

Levels of biomarkers in wastewater measured with the developed method

Deliverable D3.3



EUSEME

EUROPE-WIDE SEWAGE ANALYSIS TO
MONITOR EMERGING DRUG PROBLEMS



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Executive Summary

This deliverable consists of the concentrations of target crack cocaine analytes measured in wastewater samples.



Anhydrous ecgonine methyl ester (AEME) concentrations measured in wastewater

Day	WWTP	Compound	Concentration (ng/L)	Flow (m ³ /day)	Load (mg/day/1000 inh)
Wednesday	Eindhoven	AEME	7.17	163805	2.57
Thursday	Eindhoven	AEME	7.88	149869	2.58
Friday	Eindhoven	AEME	7.85	130484	2.24
Saturday	Eindhoven	AEME	9.65	124446	2.63
Sunday	Eindhoven	AEME	14.64	118477	3.79
Monday	Eindhoven	AEME	8.50	123995	2.31
Tuesday	Eindhoven	AEME	10.65	122749	2.86
Wednesday	Amsterdam	AEME	36.58	145000	7.91
Thursday	Amsterdam	AEME	23.41	152000	5.31
Friday	Amsterdam	AEME	28.85	149000	6.41
Saturday	Amsterdam	AEME	29.66	146000	6.46
Sunday	Amsterdam	AEME	34.34	146000	7.48
Monday	Amsterdam	AEME	30.68	142000	6.50
Tuesday	Amsterdam	AEME	32.88	141000	6.92
Wednesday	Utrecht	AEME	10.55	85740	3.38
Thursday	Utrecht	AEME	14.37	51463	2.76
Friday	Utrecht	AEME	16.71	48987	3.06
Saturday	Utrecht	AEME	22.06	48166	3.97
Sunday	Utrecht	AEME	15.76	48500	2.85
Monday	Utrecht	AEME	14.25	48580	2.59
Tuesday	Utrecht	AEME	16.13	48478	2.92
Wednesday	Antwerp	AEME	15.69	44640	5.38



Thursday	Antwerp	AEME	16.88	41808	5.42
Friday	Antwerp	AEME	18.33	49696	7.00
Saturday	Antwerp	AEME	17.82	58800	8.05
Sunday	Antwerp	AEME	21.65	43120	7.17
Monday	Antwerp	AEME	19.22	44944	6.63
Tuesday	Antwerp	AEME	19.05	44832	6.56
Wednesday	Brussels	AEME	12.43	243843	3.18
Thursday	Brussels	AEME	12.69	241247	3.21
Friday	Brussels	AEME	15.53	241758	3.94
Saturday	Brussels	AEME	11.89	241725	3.01
Sunday	Brussels	AEME	13.68	244242	3.50
Monday	Brussels	AEME	16.88	242086	4.28
Tuesday	Brussels	AEME	10.88	241110	2.75
Wednesday	Rome	AEME	2.88	777600	2.03
Thursday	Rome	AEME	3.07	787104	2.20
Friday	Rome	AEME	3.53	779328	2.50
Saturday	Rome	AEME	2.39	786240	1.71
Sunday	Rome	AEME	3.32	796608	2.40
Monday	Rome	AEME	2.66	788832	1.91
Tuesday	Rome	AEME	3.06	778464	2.17
Wednesday	Milan	AEME	4.04	321270	1.24
Thursday	Milan	AEME	3.89	318420	1.18
Friday	Milan	AEME	3.49	313750	1.04
Saturday	Milan	AEME	5.48	310200	1.62
Sunday	Milan	AEME	4.62	306740	1.35
Monday	Milan	AEME	3.66	325485	1.14
Tuesday	Milan	AEME	4.10	325775	1.28



Wednesday	Bologna	AEME	9.23	118400	1.82
Thursday	Bologna	AEME	7.49	118320	1.48
Friday	Bologna	AEME	9.77	118740	1.93
Saturday	Bologna	AEME	10.69	119960	2.14
Sunday	Bologna	AEME	11.98	120340	2.40
Monday	Bologna	AEME	9.49	115968	1.83
Tuesday	Bologna	AEME	8.50	118820	1.68
Wednesday	Bari	AEME	19.48	78759	3.34
Thursday	Bari	AEME	6.85	79150	1.18
Friday	Bari	AEME	10.13	76029	1.68
Saturday	Bari	AEME	4.68	77751	0.79
Sunday	Bari	AEME	15.64	96802	3.29
Monday	Bari	AEME	1.76	84570	0.32
Tuesday	Bari	AEME	10.52	80641	1.85
Wednesday	Lisbon	AEME	8.11	138973	2.64
Thursday	Lisbon	AEME	8.43	133571	2.64
Friday	Lisbon	AEME	9.33	125138	2.73
Saturday	Lisbon	AEME	8.28	113498	2.20
Sunday	Lisbon	AEME	10.32	104641	2.53
Monday	Lisbon	AEME	7.01	120360	1.98
Tuesday	Lisbon	AEME	8.31	140196	2.73
Wednesday	Almada	AEME	5.48	32200	1.27
Thursday	Almada	AEME	6.15	33200	1.47
Friday	Almada	AEME	4.45	32300	1.04
Saturday	Almada	AEME	7.37	34900	1.85
Sunday	Almada	AEME	8.87	32300	2.07
Monday	Almada	AEME	6.48	34000	1.57



Tuesday	Almada	AEME	6.58	36100	1.71
Wednesday	Dublin	AEME	10.01	344923	1.82
Thursday	Dublin	AEME	8.94	339168	1.60
Friday	Dublin	AEME	9.16	337346	1.63
Saturday	Dublin	AEME	8.50	322948	1.45
Sunday	Dublin	AEME	10.87	325695	1.86
Monday	Dublin	AEME	10.74	337731	1.91
Tuesday	Dublin	AEME	10.00	339684	1.79
Wednesday	Castellon	AEME	17.61	39336	3.86
Thursday	Castellon	AEME	16.00	37738	3.36
Friday	Castellon	AEME	14.46	36369	2.93
Saturday	Castellon	AEME	11.55	40550	2.61
Sunday	Castellon	AEME	15.34	35788	3.06
Monday	Castellon	AEME	15.69	38982	3.41
Tuesday	Castellon	AEME	17.61	40473	3.97