which points to the relevance of such laws as a reinforcement strategy.(LIM-40-HC-FMUSP)

P-4. Self reported (il)licit drug use in Belgian drivers

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Introduction. There are relatively few data on the prevalence of driving under the influence of drugs in the general population. **Aims.** To determine the number of drivers who took drugs and medicines by using questionnaires, and comparing to the results of toxicological analysis. **Methods.** 2957 respondents driving a personal car or van completed a questionnaire during roadside surveys to report their use of drugs and medicines during the last two weeks and indicate the time of last intake. The drug classes were combined to benzodiazepines and Z-drugs, antidepressants, codeine, alcohol, cannabis, cocaine, heroin and amphetamines. Drugs were analysed in oral fluid by UPLC-MS/MS. Frequencies in the time categories were calculated and compared with toxicological results. **Results.**

Drug class	Self-report/ toxicology	Use <1h (n)/ positive toxicology (n)	<4h	<12h	<24h	>24h	Unkn own
Alcohol	1614/196	138/95	180/56	182/ 15	370/9	713/1 4	31/7
Antidep.	110/41	6/3	14/5	50/ 19	24/8	8/0	8/6
Benzodiaz. and Zs	98/40	4/2	10/9	33/ 14	30/9	12/4	9/2
Cannabis	79/32	5/4	3/1	10 /8	7/3	46/14	8/2
Codeine	60/6	4/2	7/3	9/0	6/0	25/0	9/1
Cocaine	7/5	2/2	0	0	0	4/2	1/1
Amphetam.	5/2	0	0	0	0	3/1	2/1
Heroin	2/1	1/1	0	0	0	1/0	0

Conclusions. Alcohol, antidepressants, cannabis, benzodiazepines and codeine were most commonly used. Most drugs were last used 4 h or more before driving. Self-report yielded more positives than toxicological analysis. The percentages of positives were higher among the subjects who reported more recent drug consumption.

Disclaimer. This abstract has been produced under the project "Driving Under the Influence of Drugs, Alcohol and Medicines" (DRUID) financed by the European Community within the framework of the EU 6th Framework Program. This abstract reflects only the author's view. The European Community is not liable for any use that may be made of the information contained therein.

P-5. Analytical evaluation of five oral fluid drug testing devices

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Introduction. The correlation of oral fluid with drug concentration and the ease of sample collection make oral fluid an ideal matrix for roadside drug tests targeting impaired drivers. **Aims.** To evaluate the performance of five oral fluid testing devices: Varian OraLab® 6, Dräger DrugTest® 5000, Cozart® DDS 806, Mavand RapidSTAT and Innovacon OrAlert. **Methods.** More than 760 oral fluid samples were collected from volunteers either at drug addiction treatment centres or during roadside sessions. At the time of collection volunteers provided two oral fluid samples. One was tested on-site with one of the selected devices, while the second sample was used for confirmation analysis by ultra-performance liquid chromatography-mass spectrometry (UPLC-MS/MS). Sensitivity, specificity, accuracy and prevalence for amphetamines, cannabinoids, cocaine, and opiates were calculated for each device applying Belgian legal confirmation cut-offs (THC 10 ng/mL; amphetamine 25 ng/mL; free morphine or 6-MAM 5 ng/mL; cocaine or benzoylecgonine 10 ng/mL). **Results.** All devices showed good specificity for all drugs classes. Sensitivity and accuracy were very variable among devices and drug classes, as shown in the table below.

DEVICE	TARGET substance	True pos	False pos	True neg	False neg
Varian OraLab® 6	Cocaine	19	0	195	35
	Opiates	85	2	120	42
	THC	18	2	159	70
	Amph	19	0	216	14
Dräger DrugTest® 5000	Cocaine	6	1	124	6
	Opiates	75	3	45	14
	THC	20	5	107	5
	Amph	6	0	129	2
Cozart® DDS 806	Cocaine	1	1	129	7
	Opiates	49	0	66	23
	THC	11	0	99	28
	Amph	4	1	131	2
Mavand RapidSTAT	Cocaine	3	3	120	7
	Opiates	62	2	52	17
	THC	13	12	91	17
	Amph	1	4	123	5
Innovacon OrAlert	Cocaine	7	0	96	7
	Opiates	64	2	20	24
	THC	3	0	97	10
	Amph	1	10	97	2

DEVICE	TARGET substance	N. of tests	Sens. (%)	Spec. (%)	Acc. (%)	Prev. (%)
Varian OraLab® 6	Cocaine	249	35.2	100	85.9	21.7
	Opiates	249	66.9	98.4	82.3	51.0
	THC	249	20.5	98.8	71.1	35.3
	Amph	249	57.6	100	94.4	13.3
Dräger DrugTest® 5000	Cocaine	137	50.0	99.2	94.9	8.8
	Opiates	137	84.3	93.8	87.6	65.0
	THC	137	80.0	95.5	92.7	18.2
	Amph	137	75.0	100	98.5	5.8
Cozart® DDS 806	Cocaine	138	12.5	99.2	94.2	5.8
	Opiates	138	68.1	100	83.3	52.2
	THC	138	28.2	100	79.7	28.3
	Amph	138	66.7	99.2	97.8	4.3
Mavand RapidSTAT	Cocaine	133	30.0	97.6	92.5	7.5
	Opiates	133	78.5	96.3	85.7	59.4
	THC	133	43.3	88.3	78.2	22.6
	Amph	133	16.7	96.9	93.2	4.5
Innovacon OrAlert	Cocaine	110	50.0	100	93.6	12.7
	Opiates	110	72.7	90.9	76.4	80.0
	THC	110	23.1	100	90.9	11.8
	Amph	110	-	90.7	89.1	2.7

Conclusions. Considering that cannabis, followed by amphetamines, is the most prevalent drug among impaired drivers in Belgium, only Dräger DrugTest® 5000 appeared to be sensitive enough to be used during roadside police controls.

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P-6. Prevalence of alcohol, drugs and benzodiazepines among drivers and pedestrians involved in road accidents in the South Region of Portugal during the years 2008 - 2009

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Introduction. Driving performance is easily impaired as a consequence of the use of alcohol, licit and illicit drugs. In order to target strategies to better manage drugged driving, it is