular attention should be focused on the 'Morning After' effect. It is very difficult to know exactly how much alcohol has been consumed, and how long it will take the liver to remove it from the bloodstream (which varies from person to person). Some drivers who do not drive when drinking at night, find themselves unknowingly still over the limit the following morning.

A more sustained educational effort will be required to raise awareness of this issue and enhance drivers' understanding of the length of time necessary following drinking to allow alcohol levels to decline to safe levels. Many agencies and organisations need to be involved, including employers of staff who drive both to commute and for work purposes. There needs to be a recognition that for those who drive on a daily basis regular heavy drinking is no longer a practicable option if they are to comply with the law. Given the very large proportion of the population in this category this will mean a major change in the Nation's drinking habits with related health benefits which in turn should be taken account of in any overall cost benefit analysis.

Alcohol Unit Labelling

EC Regulations require the alcoholic strength of products to be stated on their containers. However, it is difficult for an individual to determine the amount they have consumed. Publicity and information concerning units of alcohol should stress the fact that it is not possible to accurately gauge how it will affect individuals and the only safe limit is zero.

The drinks industry could give clearer advice on alcohol content on labels and at point of sale. Research is needed on the best way to convey the message on alcohol content.

Alternatives to Drinking and Driving

Greater efforts are also needed to help people choose not to drink and drive by providing alternative options. The price of soft drinks and No or Low Alcohol Drinks in pubs and restaurants should be lower. The lack of good public transport in rural areas is often cited as a particular difficulty because it means that people must use their cars to go to the pub.

The Drinks industry should adopt a more enthusiastic marketing approach to promote a positive image for low or no alcohol drinks and introduce a price advantage for these drinks.

Self-Test Breathalysers

There are many different types of self-test breathalysers available, ranging from very cheap 'blow-in-a-bag' devices to more expensive digital breathalysers. They tend to be marketed as a means for drivers to check whether they are over the limit, particularly the morning after they had been drinking.

RoSPA is concerned that self-test breathalysers may be inaccurate and may encourage people to try to drink up to the limit and drive, rather than plan ahead, and if they are intending to drink alcohol to make arrangements (taxis, designated drivers, etc.) so that they do not need to drive.

Self-test breathalysers have to be used according to the manufacturer's instructions, and the digital ones have to be calibrated properly by the user, and re-calibrated when necessary. Therefore, there is a strong potential for inadvertent misuse resulting in inaccurate readings. Even, if the devices give accurate readings and are used correctly, some people may use them to drink up to the limit and still drive.

However, it is clear that many people do not understand the 'morning after' effect; there is wide misunderstanding about how long it takes alcohol to be eliminated from the body. Many drivers behave responsibly the night before when they know they will be drinking alcohol by making sure they do not drive, but then drive the next morning without realising that they are (or might be) over the limit. They have no accurate way of knowing whether they are still over the limit the next morning, with the result that some people genuinely get this wrong and drink and drive inadvertently. There might be a useful 'morning after' role for self-test breathalysers, but only if their accuracy could be relied upon and people understand how to use them properly and did not misuse them.

References

¹ Department for Transport (2018) 'Reported road casualties in Great Britain: Estimates for accidents involving illegal alcohol levels: 2016 (final)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732650/drink-drive-final-estimates-2016.pdf Date Accessed: 17/10/2018.

² Department for Transport (2018) 'Table RAS51005: Estimated number of drink drive casualties by casualty type: GB 2016'

<https://www.gov.uk/government/statistical-data-sets/ras51-reported-drinking-and-driving>

Date Accessed: 17/10/2018.

³ Home Office (2018) 'Police powers and procedures, England and Wales, year ending 31 March 2018'

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/751215/police-powers-procedures-mar18-hosb2418.pdf Date Accessed: 26/10/2018.

⁴ Sir Peter North QC (2010) 'Report of the Review of Drink and Drug Driving Law'

<http://webarchive.nationalarchives.gov.uk/20100921035225/http://northreview.independent.gov.uk/docs/NorthReview-Report.pdf>

⁵ RoSPA (2010) 'RoSPA's Submission to North Review of Drink and Drug Driving Law'

www.rospa.com/roadsafety/consultations/2010/north_review_written_submission.pdf

⁶ DETR (1998) 'Combating Drink Driving: Next Steps: A Consultation Paper'

<http://collections.europarchive.org/tna/20080307181424/http://www.dft.gov.uk/consultations/archive/1998/comdd/>

⁷ DETR (2000) 'Tomorrow's Roads: Safer for Everyone'

<http://www.ocs.polito.it/biblioteca/mobilita/TomorrowRoads1.pdf>

⁸ Allsop, R. (2005) 'Reducing the BAC Level to 50mg- What can we Expect to Gain?', *PACTS Research Briefing*.

⁹ Mann et al. (2001) 'The Effects of Introducing or Lowering Legal per se Blood Alcohol Limits for Driving: An International Review', *Accident Analysis and Prevention*, 33(5): 569-583.

¹⁰ NICE (2010) 'Review of effectiveness of laws limiting blood alcohol concentration levels to reduce alcohol-related road injuries and deaths'

<http://www.ias.org.uk/uploads/pdf/bloodalcoholcontenteffectivenessreview.pdf>

¹¹ DfT (2011) 'The Government's Response to the Reports by Sir Peter North CBE QC and the Transport Select Committee on Drink and Drug Driving'

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4429/report.pdf

¹² Scottish Government (2010) 'Strong Support for Action on Drink Driving'

<http://www.scotland.gov.uk/News/Releases/2010/01/22163744>

¹³ Scottish Government (2015) "Don't Risk it' Drink Drive Message Hits Home Over Festive Period'

<http://news.gov.scot/news/drink-drive-campaign-success>

¹⁴ Cooper et al (2018) ' Drink, death and driving: Do BAC limit reductions improve road safety?'

URL:<https://www.strath.ac.uk/media/1newwebsite/departmentsubject/economics/research/researchdiscussions/papers/18-12.pdf>

Date Accessed: 17/10/2018.

¹⁵ Department of Environment (2012) 'The Draft Road Traffic (Drink Driving) (Amendment) Bill and Additional Measures To Tackle Drink And Drug Driving In Northern Ireland'

www.doeni.gov.uk/index/information/foi/recent-releases/publications-details.htm?docid=8851

¹⁶ National Institute on Alcohol Abuse and Alcoholism (2014) ' Harmful Interactions: mixing alcohol with medicines'

URL: https://pubs.niaaa.nih.gov/publications/Medicine/Harmful_Interactions.pdf

Date Accessed: 02/07/2018.

¹⁷ National Police Chiefs' Council (2018) 'Police stop nearly 100,000 vehicles as part of Christmas drink and drug driving crackdown'

URL:<https://news.npcc.police.uk/releases/police-stop-nearly-100-000-vehicles-as-part-of-christmas-drink-and-drug-driving-crackdown> Date Accessed: 02/07/2018.

¹⁸ Watson et al (2005) cited in J Freeman et al (2016) 'The law isn't everything: The impact of legal and non-legal sanctions on motorists' drink driving behaviours', *Journal of Safety Research*, 59: 53-60.

¹⁹ ETSC (2016) 'Alcohol Interlocks and Drink Driving Rehabilitation in the European Union: Best Practice and guidelines for Member States'

http://etsc.eu/wp-content/uploads/2016_12_alcohol_interlock_guidelines_final.pdf

Date Accessed: 01/03/2017.

²⁰ APCOS (2010) 'Vehicle Forfeiture to Continue Beyond Festive Drink Drive Campaign'

²¹ Inwood et al (2007) 'Extended Monitoring of Drink Drive Rehabilitation Courses: Final Report'

URL: <https://trl.co.uk/reports/TRL662>

²² Driving Standards Agency (2011) 'New Approval Arrangements for Drink Drive Rehabilitation Courses: A Consultation Paper'

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/2628/dsa-2011-01-consultation-document.pdf

²³ Department for Transport (2011) 'Strategic Framework for Road Safety'

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/8146/strategicframework.pdf

²⁴ DfT (2008) 'Road Safety Research Report: An Investigation of the Usefulness, the Acceptability and Impact on Lifestyle of Alcohol Ignition Interlocks in Drink-Driving Offenders'

<http://webarchive.nationalarchives.gov.uk/20120606181145/http://assets.dft.gov.uk/publications/research-and-statistical-reports/investigation.pdf>