

Supplementary Material

1 Supplementary Figures and Tables

1.1 Supplementary Tables

Supplementary Table 1. Substance categories (3).

Substance name or group of substances	Substance(s) included in each group
Alcohol	Alcohol
Cannabis	Cannabis
Opiates	6-Acetylmorphine, Codeine, Morphine, Methadone
Cocaine	Cocaine, benzoylecgonine
Amphetamine and analogues	Amphetamine, Methamphetamine, MDA, MDMA, MDEA
Benzodiazepine and analogues	7-Aminoclonazepam, Alprazolam, Clonazepam, Diazepam, Flunitrazepam, Lorazepam, Nordiazepam, Oxazepam, 7-Aminoflunitrazepam Zolpidem, Zopiclone

Supplementary Table 2. Substances and sample cut-off concentrations for laboratory confirmation according to DRUID guidelines (3).

Substance	Cut-off concentration oral fluid (ng/mL)
6-Acetylmorphine	16.0
7-Aminoclonazepam	3.1
7-Aminoflunitrazepam	1.0
Alprazolam	3.5
Amphetamine	360.0
Benzoyllecgonine	95.0
Clonazepam	1.7
Cocaine	170.0
Codeine	94.0
Diazepam	5.0
Flunitrazepam	1.0
Lorazepam	1.1
MDA	220.0
MDEA	270.0
MDMA	270.0
Methadone	22.0
Methamphetamine	410.0
Morphine	95.0
Nordiazepam	1.1
Oxazepam	13.0
THC	27.0
Tramadol	480.0
Zolpidem	10.0
Zopiclone	25.0

Supplementary Table 3. Prevalence of cases testing positive for alcohol and/or drugs among Spanish drivers, by gender.

	Male		Female		χ^2	p
	n	% (95% CI)	n	% (95% CI)		
No substance	2043	89.6 (88.3-90.8)	600	94.7 (92.9-96.3)		
Any substance	238	10.4 (9.2-11.7)	34	5.3 (3.8-7.3)	15.081	p<0.0001
Alcohol alone >0.05mg/ml	109	4.8 (4-5.7)	14	2.2 (1.3-3.6)	8.076	p=0.004
Alcohol + drugs	8	0.3 (0.2-0.7)	2	0.3 (0.1-1)	0.018	p=0.895
Several drugs	10	0.4 (0.2-0.8)	1	0.2 (0-0.7)	1.036	P=0.309
Only one drug	112	4.9 (4.1-5.9)	16	2.6 (1.5-4)	6.697	p=0.010
Cannabis	43	2 (1.5-2.6)	12	2 (1.1-3.3)	0.004	p=0.947
Cocaine	65	3 (2.4-3.8)	4	0.7 (0.2-1.5)	11.009	p=0.001
Amphetamine and analogues	2	0.1 (0-0.3)	0	0.0	0.570	p=0.450
Opiates	2	0.1 (0-0.3)	0	0.0	0.570	p=0.450
Benzodiazepine and analogues	0	0.0	0	0.0		

Supplementary Table 4. Prevalence of cases testing positive for alcohol and/or drugs among Spanish drivers by age.

Age groups	Any substance		Alcohol and drug		Drugs (no alcohol)		Alcohol alone > 0,05mg/ml	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
16-20	8	9.3 (4.4-16.6)	0	0.0	5	5.4 (2.2-12.1)	3	4 (1-8.9)
21-25	29	9.7 (6.7-13.4)	1	0.2 (0-1.6)	12	4 (2.2-6.7)	16	5.5 (3.2-8.3)
26-30	66	16.5 (13.1-20.4)	3	0.8 (0.2-2)	34	8.4 (6.1-11.6)	29	7.2 (5-10.1)
31-35	33	9 (6.4-12.3)	1	0.3 (0-1.3)	20	5.6 (3.5-8.2)	12	3.2 (1.8-5.5)
36-40	34	11.3 (8-15.1)	1	0.2 (0-1.5)	24	7.9 (5.3-11.3)	10	3.2 (1.7-5.8)
41-45	42	10.1 (7.4-13.2)	1	0.2 (0-1.1)	29	6.9 (4.8-9.7)	12	2.9 (1.6-4.8)
46-50	17	5 (3-7.6)	1	0.2 (0-1.4)	7	1.9 (0.9-3.9)	10	2.9 (1.5-5.1)
51-55	19	8 (4.9-11.7)	0	0.1 (0-1)	5	2.2 (0.8-4.5)	14	5.7 (3.3-9.2)
56-60	10	4.6 (2.3-7.8)	2	0.9 (0.2-2.9)	5	2.5 (0.9-4.9)	3	1.2 (0.4-3.6)
>= 61	16	5.8 (3.5-8.9)	0	0.0	1	0.5 (0-1.7)	15	5.3 (3.2-8.5)
χ^2 , p	45.265, p<0.0001		6.397, p=0.700		48.592, p<0.0001		22.039, p=0.009	