

Identification of Drink-driving in the Countermeasures - Methodology

Investigation of present drink-driving status in terms of the "SUNNINES+6" project

- Comparison of Southern European countries/regions *Portugal - Greece - Spain/Catalonia (as territory)*
- Importance of Safety Performance Indicators (SPI)
- Drinking & driving was 1 of 7 case studies
- Analysis based on similar study originally done for the SUN countries (Sweden - UK - Netherlands)

Self-reported behaviour

- Utilisation of the SARTRE project dealing with SPI
- Drivers appear to under-report drinking & driving
- SARTRE 2 (1997): probability to be tested between 5.5% in Greece & 10% in Spain to 16% in Portugal
- SARTRE 3 (2004): drivers actually tested in past 3 years in the range 16-20% for the 3 countries

Methodology

1st Component: Investigation of Official Countermeasures
Offence legal definitions - Police powers/rights - Sanctions

2nd Component: Estimation of drinking & driving extent

Drivers over limit in fatal accidents or on total drivers

3rd Component: success/failure factors

The role of enforcement & sanctions application

- Identification of key-factors deserving further analysis
- Possible estimation of future savings due to policies

Official countermeasures (2004)

Country	Legal limit (g/100ml)	Police powers	Sanctions	Notes
Portugal	0.05	Police can stop any driver suspected of drinking & driving	1st offence: 120€ fine, 12h suspension 2nd offence: 240€ fine, 24h suspension 3rd offence: 360€ fine, 48h suspension	Portugal applied the strictest sanctions early exhibiting good understanding of the problem
Greece	0.05	Police can stop any driver suspected of drinking & driving	1st offence: 100€ fine, 12h suspension 2nd offence: 200€ fine, 24h suspension 3rd offence: 300€ fine, 48h suspension	Greece introduced a notably stricter Road Traffic Code (2007) reflecting in part social consensus
Spain	0.05	Police can stop any driver suspected of drinking & driving	1st offence: 100€ fine, 12h suspension 2nd offence: 200€ fine, 24h suspension 3rd offence: 300€ fine, 48h suspension	Recidivism-facing framework under revision

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Data Trends & Specific Considerations in Drink-driving

Particularities regarding data collection/processing

Relevant data are originally (at the spot) gathered by the Traffic Police and updated with medical records

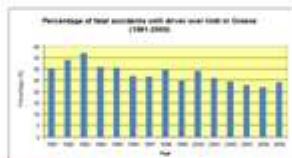
Data are further processed by National Statistical Services & Technical/Educational Institutions

Alcohol in fatal accidents may only be detected in Portugal & Greece

The Blood Alcohol Concentrate (BAC) of killed drivers is only available in about 1/3 of all recorded cases

Great effort is put by means of funding and know-how so as to acquire & better utilize equipment

Extent of the problem: Presence in fatal accidents



Country	Year	Percentage
Greece	1991	15
Greece	1992	18
Greece	1993	12
Greece	1994	15
Greece	1995	18
Greece	1996	15
Greece	1997	12
Greece	1998	15
Greece	1999	18
Greece	2000	15
Greece	2001	12
Greece	2002	15
Greece	2003	18
Greece	2004	15
Greece	2005	12

- Figures are partly reliable, due to the large proportion of unknown cases
- Greece exhibits progress in terms of drivers over limit in fatal accidents
- In Portugal killed drivers over limit are estimated at 27-28% (2002-2005)

Drinking & driving as part of all road accidents

Country	Year	Percentage
Greece	1991	15
Greece	1992	18
Greece	1993	12
Greece	1994	15
Greece	1995	18
Greece	1996	15
Greece	1997	12
Greece	1998	15
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- Certain Central-European countries exhibit notable reduction of drink-driving-related road accident fatalities
- Few countries reveal negative trends
- Rather often other factors contribute more to the reduction of all fatalities

Evaluation of Countermeasures - Future Perspectives

Evolution of enforcement: total number of alcohol tests

Country	Year	Number of tests
Greece	1991	100
Greece	1992	120
Greece	1993	150
Greece	1994	180
Greece	1995	200
Greece	1996	220
Greece	1997	250
Greece	1998	280
Greece	1999	300
Greece	2000	320
Greece	2001	350
Greece	2002	380
Greece	2003	400
Greece	2004	420
Greece	2005	450

- Greece exhibits a 6-fold increase in a 6-year period, approaching EU recommendation (1 test / 2.5 cars)
- Portugal data reveal earlier action to deal with the problem
- Spain provides data that are not directly applicable in this analysis

Controls/violators temporal distribution: The case of Catalonia



- There is great variation within 24hrs
- Around 5 am positive tests reach 10% of total (4% in Netherlands)
- 4% (an upper threshold suggested in EU by the EuroCare report-2003) is exceeded between 1-6:30 am
- Control is reasonably intensified at night to prevent drink-driving

Spatial differentiation of alcohol tests efficiency within a country

- NTUA analysis involving *multilevel* models with data between 1998-2002
- Critical parameters: urbanisation & road safety compliance in history
- Less urbanised - more road safety compliant regions are an easy target
- Enforcement alone is not enough; rationalisation of checks is necessary

Savings estimate in lives lost in alcohol-related road accidents

- About 1800 drink-drive related fatalities in the 3 countries (2003)
- Estimate for Greece: saving of 230 lives annually (from 1996 to 2003)
- Large potential in all regions
- Enforcement to be rationalised
- Sanctions to be truly imposed
- Further research in terms of other projects, e.g. Safety Net