



Drink Driving: Towards Zero Tolerance

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Drink Driving: Towards Zero Tolerance

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European Transport Safety Council

The European Transport Safety Council (ETSC) is an international non-governmental organisation which was formed in 1993 in response to the persistent and unacceptably high European road casualty toll and public concern about individual transport tragedies. ETSC brings together experts of international reputation and representatives of 45 national and international organisations concerned with transport safety from across Europe to exchange experience and knowledge and to identify and promote research-based contributions to transport safety. ETSC provides an impartial source of advice on transport safety matters to the European Commission, the European Parliament and, where appropriate, to national governments and organisations concerned with safety throughout Europe.

Contents

Executive Summary	7
Introduction	9
1. Scope of the problem	11
2. EU measures to tackle drink driving	12
2.1 European Commission's Policy Orientations on Road Safety 2011-2020	12
2.2 Council Conclusions on the Policy Orientations	12
2.3 European Parliament response to the Policy Orientations	12
2.4 The Cross Border Enforcement Directive	13
2.5 The Traffic Law Enforcement Recommendation	14
2.6 The European Alcohol and Health Forum	14
3. Policy Recommendations	15
4. Drink Driving Country Ranking	16
4.1 Faster progress in reducing drink driving deaths than other road deaths	16
4.2 Comparison between countries	16
4.3 Drink Driving enforcement	19
4.4 Progress in implementing alcohol interlocks	20
5. Case Studies	22
5.1 Czech Republic	22
5.2 Ireland	30
5.3 Norway	38
5.4 Sweden	44

Executive summary

This ETSC policy paper provides an overview of the drink driving situation in the European Union (Chapter 1) and measures taken at the EU level to curb drink driving deaths (Chapter 2). ETSC calls on Member States and the European Institutions to adopt a zero tolerance for drink driving. Other ETSC recommendations to Member States and the European Union are also included in Chapter 3.

Chapter 4 looks at countries' progress in reducing road deaths attributed to drink driving between 2001 and 2010. Road deaths attributed to alcohol have been cut by 53% between 2001 and 2010 in these countries, while other road deaths decreased by 47%. **Ireland** achieved impressive reductions in cutting alcohol related deaths from 124 in 2003 to 48 in 2007. Slovakia cut drink driving deaths from 50 in 2001 to an average of 15 per year in 2008-2010. **Latvia, Bulgaria, Hungary, Sweden, Slovenia, Lithuania, Germany, Belgium, Greece** and **Austria** also reduced drink driving deaths faster than other road deaths.

Chapter 5 presents a case study of four European countries: the Czech Republic, Ireland, Norway and Sweden. Successes and shortcomings of drink driving policies are discussed with national experts from these four countries. The implementation of alcohol interlocks in Norway, the adoption of a lower BAC limit in Ireland or the effect of zero tolerance for drink driving in the Czech Republic and the impact of Vision Zero to support the fight against drink driving in Sweden are among the good practices implemented in those countries.



Introduction

In 2010, nearly 31,000 people were killed in the European Union as a consequence of road collisions.¹ Up to 2% of km driven in the EU are associated with an illegal Blood Alcohol Concentration.² Drink driving is one of the three main killers. According to the European Commission's estimates 25% of all road deaths across the EU are alcohol related³. If so, ETSC estimates that 6,500 deaths would have been prevented in 2010 if all drivers had obeyed the law on drink driving.

The ETSC's Drink Driving Policy Network aims at contributing to the reduction of alcohol-related road deaths and injuries through the identification and promotion of best practice. It focuses particularly on gathering and disseminating information on EU Member States' performance in reducing deaths from drink driving and presenting good practice examples from those countries that have showed a strong commitment in tackling one of the main killers on the roads.

1 ETSC (2011) 5th Road Safety PIN Report.

2 ERSO 2006.

3 Against 11% according to official statistics. ETSC (2010) 4th Road Safety PIN Report.

1. Scope of the problem

Europe is the heaviest drinking region in the world, with a prevalence of heavy episodic drinking in excess of one fifth of the adult population. Data from the latest WHO Report on Alcohol and Health 2010 show that alcohol consumption decreased during the 1990s, then increased and stabilised at a higher level than between 2004 and 2006. The European average of 9.2 litres of pure alcohol consumed per year hides big differences among countries. Countries such as Malta, Norway and Sweden have a lower level of alcohol consumption than Estonia, the Czech Republic and Ireland.⁴

Alcohol, even in small quantities, immediately affects the brain system. Effects on the human body and behaviour range from anaesthesia after large amounts of alcohol to impairment of behavioural and cognitive capabilities after small doses. Alcohol may also decrease motivation to comply with safety standards, which may result in an active search for dangerous situations (such as competitive behaviour, or excessive speed). In general, all functions which are important in the safe operation of a motor vehicle can be affected by the levels of alcohol well below current legal limits operating in EU countries.

Impairment through alcohol is an important factor influencing both the risk of a road crash as well as the severity of the injuries that result from crashes. Drivers who have been drinking have a much higher risk of involvement in crashes than those with no alcohol in their blood, and this risk increases rapidly with increasing blood alcohol content.⁵ It has been estimated that a BAC of 0.8g/l increases the crash risk of a driver 2.7 times compared to a zero BAC. When a driver has a BAC of 1.5g/l the injury crash rate is 22 times that of a sober driver. Not only the crash rate grows rapidly with increasing BAC but the crash also becomes more severe. With a BAC of 1.5g/l the crash rate for fatal crashes is about 200 times that of sober drivers.

4 WHO Report 2010 on Alcohol and Health: http://www.euro.who.int/_data/assets/pdf_file/0004/128065/e94533.pdf

5 GRSP (2007), *Drinking and Driving, a road safety manual for decision makers and practitioners*.

Relative Risk Estimate

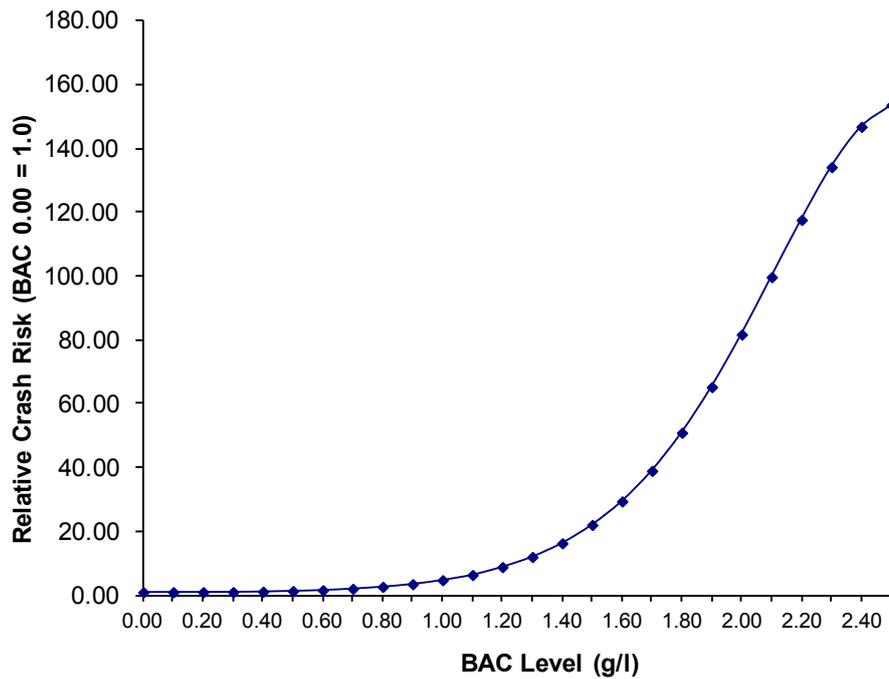


Fig.1: Crash Risk of Alcohol Impaired Driving. Source R. P. Compton, et al. Proceedings of ICADTS T-2002, Vol. I, p. 43.

Drivers are usually aware of the increased risk of being involved in a fatal collision after drinking but largely underestimate the increased risk of being involved in a fatal collision when speeding. Driving with 0.5 g/l BAC increases the risk of a fatal crash by a factor of 5, the same as driving about 50% faster. The increased risk of driving at 75km/h on a 50km/h road, 135km/h on a 90km/h road or 180km/h on a 120km/h motorway is therefore similar to the risk of driving with a 0.5g/l BAC.

2. Measures taken at the EU level to tackle drink driving

2.1 European Commission's Policy Orientations on Road Safety 2011-2020

In July 2010, the European Commission published the communication "Towards a European road safety area: policy orientations on road safety 2011-2020"⁶. The EC renewed the target of halving the number of road deaths in the EU between 2010 and 2020. The strategy placed an emphasis on enforcement of road users' behaviour, including drink driving, stressing the need to match strong penalties for drink driving with preventative measures. The Commission also committed to "examine to what extent measures are appropriate for making the installation of alcohol interlock devices in vehicles compulsory, for example with respect to professional transport (e.g. school buses)".

In an accompanying memo the Commission also stated that it would consider legislative measures to require mandatory use of alcohol interlocks for specific professional cases, such as school buses, or in the framework of rehabilitation programmes (for professional and non-professional drivers) for drink driving offenders.

2.2 Council Conclusions on the Policy Orientations

The Council responded to the European Commission "Policy Orientations 2011-2020" in its conclusions⁷ on road safety in December 2010. EU Transport Ministers endorsed the Commission's new ambitious target of halving road traffic deaths by 2020 and even went beyond this by proposing that the EU aim towards the long-term zero vision for its road transport safety. The Ministers also gave support for the need for further strengthening of enforcement of road traffic rules by Member States and at EU level. Harmonisation of traffic rules was also identified as a priority for the next decade. New technology was seen to be important and the Ministers encouraged "new technical solutions to deal with problems like speeding and impaired driving (such as driving under the influence of alcohol, drugs and fatigue)".

2.3 European Parliament response to the Policy Orientations

In September 2011, the European Parliament adopted the report prepared by Rapporteur Koch⁸. The EP welcomed the EC Policy Orientations yet regretted that only some weaker policy orientations were put forward and called for the adoption of a full action programme.

The EP asked the Commission to prepare proposals for:

- an EU-wide harmonised blood alcohol limit
- a 0.0g/l limit for novice and professional drivers
- the compulsory installation of alcohol interlocks to all new types of commercial passenger and goods; transport vehicles and to the vehicles of road users who already have committed more than one drink-driving conviction

The European Parliament asked the EC to present by 2013 a proposal for a Directive for the fitting of alcohol interlocks, including the relevant specifications for its technical implementation.

The second of the above measures proposed by the European Parliament would be to modify the EC Recommendation on BAC limits adopted in January 2001, lowering the blood alcohol content for inexperienced drivers and professional drivers from 0.2g/l to zero tolerance.

The table below shows the current BAC limits in force in the 27 EU Member States. A zero tolerance approach for all road users has been already in place for decades in the Czech Republic, Hungary, Romania and Slovakia. Germany and Italy introduced a 0.0 BAC limit for novice and professional drivers compared to 0.5g/l for all road users. Only two countries still have a BAC limit higher than the EC recommendation, namely

⁶ EC Policy orientations (2010) http://ec.europa.eu/transport/road_safety/pdf/road_safety_citizen/road_safety_citizen_100924_en.pdf

⁷ Council Conclusions (December 2010): http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/trans/118150.pdf

⁸ EP report on European Road Safety (2011): <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A7-2011-0264+0+DOC+PDF+V0//EN>

the United Kingdom and Malta, both with a BAC limit set at 0.8g/l. Sir Peter North's report, supporting a reduction to 0.5g/l and 0.2g/l for professionals, was finally rejected by the British Government in November 2010. However, Northern Ireland and Scotland are considering independently reducing the blood alcohol limit to 0.5g/l for all drivers.

	Standard BAC	BAC for commercial drivers	BAC for novice drivers
Austria	0.5	0.1	0.1
Belgium	0.5	0.5	0.5
Bulgaria	0.5	0.5	0.5
Cyprus	0.5	0.5	0.5
Czech Republic	0.0	0.0	0.0
Denmark	0.5	0.5	0.5
Estonia	0.2	0.2	0.2
Finland	0.5	0.5	0.5
France	0.5	0.5 (0.2 bus drivers)	0.5
Germany	0.5	0.0	0.0
Greece	0.5	0.2	0.2
Hungary	0.0	0.0	0.0
Ireland	0.5	0.2	0.2
Italy	0.5	0.0	0.0
Latvia	0.5	0.5	0.2
Lithuania	0.4	0.2	0.2
Luxembourg	0.5	0.1	0.1
Malta	0.8	0.8	0.8
Netherlands	0.5	0.2	0.2
Poland	0.2	0.2	0.2
Portugal	0.5	0.5	0.5
Romania	0.0	0.0	0.0
Slovakia	0.0	0.0	0.0
Slovenia	0.2	0.0	0.0
Spain	0.5	0.3	0.3
Sweden	0.2	0.2	0.2
UK	0.8	0.8	0.8

Table 1: Legal BAC limits in the 27 EU Member States

2.4 The Cross Border Enforcement Directive

In November 2011 an important piece of legislation of relevance to drink driving was adopted by the EU to improve enforcement of traffic laws across Europe. The Cross Border Enforcement Directive will allow the exchange of data between the country in which the offence is committed and the one in which the vehicle is registered. Drink driving was listed as one of the main offences causing death and serious injury in the EU together with speeding, failing to wear seatbelts and failing to stop at traffic lights. Following the implementation of the Directive, drink drivers, driving in a Member State other than the one where their vehicle is registered in, will be identified and prosecuted.

2.5 The Traffic Law Enforcement Recommendation

The European Commission adopted a Recommendation on Enforcement in the field of road safety in 2004⁹. Enforcement is a means of preventing collisions from happening by way of persuading drivers to comply with the safety rules. It is based on giving drivers the feeling that they run too high a risk of being caught when breaking the rules. In the Recommendation Member States are asked to apply in a national enforcement plan what is known to be best practice in the enforcement of speed, alcohol and seat belt legislation. For drink driving, random breath testing with alcohol screening devices should be applied and evidential breath testing devices used. The impact assessment for the Recommendation showed that improved enforcement of drink driving laws would have the potential to prevent approximately 4,000 deaths and 150,000 injuries annually.

2.6 The European Alcohol and Health Forum

In October 2006 the European Commission adopted a Communication setting out a strategy to support Member States in reducing alcohol-related harm (EC 2006). The priorities identified in the Communication are:

- to protect young people and children and the unborn child;
- to reduce injuries and deaths from alcohol-related road accidents;
- to prevent harm among adults and reduce the negative impact on the workplace;
- to raise awareness of the impact on health of harmful alcohol consumption; and on appropriate consumption patterns;
- to develop a common evidence base at EU level.

Concerning drink driving, the Strategy recommends introducing maximum BAC limits according to the above mentioned Recommendation (0.5g/l and 0.2g/l for professional and novice drivers). Moreover, the European Commission highlights the importance of effective enforcement of drink driving laws in order to substantially reduce road deaths. Thus, it recommends the introduction and enforcement of frequent and systematic random breath testing, supported by education and awareness campaigns involving all stakeholders. According to the Commission, a combination of strict enforcement and active awareness raising would be a key to success. In the framework of the EU strategy, the Commission, businesses and NGOs also created a Forum to tackle alcohol-related harm¹⁰.

⁹ EC Recommendation (2004) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:111:0075:0082:EN:PDF>

¹⁰ European Alcohol and Health Forum website: http://ec.europa.eu/health/alcohol/forum/index_en.htm

Policy Recommendations

The EU should:

- Propose a Directive setting a zero tolerance for drink driving for commercial and novice drivers¹¹.
- Encourage Member States to prepare national enforcement plans with yearly enforcement targets, including on drink driving, in line with the EC 2004 Recommendation on traffic law enforcement in the field of road safety.
- Work towards the adoption of standardised definitions of drink-driving and alcohol-related collisions and road deaths across the EU based on SafetyNet recommendations.
- Work on an EU-wide monitoring system to determine the prevalence of drink driving in the EU and rates of traffic deaths related to drink driving. This should include testing for alcohol for at least all drivers involved in fatal collision (if not all road users).
- Work towards an appropriate labelling of alcohol to draw attention to the consequences of drinking and driving.
- Introduce uniform standards for alcohol interlocks in Europe, and provide assistance to reduce the workload for those countries that wish to introduce the technology without having the appropriate legal framework.
- Legislate for a consistently high level of reliability of alcohol interlock devices.
- Further research into the development of non-intrusive alcohol interlocks.
- Introduce alcohol interlocks in a first phase to repeat offenders and professional drivers.
- In the medium term introduce legislation making non-intrusive alcohol interlocks mandatory for all drivers.

Member States should:

- Consider adopting a zero tolerance for drink driving for all drivers¹².
- Apply international best practices in tackling drink driving, in particular as set out in the 2004 EC Recommendation on traffic law enforcement.
- Intensify enforcement of laws against driving after drinking by setting targets for minimum level of alcohol checks of the motorist population, e.g. 1 in 5 motorists should be checked each year.
- Introduce systematic breath-testing in all Police checks relating to driver behaviour.
- Implement a roadside evidential breath testing procedure, which will allow the police to test more suspected drink drivers with the same level of human resources.
- Introduce obligatory testing for alcohol for all road users involved in fatal accidents, if not in all injury collisions dealt with by the Police.
- Introduce rehabilitation programmes and higher penalties to address recidivism in case of drink driving.
- Develop the use of alcohol interlocks in rehabilitation programmes.
- Consider extending the use of alcohol interlocks for certain categories of drivers (e.g. bus drivers transporting children or professional drivers) and fleet drivers.
- Organise regular nationwide campaigns to raise the public's understanding that drinking and driving is never a good mix.
- Consider the launch of a nationwide initiative for commercial organisations to consider drink driving by their workforces within the context of their business model.

¹¹ A technical enforcement tolerance level could be set at either 0.1 or 0.2g/l BAC but the message to drivers should be clear: no drink and drive.

¹² Ibid

4. Drink Driving Country Ranking

4.1 Faster progress in reducing drink driving deaths than other road deaths

Around 3,200 people were recorded killed in a drink driving collision in police records in 2010 in 22 EU countries taken together where data are available, compared with 6,400 in 2001. Road deaths attributed to alcohol have been cut by 53% between 2001 and 2010 in these countries, while other road deaths decreased by 47%. (Fig.2)

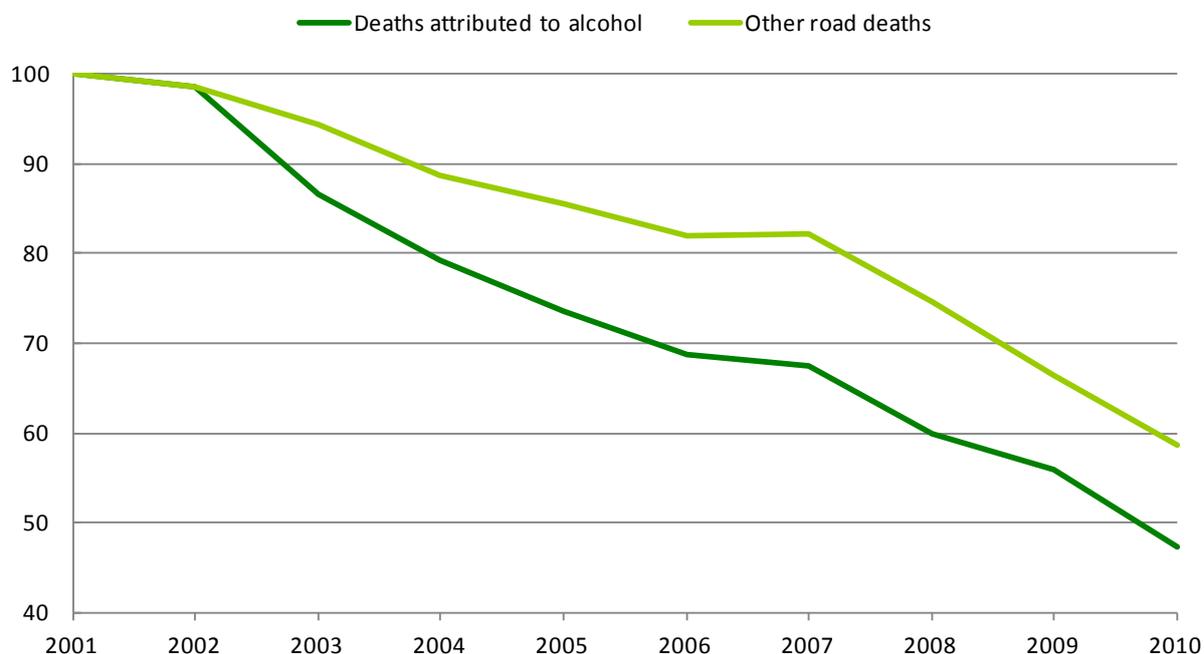


Fig. 2: Relative developments in road deaths attributed to alcohol and other road deaths in 22 EU countries taken together over the period 2001 to 2010. ¹³

4.2 Comparison between countries

Fig. 3 shows individual countries' performance in reducing road deaths attributed to drink driving compared with progress in reducing other road deaths, using each country's own method of identifying alcohol-related deaths. In one third of the countries, progress in reducing drink driving has contributed more than its share to overall reduction in road deaths.

Ireland achieved impressive reductions in cutting alcohol related deaths from 124 in 2003 to 48 in 2007, the last available year, even at a time when other road deaths were increasing. As a result, the share of drink driving deaths out of the total road deaths decreased from 37% in 2003 to 14% in 2007. It is not known unfortunately whether this positive trend has continued until 2010 after the introduction of major changes in legislation (see case study below) but data should be available again following the introduction of mandatory alcohol testing for drivers involved in collisions. It is expected that the continuous decrease in road deaths since 2007 has been substantially due to the changes in legislation pertaining to alcohol. It is also very likely that the recent changes regarding the reduced BAC limits and mandatory testing at serious injury collisions will contribute to such a decrease and will be the focus of research into fatal collisions over the period 2008-2012.

Slovakia, already ranking second for reduction up to 2008¹⁴, maintains the good progress cutting drink driving deaths from 50 in 2001 to an average of 15 per year in 2008-2010. Drink driving deaths dropped by about 16 percentage points faster than other road deaths on average each year since 2001 (Fig.3).

¹³ AT, BE, BG, CY, CZ, DK, FI, FR, DE, EL, HU, LV, LT, LU, NL, PL, SK, SI, ES, SE and GB for which data are available for at least 9 out of 10 years. See annexes for detailed data for all the 27 EU countries.

¹⁴ ETSC (2010) 4th Road Safety PIN Report, Road Safety Target in Sight: Making up for lost time.

Latvia, Bulgaria, Hungary, Sweden, Slovenia, Lithuania, Germany, Belgium, Greece and Austria also reduced drink driving deaths faster than other road deaths by more than the average for the 22 EU countries for which this indicator can be estimated.

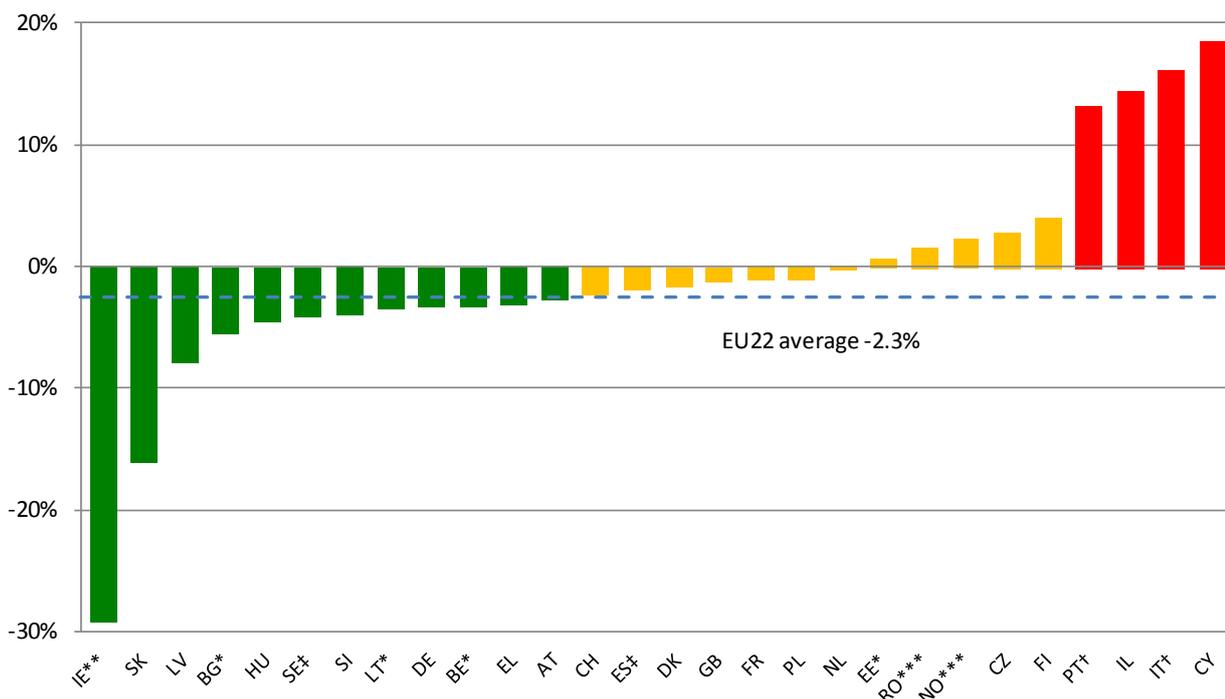


Fig. 3: Difference between the average annual percentage change in the number of road deaths attributed to alcohol and the corresponding reduction for other road deaths over the 2001-2010 period
 *BE, BU (2001-2009) **IE(2003-2007), ***NO, RO (2005-2010), PT,IT†(2001-2008)
 Note: LU excluded from Fig. 2 as annual numbers of alcohol related road deaths are < or around 10.
 EU22 average: EU27 excluding IE, IT, MT, PT and RO.

In contrast to Slovakia, the **Czech Republic**, which was ranking first for reduction up to 2008, lost pace in reducing drink driving deaths in 2009 and 2010, falling among the countries where developments in drink driving collisions have slowed down overall progress in reducing road deaths.

The Indicator

Levels of deaths attributed to drink driving cannot be compared between countries, as there are large differences in the way in which countries define and record a 'road death attributed to drink driving'. Researchers in the European research project SafetyNet recommend using the definition of "any death occurring as a result of road accident in which any active participant was found with blood alcohol level above the legal limit". National definitions as provided by PIN Panellists are available in the Background Tables on www.etsc.eu/PIN-publications.php. While some EU countries adopted the SafetyNet recommended definition, in practice, it seems however to be mostly drivers involved in collisions who are tested for alcohol. The extent to which other road users involved in fatal collisions are tested varies considerably among countries¹⁵.

Countries are therefore compared on the basis of developments in deaths attributed to drink driving, relative to developments in other road deaths, using each country's own method of identifying alcohol-related deaths (Fig. 3). Countries are also compared in terms only of developments in deaths attributed to drink driving (Fig. 4). Rates of change are comparable across countries in so far as procedures for recording deaths have remained consistent in the countries concerned during the reporting period. These rankings are an update of the rankings published in ETSC (2010) 4th Road Safety PIN Report, Chapter 3 which provides information about level of underreporting.

Numbers of deaths attributed to drink driving were supplied by the PIN Panellists in each country. Estimates of numbers of deaths attributed to drink driving are not available in Malta, Spain and Sweden. For Spain and Sweden we used in their place the numbers of killed drivers who tested positive in post-mortem blood alcohol tests. Deaths attributed to drink driving are available only from 2004 in Norway and from 2003 to 2007 in Ireland. Italy decided to stop reporting deaths attributed to drink driving in 2009 instead of improving data reporting, leaving the country with no indicator for the effectiveness of its fight against drink driving. No reply was received from Bulgaria.

The reductions in deaths attributed to alcohol have been most impressive in **Ireland, Slovakia and Latvia**, with reductions of more than 15% on average each year since 2001 (Fig.4). In contrast, alcohol-related deaths increased in **Italy, Cyprus, Israel, Portugal and Romania**. For most countries, the percentage reductions in Fig.4 exceed those in Fig.3 because numbers of other road deaths have also been falling.

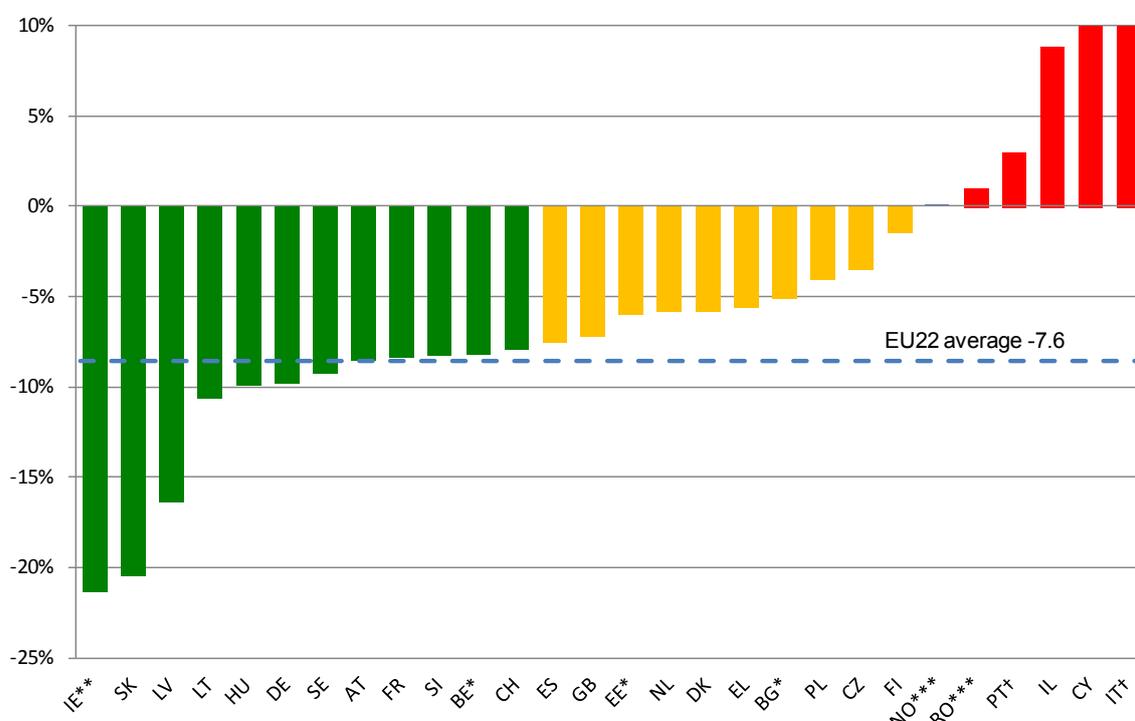


Fig. 4: Average annual percentage change in the number of road deaths attributed to alcohol over the 2001-2010 period.

¹⁵ The Austrian law does not allow the Police to test a killed or unconscious road user for alcohol. In Belgium, Germany and The Netherlands drivers killed on the spot might not be tested. In Romania and Switzerland testing might only occur when the Police suspect the presence of alcohol.

Deaths attributed to drink driving decreased by 7.6% each year on average across the 22 EU countries for which data are available for at least nine out of ten years. Other road deaths decreased by 5.3% over the same period in the same group of countries.

Reduction in drink driving deaths is at the core of Ireland's success in road safety. The Irish government has shown strong commitment in tackling alcohol at the wheel, introducing a set of measures including in 2006 mandatory alcohol testing each time a driver is stopped at a roadside and in 2007 tougher penalties for drink driving. Further reductions in fatal collisions are expected following two changes in legislation adopted in 2011: lower BAC limits of 0.2g/l for novice and professional drivers including taxi-drivers and hauliers and 0.5g/l for all other road users, and mandatory alcohol testing for drivers involved in road traffic collisions.

"The change of the BAC limits last autumn was coupled with intensive Police enforcement and information campaigns. We have seen a strong support for a lower BAC limit among Irish drivers."

Minister Leo Varadkar, Minister for Transport, Ireland.

4.3 Drink Driving Enforcement

Consistent and visible enforcement is a powerful deterrent to drink driving. Targeted breath testing coupled with publicity around enforcement increases drivers' subjective perception of being caught. Unfortunately, being checked for alcohol is rather exceptional: 71% of drivers declared in a driver survey carried out in 2002/2003 in 23 countries that they had not been checked for drink driving over the past three years, and the likelihood of being tested was very low (SARTRE 3, 2004).

Country	2010		2009		2008		2007	
	Roadside police tests per 1,000 population	% above legal limit	Roadside police tests per 1,000 population	% above legal limit	Roadside police tests per 1,000 population	% above legal limit	Roadside police tests per 1,000 population	% above legal limit
FI	429	0.9%	421	1.0%	385	1.3%	318	1.6%
NO	367	0.2%		0.3%	336	0.3%		0.2%
SE	287	0.6%	293	0.7%	256	0.8%	283	0.7%
CY	217	5.3%	196	6.2%	182	5.9%	149	6.8%
SI	198	4.7%	212	4.7%	202	5.8%	191	7.3%
FR	173	3.4%	181	3.3%	189	3.3%	182	3.3%
EL	161	2.1%	147	2.8%	135	3.1%	143	2.9%
IE	126	1.9%	119	2.6%	128	3.2%	113	4.1%
AT	122	3.7%	102	4.8%		5.8%	77	7.0%
IL	122	1.0%	83	1.7%	67	2.0%	24	3.7%
HU	120	3.6%	127	3.3%	130	3.1%	143	3.2%
ES	114	1.8%	128	1.8%	112	1.8%	96	2.2%
PT	106	3.8%	81	4.3%	63	5.9%	57	5.6%
EE	105	0.7%	98	0.8%	95	1.1%	68	1.0%
PL	88	4.9%		7.5%	47	9.5%		
IT	27	2.5%	27	2.9%	23	3.4%	13	6.0%
LT					40	1.7%	34	1.6%
DK					36	5.7%		
GB			14	11.6%	12	12.9%	10	16.3%

Table 2: Numbers of roadside alcohol breath tests (per 1,000 inhabitants) and percentage of those tested found to be above the legal BAC limit.

Nineteen countries provided the number of roadside checks performed during one year by the Police (Table 2). Police in **Finland, Norway and Sweden** are most active on the fight against drink driving, with respectively 429, 367 and 287 drivers checked per 1,000 inhabitants in 2010. Numbers of checks are also high in **Cyprus and Slovenia**. But, even in these countries, the chance of a driver being breath tested during one year is less than 1 in 5 on average.

Norway, Sweden and Estonia registered the lowest percentage of drivers tested above the legal BAC. Percentages of drivers testing positive are high in **Cyprus, Great Britain, Poland and Slovenia**, for example, but are lower where enforcement is highest.

Belgium, Latvia, Lithuania, Slovakia and Romania only collect number of checks where drivers tested above the legal BAC (so called "positive tests") without knowing total number of checked performed by the Police which deprives them information on the scale of the problem. The Czech Republic police stopped collecting this information in 2008 (Table 3).

Country	2011	2010	2009	2008	2007
CY		11.6	12.2	10.8	10.2
SI		9.3	10.0	11.8	13.9
FR		6.0	6.0	6.1	6.1
BE		5.0	4.9	4.8	4.3
PL		4.3	4.5	4.4	4.2
HU		4.3	4.1	4.1	4.5
PT		4.1	3.5	3.7	3.2
FI		3.9	4.4	4.9	5.2
EL	3.1	3.4	4.1	4.2	4.2
IE		2.4	3.0	4.1	4.6
ES		2.0	2.2	2.1	2.1
LV	1.9	1.8	2.2	3.0	2.9
SE	1.8	1.8	1.9	2.1	2.0
DK		1.8	1.8	2.0	
RO	1.7	1.7	1.7	1.7	1.7
GB		n/a	1.6	1.5	1.7
IL		1.2	1.4	1.3	0.9
SK		1.2	1.3	0.9	0.8
LT		1.1	1.1	0.7	0.5
NO		0.9	0.8	0.9	0.9
EE		0.7	0.7	1.0	0.7
IT		0.7	0.8	0.8	0.8
BG				3.0	3.0
CZ				0.8	0.7
NL				0.0	0.1

Table 3: Number of positive checks per 1,000 inhabitants

In Germany and Switzerland no information is available on the number of drink driving checks the police perform, nor the number of positive checks.

4.4 Progress in implementing alcohol interlocks

Alcohol Interlocks are an effective countermeasure in the fight against drink driving. Alcohol Interlocks are connected to the vehicle ignition system and require the driver to take a breath test in order to drive the car. If the driver is found with alcohol above the legal BAC limit the engine will not start. In many EU countries the technology has found its way into vehicles which are used for the transport of goods or passengers on a voluntary basis: the alcohol interlock is used as a quality assurance tool to comply with a company's alcohol and drugs policy. More and more countries in Europe are adopting legislation for the use of alcohol interlocks in rehabilitation programmes for first high-level offenders and recidivists as a substitute punishment of driving licence withdrawal.

Finland was the first European country to legislate on alcohol interlocks in 2008. A rehabilitation programme was set up for convicted drink drivers in order for them to keep their driving licence by equipping their motor vehicle with an alcohol interlocks. The offender must cover their own costs at approximately 150 Euros per month and the offender must also participate in an accompanying rehabilitation programme. The length of the controlled period with the alcohol interlock is from one to three years. The offenders also have to take part in regular tests for alcohol dependency during the period.

Since August 2011, alcohol interlocks have become mandatory also for all vehicles used for child and daycare transportation (chartered transport ordered by municipality, city, school or institute). Taxis and buses dedicated to school transport (estimated to be around 7,000) are also requested to comply with the law. A new medium term plan foresees alcohol interlock devices to be mandatory in all public transport by 2014.

Finland's neighbouring countries, **Sweden** and **Denmark**, also decided to adopt alcohol interlocks to tackle drink driving on their roads. In January 2012 the law on rehabilitation programmes applying to all drink driving offenders came into force in Sweden. A 2-year programme was implemented for high risk groups (first time high level offenders and recidivists) and a 1-year programme for the others. The device is largely employed within the commercial transport with more than 70,000 alcohol interlocks installed in Sweden for commercial driving. In Denmark, the alcohol interlock legislation was adopted in 2010 for first time high level offenders and recidivist drivers. The law has not come into force yet and a date has still to be set for the starting of the programme.

Belgium adopted legislation on alcohol interlocks rehabilitation of first time high level offenders and recidivist drivers in December 2010. Judges will be able to offer to an offender an alcohol interlock programme. Participants to the rehabilitation programme will be submitted to a zero tolerance for drink driving (equivalent to 0.2g/l BAC) - the reasoning is that the driver would otherwise be banned from traffic and with the alcohol interlock they have a 'second chance'.

The law on the Alcohol Interlocks Programme (AIP) came into effect in December 2011 in **The Netherlands** and targets first time serious drink-driving offenders and repeat offenders. The standard period for the AIP is two years. If, during that period, the participants have still not been able to demonstrate that they can separate drinking from driving, the AIP is extended repeatedly for six months at a time. The programme is mandatory: yet, if the offender does not participate, or if the programme is not completed, then the driving license will be declared void for 5 years. The BAC-level interlock breath test is set at 0.2g/l.

In **France** it was estimated that, if all drivers respected the 0.5g/l BAC limit, 26% of road deaths could be prevented in France. In September 2010 a new law introduced mandatory alcohol interlocks in all new buses carrying children. The existing fleet will be retrofitted progressively until September 2015. Legislation on the implementation of rehabilitation programmes for recidivists and first time offenders has recently been adopted.

In the **UK** the Road Safety Bill introduced a pilot rehabilitation programme for drink driving offenders. A coach company fitted alcohol interlocks to its entire fleet (approximately 500 vehicles) in February 2010.

Other EU Member States, such as **Austria** and **Germany**, followed the examples of countries with a long tradition in the field of alcohol interlocks programmes and decided to set up pilot projects in order to assess the impact of the device to improve road safety and reduce the number of drink driving road collisions.

5. Case studies

5.1 Czech Republic

Road deaths in 2010:	802
Road deaths per million inhabitants:	76
Percentage change in road deaths between 2001 and 2010:	-40%
Road deaths attributed to alcohol (2010):	108
Average annual reduction in DD deaths (2001-2010):	-3.4%



Introduction

The **Czech Republic**, which was ranking first for reduction up to 2008, lost pace in reducing drink driving deaths in 2009 and 2010, falling among the countries where developments in drink driving collisions have slowed down overall progress in reducing road deaths. Deaths went up to 85 in 2008 and to 127 in 2009. In 2010, the number of alcohol-related road deaths registered was 108, representing 13% of the total number of people killed.

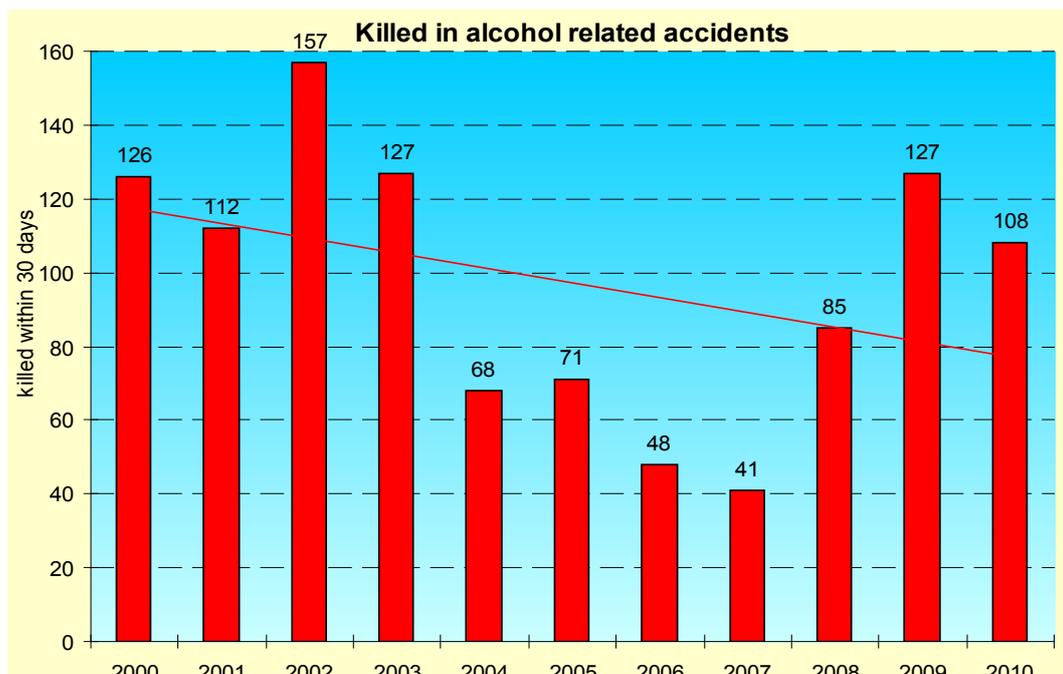


Fig. 5: Road deaths attributed to alcohol in Czech Republic from 2000 to 2009. Source: Transport Research Centre (CDV).

In the National Road Safety Strategy published by the Czech Ministry of Transport it was estimated that in 69% of all fatal collisions involving an impaired driver in 2010, the driver was found to have a BAC of 1.0g/l or more.

The proportion of drink driving collisions out of the total collisions has increased since 2007 from 3.4% up to 7.9% in 2008, 14.1% in 2009 and 13.5% in 2010. The road users' group mostly involved were cyclists (33% of drink driving collisions involved a cyclist), pedestrians (16.2%) and young drivers during weekend nights.

Legislation and National Road Safety Plan

At the core of the measures to prevent drink driving is the legal maximum alcohol limit for drivers. The Czech Republic has been a pioneer when in 1953 the first national road act sets drink driving as a priority for road safety and introduced a zero BAC limit. Since then, the limit has never been changed and drinking alcohol before driving is strictly forbidden. The definition adopted for an alcohol-related road collision is: any collision where a road user is found with a BAC limit above 0.0g/l.

In April 2004 the Czech Government approved the National Strategy on Road Safety with the main goal of reducing by 50% the number of deaths by 2010. Unfortunately, 2010 figures showed that the target had not been reached, with only a 40% reduction achieved since 2001 and 802 people killed on Czech roads in 2010, far from the objective of no more than 715 people killed foreseen in the national plan.

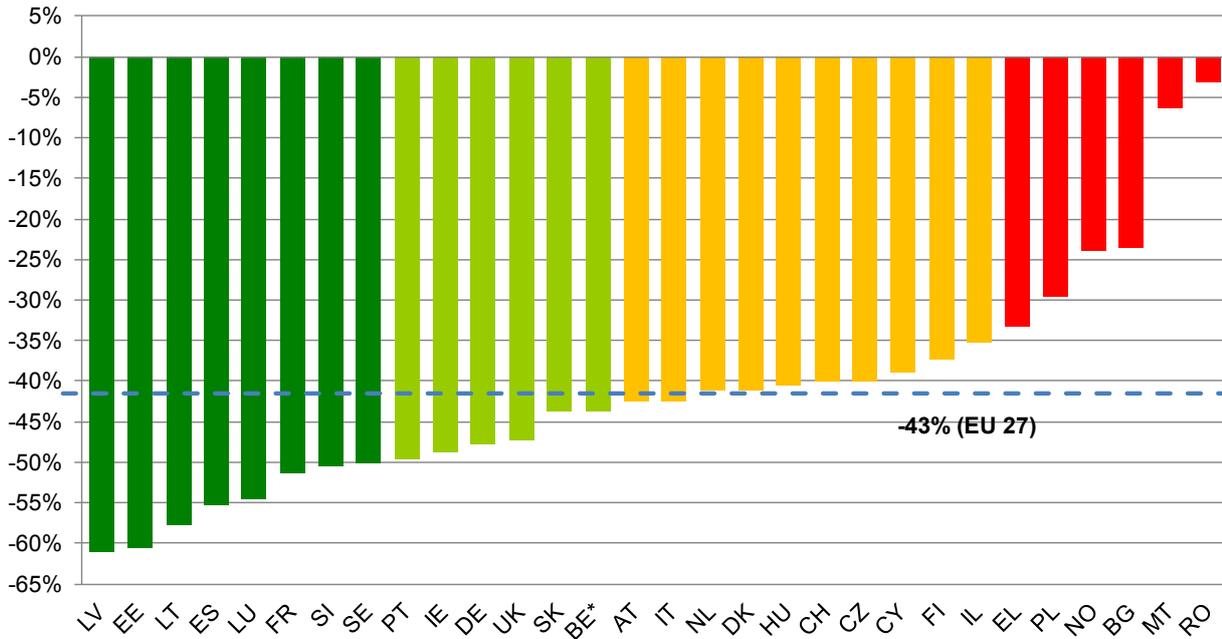


Fig. 6: Percentage change in road deaths between 2001 and 2010

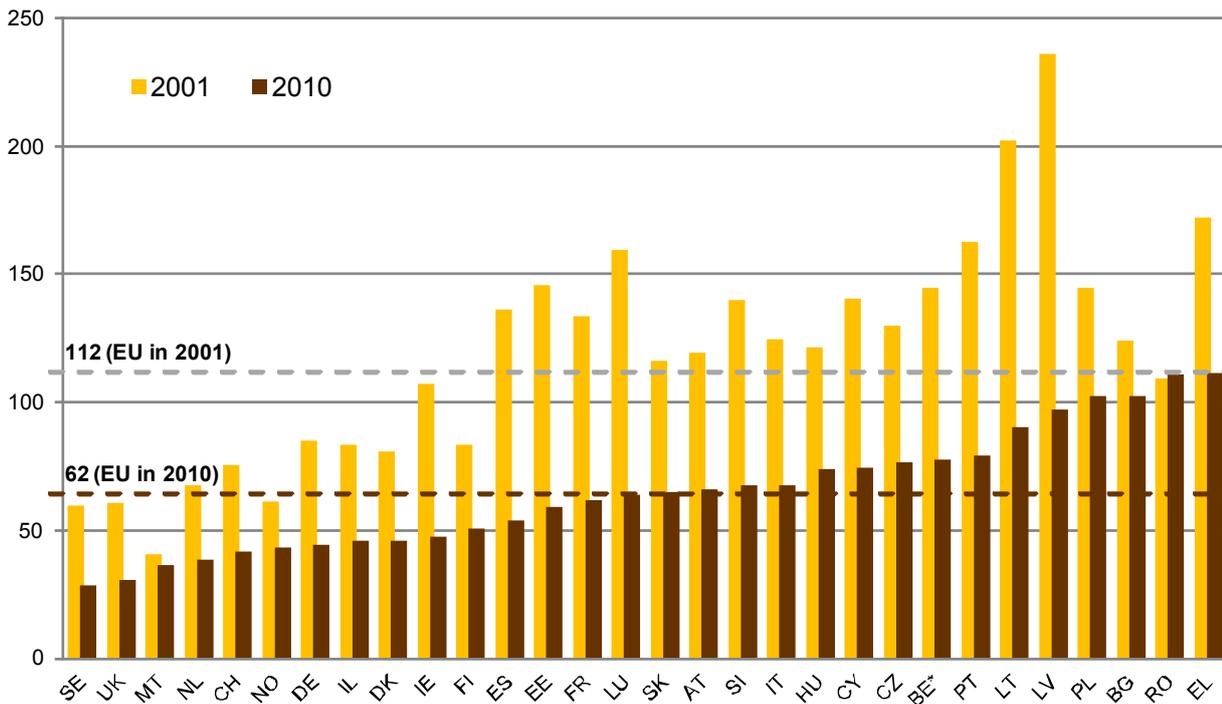


Fig. 7: Road deaths per million inhabitants in 2010 (with 2001 for comparison) ETSC 2011 - 5th Road Safety PIN Report

The government set new targets in a new National Road Safety Plan approved by the Government in August 2011. The Strategy covers the period between 2011 and 2020 and the main goal is to reduce the number of deaths to average EU levels and the number of serious injuries by 40% (from the year 2009). This would mean a drop in the number of road deaths of about 60% compared to 2009. Tackling drink driving together with speeding, aggressive behaviour and vulnerable road users belong to the priorities of the Strategy. Specific targets for drink driving are set in the 2011-2020 strategy:

- a 60% reduction in deaths attributed to drink driving (no more than 40 people killed compared to 108 in 2010)
- no more than 150 serious injuries attributed to drink driving

Enforcement and Sanctions

The Czech Republic has a long tradition in collecting reliable alcohol data in road collisions. A breath test is done and reported by the Police for all road crashes occurred and road safety experts believe that the level of underreporting is very low.

Following the increase in drink driving deaths in 2009 and 2010, systematic breath testing was introduced in January 2010. All drivers stopped by the Police are now systematically breath-tested for alcohol. However, the level of enforcement is low and on average only 1 out of 7 drivers is checked every year on Czech roads. Unfortunately the Police do not collect the number of drink driving checks carried out annually. The Czech Republic should therefore intensify drink driving enforcement by setting targets for minimum levels of alcohol checks of the motorist population.

The sanctions foreseen by Czech legislation for drivers under the influence of alcohol are the following:

BAC	Financial Penalties	Penalty Points	Driving restrictions
≤ 0.3g/l	100 – 780 Euros	0	From 6 months to 1 year
0.3 to 1.0g/l	100 – 780 Euros	7	From 1 to 2 years
>1.0g/l	980 – 2 000 Euros	7	Up to 10 years Prison up to 3 years

Public Awareness and Support

Due to the early introduction of a Zero BAC limit for all drivers, today drinking and driving is socially unacceptable in the Czech Republic and the population is well aware of the limit in their country. Since more than half a century the message sent to drivers is clear: never drive after drinking. In a survey carried out in 2002-2003 in 23 countries¹⁶, when asked to estimate the amount of alcohol drivers can drink to stay under the legal limit, 84% of the interviewed drivers in the Czech Republic (the highest rate among all the other EU Member States) declared that no alcohol at all should be drunk before driving. Several campaigns and media debates on the topic are carried out by the Ministry of Transport (Besip) in cooperation with other road safety association to reaffirm the message of never drink and drive.

Results from a Eurobarometer¹⁷ survey showed that the knowledge about the legal national BAC limit was highest amongst Czech interviewees. Indeed 75% of respondents knew that the limit was zero in the Czech Republic.

¹⁶ SARTRE 3.

¹⁷ Eurobarometer 2010 - EU citizens' attitudes towards alcohol.

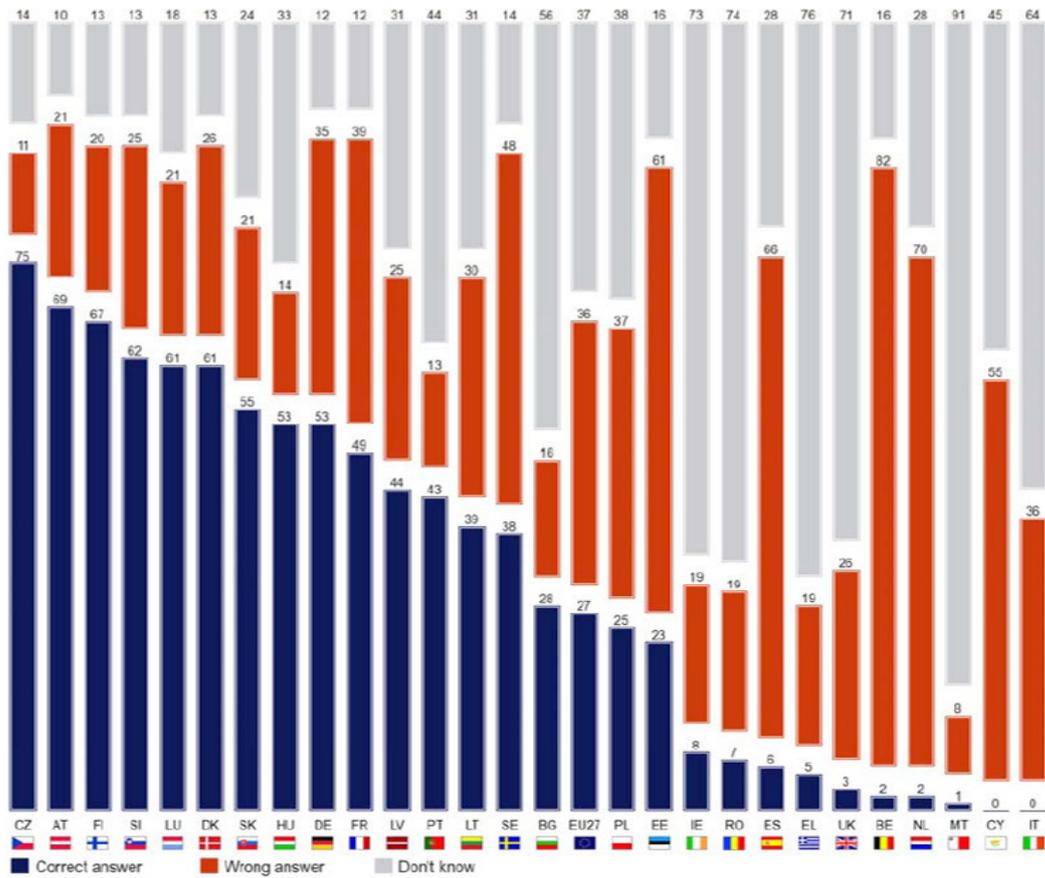


Fig. 8: Knowledge of BAC in EU countries (Question: What is the national legal alcohol level allowed for drivers?) Source: Eurobarometer

Yet alcohol consumption in the general population remains high. Czech people consider alcohol as an important part of their social activities, and part of everyday life. The pure alcohol consumption remains above the EU average.

In the figure below, the Czech Republic is, together with Luxembourg, the country with the highest level of alcohol consumption.

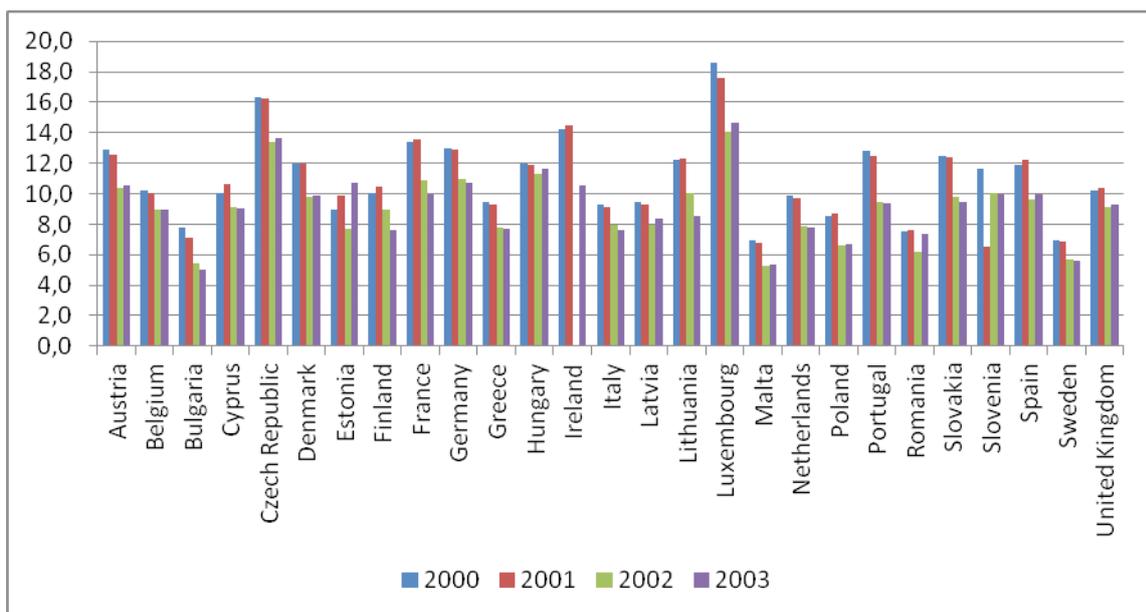


Fig. 9: Alcohol consumption in the EU-27. Source: WHO 2006

Awareness Campaigns

Regular campaigns are run by the Czech Governmental Council for Road Safety (Besip). The Czech Governmental Council for Road Safety is an advisory body founded in 2004 under the Ministry of Transport. Its members comprise representatives from the Ministries of Transport, Interior, Health, Education, Finance, Environment, Defence, the Police and NGOs and is chaired by the Minister of Transport. The anti drink driving message is conveyed through a variety of supports (spots, billboards) and using TV, radios and gigs.

Below are some examples of campaigns lately run in the Czech Republic.

The Action

The Action is a road safety campaign targeting mostly young and novice drivers. The project aims at preventing the use of alcohol and other drugs before driving, especially during weekends' nights. It has been the first prevention campaign in the Czech Republic and uses a different mean of communication compared to other countries' campaigns to make teenagers and young people aware of the risks of alcohol and drugs behind the wheels: it consists of a stage show on the possible consequences of a road crash, such as a permanent disability. The project sees the involvement of police, fire fighters and paramedics who share their experiences at the scene of a road crash with the audience. The play results in a strong emotional experience, and introduces viewers to the real consequences of an accident on the victim, but also on the other people around them. Free performances are especially organised for students of secondary school and children from primary schools and lasts about 60 minutes. More info on <http://www.domluvme-se.cz>.

Let's agree ("Domluvme Se")

This campaign is targeting young drivers and drink driving. Its concept is based on similar European campaigns (e.g. Designated Driver, EUROBOB, Capitaine de Soirée). The campaign has been organised since 2006 by BESIP together with Enterprise of responsible breweries under the Czech association of breweries and the FORUM PSR, a Social Aspect Organisation, where several drinks producers were members.



Conclusions

What can other countries learn from the Czech Republic?

- The message set by a Zero BAC limit is very clear: never drive after drinking
- High acceptance of a zero limit
- Driving under the influence of alcohol is not socially accepted
- Strict sanctions for drunk drivers
- Road crashes due to alcohol highly reported by the media
- Several communication campaigns to tackle drink driving supported by the Ministry of Transport

What still needs to be done?

- Intensify enforcement of law against drink driving by setting targets for minimum level of alcohol checks of the motorists population, e.g. 1 in 5 motorists should be checked each year
- Introduce alcohol interlocks in rehabilitation programmes for first time high level offenders and recidivist drivers to help offenders dissociate drinking from driving
- Include alcohol interlocks in public procurement and commercial transport

ETSC would like to thank Petr Pokorny and Jindrich Fric from the Czech Transport Research Centre (CDV).

References

National Road safety Plan (in Czech)

http://www.ibesip.cz/files/=4221/NSBSP%2b2011-2020_form%C3%A1tov%C3%A1n%C3%AD_II.pdf

http://www.ibesip.cz/files/=4264/Besip_dokument.pdf

Ministry of Transport (Ministerstvo Dopravy)

www.mdcr.cz

Transport Research Centre (CDV) (Centrum Dopravního Výzkumu)

www.cdv.cz

Anti – Drink driving campaigns and websites

<http://www.forum-psr.cz>

<http://www.domluvme-se.cz/default.aspx?l=1>

<http://www.pijsrozumem.cz/>

ETSC (2007) 1st Road Safety PIN Report, Raising Compliance with Road Safety Law

ETSC (2010) 4th Road Safety PIN Report, Road Safety Target in Sight – Making up for lost time

ETSC (2011) 5th Road Safety PIN Report, 2010 Road Safety Target Outcome: 100,000 fewer deaths since 2001

ETSC 6th Safety Lecture 2004, Road Safety in an enlarged Europe: challenges and opportunities for the 25 EU member states

<http://www.etsc.eu/documents/Proceedings%2013%2010%2004.pdf>

Eurobarometer 2010 – EU citizens' attitudes towards alcohol

http://ec.europa.eu/health/alcohol/docs/ebs_331_en.pdf

5.2 Ireland

Road deaths in 2010:	212
Road deaths per million inhabitants:	47
Percentage change in road deaths between 2001 and 2010:	-48%
Road deaths attributed to alcohol (2007):	48
Average annual reduction in DD deaths (2003-2007):	-21.2%



Introduction

Ireland has made laudable road safety progress since the Government adopted a strategic approach to road safety in 1998 and is one of the good performers in reducing the number of road deaths. The country adopted and implemented a comprehensive set of measures to increase road safety and tackle drink driving. From a road system which was detrimental to Ireland's progress, a network was constructed to rival the best in Europe. In little more than a decade, Ireland upgraded a significant portion of its existing national road network and delivered over 1,000 kilometres of motorway. Included in this milestone is the construction of hundreds of bridges, the digging of tunnels, and exploration of the country's heritage and the protection of Ireland's environment.

Ireland also adapts effective policies to combat drink driving. Between 2001 and 2010, Ireland achieved a 48% reduction in the number of road deaths, cutting them from 411 in 2001 to 212 in 2010 and thus almost reached the EU 2010 target of halving the number of road deaths (see Fig.10). Ireland's fast progress was also recognised by ETSC who gave the country its Road Safety PIN Award in 2009. Ireland now ranks 6th out of the 27 EU Member States in terms of road deaths per million inhabitants, with 47 deaths in 2010 compared to 107 in 2001 (see Fig.11). In 2011 the number of fatalities fell to 186 or 42 fatalities per million inhabitants.

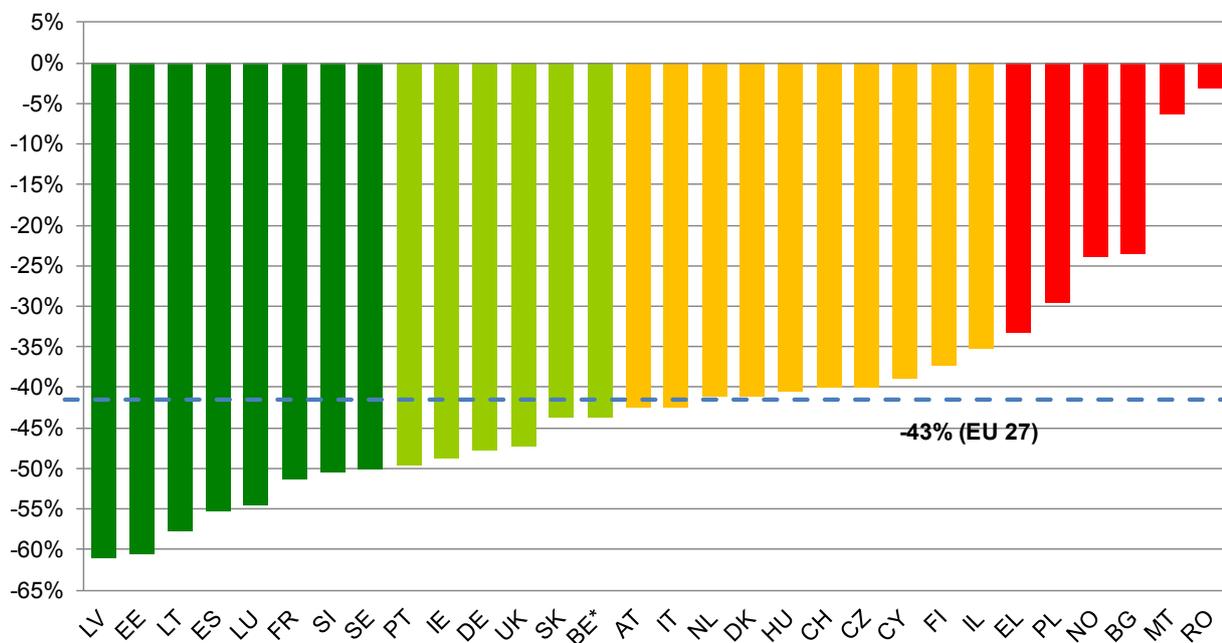


Fig.10: Percentage change in road deaths between 2001 and 2010, ETSC 2011 - 5th Road Safety PIN Report

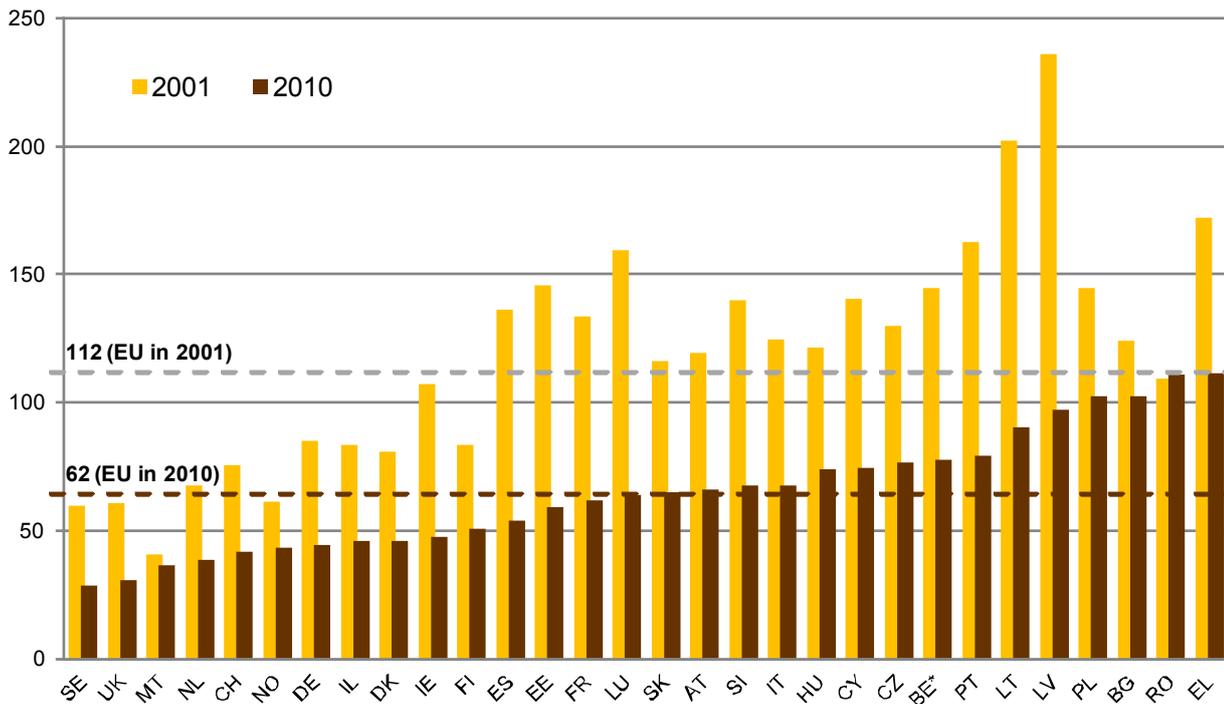


Fig.11: Road deaths per million inhabitants in 2010 (with 2001 for comparison) ETSC 2011 - 5th Road Safety PIN Report

The adoption and effective implementation of the Government Road Safety Strategic Plans for 2004-2006 and 2007-2012 contributed to Ireland’s success. The most important measures aimed at combating drink driving were:

- Hard hitting TV and radio campaigns;
- Provision of resources in Evidential Testing Equipment by the Medical Bureau for Road Safety;
- Mandatory Alcohol Testing (MAT) in 2006;
- Increased resources of the Garda Traffic Corps (Police Forces);
- Tougher penalties for drink driving in 2007;
- A lower legal BAC limit of 0.2g/l for novice and professional drivers and 0.5g/l for all other road users in 2010;
- Mandatory alcohol testing for drivers involved in road traffic collisions in 2011.

The introduction of new measures has been supported by hard-hitting TV and radio campaigns. Ireland is one of the countries where mass media TV campaigns are highly exploited to spread road safety messages and to change attitudes and behaviour towards the main causes of road crashes, including drink driving. As a result, there has been a progressive cultural change in attitudes towards drink driving, as road users are more aware of the risks related to getting behind the wheel while inebriated.

On the other hand, Ireland also showed an increase in terms of general alcohol consumption. In 2009, the Irish Health Research Board ranked it among the highest alcohol consuming countries in the EU. In 2008 the recorded per capita consumption was 12.4 litres of pure alcohol for every adult aged 15 or over¹⁸.

Road Safety Strategy 2007-2012

The Irish government launched its third Road Safety National Plan for the years 2007-2012, following the two strategies covering the 1998-2002 and 2004-2006 periods respectively. The aim of the latest plan is to build on the progress achieved in order to further improve road safety on Irish roads. Best practices from well performing European countries such as Sweden, The Netherlands, Norway and the UK were taken as a reference point and served in the drawing up of Irish priorities. The strategy set two targets for the period 2007-2012:

¹⁸ Health Research Board, (2009), Social consequences of harmful use of alcohol in Ireland.

- reducing deaths to not more than 60 deaths or better per million inhabitants;
- reducing serious injuries by 25%.

The strategy identified 126 specific measures or actions to be implemented by the end of 2012. The main priorities areas reflect the most dangerous driving behaviour leading to road collisions: inappropriate speed, impaired driving, non use of seat belts and child safety restraints, unsafe behaviour towards, and careless actions of, vulnerable road users. To tackle drink driving the government committed to:

- determine the incidence of drink driving in Ireland using police data collected at the point of enforcement through mandatory alcohol testing;
- establish drug impairment training programmes for Garda (Police), doctors and nurses by 2009;
- reduce the legally permitted BAC limit.

The outcomes and results are reported in a yearly Review of the road safety strategy. The Road Safety Authority (RSA) publishes the review during the second quarter of the year. The target of reducing deaths to not more than 60 deaths per million inhabitants was achieved in 2009. A critical success factor was the establishment of a Government 'Cabinet Sub Committee' on road safety where progress on the implementation of the Road Safety Strategy was monitored at the highest political level.

Legislation

The main legislation dealing with road safety in Ireland is the Road Traffic Act 1961-2011. Concerning drinking and driving, the law has been updated and modernised, especially following the introduction of mandatory breath testing in 2006 and the lower legal BAC limit in 2011.

With the introduction of the Road Traffic Act in 2006 the Garda received wider powers to reduce and eliminate instances of drink driving on Irish roads. Before 2006, a police officer had to form an opinion that a driver had consumed alcohol or that the driver had drunk and committed a road traffic offence before being legally entitled to do a breath test. Following the Road Traffic Act of 2006 the Garda had the power to test any driver stopped at an authorised mandatory alcohol checkpoint, regardless of whether the driver is suspected to have drunk or not.. This is now also commonly known as **mandatory alcohol testing**. The introduction of this new power made it much more likely that anyone driving in Ireland having consumed alcohol would be detected and prosecuted by the Garda.

Moreover, since the 1st of June 2011, new legislation concerning drink driving enforcement mandates the Garda to conduct preliminary breath tests for drivers who have been involved in road traffic collisions where a person has been injured. If the person refuses to be tested they are liable to pay a fine, be sentenced to imprisonment for not more than 6 months, or both. Consequently, since 2004 the Irish government has increased the number of the Traffic Corps police officers in order to enforce these new provisions.

The main legislation dealing with road safety in Ireland is the Road Traffic Act 1961. Concerning drinking and driving, the law has been updated and modernised, especially following the introduction of mandatory breath testing in 2006 and the lower legal BAC limit in 2010.

BAC limit

In July 2011 Ireland lowered the maximum permitted BAC limit for drivers. The previous legal BAC limit of 0.8g/l was reduced to 0.2g/l for learners, newly qualified drivers (for a period of two years after passing the driving test) and professionals, including taxi drivers and hauliers. The BAC limit for all other drivers was set at 0.5g/l. The new legislation brought Ireland in line with the European Commission recommendation on BAC levels and the vast majority of EU Member States. The UK and Malta are the only EU countries with BAC limits over the 0.5g/l recommended value. While reducing the BAC limit was one of the objectives included in the Road Safety Strategy 2007-2012 – as a measure aimed at tackling drink driving and reducing the number of alcohol related road deaths – the measure required considerable political leadership and energy to get adopted. The former Minister of Transport, Noel Dempsey, presented the draft bill to the Irish Parliament in 2009 and two years of discussions were required to have it approved.

The new drink drive limit came into force as from the 28th of October 2011 following the enactment of the Road Traffic No. 2 Act 2011. The launch of a new campaign to raise awareness of the new reduced drink

drive limits was organised on the 26th of October 2011. It included TV, Radio, Press and Online advertising¹⁹.

The lowering of the drink drive limit has seen the introduction of a new Administrative Penalty System to deal with certain drink driving offences. Previously all drink driving offences were dealt with in the courts and an automatic disqualification applied to all drink driving convictions. Under the new system if a driver is not already disqualified from holding a driving licence at the time of detection or has not availed of the administrative fixed penalty notice option in the preceding 3 years, and the BAC levels in the body do not exceed 1.0g/l, he or she will be subsequently served with a fixed penalty notice. Court proceedings will not be initiated if payment of the fixed charge is made and the penalty accepted.

Sanctions and Penalties

Penalties on conviction for drink driving vary depending on the amount of alcohol detected. Another factor the court will take account of is whether the driver has any previous drink driving offences on their record. All convictions for drink driving carry a temporary disqualification from driving.

The Fixed Charge Penalties applying to new lower drink drive limits are as follows:

- 0.5g/l – 0.8g/l - the driver will be arrested brought to a Garda Station and required to provide evidential breath or blood or urine specimens. In all cases where the BAC is deemed to be between 0.5 and 0.8g/l and the driver is not a recidivist he/she will be served with a fixed penalty notice and receive a fine of €200 and 3 penalty points. Points will remain on a licence record for a period of three years. Any driver accumulating 12 points in a three year period will be disqualified from driving for a period of 6 months.
- 0.8g/l – 1.0g/l - the driver will be arrested brought to a Garda Station and required to provide evidential breath or blood or urine specimens. In all cases where the BAC is deemed to be between 0.8 and 1.0g/l and the driver is not a recidivist he/she will be served with a fixed penalty notice and receive a fine of €400 and the person will be disqualified from holding a driving licence for a period of 6 months.
- 0.2g/l – 0.8 g/l - the driver will be arrested brought to a Garda Station and required to provide evidential breath or blood or urine specimens. In all cases where the BAC is deemed to be between 0.2 and 0.8g/l and the driver is not a recidivist he/she will be served with a fixed penalty notice and receive a fine of €200 and the person will be disqualified from holding a driving licence for a period of 3 months.

Where the BAC detected is above 1.0g/l or above 0.8g/l for a specified person, where the person is not eligible to be served with a Fixed Penalty Notice, or where payment has not been made in respect of a Fixed Penalty Notice the following court penalties apply on conviction:

	Novice	Professional	Imprisonment	License Ban
Regime for BACs of less than 80	0.5+ to 0.8	0.2+ to 0.8	6 Months	1 year
Regime for BACs of greater than 80. No change.	0.8+ to 1.0		1 year	2 years
	1.0+ to 1.5		2 years	4 years
	1.5+		3 years	6 years

The above penalties are minimum penalties and the judge has the discretion to increase these penalties. Since 5 March 2007 the maximum fine for drink driving is €5,000, 6 months in prison or both.

¹⁹ Campaign on new BAC limit videos:

http://www.youtube.com/watch?v=Q_CWF55S9Cw&feature=player_embedded#!

http://www.youtube.com/watch?feature=player_embedded&v=JVGPnZ43fil

The rules which allow for the removal of a disqualification were changed on 5 March 2007. Under the new rules, only people who have been disqualified for the first time for a period of more than 2 years will be allowed to apply to the court to have their disqualification period reduced and their driving licence restored. At least half of the period of disqualification must have elapsed before the person can apply for the restoration of their licence. The court may only reduce the overall period of the disqualification to a minimum of two-thirds of the period specified in the original disqualification order. When a court considers an application for the restoration of a driving licence it evaluates the nature of the offence, the character of the applicant and their post-conviction conduct.



Attitude and Risk Perception

During the past decade a stark change in the attitude concerning the risks related to drink driving has occurred in the Irish society. A number of surveys were carried out, revealing a steady increase in the number of interviewees who condemned drink driving as reprehensible and absolutely dangerous.

Ireland's road safety advertising has been based upon the Education/ Enforcement Model in which the advertising is designed to win the moral argument, shape the climate of opinion and build community support for increased enforcement.

The case studies for the Road Safety Authority's campaigns have won numerous Effectiveness Awards from independent juries of experts, including Ireland's Grand Prix (IAPI ADFX) and a European Effie (Stig Carlson award for socially responsible advertising) from Brussels. The Ads have also been aired in other EU countries.

A 2012 poll conducted on behalf of the RSA shows over 90% of adults in Ireland say that there is simply no amount of alcohol that you can drink if driving.

While some polls have shown that awareness levels of the drink drive limit are poor (up to 60% do not know what the limit is) this is probably reflected by the fact that a majority agree with the statement that you should never drink and drive, i.e. the limit is irrelevant as they don't drink drive.

Public support for the new lower drink drive limits is very high with 9.3 out of 10 polled supporting the Government's move to lower the legal limit for driving from 0.8 milligrams to 0.5 milligrams. A similar number, 9.4 out of 10, also back the move to reduce the limit to 0.2 milligrams for learner and professional drivers.

Awareness Campaigns

Ireland has a long experience in road safety mass media campaigns, adopting a direct and hard hitting way to convey their message. The first campaign against drink driving, "Shame," was aired in 2000 with the aim of 'telling it like it is' and presenting motorists with the stark reality and consequences of drinking and driving. Since then, a significant number of campaigns and initiatives were carried out and advertised on the TV and radio stations. Education and campaigning is one of the approaches the Irish Government adopted in order to reduce the number of deaths on national roads. Moreover, the Road Safety Strategy for 2007-2012 included two main actions related to communication campaigns:

- Action 2. To implement mass media campaigns which target the main causal factors for collisions, deaths and serious injuries for all road users but in particular the high risk groups;
- Action 6. Lead the implementation of a comprehensive integrated road safety education programme in schools and in the Community.

Some of the major mass media campaigns are described below.

“Shame”

One of the first and most powerful campaigns against drinking and driving, it was first aired in 2000 and re-broadcast on St. Patrick’s Day 2010. The advert features a young man who has a drink with his friends after a soccer match and then decides to drive home. Because he is impaired, he loses control of his car and somersaults into the back garden of a house where a child is playing. The consequences are devastating.



‘Just one’

A young man enters a bar and his eyes lock with a beautiful girl. Their relationship is promising – until she sees the car keys that suggest he is going to drink and drive. Coinciding with her look of suspicion, the voice over says “Before you decide to drink and drive, just think of the decisions you could forcing on others”. Suddenly the guy pauses before drinking his pint and he is transported into a world of consequences. We see the harrowing decisions that people are forced to make as a result of drink-driving – we see the victims and their tragedy, under the voice-over “Just One Drink Impairs Driving”. Back to the bar, the guy puts down the pint and the girl smiles knowingly. As the end titles reveal “Never Ever Drink and Drive” we realise that there are better choices with better consequences than drinking and driving.



‘Crashed lives’

The ‘Crashed Lives’ road safety campaign launched in 2007 featured two TV advertisements entitled ‘Micilín’. In his true-life testimonial, Micilín Feeney describes how in 2004, aged 23 years, he crashed in Lettermullen, County Galway. Micilín survived his crash but suffers from an acquired brain injury. “I made a stupid mistake. I had been drinking and then I drove. If you think drinking and driving is cool, just think of me. Never risk it,” Micilín says. He tells his story in both English and Irish and his ads have been airing on TV and on radio for the past four years. Micilín has also appeared on many TV chat shows and radio stations appealing for people not to drink and drive.

Christmas anti drink driving campaigns

The RSA and An Garda Síochána (Irish Police) have staged high profile education campaigns at Christmas and New Year in order to highlight the dangers of drink driving. In a show of support and commitment from the highest political level, both in 2009 and 2010, the end of the year campaigns were launched by President of Ireland, Ms. Mary McAleese, in the National Rehabilitation Hospital in Dun Laoghaire, Dublin.

'The morning after'

Since 2007 the RSA has been running a major campaign in association with the drinks industry group MEAS (Mature Enjoyment of Alcohol in Society). The campaign highlights the dangers of drink driving by looking at 'the morning after' a night out socialising. This is a major campaign which in 2010-2011 included a TV advert, two radio ads, outdoor advertising in clubs and pubs, and the handing out of campaign literature by An Garda Síochána at roadside checkpoints. The campaign runs each year at Christmas and New Year period and over the St. Patrick's festival. The campaign will run again in 2012.

Commission for taxi regulation

In 2008, 2009 and 2010, the RSA ran a joint campaign with the Commission for Taxi Regulation to highlight the dangers of drink driving and the need to make alternative plans if socialising. Specifically, the public were advised to book a taxi, hackney or mini bus and to leave the car keys at home. This campaign included a TV, radio and outdoor advertising campaign. It was launched at a high profile event in 2008 which attracted considerable media attention. The campaign ran during the summer months and again at Christmas to complement anti-drink drive initiatives.

A website on drink driving

In 2009 the RSA launched a new website aimed at dispelling the myths surrounding drink driving. The site was set up to provide the public with factual information on the effects of drinking and driving and its role in road deaths and serious injuries. www.drinkdriving.ie

Education resources

Anti-Drink Driving education has been built into all of the RSA's educational resources. These resources target local community groups as well as students at secondary and third level.

'Kilkee'

Collectively, Ireland has made a decision to wake up to unnecessary deaths on the road, and together, we've saved 1105 lives in the past decade.

Just over ten years ago, only thirty percent of people subscribed to the view that there is simply no amount of alcohol you can drink if driving. Last year, the same question was asked, and more than double the number of people agreed with this statement.

We've come a long way, and as a consequence, we've saved the population of an entire town in the last decade compared to the ten years previous. Our most recent ad looks at the town of Kilkee in Co. Clare, in the west of Ireland – a town with a population slightly less than the number we've saved – 1024. This hopeful message is a thank you to the people of Ireland for making these changes on the road, and coincides with the reduction of the blood alcohol levels for drink driving. We are saying: 'Thank you for all the good work up to now. But, with this new legislation, we will be able to save even more lives.'

The action in the ad looks at the town of Kilkee absent of people. There is a meditative feeling – almost wondering what it would be like if these thousand people had have died. What would have happened to their friends? Families? Communities? As the voiceover speaks to us, however, we see that all of these people are actually here, living a full and rich life. The ad is a celebration of what we have all done on the road. It's a celebration of life which otherwise mightn't have been.



Conclusions

What can other countries learn from Ireland?

- Political Commitment to cut drink driving deaths
- Massive awareness raising campaigns, especially targeting young people, play a significant role in communicating road safety issues among the community and maintaining road safety as a priority social issue in Ireland
- Targeted legislation to tackle drink driving
- Increased resources of the Garda Traffic Corps (Police Forces)
- Increased compliance with road traffic law
- Increased penalties, court fines, disqualification periods
- Mandatory alcohol tests (equivalent to what other countries call Targeted Breath Testing)
- Important role of the RSA (Road Safety Authority) in providing science-based positions and support in prioritising and evaluating policy actions
- Strong public acceptance of tougher measures from the government to reduce road deaths caused by alcohol

What still needs to be done?

- Keep road safety as a top priority within governmental decisions
- Maintain the number of alcohol roadside checks done by the Police
- Consider the employment of new technologies, such as alcohol interlocks as a useful tool within professional and commercial transport
- Establish a rehabilitation programme for recidivists and high-level offenders
- Develop data on serious injury collisions and particularly where alcohol is a factor

ETSC would like to thank Michael Brosnan and Niamh Gaughan from the Road Safety Authority (RSA).

References

Road Safety Act 2011

<http://www.irishstatutebook.ie/pdf/2011/en.act.2011.0007.PDF>

Road Safety Strategy 2007-2012

http://www.rsa.ie/Documents/Road%20Safety/RSA_Strategy_ENG_s.pdf

RSA survey attitude road users

<http://www.rsa.ie/PageFiles/5288/rsa-ireland-drink-driving-facts.pdf>

Legislation and sanctions

http://www.citizensinformation.ie/en/travel_and_recreation/motoring_1/driving_offences/drink_driving_offences_in_ireland.html

Irish Police website

<http://www.garda.ie/Controller.aspx?Page=8243>

5.3 Norway

Road deaths in 2010:	208
Road deaths per million inhabitants:	43
Percentage change in road deaths between 2001 and 2010:	-24%
Road deaths attributed to alcohol (estimation):	40
Average annual Change in DD deaths (2005-2010):	+0.07%



Introduction

Norway has had a long tradition of road safety with lower than EU average road deaths per million inhabitants. Norway is the 6th safest country in terms of road deaths per million inhabitants after Sweden, followed by the UK, Malta, the Netherlands, and Switzerland with 42 people killed per million inhabitants.

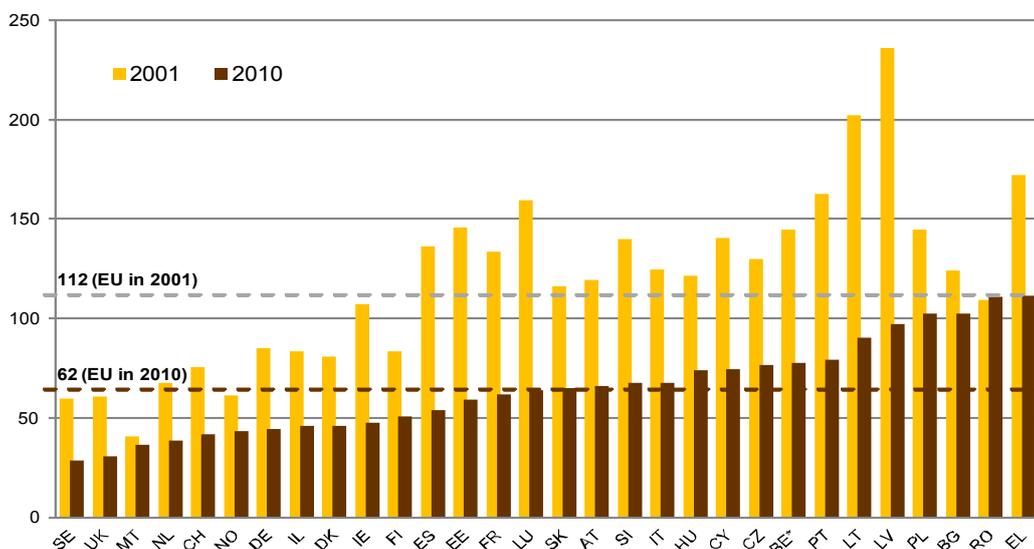


Fig.12: Road deaths per million inhabitants in 2010 (with 2001 for comparison) ETSC 2011 - 5th Road Safety PIN Report

The number of people killed decreased by 24% between 2001 and 2010. The performance of Norway is disappointing compared to its Scandinavian neighbours, Sweden (-50%), Denmark (-41%) and Finland (-38%).

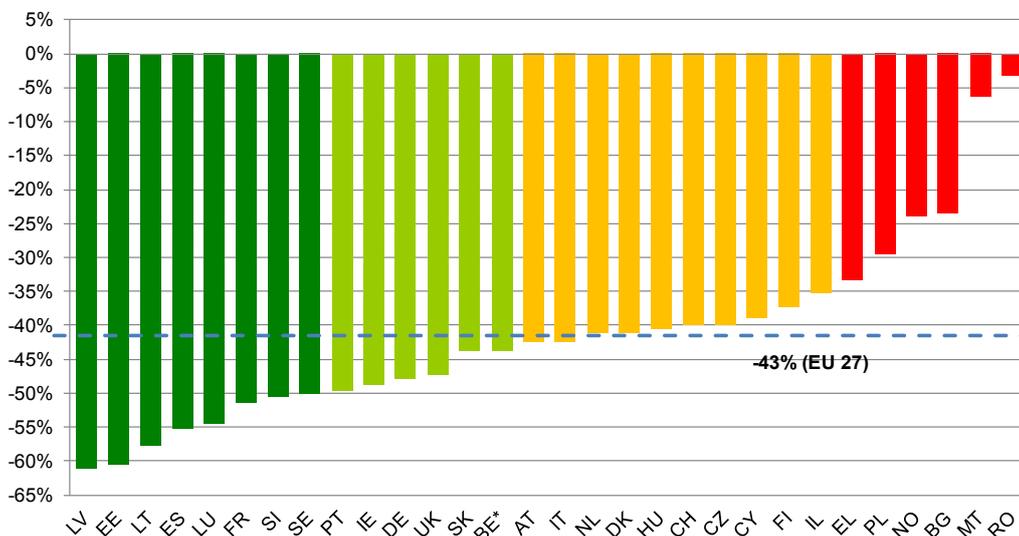


Fig. 14: Percentage change in road deaths between 2001 and 2010

Data on numbers of road deaths attributed to alcohol are unfortunately not available depriving Norway of important feedback on the effectiveness of its actions. However, it has been estimated that intoxication from alcohol, drugs and/or medication is a probable contributing factor in 22% of all fatal collisions²⁰.

National Plan

Following the example of its neighbouring country, Sweden, the Norwegian Government adopted Vision Zero as the ultimate goal of road safety policy in Norway. Vision Zero is an ethical approach about not accepting that people die or get seriously injured in road traffic. The strength of Vision Zero is that it gives a common goal for all stakeholders to strive for and to contribute to, even if each group prefers different ways to get there. A shared responsibility between system builders and road users gives all stakeholders the opportunity to be innovative, to think and act in new ways, taking onboard new strategies and evaluating former ones. Vision Zero gives energy and puts pressure on everybody to perform better and not to lose impetus.

The National Transport Plan for 2010-2019 set the target of reducing the number of people killed or seriously injured in road accidents by at least one-third by 2020. This means that the number of road deaths and severe injuries should be reduced from 1,150 in 2010 to 950 in 2014 and 775 in 2020.

Enforcement and Legislation

The number of roadside police checks carried out in Norway for alcohol per 1,000 inhabitants is one of the highest in Europe, together with Finland with no less than 367 drivers per 1,000 inhabitants checked for drink driving in 2010. With 1,783 million drivers checked in 2010, the Police is close to reach its objective of testing around 1.8 million drivers each year. Norway has also introduced systematic breath-testing in all Police checks. Each time a driver is stopped by traffic Police, he/she will be systematically checked for drink driving.

As a result of both the high number of checks and systematic breath tests, the proportion of drivers caught with an illegal BAC in police checks is one of the lowest in Europe with only 0.2% driving over the legal limit. Still every year, approximately 9,000 drivers are caught while driving under the influence of alcohol, posing great threat to other road users²¹.

BAC limit

Norway was the first country in the world to set a legal limit for drink driving, introducing a 0.5g/l BAC limit in 1936. After Sweden reduced the legal limit in 1990, the pressure increased for a similar reduction in Norway. The legal BAC was reduced in 2001, with a maximum permitted level of 0.2g/l for all drivers. The law also stipulates that general alcohol consumption is forbidden during working hours and 8 hours before work for professional drivers.

The government commissioned a survey to evaluate the effects of the reduced BAC limit law: 3,001 drivers were interviewed before and after the reduction of the BAC. The percentage of drivers claiming that they would not drink alcohol before driving increased from 82 to 92%. There was no difference, however, in the percentage of drivers saying they were at least a little likely to drive with a BAC between 0.2 and 0.5g/l²².

Sanctions

Norway is a country with a long tradition of strict enforcement and particularly severe drink-driving sanctions. The sanctions escalate as the BAC level increases and can range from a fine for being just over the limit (above 0.2g/l and up to 0.5g/l) to licence withdrawal and imprisonment. The penal and administrative sanctions may in most situations be applied in combination. Concerning drink driving fines, they are proportional to the offender's average monthly salary as follows:

²⁰ Norwegian Public Roads Administration, In-depth Analyses of Fatal Road Accidents in the year 2010.

²¹ Source: ETSC 2009, How Far from Zero? Benchmarking of road safety performance in the Nordic countries

²² Source TOI (The Institute of Transport Economics) *Reduced BAC Limit - Less Drinking and Driving?* <https://www.toi.no/getfile.php/Publikasjoner/T%D81%20rapporter/2001/530-2001/sum-530-2001.pdf>

BAC level	Fine	Imprisonment	Driving licence suspension
0.2-0.5g/l	From 1,300€ up to 2,000€	NO	Maximum 6 months
0.5-1.2g/l	1 month and ½ salary	Suspended/unconditional	12 to 24 months
>1.2g/l	1 month and ½ salary	Unconditional	At least 2 years

The DUI Prevention Programme in Norway

In Norway a judge can offer alternative sanctions to high level and recidivist offenders in the framework of the Driving under the Influence Rehabilitation Programme. This began as a trial arrangement in 1996, but from 2003 the DUI Prevention Programme was extended to all counties in Norway. The prevention programme aims at helping drivers to separate drinking from driving.

The programme takes normally 10 months and consists of 20-30 hours of group meetings – oriented lessons for two or three months and individual conversations every 14 days. The content of the conversations is adapted to individual needs and should be related to the content of group meetings. The convicted person shall also be surveyed to determine their potential health substance abuse treatment needs and rights status in specialist health services.

Probation officers shall supervise the convicted person carrying out the various parts of the programme and the conditions for implementation are followed. Serious breaches of the conditions may result in penalty converted into imprisonment.

The programme content will provide knowledge about the consequences of intoxicated driving and awareness of the convicted person to take responsibility for their actions. Drivers are faced with consequences of drunk driving. They are asked to reflect upon what motivates them to drink and drive and what strategies they should develop to avoid drink driving in the future.

By participating in the programme drivers have increased understanding of their own drug abuse and risks associated with it, increased motivation to change, and receive support to help themselves in order to avoid re-intoxicated driving.

Structured programmes based on cognitive behavioural theory have proved most effective for changing criminal attitudes and learning of new skills. The Correctional Service of Norway Staff Academy (KRUS) has developed a guide for implementing the programme to ensure uniform practices that meet the technical guidelines for knowledge-based correctional services.

Risk perception and alcohol consumption

Drink driving is not socially accepted in Norway. Most Norwegians comply with the national laws for drink driving offences. The general attitude is therefore that you never drink before driving.

In Norway, adult per capita consumption of alcohol is mainly characterised by consumption of beer and wine. Spirits and other fermented alcoholic beverages are also consumed, but to a lesser extent. Recorded adult per capita consumption is around 6.2 litres of pure alcohol and this has increased according to figures from recent years. Some unrecorded alcohol production is also seen in the country, adding around 1.6 litres to recorded adult per capita consumption. Total adult per capita consumption of pure alcohol in Norway is around 7.8 litres²³.

DRUID Project

Norway, along with 12 other countries, participated in a major EU-funded research project called DRUID (Driving under the Influence of Alcohol, Drugs and Medicines). One of the activities within the project was to study how many drivers were driving under the influence.

Results showed that 3% of the 9,236 selected drivers in Norway tested positive for alcohol, psychoactive medicines or illegal drugs; 0.3% were tested with an alcohol concentration of 0.2g/l or more; a very low

²³ Source: WHO Global Information System on Alcohol and Health, 2009.

percentage compared to most European countries. Looking at regional disparities, more drivers driving in south-eastern Norway were tested positive for alcohol and drugs than drivers from other parts of the country. Drivers stopped in the Oslo area were tested more than drivers from other cities or rural areas. Drivers were stopped by traffic police who first made their own checks. Then the drivers were invited by staff from the Norwegian Institute of Public Health to participate in a voluntary and anonymous research project: 94% of the invited drivers agreed to participate. Saliva samples were analysed at the Norwegian Institute of Public Health and tested for alcohol and drugs.

The Norwegian Institute of Public Health declared that the prevalence of alcohol and illegal drugs in samples from Norwegian drivers was lower than the European average. About one in 30 car drivers on Norwegian roads had alcohol, illegal drugs or psychoactive medicines in their blood. Moreover, Norwegian drivers were among the best at avoiding alcohol consumption before driving.

Alcohol Interlocks and political engagement

The National Plan of Action for Road Safety 2006-2009 recognised that alcohol interlocks are an effective way of tackling drink driving. The installation of the device is so far not mandatory and no specific law exists for their implementation. The National Plan encourages all private companies to voluntarily install alcohol interlocks.

More recently, the Norwegian Ministry of Justice and Public Security and the Ministry of Transport and Communications appointed a working group to assess the possibility of introducing alcohol interlocks as part of the existing rehabilitation program. The working group results and legislative suggestions will be presented in a report to the Ministries in 2012.

Alcohol Interlocks trials in Norway

Norway took part in a European Commission funded project studying the feasibility of introducing alcohol interlocks in Europe. The trial was conducted in Belgium, Germany, Norway and Spain between 2004 and 2005²⁴. The purpose of the Norwegian trial was to study the acceptance of alcohol interlocks among bus drivers, their managers and bus passengers.

Fourteen buses from the public transport company in Lillehammer, a town of some 25,000 inhabitants in south-east Norway, were equipped with alcohol interlocks for a year. After an installation and training period of about one month, the trial period lasted for about 12 months. At the end of the trial, the alcohol interlocks were removed from the buses. The bus drivers' acceptance and attitudes were studied by interviewing some 30 drivers before and after the trial. Those interviewed were the normal drivers of the buses. Thus there was no selection of drivers for the trial.

In total 12,792 initial tests were recorded: 11,179 of those were accepted technically and 1,613 were refused due to incorrect blowing method. There were five positive tests of the total of 11,179 technically accepted tests. Four of these cases were followed by passed retests or had some reasonable explanation other than actual driving with BAC above 0.02g/l.

Passengers' surveyed were very positive about alcohol interlocks. The majority would accept delays caused by alcohol interlocks, but only about a third of the passengers were willing to pay extra for the devices. The public transport company's managers were positive about the trial. However, the local authorities were not willing to contribute financially to the continued use of alcohol interlocks in the buses after the end of the trial, because the actual effect in reducing collisions in public transport is not known. Before the start of the trial, 68% of passengers surveyed were of the opinion that all buses in Norway should be fitted with alcohol interlocks, 94% of them were of the same opinion after the trial.

Several lessons were learnt from the Norwegian pilot trial:

- alcohol interlocks used in public transport should have a high technical quality to avoid delays
- a pilot programme should be carried out to avoid problems due to technical malfunctions
- the local authorities and public companies expressed the need for further research about alcohol interlock effects on casualty reductions
- a legal framework concerning rules for drivers driving vehicles with alcohol interlocks should be developed

²⁴ Alcolock implementation in the European union: http://ec.europa.eu/transport/roadsafety_library/publications/alcolock_d3.pdf

- manufacturers should consider the possibility of sending a message automatically to the operations manager whenever a positive test has occurred
- manufacturers should reduce time for the alcohol interlock to warm-up in cold weather

Conclusions

What can other countries learn from Norway?

- One of the most severe sanctions regimes for drink driving offenders compared to other EU countries
- One of the highest number of alcohol checks performed each year in Europe
- Systematic breath testing each time the Police stop a driver

What still needs to be done?

- Organise more regular nationwide anti-drink driving communication campaigns
- Adopting legislation on Alcohol Interlocks in rehabilitation programmes for recidivists and first time high level offenders
- Extending the use of alcohol interlocks for professional and fleet drivers
- Test all drivers involved in fatal collisions for alcohol (if not all road users) to determine the prevalence of drink driving and monitor progress towards the national goal of a reduction of 25% in drivers driving under the influence

ETSC would like to thank John Arild Jenssen and Grete Mathisrud from the Norwegian Ministry of Transport.

References

The Public Road Administration

<http://www.vegvesen.no/Trafikkinformasjon/Lover+og+regler/Trafikkregler>

TOI, The Institute of Transport Economics

<https://www.toi.no/category25.html>

The Norwegian Council for Road Safety

<http://www.tryggtrafikk.no/>

National Plan of Action for Road Safety (2006-2009)

<http://www.vegvesen.no/attachment/58682/binary/2817>

Vision, Strategy and Targets for Road Safety 2006-2015

<http://www.vegvesen.no/attachment/58683/binary/2818>

National Plan of Action for Road Safety (2010-2013)

<http://www.vegvesen.no/attachment/191024/binary/370917>

Police Forces

<https://www.politi.no/>

DRUID Project

http://www.druid-project.eu/cln_031/nn_107542/Druid/EN/home/homepage_node.html?_nnn=true

ETSC (2010) 4th Road Safety PIN Report, Road Safety Target in Sight – Making up for lost time

ETSC (2011) 5th Road Safety PIN Report, 2010 Road Safety Target Outcome: 100,000 fewer deaths since 2001

ETSC (2009) How Far from Zero? Benchmarking of road safety performance in the Nordic countries

http://www.etsc.eu/documents/copy_of_copy_of_copy_of_Road%20Safety%20in%20Nordic%20countries.pdf

5.4 Sweden

Road deaths in 2010:	266
Road deaths per million inhabitants:	28
Percentage change in road deaths:	-50%
Killed car drivers who tested positive in post-mortem blood alcohol tests in 2010:	19
Average annual reduction in drunk driver deaths since 2001:	-9.2%



Introduction

Sweden has one of highest levels of road safety in Europe with fewer and fewer people killed in road traffic. Strong political commitment was shown in 1997, when the introduction of “Vision Zero” made Sweden the front runner in attaining the highest level of safety on its road network. Other European countries, such as Finland and Norway, would subsequently adopt the same long term target in order to reduce the number of road deaths.

Sweden reached a historically low level of road mortality in 2010 with 28 people killed per million inhabitants. Road deaths were cut by 50% from 2001 to 2010 moving from 531 deaths in 2001 to 266 in 2010, allowing Sweden to reach the EU target with only eight other EU Member States (see figure below). This positive trend allowed Sweden to be ranked as the safest country within the European Union, followed by the UK, Malta and the Netherlands.

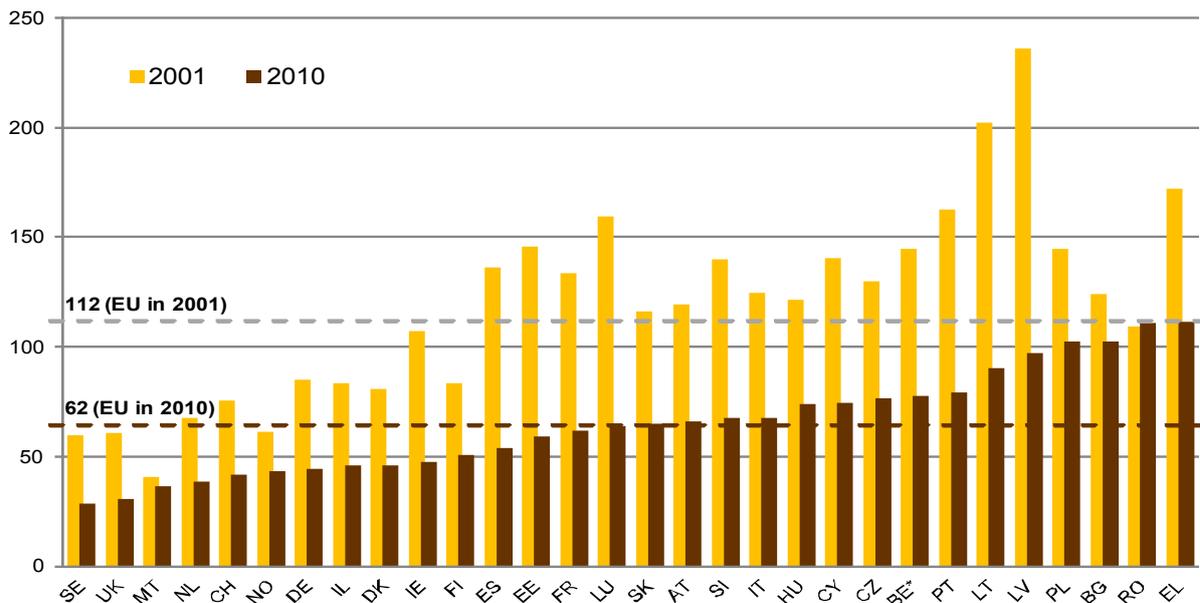


Fig.13: Road deaths per million inhabitants: comparison between 2001 and 2010, 5th Road Safety PIN Report

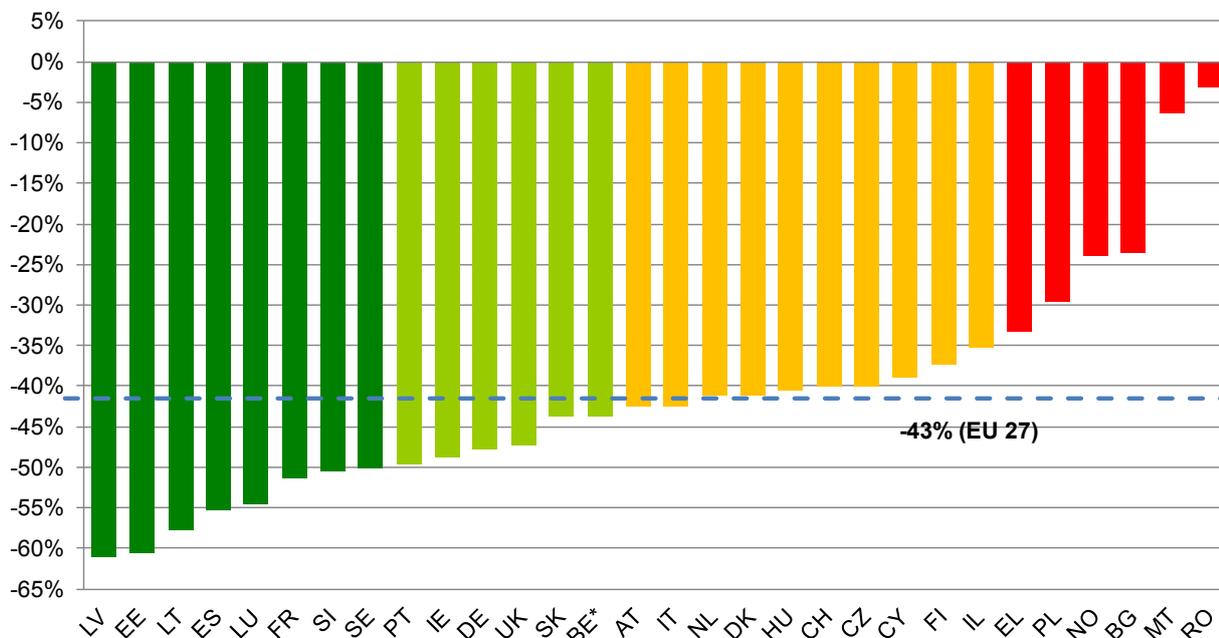


Fig.14: Percentage change in road deaths between 2001 and 2010, 5th Road Safety PIN Report

Drinking and driving figures taken from police checks show that the percentage number of sober drivers (BAC<0.2g/l) reached 99.74% in 2010, compared with 99.71% in 2007.²⁵ An observational study estimated that 0.24% of the traffic volume on Swedish roads is made by intoxicated drivers.²⁶

Since 2003 the percentage of killed car drivers driving while under the influence of alcohol has decreased reaching 16% in 2010, one of the lowest levels ever recorded in the period 1997-2010. Nineteen car drivers tested positive in post-mortem blood alcohol tests in 2010, with an average annual reduction of 9.2% in the number of drink driving deaths since 2001. Nevertheless, almost 20% of all fatal collisions still involve a driver under the influence, with male drivers as a high-risk group among road users.

Progress in reducing alcohol consumption has been slower than in reducing drink driving with an increase between 2000 and 2004 followed by a relatively slow decrease until 9.2 litres per inhabitants in 2010. In order to reduce the number of alcohol-related road crashes, Sweden implemented a comprehensive strategy involving enforcement, rehabilitation programmes and awareness raising campaigns.

The role of the government: Vision Zero and National Interim Target

Vision Zero in 1997

Approved by the Swedish Parliament in 1997, 'Vision Zero' became the foundation for road traffic safety in Sweden and is based on the ethical principle that "no loss of life in traffic is acceptable"²⁷. Therefore, it requires road deaths and serious injuries to be reduced to zero as the ultimate goal to be reached in the long term. Interim targets were also adopted as further steps towards the Vision Zero. The human factor is at the core of Vision Zero. It takes into account the vulnerability of road users and that humans make mistakes. An efficient road system has to try to mitigate the consequences of those mistakes. As such, roads must be designed and perform in order to minimise the risks for road users and prevent deaths and injuries due to the fallibility of individuals. Shared responsibility is another key principle within Vision Zero: it means that everyone is accountable in the road system, from individuals to government, police and transport companies. As far as individuals are concerned, their responsibility is to comply with all traffic laws, including laws regulating drinking and driving. Following the adoption of Vision Zero, an 11-point programme on improving road safety was published in 1999 by the Government, among which responsibilities of road users in avoiding behaviours such as intoxicated driving was included. This was later followed by a new management philosophy, "Management by objectives", where a common follow-up strategy is used instead of a common planning strategy²⁸.

25 Trafikverket 2011, Analysis of Road Safety Trends 2010: *Management by Objectives for Road Safety Work, Towards the 2020 Interim Target*.

26 Forsman, Å., Gustafsson, S. & Varedian, M. (2007): The prevalence of drink driving – a methodological study in three Swedish counties, VTI report 599, Swedish National Road and Transport Research Institute (in Swedish with English summary).

27 <http://www.visionzeroinitiative.com/en/Concept/The-vision-zero/>

28 Vägverket 2008, Management by objectives for road safety work – Stakeholder collaboration towards new interim targets 2020.

Government proposition 2008-2020

The Swedish government set up interim targets in accordance with the adoption of Vision Zero. Despite the fact that the interim target of a maximum 270 road deaths for 2007 was not reached, a new commitment was made in 2008 (Government Bill 2008/09:9): deaths should be reduced by 50% and seriously injured by 25% between 2007 and 2020. In other words, there should be a maximum of 220 road deaths in 2020. Thirteen Road Safety Indicators were proposed in order to reach the overall objective by 2020.

When the interim targets up to 2020 were adopted it was also decided that they had to be reviewed both in 2012 and 2016, to ensure their effectiveness. The 2012 review is now ongoing and results will be known during a Conference in April 2012. This review will most likely take account of the EU target of 50% reduction between 2010 and 2020 therefore, if it is applied in Sweden as well, a new interim target for 2020 should be set at a maximum of 133 road deaths²⁹.

One of the indicators established the target of 99.90% of traffic volume with sober drivers to be achieved by 2020. The table below shows how the proportion of sober drivers (defined as drivers with a BAC limit below 0.2g/l) has increased from 99.71% in 2007 to 99.74% in 2010³⁰.

Swedish legislation on drinking and driving

The Swedish Transport Administration adopted the following definition for road crashes attributed to alcohol:

“road collisions involving impaired (drunk) passenger car driver, but also drunk pedestrians, cyclists, moped riders and motor cycle riders; all crashes having alcohol and/or other drugs as a contributory factor, even when a drunk pedestrian has fallen asleep on the road and is hit by a sober driver.”

Sweden was one of the leading countries in Europe in the area of law enforcement for drink driving. In 1990, the Traffic Offence Act set the maximum allowed blood alcohol limit at 0.2g/l for all categories of road users, lowered from the 0.5g/l adopted in 1950s. Young and professional drivers and riders are not treated differently in terms of BAC level.

Sanctions related to drink driving may vary depending on the severity of the offence ('drink driving' and 'gross drink driving'). The sanctions imposed by the Swedish legislation are as follows:

Type of Offence	Sanction	Driving licence suspension	
Drink driving	BAC limit from 0.2 up to 0.99 g/l	'Day fines' or imprisonment up to 6 months	From 1 up to 12 months
"Gross" Drink driving	- BAC limit from 1.0 g/l; - or in any other way affected by alcohol or any other drug; - or driving in a dangerous way	At least 60 'day fines' or imprisonment up to 2 years	- At least 12 months up to 36 - If the licence has been suspended less than 12 months a new licence is issued after application if the driver has a license condition. If the licence has been suspended for a longer period than 12 months the driver has to: • have a new permission to take a driving test and • pass a theory and a practice test before getting a new licence

²⁹ Trafikverket, the Swedish Transport Administration: <http://www.trafikverket.se/Foretag/Trafikera-och-transportera/Trafikera-vag/Sakerhet-pa-vag/Tillsammans-for-Nollvisionen/Aktuellt---Tillsammans-for-Nollvisionen/2012-01/Etappmal-for-trafiksakerhet-pa-vag-att-revideras--en-god-utveckling-kraver-skarpare-mal/>

³⁰ Source: Trafikverket 2011, Analysis of Road Safety Trends 2010: Management by Objectives for Road Safety Work, Towards the 2020 Interim Target.

Police Enforcement

There are four priority areas for the Police in terms of collision prevention measures:

- speed
- drink driving
- use of seat belts, child restraints and helmets
- aggressive driving

Monitoring drink driving remains one of the top priorities to keep a high level of safety on Swedish roads. Police undertake both random breath testing and targeted alcohol checks, choosing a site on the basis of the expectation that there will be a high percentage of drunk drivers in that specific spot. Also, drivers stopped for whatever reason (speeding, seat belt use), will be systematically checked for drunk driving. Each police officer is equipped with a breathalyser to carry out alcohol testing. No suspicion of crime is needed before the testing. If the breathalyser indicates alcohol above the limit, the driver will be taken to the police station for confirming tests. The test can also be taken in police vans equipped with the Evidenzer. The Road Safety Bill³¹ granted the police the right to confiscate property (car-keys) to prevent an alcohol-related offence.

Sweden has one of the highest numbers of drink driving checks in Europe, together with Finland and Norway. In 2001, 1.1 million tests were carried out while in 2007 alcohol checks reached the number of 2.7 million. In 2010, the police undertook around 2.5 million alcohol checks. This is in line with the objective set out in the Police Road Safety Policy adopted by the Swedish Police which is to have at least 2.2 million breath tests per year.

Consumers' attitude and behaviour

The Swedish population seems to be aware of the risks related to drink driving. The adoption of strict legislation, high levels of police drink driving checks and communication campaigns have resulted in a low tolerance from the population towards drink driving as a road user behaviour: there is therefore no room for social acceptance and Sweden appears to be one of the European countries in which citizens are more conscious of the effects that driving under the influence of alcohol/drugs can trigger. Surveys and research, done at EU level, clearly illustrate attitudes of European citizens towards alcohol and road safety and show that the opinion of Swedish citizens tends to differ from other EU countries in that they are keenly in favour of stronger measures to tackle drink driving.

In the Eurobarometer published in April 2010, when asked after how many alcoholic drinks should someone not drive, 45% of Swedish people, one of the highest percentage among European respondents, considered zero as the safest option.³²

In the SARTRE 3 report on "European drivers and road risk"³³, when asked how often alcohol is the cause of road crashes, 94% of the Swedish interviewees declared that alcohol is often/very often/always the major cause of car collisions. With regards to European measures to be put into force, it appeared that Swedish drivers agreed that novice drivers should not drink any alcohol before driving.

Rehabilitation programmes

Sweden regards drink driving not only as a road safety issue but also as a health concern. High consumption of alcohol is considered as an illness therefore drink driving offenders also require help from society and not just punishment for an offence. In this regard a rehabilitation programme named SMADIT – Cooperation against alcohol and drugs in traffic – was developed. The joint national action involves different stakeholders (the Swedish Transport Administration, the Police Authority, municipal social services and addiction treatment centres within county councils) to help drunk drivers quickly find treatment and rehabilitation. The overall aim is to reduce the number of drink drivers and to give people with drink and drug problems an opportunity to separate these from driving.

The main idea of SMADIT is that those driving under the influence of alcohol and charged by the Police receive an offer of a consultation, a SMADIT invitation, with social services or rehabilitation clinics in order

31 <http://www.sweden.gov.se/content/1/c6/02/42/37/0e9d625a.pdf>

32 http://ec.europa.eu/health/alcohol/docs/ebs_331_en.pdf

33 <http://sartre.inrets.fr/documents-pdf/rep53V1E.pdf>

to tackle their alcohol and/or drug dependency within 24 hours from the committed offence. Immediately after they have been found by the police, alcohol dependent drivers are indeed much more predisposed and motivated towards receiving medical care. SMADIT is based on the Skellefte model³⁴, that was developed in 1997 and became an increasingly accepted and effective method in reducing the number of people driving under the influence of drugs and alcohol and thereby reducing the number of drug and alcohol related traffic collisions. Starting from the Skellefteå municipality, almost all municipalities in the country are developing today the SMADIT programme.

An evaluation undertaken by the VTI (Swedish National Road and Transport Research Institute) found that the target of the Stockholm project, which was to ensure that 10% of the drink drivers who were given an invitation should accept treatment for their dependency, has been reached. According to calculations, the Skellefte Model is socio-economically beneficial. This holds true if a sufficient number of drunk drivers are asked if they wish to participate in an interview with the addiction treatment system, and if the fixed costs are kept down. Overall, the Skellefte Model stands out as an excellent initiative against drunk driving, although there is room for improvement.³⁵

Awareness campaigns

The Swedish Transport Administration (Trafikverket.se) is currently running a nationwide long term campaign targeting young people between 15 to 24 years old about the risks of alcohol and drink driving. "Don't drink and drive" started in 2003 and is ongoing. The main purpose of the campaign is to change young people's attitudes and prevent reckless and dangerous behaviour. It aims to convince them of the following:



- not to drive under the influence of alcohol or any other drug
- to refuse to go with a drunk driver
- not to let other people drive while under the influence

"Don't drink and drive" is a successful programme thanks to all young people who get involved and also to the different stakeholders that cooperate in developing the anti-drunk driving campaign and its activities: police, schools, families, sports organisations and other clubs. The message conveyed is clear and direct and disseminated through films, exhibitions, lectures and on the dedicated website³⁶. Here young victims of road crashes due to alcohol give their witnesses.³⁷ The final goal is to get people thinking and talking to each other about the dangers of alcohol and drunk driving and to get young people involved in the planning and implementation of activities addressing this issue.

Alcohol Interlocks

The Swedish government's commitment in reducing alcohol-related road deaths is clearly shown by its pioneering adoption of alcohol interlock devices. Alcohol Interlocks in Sweden are employed in different areas, mainly:

- rehabilitation for first high-level offenders and recidivists,
- commercial transport,
- private companies use on a voluntary basis.

Rehabilitation programmes

In the field of rehabilitation, Sweden started local trial programmes for drink driving offenders in 1999 with the aim of offering a choice between installing an alcohol interlocks device and having the driving licence suspended. Trials were consequently extended from the 3 counties where the programme was first set up in 1999 to the national level in 2003. Participation in the programme was voluntary and did not have an effect on the penalty received for the offence committed; therefore any fine or imprisonment sentence could not be avoided just by taking part in the alcohol interlocks programme. A conditional driver's licence with a

³⁴ http://publikationswebbutik.vv.se/upload/4568/89250_national_cooperation_against_drink_and_drug_driving_in_traffic_according_to_the_skellefte_model.pdf

³⁵ Hrelja R., Forsman, Å., Forsberg, I., Henriksson, P. & Wiklund, M. (2009): Joint national action against drunk and drugged drivers according to the Skellefte Model. Synthesis report. VTI report 637. Swedish National and Transport Research Institute (in Swedish with English summary)

³⁶ <http://www.trafikverket.se/DDD/Dont-Drink-and-Drive/>

³⁷ <http://www.youtube.com/user/dontdrinkanddrivese>

special condition code allowing participants to drive a car with an alcohol interlocks installed was issued by the Swedish Transport Agency³⁸ to those taking part in the programme.

The pilot programme lasted for two years and included regular medical checks for participants to prove that they had been sober as well as bimonthly checks on the alcohol interlock device. The target group included first offenders and recidivists (BAC over 0.2 g/l). Since participation was voluntary and the costs had to be covered by the offender, only 11% of drink driving offenders participated in the programme. However, 59% of the participants fulfilled the 2-year programme, which is seen as a very good result. Costs were high: around 6,500 Euro for the 2-year programme that included:

1. the county administrative board application fee and participation fee
2. medical certificates including medical examinations with a blood test every 3 months
3. rental of the alcohol interlocks
4. the issuance of a driving licence: at the end of the two year period, a new driving licence was issued, provided that all the conditions were met.

The advantages of taking part in this programme were that participants were able to retain their driving licence, to go to work and also received support in tackling alcohol problems. One of the main issues was related to false manipulation of the alcohol interlocks: if a participant tried to circumvent the device this resulted in exclusion from the programme. In this specific case, and if an offender decided to quit the programme, the County Administrative Board withdrew their driving licence and imposed a driving ban.

The main outcomes of the alcohol interlock pilot programmes can be summarised as follows:

- 48% of participants dropped out due to the strict rules of the programme
- Among them, 45% were excluded for their attempts to start the vehicle with alcohol in their breath and another 38% were not able to prove sobriety during the second year; the remaining 17% decided to quit the programme voluntarily
- Drink drivers who completed the programme reduced their drink-driving recidivism by 60%
- Those who completed the programme were far less likely to be in an alcohol related crash
- The number of traffic collisions known by the Police among the participants was reduced as well as the need for hospital treatment. Harmful alcohol consumption as confirmed by both audit and biological markers in blood tests was reduced as were the number of sick leave days paid by the National Health.³⁹

After several years of trials, on December 2010, the Swedish Parliament approved a proposal on a mandatory alcohol interlock rehabilitation programme that came into force on the 1st of July 2011. The programme will target the following road user groups:

- All drivers who are willing to apply voluntarily: alcohol interlock programme is chosen instead of a licence ban and it will be compulsory for 1 year
- Recidivists and high-level offenders with a BAC over 1.0g/l: in this case the condition is to drive a car with an alcohol interlock for 2 years and follow periodical medical checks (e.g. minimum 4 blood tests during at least 6 months to prove that they have lived a sober life).

The programme is conditional to maintaining a driving licence instead of facing a driving ban and the costs will be again covered by the participants. The participation fee for one year is estimated to be approximately 2,400 – 3,000 euro and for two years approximately 3,200 – 4,800 euro.

Commercial transport

The alcohol interlock device is also used as a quality assurance tool by many Swedish companies. Collisions involving heavy goods vehicles are rare yet their consequences are often dramatic. By choosing an alcohol interlock, the company guarantees that they only employ sober drivers for their transport services.

Trial programs for the commercial fleet began in 1999 with a taxi company, a bus company and a trucking company. Almost 100 vehicles in each company were equipped with alcohol interlocks with positive feedback during the first 2 years of the trial: several other companies requested alcohol interlocks to be installed in their fleet. In addition to this large national trial, many smaller trials took place in Sweden involving both large and small companies. Many Swedish companies now have alcohol interlocks fitted in

38 <http://www.transportstyrelsen.se/en/>

39 ETSC (2008) Drink Driving Monitor 4 <http://www.etsc.eu/documents/DDMon4.pdf>

their vehicles as an excellent guarantee of sober and safe transport services. More and more municipalities, county councils, public agencies and transport companies are also making alcohol interlocks a requirement for their transportation contracts. As a result, the number of alcohol interlocks used in commercial driving has increased gradually over the years, and today more than 70,000 alcohol interlocks have been installed in Sweden.⁴⁰

Government engagement

From 2003 onwards many municipalities began having alcohol interlocks fitted in their own fleets and many more asked to their transport providers to use alcohol interlocks as a priority requirement. From the Government side, a number of measures were also taken to encourage the development and use of alcohol interlocks devices. In 2007, the Swedish Government adopted an Alcohol interlock strategy recommending⁴¹:

1. Alcohol interlocks to be a condition for drink driving offenders to regain their driving licence back
2. Alcohol interlocks in all new buses from 2010
3. Alcohol interlocks in all new trucks as soon as possible
4. Gradual introduction of alcohol interlocks in all public transport
5. Further promotion of introducing alcohol interlocks as a guarantee of quality among enterprises
6. Possible mandatory introduction of alcohol interlocks in all new cars when user-friendly devices are available on the market
7. Improvement of the device

Following the 2007 strategy, the Government committed having 75% of government vehicles equipped with an alcohol interlock by 2012; moreover all trucks of 3.5 tons and over, which are contracted by the Swedish Transport Administration for more than 100 hours per year, have to be fitted with alcohol interlocks. Since January 2010, all those authorities who purchase, lease, and use vehicles for certain contracted road transports including all school transport vehicles must be fitted with alcohol interlocks by 2012. Currently approximately 10,000 buses and 12,500 taxis are used to transport children to schools. Of these, approximately 3,600 buses and 6,250 taxis are already fitted with alcohol interlocks.

Finally, at the beginning of 2011, a Government Bill was proposed exempting alcohol interlocks in company cars from taxes. The new provision should have come into force in July 2011 but as yet no decision has been made on this issue.

40 Trafikverket 2011, Analysis of Road Safety Trends 2010: *Management by Objectives for Road Safety Work, Towards the 2020 Interim Target*.

41 <http://www.sweden.gov.se/content/1/c6/08/76/16/8ea16d7d.pdf>

Conclusions

What can other countries learn from Sweden?

- “Vision Zero” is a powerful target to improve road safety
- 0.2 BAC level for all drivers
- High level of police enforcement and one of the highest number of drink driving police checks per population within the European Union
- High level of public awareness on the dangers related to alcohol behind the wheel and strong public acceptance of measures to tackle drink driving
- The Aim to not only punish the offender but above all to provide medical treatment to deal with alcohol problems both through rehabilitation campaigns (SMADIT) and alcohol interlocks programmes
- Strong commitment from the Swedish government: drink driving is one of the top priorities on the agenda

What still needs to be done in Sweden?

- Maintain the same high level of political commitment in tackling drink driving
- Maintain high levels of police enforcement on Swedish roads
- New actions to tackle the consumption of alcohol in the general population
- Continue targeting those age groups most involved in alcohol-related road crashes through awareness raising campaigns
- Show leadership in introducing alcohol interlocks for all offenders and professional drivers and keep being a role model country for all EU Member States

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References

Vision Zero

<http://www.visionzeroinitiative.com/>

The Swedish National Road and Transport Research Institute (VTI)

<http://www.vti.se/en/>

The Swedish Transport Administration (Trafikverket)

<http://www.trafikverket.se/>

Swedish Transport Agency

<http://www.transportstyrelsen.se/en/>

National Police

www.polisen.se

Awareness campaign

<http://www.trafikverket.se/DDD/Dont-Drink-and-Drive/>

Bibliography

Council Conclusions on the EC Policy Orientations(2010).

http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/trans/118150.pdf

ERSO (European Road Safety Observatory) (2006a): Alcohol. Retrieved January, 20, 2008. www.erso.eu

EC Alcolock implementation in the European Union.

http://ec.europa.eu/transport/roadsafety_library/publications/alcolock_d3.pdf

European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions, Towards a European road safety area: policy orientations on road safety 2011-2020, SEC(2010)903.

http://ec.europa.eu/transport/road_safety/pdf/road_safety_citizen/road_safety_citizen_100924_en.pdf

EC Recommendation of 6 April 2004 on enforcement in the field of road safety.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:111:0075:0082:EN:PDF>

EC Recommendation of 17 January 2001 on the maximum permitted blood alcohol content (BAC) for drivers of motorised vehicles.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:043:0031:0036:EN:PDF>

EP report on European Road Safety (2011).

<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A7-2011-0264+0+DOC+PDF+V0//EN>

ETSC (2011) 5th Road Safety PIN Report. Road Safety Target Outcome: 100,000 fewer deaths since 2001.

ETSC (2010) 4th Road Safety PIN Report. Road Safety Target in Sight: Making up for lost time.

ETSC 2009, How Far from Zero? Benchmarking of road safety performance in the Nordic countries.

http://www.etsc.eu/documents/copy_of_copy_of_copy_of_Road%20Safety%20in%20Nordic%20countries.pdf

ETSC (2008) Drink Driving Monitor 4. <http://www.etsc.eu/documents/DDMon4.pdf>

ETSC (2007) 1st Road Safety PIN Report, Raising Compliance with Road Safety Law.

ETSC 2007b: Traffic Law Enforcement across the EU. Time for a Directive. Brussels, Belgium.

ETSC 6th Safety Lecture 2004, Road Safety in an enlarged Europe: challenges and opportunities for the 25 EU member states.

<http://www.etsc.eu/documents/Proceedings%2013%2010%2004.pdf>

Eurobarometer 2010 - EU citizens' attitudes towards alcohol.

http://ec.europa.eu/public_opinion/archives/ebs/ebs_331_en.pdf

Eurocare (2003): Drinking and driving in Europe. Brussels, Belgium.

European Alcohol and Health Forum website:

http://ec.europa.eu/health/alcohol/forum/index_en.htm

Forsman, Å., Gustafsson, S. & Varedian, M. (2007): The prevalence of drink driving - a methodological study in three Swedish counties, VTI report 599, Swedish National Road and Transport Research Institute (in Swedish with English summary).

GRSP (Global Road Safety Partnership) (2007): Drinking and Driving: a road safety manual for decision makers and practitioners. Geneva.

Health Research Board, (2009), Social consequences of harmful use of alcohol in Ireland.

Hrelja R., Forsman, Å., Forsberg, I., Henriksson, P. & Wiklund, M. (2009): Joint national action against drunk and drugged drivers according to the Skellefte Model. Synthesis report. VTI report 637. Swedish National

and Transport Research Institute (in Swedish with English summary).

OECD/ECMT (2006), Speed management.

<http://www.internationaltransportforum.org/Pub/pdf/06Speed.pdf>

Norwegian Public Roads Administration, In-depth Analyses of Fatal Road Accidents in the year 2010.

SARTRE (Social Attitudes to Road Traffic Risks in Europe) 2004: European drivers and road risk. SARTRE 3. Arcueil, France.

TOI (The Institute of Transport Economics) *Reduced BAC Limit – Less Drinking and Driving?*

<https://www.toi.no/getfile.php/Publikasjoner/T%D8!%20rapporter/2001/530-2001/sum-530-2001.pdf>

Trafikverket 2011, Analysis of Road Safety Trends 2010: *Management by Objectives for Road Safety Work, Towards the 2020 Interim Target.*

Vägverket 2008, Management by objectives for road safety work - Stakeholder collaboration towards new interim targets 2020.

WHO Report 2010 on Alcohol and Health.

http://www.euro.who.int/_data/assets/pdf_file/0004/128065/e94533.pdf

WHO Global Information System on Alcohol and Health, 2009.

Annex

Country	Code	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Annual Average % change 2001-2010
Austria	AT	68	91	82	67	56	55	54	52	46	32	-8.41%
Belgium	BE	109	88	73	35	38	54	60	54	44	n/a	-8.08%
Bulgaria	BG	52	54	57	43	47	40	44	45	32	n/a	-5%
Cyprus	CY	10	10	8	24	23	15	16	19	19	26	10.03%
Czech Republic	CZ	112	157	127	68	71	48	41	85	127	108	-3.41%
Denmark	DK	115	132	105	106	85	73	112	93	75	64	-5.78%
Estonia	EE	74	87	60	59	64	86	97	55	30	n/a	-5.90%
Finland	FI	82	91	67	84	89	88	91	96	68	64	-1.35%
France	FR	2,644	2,319	1,920	1,736	1,532	1,357	1,358	1,206	1,282	1,230	-8.26%
Germany	DE	909	932	817	704	603	599	565	523	440	342	-9.76%
Greece	EL	202	149	131	157	177	132	149	116	132	88	-5.53%
Hungary	HU	167	191	154	188	164	175	161	111	81	61	-9.85%
Ireland	IE	n/a	n/a	124	110	102	67	48	n/a	n/a	n/a	-21.29%
Israel	IL	10	11	10	23	20	28	33	31	19	14	8.81%
Italy ⁽¹⁾	IT	88	120	144	163	119	156	189	204	n/a	n/a	10.10%
Latvia	LV	111	160	119	113	96	84	91	58	36	22	-16.31%
Lithuania	LT	118	91	80	97	106	78	88	63	45	32	-10.59%
Luxembourg ⁽²⁾	LU	4	8	7	7	3	9	5	4	5	11	1.90%
Malta	MT	n/a										
The Netherlands	NL	29	46	32	29	36	22	28	25	27	18	-5.80%
Norway	NO	n/a	n/a	n/a	n/a	48	35	44	65	42	40	0.07%
Poland	PL	425	529	463	423	458	390	461	470	357	271	-3.94%
Portugal	PT	46	50	49	32	58	51	65	49	n/a	n/a	2.98%
Romania ⁽³⁾	RO	33	13	24	24	192	211	223	267	218	194	0.95%
Slovakia	SK	50	56	54	41	37	49	30	24	19	3	-20.38%
Slovenia	SI	128	110	96	116	95	125	n/a	77	55	49	-8.19%
Spain ⁽²⁾	ES	484	466	516	398	395	364	336	273	277	265	-7.48%
Sweden ⁽²⁾	SE	57	63	66	50	47	46	48	37	41	19	-9.20%
Switzerland	CH	107	93	106	103	79	58	55	58	56	63	-7.87%
Great Britain ⁽³⁾	GB	530	550	580	590	550	560	410	400	380	250	-7.17%
EU for which data is available		6,647	6,563	5,955	5,464	5,243	4,934	4,895	4,406	3,836	3,255	
	EU22 ⁽⁴⁾	6,480	6,380	5,614	5,135	4,772	4,449	4,370	3,886	3,618	3,061	-7.64%

Table 1 (Fig. 2): Road deaths attributed to drink driving

Source: National statistics provided by the PIN Panelists in each country, using each country's own method of identifying alcohol related-deaths.

See Table 2 national definition of road deaths attributed to alcohol

(1) Italy stopped reporting deaths attributed to drink driving in 2009.

(2) LU excluded in Fig. 2 as annual numbers of alcohol related deaths are < or around 10.

(3) RO: we considered data only since 2005 when reporting of deaths attributed to drink driving improved considerably.

(4) Killed car drivers who tested positive in post-mortem blood alcohol tests.

(5) Data for the UK is n/a.

(6) EU27 excluding IE, IT, MT, PT and RO. 2009 data for BE and BU were used for 2010.

Country	National definition of deaths attributed to drink driving if different to the SafetyNet recommended definition
Austria	SafetyNet recommended definition. Dead and unconscious persons are however not tested.
Belgium	Driver under the influence of alcohol and drivers who refuse to be tested. Drivers killed on the spot might not be tested.
Bulgaria	SafetyNet recommended definition
Cyprus	SafetyNet recommended definition
Czech Republic	SafetyNet recommended definition
Denmark	SafetyNet recommended definition
Estonia	SafetyNet recommended definition
Finland	SafetyNet recommended definition
France	SafetyNet recommended definition
Germany	SafetyNet recommended definition. However, drivers killed on the spot might not be tested.
Greece	Deaths in collisions where a driver was found with blood alcohol level above the legal limit. In practice, however, the Police is not systematically testing drivers for alcohol.
Hungary	Killed drivers at fault under the influence of alcohol.
Ireland	SafetyNet recommended definition.
Israel	SafetyNet recommended definition.
Italy	SafetyNet recommended definition. In practice, it seems however that deaths are often attributed to drink driving only when alcohol is considered by the Police officer to be the unique contributory factor of the fatal accident.
Latvia	Deaths occurring as a result of road accident in which at least one driver (excluding moped riders) was found with blood alcohol level above the legal limit (0.2 g/l for novice drivers, 0.5g/l for all other drivers)
Lithuania	Deaths occurring as a result of a road collision in which at least one driver was found with blood alcohol level above the legal limit (0.2 g/l for novice and professional drivers, 0.4 g/l for all other drivers)
Luxembourg	From 2001 to 2009: killed persons of accidents where the police suspected the presence of alcohol. As from 2010 on we use SafetyNet recommended definition.
Malta	n/a
The Netherlands	Drivers killed on the spot might not be tested.
Norway	n/a
Poland	SafetyNet recommended definition
Portugal	SafetyNet recommended definition
Romania	Killed people tested for alcohol. Testing might only occur when the Police suspects the presence of alcohol.
Slovakia	Fatal accident where alcohol was indicated with guilty traffic participant. Not clear!
Slovenia	SafetyNet recommended definition
Spain	Killed car drivers who tested more than 0.3 g/l in post-mortem blood alcohol tests.
Sweden	Killed car drivers who tested positive in post-mortem blood alcohol tests.
Switzerland	People tested for alcohol. Testing might only occur when the Police suspects the presence of alcohol.
Great Britain	People killed in a collision where one or more of the motor vehicle drivers or riders involved either refused to give a breath test specimen when requested to do so by the police (other than when incapable of doing so for medical reasons), or one of the following: a) failed a roadside breath test by registering over 0.35g/l of alcohol in their breath. b) died and was subsequently found to have more than 0.8g/l of alcohol in their blood.

Table 2: National definition of deaths attributed to drink driving

Source: definition provided by the PIN Panellists in each country

SafetyNet recommended definition: Any death occurring as a result of road accident in which any active participant was found with blood alcohol level above the legal limit.

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Difference (Fig. 1) (3)
Austria	890	865	849	811	712	675	637	627	587	520	-3%
Belgium	1.377	1.218	1.141	1.127	1.051	1.015	1.007	890	900	796	-3%
Bulgaria	959	905	903	900	910	1.003	962	1.016	869	743	-5%
Cyprus	88	84	89	93	79	71	73	63	52	34	18%
Czech Republic	1.222	1.274	1.320	1.314	1.215	1.015	1.181	991	774	694	3%
Denmark	316	331	327	263	246	233	294	313	228	191	-2%
Estonia	125	136	104	111	105	118	99	77	70	49	1%
Finland	351	324	312	291	290	248	289	248	211	208	4%
France	5.518	5.336	4.138	3.794	3.786	3.346	3.262	3.069	2.991	2.762	-1%
Germany	6.068	5.910	5.796	5.138	4.758	4.492	4.384	3.954	3.712	3.309	-3%
Greece	1.678	1.485	1.474	1.513	1.481	1.525	1.463	1.437	1.324	1.170	-3%
Hungary	1.072	1.238	1.172	1.108	1.114	1.128	1.071	885	741	678	-4%
Ireland			211	264	294	298	290				-29%
Israel	532	514	435	444	417	377	349	381	295	338	14%
Italy	7.008	6.860	6.419	5.959	5.699	5.513	4.942	4.521			16%
Latvia	447	399	413	403	346	323	328	258	218	196	-8%
Lithuania	588	606	629	655	667	682	652	436	325	268	-3%
Luxembourg	66	54	46	43	44	34	40	31	43	21	10%
Malta		16	16	13	16	10	14	15	21	15	n/a
The Netherlands	1.054	1.023	1.056	852	781	789	763	725	693	622	-0%
Norway	275	310	280	258	176	207	189	190	170	170	2%
Poland	5.109	5.298	5.177	5.289	4.986	4.853	5.122	4.967	4.215	3.636	-1%
Portugal	1.624	1.618	1.493	1.262	1.189	918	909	836			13%
Romania	2.418	2.398	2.205	2.420	2.437	2.376	2.577	2.798	2.579	2.183	2%
Slovakia	575	570	599	567	563	559	631	582	366	350	-16%
Slovenia	150	159	146	158	162	137	168	137	116	89	-4%
Spain (1)	963	975	1.105	951	1.006	996	923	702	646	590	-2%
Sweden (1)	174	190	175	137	141	152	152	142	122	99	-4%
Switzerland	437	420	440	407	330	312	329	299	293	264	-2%
Great Britain	2.920	2.881	2.928	2.631	2.651	2.612	2.536	2.138	1.842	1.600	-1%
EU for which data is available	42.760	42.153	40.243	38.067	36.729	35.121	34.769	31.858	23.645	20.823	
EU22*	31.710	31.261	29.899	28.149	27.094	26.006	26.037	23.688	21.045	18.625	-2.3%

Table 3 (Fig. 1): Number of road deaths non-attributed to alcohol

(1) Number of car driver killed tested

(2) Car driver deaths

*EU27 excluding IE, IT, MT, PT and RO. 2009 data for BE and BU were used for 2010.

(3) Difference between the average annual % change in the number of road deaths attributed to alcohol and the corresponding reduction for other road deaths over the 2001-2010 period

Country	2011		2010		2009		2008		2007	
	Roadside police tests per 1,000 population	% above legal limit	Roadside police tests per 1,000 population	% above legal limit	Roadside police tests per 1,000 population	% above legal limit	Roadside police tests per 1,000 population	% above legal limit	Roadside police tests per 1,000 population	% above legal limit
FI			429	1	421	1	385	1	318	2
NO			367	0		0	336	0		0
SE	259	1	287	1	293	1	256	1	283	1
CY			217	5	196	6	182	6	149	7
SI			198	5	212	5	202	6	191	7
FR			173	3	181	3	189	3	182	3
EL	156	2	161	2	147	3	135	3	143	3
IE			126	2	119	3	128	3	113	4
AT			122	4	102	5		6	77	7
IL			122	1	83	2	67	2	24	4
HU			120	4	127	3	130	3	143	3
ES			114	2	128	2	112	2	96	2
PT			106	4	81	4	63	6	57	6
EE			105	1	98	1	95	1	68	1
PL			88	5		8	47	9		
IT			27	2	27	3	23	3	13	6
LT							40	2	34	2
DK							36	6		
GB					14	12	12	13	10	16

Table 4: Roadside alcohol breath tests (per 1,000 inhabitants) and percentage of those tested found to be above the legal limit.

Country	Positive checks per 1,000 population				
	2011	2010	2009	2008	2007
AT		4	5	5	5
GB		n/a	2	2	2
CY		12	12	11	10
SI		9	10	12	14
FR		6	6	6	6
BE		5	5	5	4
PL		4	5	4	4
HU		4	4	4	5
PT		4	3	4	3
FI		4	4	5	5
EL	3	3	4	4	4
IE		2	3	4	5
ES		2	2	2	2
LV	2	2	2	3	3
SE	2	2	2	2	2
DK		2	2	2	
RO	2	2	2	2	2
IL		1	1	1	1
SK		1	1	1	1
LT		1	1	1	1
NO		1	1	1	1
EE		1	1	1	1
IT		1	1	1	1
BG				3	3
CZ				1	1
NL				0	0

Table 5: Number of positive tests (per 1,000 inhabitants)

Country	Total number of alcohol roadside police checks					Among them, number of positive alcohol roadside police checks (with BAC above the legal BAC limit)				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
AT	637.386	724.488	850.512	1.025.302		44.608	42.281	41.160	37.519	
BE	n/a	n/a				45.541	50.990	52.214	53.772	
BG	n/a	n/a				23.234	22.835			
CY	116.184	143.848	156.408	174.584		7.916	8.490	9.742	9.306	
CZ	n/a	n/a				7.598	8.178			
DK	n/a	195.000	n/a	n/a		n/a	11.211	10.135	9.767	
EE	91.639	126.784	131.071	140.096		925	1.384	1.004	932	
FI	1.676.544	2.040.243	2.242.299	2.294.019		27.544	25.819	23.350	21.130	
FR	11.230.014	11.743.065	11.284.099	10.892.996		376.124	381.705	371.741	375.487	
DE	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a	
EL	1.596.036	1.509.092	1.660.797	1.818.849	1.762.341	46.378	47.257	45.897	38.033	34.992
HU	1.437.874	1.301.127	1.272.963	1.204.251		45.682	40.721	41.504	43.477	
IE	489.029	563.115				19.858	18.028			
IL	175.000	500.000	630.291	940.340		6.434	9.960	10.529	9.587	
IT	790.319	1.393.467	1.601.080	1.643.135		47.206	47.465	47.175	40.721	
LV	n/a	n/a	n/a	n/a		6.724	6.801	4.882	4.093	4.196
LT	114.144	134.026	n/a	n/a		1.770	2.305	3.609	3.572	
LU	193	206								
MT	n/a	n/a								
NL	28.857	26.364				878	757			*
NO	1.788.837	1.592.280	1.599.672	1.783.702		4.335	4.356	4.040	4.318	
PL	n/a	1.775.186	2.305.582	3.351.776		159.346	168.612	173.324	165.885	
PT	606574	670362	857178	1130981		34.082	39.806	36.919	43.107	
RO	n/a	n/a	n/a	n/a	n/a	35.969	36.255	35.877	37.219	36.399
SK	n/a	n/a	n/a	n/a		4.489	4.604	6.889	6.713	
SI	384.591	405.975	431.094	404.917		27.934	23.745	20.242	19.064	
ES	4.273.488	5.087.873	5.861.282	5.241.403		92.449	93.979	103.006	93.705	
SE	2.579.037	2.350.540	2.708.466	2.680.991	2.441.583	18.268	18.958	17.670	16.854	16.676
CH	n/a	n/a	n/a	n/a						
GB	600.000	711.658	813.288	n/a		98.000	91.666	93.973	n/a	

Table 6: Roadside alcohol breath tests (per 1,000 inhabitants) and percentage of those tested found to be above the legal limit.

Source: National statistics provided by the PIN Panelists in each country,

Italy: Data from Traffic police forces and Carabinieri (data from local police forces are not included)

Sweden: Police data

Spain: Data not available from Basque Country, Catalonia and urban areas.

Estonia: Checks in random police raids

GB: England and Wales only

Finland: It is estimated that national traffic police makes 50% of all tests. Therefore tests made by traffic police have been multiplied by two.

Norway: Number of checks is the total number of drivers checked by the police; number of positives is the number of drivers convicted

Portugal: New values: Data provided by ANSR

NL: Source: Rijden onder Invloed. Monitor driving under influence of alcohol in weekend nights. <http://www.om.nl/publish/pages/101669/rijdenonderinvloed1999-2008-definitief.pdf>

Besides this research, also normal roadside breath tests are undertaken. The number of tests is not known.

* Statistics: Netherlands (CBS) Number of registered DD/BAC-offences by Police:

2007: 59,790 2008: 58,560; 2009: 55,745 2010: 49,125

<http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLNL&PA=80344NED&D1=0,2&D2=62&D3=0&D4=a&HD=120208-0903&HDR=G2,G3&STB=G1,T>

It is not possible to estimate the number of tests from the registered offences, as the % above the limit is not known. In cases that someone is tested, there may be a suspicion, so the % will be higher than in the monitor

On the other hand, the monitor is during weekendnights only, so during the rest of the week the % will be lower.

Country	Population (1,000)				
	2007	2008	2009	2010	2011
AT	8.283	8.319	8.355	8.375	8.404
BE	10.585	10.667	10.753	10.840	10.952
BG	7.679	7.640	7.607	7.564	7.505
CY	779	789	797	803	804
CZ	10.287	10.381	10.468	10.507	10.533
DK	5.447	5.476	5.511	5.535	5.561
EE	1.342	1.341	1.340	1.340	1.340
FI	5.277	5.300	5.326	5.351	5.375
FR	61.795	62.135	62.474	62.799	63.136
DE	82.315	82.218	82.002	81.802	81.752
EL	11.172	11.214	11.260	11.305	11.310
HU	10.066	10.045	10.031	10.014	9.986
IE	4.313	4.401	4.450	4.468	4.481
IL	7.244	7.419	7.552	7.695	0
IT	59.131	59.619	60.045	60.340	60.626
LV	2.281	2.271	2.261	2.248	2.230
LT	3.385	3.366	3.350	3.329	3.245
LU	476	487	494	502	512
MT	408	410	414	414	418
NL	16.358	16.405	16.486	16.575	16.656
NO	4.681	4.737	4.799	4.858	4.920
PL	38.125	38.116	38.136	38.167	38.200
PT	10.599	10.618	10.627	10.638	10.637
RO	21.565	21.529	21.499	21.462	21.414
SK	5.394	5.401	5.412	5.425	5.435
SI	2.010	2.010	2.032	2.047	2.050
ES	44.475	45.283	45.828	45.989	46.153
SE	9.113	9.183	9.256	9.341	9.416
CH	7.509	7.593	7.702	7.786	7.867
GB	59.227	59.623	60.003	60.463	

Table 7: Number of inhabitants (in thousands).
Source: Eurostat.

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