



SAFE & SOBER TRANSPORT

Alcohol Interlock Seminar

Barcelona

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DRINK AND DRIVING IN SPAIN

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DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

IMPACT

Alcohol is present in one third of fatal accidents and multiplies by 9 the possibility that an accident occurs (DGT, 2011)

- **In 2009, Toxicological analysis were performed at 923 drivers killed in traffic accidents, 277 presenting a rate higher than 0.3 g / l, i.e. 30.0%.**
- **Of the 277 drivers killed tested positive for alcohol, 62 also tested positive for drugs and / or medicines.**
- **The percentage of drivers that the rate was equal or higher than 0.3 g / l has dropped from 37.4% in 2003 to 30.0% in 2009. (Also the percentage of drivers tested on the total of deaths has increased from 50.7% in 2003 to 54.6% in 2009)**

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DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

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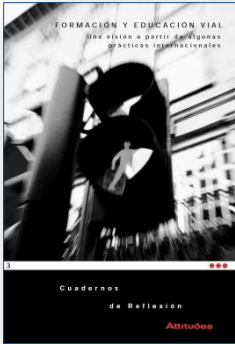
IMPACT

- **Between 2003 and 2009, they have been in three 3.4 million preventive breath tests more and the positive rate has reduced more than half.**
- **In 2003, the Civil Guard traffic made 1,700,000 preventive tests. They got 71.685 positives, 4.18%; in 2009, the number of preventive tests has been 5.105.660, resulting in positive 90.306, 1.77%.**
- **In 2009, 5.56% of the people who had the breath alcohol test were positive and 1.06% of those were doing an infraction some minutes before having the test.**

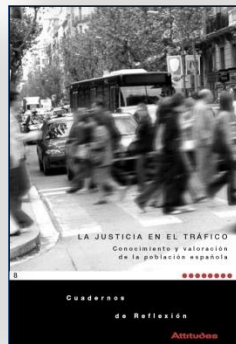
DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

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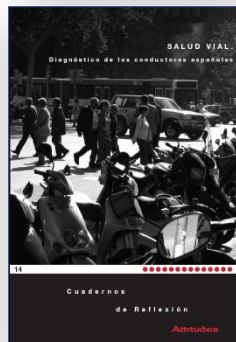
STUDIES OF “ATTITUDES”. AUDI SOCIAL INITIATIVE



- *Training and Road Education: A view from some international practices. Attitudes' Notebook. (ALONSO, ET AL., 2003a)*
- *Training and Road Education : A view from the Spanish population. Attitudes' Notebook. (ALONSO, ET AL., 2003b)*



- *Justice in Traffic. Analysis of the legislative-executive international cycle. Attitudes' Notebook. (ALONSO, ET AL., 2005a)*
- *Justice in Traffic. Knowledge and assessment of the Spanish population. Attitudes' Notebook (ALONSO, ET AL., 2005b)*



- *Health in roads. Theory and practice of the physical-psychotic disorder in driving. Attitudes' Notebook. (ALONSO, ET AL., 2008^a)*
- *Health in roads. Diagnosis of the Spanish drivers. Attitudes' Notebook. (ALONSO, ET AL., 2008^b)*



DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

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COMPARATIVE FREQUENCY OF DECLARATION OF REALIZATION OF BEHAVIOR (ALONSO ET AL., 2005)

Usual Behaviors During Driving	Percentage of drivers
Speeding	37,7%
Yell or insult while driving	33,6%
Driving without seatbelt (counting back-seatbelts and driving in the city)	29,9%
Not keeping a safe distance	24%
Smoking while driving	19,3%
Inadequate speed	13,3%
Driving after having a drink	9,8%
Driving a car without the technical inspection	6,9%
Driving a car without insurance	0

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVERS ADMIT INFRACTIONS (ALONSO ET AL., 2005)

Drivers admit infractions	%
Most of the time	0,5%
In many cases	0,2%
Some times	9,1%
rarely	15,1%
Never	74,7%

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

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GENERAL REASONS FOR GETTING AN INADEQUATE BEHAVIOUR (ALONSO ET AL., 2005)

- Perception of taking control of every situation
- Overvalue the capacities
- Personal habits
- Driving culture

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

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SPECIFIC REASONS FOR DRIVING UNDER THE INFLUENCE OF ALCOHOL (ALONSO ET AL., 2005)

Specific reasons for driving under the influence of alcohol	%
I have to return, I can't do anything	24,5%
Intentional	16,4%
meals	17,3%
It doesn't affect me, I feel good	12,7%
Other reasons	10%
I don't drink too much	8,2%
I don't realise	5,5%
I have to travel	4,5%
Everybody does it	3,6%
It's a short distance	1,8%

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

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VALUATION OF THE RISK ASSOCIATED WITH DIFFERENT BEHAVIORS (ALONSO, ET AL., 2005)

Conductas realizadas con más frecuencia	Risk perceived (Scale 0-10)
Driving after having a drink	9,1
Speeding	8,3
Inadequate speed	8,3
Not keeping a safe distance	7,9
Driving without seatbelt (counting back-seatbelts and driving in the city)	6,9
Driving a car without the technical inspection	5,5
Smoking while driving	5,3
Yell or insult while driving	4,7
Driving a vehicle without insurance	0

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DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

ASSESSING RISK ASSOCIATED WITH DIFFERENT BEHAVIORS DEPENDING ON THE FREQUENCY OF DRIVING UNDER THE INFLUENCE OF ALCOHOL (ALONSO, ET AL., 2005)

Assessing risk associated with different behaviors depending on the frequency of driving under the influence of alcohol	Average
Most of the time	4,5
In many cases	9
Sometimes	7,8
Rarely	8,6
Never	9,3

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

CONSIDERING SOME STATES THAT AFFECT THE DRIVING (ALONSO, ET AL., 2008)

Conditions affecting the driving	Average
Drug addiction	2,99
Alcohol Adiction	2,98
Lack of sleep	2,97
Drugs consumption	2,90
Fatigue	2,81
Depression	2,74
Anxiety	2,74
Stress	2,72
Post-heart attacks	2,65
Headaches or migraines	2,57
Heart problems	2,54
Myopia	2,47
Join or muscle pain	2,33
Allergies	2,15
Diabetes	2,12

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DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DEGREE OF RISK ATTRIBUTED TO "DRIVING DRINKING TWO BEERS" DEPENDING ON THE TYPE OF MOVE (ALONSO, ET AL., 2003)

Degree of risk attributed to "DRIVING DRINKING TWO BEERS" depending on the type of move	Average
In itinere	5,95
In mision	5,70
Leisure or personal	6,00
Others	6,80

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

HOW IT AFFECTS "DRIVING DRINKING TWO BEERS" DEPENDING ON THE TYPE OF USER (ALONSO, ET AL., 2003)

How it affects driving drinking two beers depending on the type of user	Average
Current driver, professional transporter	5,6
Current driver, traveling in mision	6,2
Current driver, other offsets	5,9
Driver in the past, cyclist	5,4
Driver in the past, pedestrian	6,9
Cyclist, no drivers	6,0
Pedestrian, no drivers	7,2

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DEGREE OF RISK ATTRIBUTED TO "BEING A DRIVER PASSENGER WHO HAS CONSUMED ALCOHOL" DEPENDING ON THE TYPE OF USER (ALONSO, ET AL., 2003))

Degree of risk attributed to "being a passenger of a driver who has consumed alcohol" according to the type of user	Average
Current driver, professional transporter	9,2
Current driver, traveling in mision	8,4
Current driver, other offsets	8,7
Driver in the past, cyclist	9,0
Driver in the past, pedestrian	8,85
Cyclist, no drivers	8,35
Pedestrian, no drivers	9,15

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

PROBABILITY OF RECEIVING A PENALTY(ALONSO ET AL., 2005)

Probability of receiving a penalty	Average
Yell or insult while driving	0,9
Smoking while driving	1,5
Not keeping a safe distance	2,0
Inadequate speed	3,1
Speeding	3,2
Driving a vehicle without insurance	4,2
Driving a vehicle without the technical inspection	4,3
Driving a vehicle without insurance	4,4
Driving exceeding alcohol limits	5,2

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

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EVALUATION OF THE PENALTIES ACCORDING BEHAVIOR (ALONSO ET AL., 2005)

Evaluation of the enforceability of conduct	% Yes	% No
Speeding	97,1	2,9
Inadequate speed	92	8
Not keeping a safe distance	75,3	24,7
Yell or insult while driving	35	65
Driving exceeding alcohol limits	99,1	0,9
Driving without seatbelt (counting back-seatbelts and driving in the city)	86	14
Smoking while driving	35,5	64,5
Driving a vehicle without insurance	97,3	2,7
Driving a vehicle without the technical inspection	86,1	13,9

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DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

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ASSESSMENT OF THE SEVERITY IN THE PENALTY RECEIVED (ALONSO ET AL., 2005)

Assessment of the severity in the penalty received	Excessive	Adequate	Low
Speeding	41,4	52,2	6,5
Inadequate speed	38,7	54,8	6,5
Driving exceeding alcohol limits	25	75	0
Driving without seatbelt	41,7	56,3	2,1
Driving a vehicle without the technical inspection	55,2	41,4	3,4

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DO YOU THINK THE PENALTY CODE HAS CHANGED PEOPLE'S BEHAVIOR?

Do you think the penalty code has changed people's behavior?	% Yes	% No
Speed	57,8	42,2
Inadequate speed	67,7	32,3
Driving exceeding alcohol limits	91,7	8,3
Driving without seatbelt	68,8	31,3
Driving a vehicle without the technical inspection	82,8	17,2

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

THE “TEN D BY NIGHT” PROJECT



1. Dark
2. Dance
3. Disco
4. Dose
5. Drugs
6. Drive
7. Danger
8. Damage
9. Disability
10. Death

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

“TEN D BY NIGHT” PROJECT: SCIENTIFIC RESULTS

Table 3. Alcohol and psychoactive substances use by Country (consumption declared)

	N	Belgium- The Netherlands	Bulgaria	Italy	Poland	Spain	Overall
		N=851	N=1044	N=954	N=1006	N=1002	N=4857
Alcohol consumption (last month)	4835						
never		10% (83)	11% (116)	6% (56)	6% (64)	7% (74)	8% (393)
once or twice a month		21% (177)	22% (231)	16% (155)	25% (247)	26% (256)	22% (1066)
once a week		34% (290)	29% (300)	44% (419)	37% (367)	47% (470)	38% (1846)
3 or 4 days per week		23% (191)	24% (246)	23% (219)	26% (261)	15% (153)	22% (1070)
every day		13% (107)	14% (151)	10% (97)	6% (60)	5% (45)	10% (460)
Binge drinking (last month)	4783						
yes		33% (274)	54% (553)	41% (383)	58% (563)	72% (711)	52% (2484)
no		67% (569)	46% (478)	59% (560)	42% (412)	28% (280)	48% (2299)
Any psychoactive substance consumption (last year)	4833						
yes		31% (259)	18% (185)	25% (235)	37% (364)	56% (558)	33% (1601)
no		69% (586)	82% (854)	75% (716)	63% (633)	44% (443)	67% (3232)
Beer consumption before the night	4513						
yes		33% (269)	31% (270)	21% (193)	31% (289)	30% (294)	29% (1315)
no		67% (558)	69% (592)	79% (714)	69% (645)	70% (689)	71% (3198)
Wine consumption before the night	4311						
yes		11% (89)	6% (43)	27% (254)	6% (57)	16% (157)	14% (600)
no		89% (713)	94% (674)	73% (671)	94% (834)	84% (819)	86% (3711)
Distilled spirits consumption before the night	4500						
yes		15% (123)	25% (217)	24% (218)	23% (215)	26% (255)	23% (1028)
no		85% (682)	75% (656)	76% (704)	77% (713)	74% (717)	77% (3472)
Cocktail consumption before the night	4279						
yes		8% (61)	2% (13)	21% (191)	2% (21)	9% (84)	9% (370)
no		92% (739)	98% (683)	79% (730)	98% (868)	91% (889)	91% (3909)
Alcopops consumption before the night	4298						
yes		3% (27)	0% (3)	1% (7)	7% (68)	64% (635)	17% (740)
no		97% (767)	100% (686)	99% (895)	93% (848)	36% (362)	83% (3558)
Psycho-active substance consumption before the night	4826						
yes		6% (52)	2% (16)	4% (35)	4% (37)	22% (222)	8% (362)
no		94% (794)	98% (1022)	96% (909)	96% (963)	78% (776)	92% (4464)
Planning to drink alcohol during the night	4827						
yes		59% (503)	63% (652)	74% (698)	76% (759)	67% (665)	68% (3277)
maybe		10% (85)	12% (120)	10% (94)	6% (59)	6% (58)	9% (416)
no		30% (258)	26% (266)	17% (157)	18% (181)	27% (272)	23% (1134)
Planning to take psycho-active substance during the night	4805						
yes		3% (29)	1% (11)	1% (14)	2% (21)	16% (156)	5% (231)
maybe		2% (15)	3% (29)	2% (21)	5% (47)	7% (73)	4% (185)
no		95% (801)	96% (989)	96% (910)	93% (928)	77% (761)	91% (4389)

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN “TEN D BY NIGHT” PROJECT: SCIENTIFIC RESULTS

Table 4. Driving and alcohol/psychoactive substances use by Country

	N	Belgium- The Netherlands	Bulgaria	Italy	Poland	Spain	Overall
		N=851	N=1044	N=954	N=1006	N=1002	N=4857
Driving under influence of alcohol (last month)	4788						
yes		27% (226)	14% (150)	24% (225)	6% (56)	31% (297)	20% (954)
no		73% (617)	86% (888)	76% (723)	94% (940)	69% (666)	80% (3834)
Driving under influence of drugs (last month)	4731						
yes		5% (43)	2% (18)	5% (49)	3% (29)	17% (161)	6% (300)
no		95% (784)	98% (1013)	95% (887)	97% (948)	83% (799)	94% (4431)
Arrested for driving under influence of alcohol/drugs (last year)	4757						
yes		5% (38)	1% (13)	1% (10)	1% (8)	5% (49)	2% (118)
no		95% (801)	99% (1010)	99% (936)	99% (980)	95% (912)	98% (4639)
Crash driving under influence of alcohol/drugs (lifetime)	4788						
yes		5% (41)	3% (30)	6% (53)	2% (15)	7% (71)	4% (210)
no		95% (798)	97% (1004)	94% (895)	98% (983)	93% (898)	96% (4578)

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN “TEN D BY NIGHT” PROJECT: SCIENTIFIC RESULTS

Table 5. Alcohol and psychoactive substance consumption declared at the event by Country

	N	Belgium- The Netherlands	Bulgaria	Italy	Poland	Spain	Overall
		N=851	N=1044	N=954	N=1006	N=1002	N=4857
Nr of alcoholic drinks during the night	3243						
1		10% (62)	16% (169)	32% (192)	14% (108)	12% (24)	17% (555)
2		10% (66)	23% (236)	26% (156)	17% (130)	16% (32)	19% (620)
3		8% (48)	20% (211)	14% (84)	18% (140)	15% (30)	16% (513)
4		5% (33)	8% (86)	8% (48)	13% (97)	11% (21)	9% (285)
5 or more		32% (205)	5% (49)	9% (56)	18% (139)	25% (48)	15% (497)
none		35% (223)	27% (281)	12% (73)	20% (157)	20% (39)	24% (773)
Drug consumption at the event	3219						
yes		7% (47)	2% (18)	1% (7)	5% (37)	25% (48)	5% (157)
no		93% (586)	98% (998)	99% (603)	95% (731)	75% (144)	95% (3062)
Marijuana		5% (33)	1% (13)	1% (4)	3% (26)	21% (40)	4% (116)
Methamphetamines		2% (12)	0% (3)	0% (0)	0% (2)	1% (1)	1% (18)
Cocaine		1% (8)	0% (5)	0% (0)	1% (5)	0% (0)	1% (18)
Hallucinogens		0% (1)	0% (2)	0% (0)	0% (2)	2% (3)	0% (8)
Amphetamines		1% (8)	0% (5)	0% (0)	1% (5)	0% (0)	1% (18)
Benzodiazepines		0% (1)	0% (2)	0% (1)	0% (1)	0% (0)	0% (5)
Opiates		0% (0)	0% (1)	0% (0)	0% (1)	0% (0)	0% (2)

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN “TEN D BY NIGHT” PROJECT: SCIENTIFIC RESULTS

Table 6. Blood alcohol concentration and reaction time at the entrance and exit of the clubs by Country

Country	Alcohol test				Reaction time test			
	N	First Alcohol Test	N	Second Alcohol Test	N	First RT Test	N	Second RT Test
Belgium-The Netherlands	829	0.29 (0.26;0.32)	643	0.42 (0.38;0.47)	705	1.03 (1;1.06)	550	0.98 (0.95;1)
Bulgaria	1044	0.18 (0.16;0.2)	1036	0.45 (0.43;0.48)	1040	0.71 (0.69;0.73)	1031	0.69 (0.68;0.71)
Italy	942	0.22 (0.19;0.24)	604	0.36 (0.33;0.39)	935	0.65 (0.63;0.67)	596	0.66 (0.64;0.68)
Poland	1000	0.44 (0.41;0.47)	776	0.72 (0.68;0.76)	999	0.60 (0.57;0.65)	776	0.62 (0.61;0.65)
Spain	993	0.45 (0.42;0.47)	167	0.53 (0.47;0.6)	927	0.75 (0.72;0.78)	147	0.69 (0.66;0.73)
Overall	4808	0.32 (0.3;0.33)	3226	0.5 (0.48;0.52)	4606	0.73 (0.72;0.74)	3100	0.72 (0.71;0.73)

Table 7. Intention to drive expressed by participants with second Alcohol test > 0.5 g/l by Country

	N	Belgium-The Netherlands	Bulgaria	Italy	Poland	Spain	Overall
		N=208	N=418	N=171	N=455	N=81	N=1333
Are you going to drive this night?	1289						
no		80% (162)	94% (387)	69% (116)	99% (435)	63% (42)	89% (1142)
yes, later		6% (13)	5% (19)	11% (19)	0% (2)	25% (17)	5% (70)
yes, now		13% (27)	1% (5)	20% (33)	1% (4)	12% (8)	6% (77)

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

LAW- POINTS DRIVING LICENCE

Penalties	Sanction
<ul style="list-style-type: none">• >0,50 g/l Blood alcohol concentration (0,25 mg/l breath alcohol concentration) for drivers;• >0,30 g/l Blood alcohol concentration (0,15 mg/l breath alcohol concentration) for professional drivers;• >0,30 g/l Blood alcohol concentration (0,15 mg/l breath alcohol concentration) for novice drivers with less than 2 years of experience	6 points
<ul style="list-style-type: none">• [0,25 -0,50] g/l Blood alcohol concentration for professional drivers• [0,15 -0,30] g/l Blood alcohol concentration for novice drivers with less than 2 years of experience	4 points
<ul style="list-style-type: none">• Negation of having the alcohol test	6 points

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

REGULATIONS. MAJOR CAUSES OF LOSING THE DRIVING LICENCE FOR DEMERIT POINTS (DGT, 2011)

Major causes of losing the driving licence for demerit points	%
Speeding	48%
Seat belt/crash helmet	12%
Blood alcohol level	11%
Mobile phone use	10%

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

LAW- ALCOHOL(PENALTY CODE, CHAPTER IV)

Penalty code	Crimes against road and traffic safety	Sanctions
ALCOHOL	More than: 0,60 mlgr/l Breath alcohol concentration (BRAC) (1,2 gr/l BAC)	<ul style="list-style-type: none">• Prision (3 - 6 months) or a ticket (6 - 12 months) and• Social works (30 - 90 days) and• No driving licence (up to 4 years)
ALCOHOL	Negation of having the alcohol test	<ul style="list-style-type: none">• Prision (6 - 12 months) and• No driving licence (1-4 years)

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

ALCOHOL TICKETS(23 DICIEMBRE, 2008)

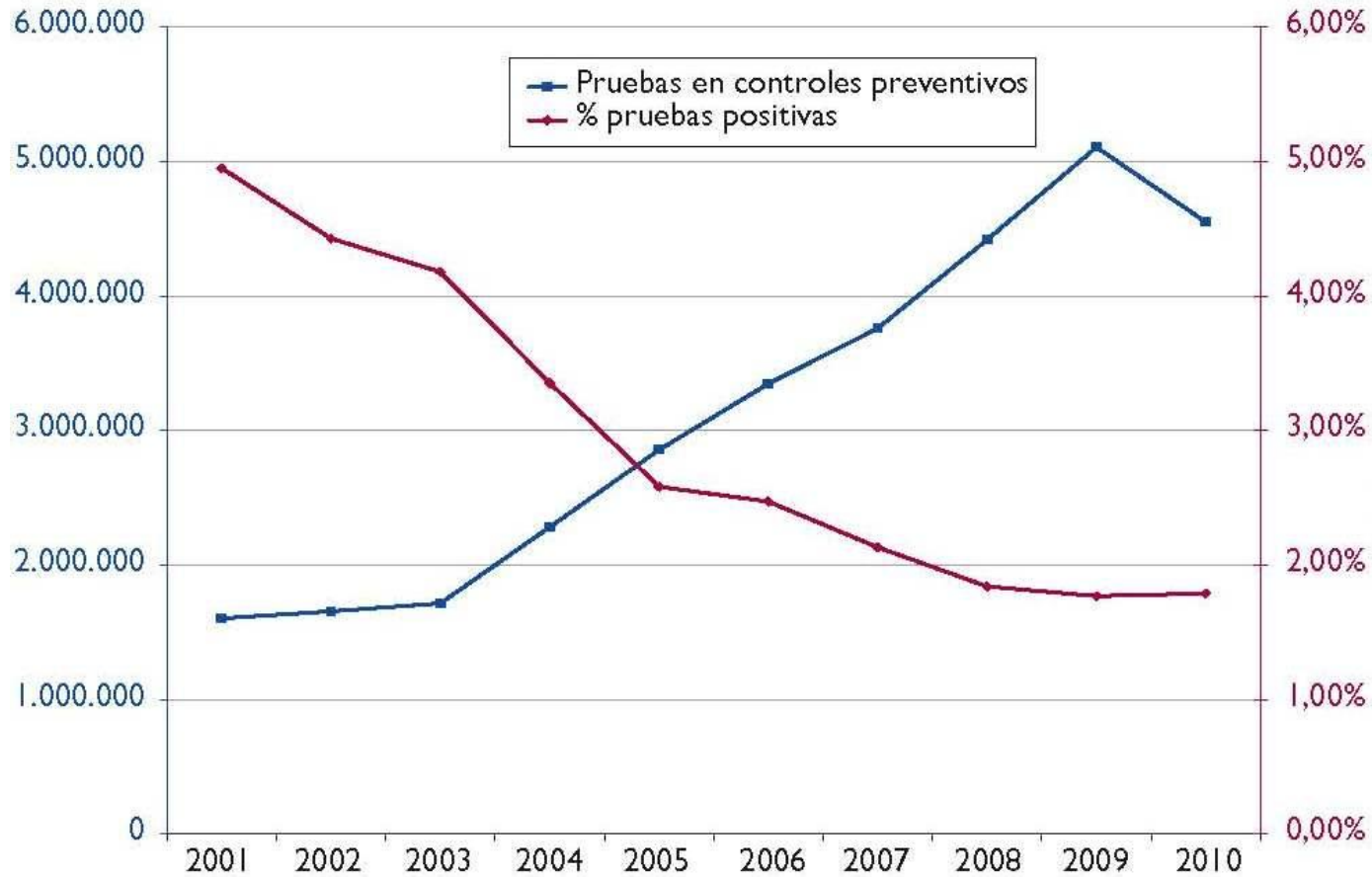
Total of penalties	4.072	(Serious infraction) (Art 65 Road Safety Law)
Administrative penalty	3.316 (83%)	-Economic penalty: 300 - 600 euros) -No driving licence (up to 3 months) -(4 - 6) points according the concentration
>0,6 mlgr/l BRAC (1,2 gr/l BAC) Crime Judicial penalty	756 (18%)	Sanctions: -Prision (3 - 6 months) or a ticket (6 - 12 months) and -Social works (30 - 90 days) and -No driving licence(1 - 4 years)
Negation of having the alcohol test Crime	30	Sanctions: -6 points -Prision (6 - 12 months) and -No driving licence(1 - 4 years)

Reform of the Criminal Code (December 2, 2007) has led to the **arrest of more than 35,000 people** for driving with a blood alcohol level qualified as a crime.

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

PREVENTIVE CONTROL TEST VS. % POSITIVE TESTS



DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

DRIVING UNDER THE INFLUENCE OF ALCOHOL IN SPAIN

AWARENESS CAMPAIGNS



SIMULATORS EXPERIENCE



SIMULATORS EXPERIENCE





datS

Research Group · Grupo de Investigación · Grup d'Investigació
DESARROLLO Y ASESORAMIENTO EN TRÁFICO Y SEGURIDAD VIAL

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