

Supplementary index to:

Wastewater-based epidemiology reveals illicit drug consumption and possible prescription drug trafficking in a prison

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Table S1. Data used in WBE back calculations: flow rates and population served

Sampling campaign	Date	Population (total)	Prisoners	% prisoners	Flow rate (m ³)
June 2023	09/06/2023	869	815	94%	243
	10/06/2023	869	815	94%	239
	11/06/2023	869	815	94%	240
	12/06/2023	869	815	94%	225
	13/06/2023	869	815	94%	292
	14/06/2023	869	815	94%	238
	15/06/2023	869	815	94%	267
November 2023	09/11/2023	848	777	92%	266
	10/11/2023	848	777	92%	249
	11/11/2023	848	777	92%	212
	12/11/2023	848	777	92%	219
	13/11/2023	848	777	92%	213
	14/11/2023	821	777	95%	230
	15/11/2023	820	777	95%	214
February 2024	08/02/2024	864	787	91%	179*
	09/02/2024	864	787	91%	208
	10/02/2024	864	787	91%	251
	11/02/2024	864	787	91%	213
	12/02/2024	864	787	91%	216
	13/02/2024	864	787	91%	215
	14/02/2024	864	787	91%	229

* This day was not considered because of an obstruction in the auto sampler.

Table S2. Analytical parameters for the validated SPE-LC-MS/MS method for morphine, pregabalin and gabapentin

Analyte / Internal Standard	Precursor ion (Cone voltage)	Product ion 1 (Collision energy)	Product ion 2 (Collision energy)	Trueness %	Precision %RSD	LOQ (ng/L)
Morphine	286 (50)	201 (25)	58 (28)	104	6.3	0.3
Pregabalin	160 (25)	142 (10)	97 (15)	98	5.2	5.0
Gabapentin	172 (30)	137 (15)	154 (10)	104	3.6	4.0
Morphine-D3	289 (50)	201 (25)				
Pregabalin-13C3	163 (25)	144 (10)				
Gabapentin-D10	182 (25)	147 (15)				

Table S3. Defined Daily Dose (DDD) of the analyzed compounds.

Pharmaceuticals	Defined Daily Dose (DDD)
Pregabalin	300
Gabapentin	1800
Alprazolam	1
Bromazepam	10
Clonazepam	8
Clorazepate	20
Diazepam	10
Lorazepam	1
Lormetazepam	1
Methylphenidate	30
Lisdexamphetamine	30
Methadone	25
Morphine	100
Codeine	100
Esketamine	8

Table S4. Pharmacy data of the analyzed pharmaceuticals.

	Pharmaceuticals	Sampling campaign	Date	Pharmacy dispensation data (mg/1000 hab/day)	Pharmacy dispensation data DID (DDD/1000 hab)
Gabapentinoids	Pregabalin	June 2023	09/06/2023	12140.4	40.5
			10/06/2023	12715.8	42.4
			11/06/2023	12715.8	42.4
			12/06/2023	12715.8	42.4
			13/06/2023	13262.4	44.2
			14/06/2023	13233.6	44.1
		15/06/2023	13233.6	44.1	
		November 2023	09/11/2023	14829.0	49.4
			10/11/2023	14829.0	49.4
			11/11/2023	15182.8	50.6
			12/11/2023	15182.8	50.6
			13/11/2023	15271.2	50.9
			14/11/2023	15651.6	52.2
		February 2024	15/11/2023	15762.2	52.5
			08/02/2024	26417.8	88.1
	09/02/2024		26765.0	89.2	
	10/02/2024		26765.0	89.2	
	11/02/2024		26765.0	89.2	
	12/02/2024		26765.0	89.2	
	Gabapentin	June 2023	13/02/2024	28166.9	93.9
			14/02/2024	28201.2	94.0
			09/06/2023	14269.3	7.9
			10/06/2023	14614.5	8.1
			11/06/2023	14614.5	8.1
			12/06/2023	14614.5	8.1
		November 2023	13/06/2023	14614.5	8.1
			14/06/2023	15304.9	8.5
			15/06/2023	15304.9	8.5
			09/11/2023	6367.9	3.5
			10/11/2023	6367.9	3.5
11/11/2023			6367.9	3.5	
February 2024		12/11/2023	6367.9	3.5	
		13/11/2023	6367.9	3.5	
		14/11/2023	7551.8	4.2	
	15/11/2023	7561.0	4.2		
	08/02/2024	7407.4	4.1		
	09/02/2024	5324.1	3.0		
Benzodiazepines	Alprazolam	June 2023	10/02/2024	5324.1	3.0
			11/02/2024	5324.1	3.0
			12/02/2024	5324.1	3.0
			13/02/2024	5602.9	3.1
			14/02/2024	5609.8	3.1
			09/06/2023	119.1	119.1
			10/06/2023	123.1	123.1
			11/06/2023	123.1	123.1
			12/06/2023	123.1	123.1
			13/06/2023	123.1	123.1
14/06/2023	123.1	123.1			
15/06/2023	125.4	125.4			
			09/11/2023	159.8	159.8

Pharmaceuticals	Sampling campaign	Date	Pharmacy dispensation data (mg/1000 hab/day)	Pharmacy dispensation data DID (DDD/1000 hab)	
	November 2023	10/11/2023	159.2	159.2	
		11/11/2023	166.3	166.3	
		12/11/2023	166.3	166.3	
		13/11/2023	162.1	162.1	
		14/11/2023	169.3	169.3	
		15/11/2023	169.5	169.5	
		February 2024	08/02/2024	269.7	269.7
			09/02/2024	274.3	274.3
			10/02/2024	274.3	274.3
			11/02/2024	274.3	274.3
			12/02/2024	275.5	275.5
			13/02/2024	289.9	289.9
			14/02/2024	290.2	290.2
		Bromazepam	June 2023	09/06/2023	17.3
	10/06/2023			17.3	1.7
	11/06/2023			17.3	1.7
	12/06/2023			17.3	1.7
	13/06/2023			17.3	1.7
	14/06/2023			17.3	1.7
	15/06/2023		17.3	1.7	
	November 2023		09/11/2023	10.6	1.1
			10/11/2023	10.6	1.1
			11/11/2023	10.6	1.1
			12/11/2023	10.6	1.1
			13/11/2023	10.6	1.1
			14/11/2023	11.0	1.1
	15/11/2023		11.0	1.1	
	February 2024		08/02/2024	10.4	1.0
09/02/2024			10.4	1.0	
10/02/2024			10.4	1.0	
11/02/2024			10.4	1.0	
12/02/2024		10.4	1.0		
13/02/2024		11.0	1.1		
14/02/2024		12.8	1.3		
Clonazepam	June 2023	09/06/2023	127.7	471.5	
		10/06/2023	126.6	476.1	
		11/06/2023	126.6	476.1	
		12/06/2023	126.6	477.6	
		13/06/2023	126.6	502.3	
		14/06/2023	126.6	510.4	
	15/06/2023	117.4	519.6		
	November 2023	09/11/2023	136.8	435.1	
		10/11/2023	136.8	430.7	
		11/11/2023	134.4	448.1	
		12/11/2023	134.4	448.1	
		13/11/2023	129.7	454.0	
		14/11/2023	126.1	489.6	
	15/11/2023	126.2	496.3		
February 2024	08/02/2024	190.4	721.6		
	09/02/2024	176.5	701.4		
	10/02/2024	176.5	701.4		
	11/02/2024	176.5	701.4		

Pharmaceuticals	Sampling campaign	Date	Pharmacy dispensation data (mg/1000 hab/day)	Pharmacy dispensation data DID (DDD/1000 hab)	
		12/02/2024	199.7	701.4	
		13/02/2024	210.1	738.1	
		14/02/2024	204.9	739.0	
	Clorazepate	June 2023	09/06/2023	9430.4	471.5
			10/06/2023	9522.4	476.1
			11/06/2023	9522.4	476.1
			12/06/2023	9551.2	477.6
			13/06/2023	10046.0	502.3
			14/06/2023	10207.1	510.4
			15/06/2023	10391.3	519.6
		November 2023	09/11/2023	8702.8	435.1
			10/11/2023	8614.4	430.7
			11/11/2023	8962.3	448.1
			12/11/2023	8962.3	448.1
			13/11/2023	9080.2	454.0
		February 2024	14/11/2023	9792.9	489.6
			15/11/2023	9926.8	496.3
			08/02/2024	14432.9	721.6
	09/02/2024		14027.8	701.4	
	10/02/2024		14027.8	701.4	
	11/02/2024		14027.8	701.4	
	12/02/2024		14027.8	701.4	
	Diazepam	June 2023	13/02/2024	14762.5	738.1
			14/02/2024	14780.5	739.0
			09/06/2023	1222.7	122.3
			10/06/2023	1314.7	131.5
			11/06/2023	1314.7	131.5
			12/06/2023	1317.6	131.8
		November 2023	13/06/2023	1340.6	134.1
			14/06/2023	1375.1	137.5
			15/06/2023	1403.9	140.4
09/11/2023			1341.4	134.1	
10/11/2023			1326.7	132.7	
11/11/2023			1397.4	139.7	
12/11/2023			1397.4	139.7	
February 2024		13/11/2023	1376.8	137.7	
		14/11/2023	1486.0	148.6	
	15/11/2023	1536.6	153.7		
	08/02/2024	1883.7	188.4		
	09/02/2024	1947.3	194.7		
	10/02/2024	1947.3	194.7		
Lorazepam	June 2023	11/02/2024	1935.8	193.6	
		12/02/2024	1930.0	193.0	
		13/02/2024	2012.8	201.3	
		14/02/2024	2003.0	200.3	
		09/06/2023	200.2	200.2	
		10/06/2023	200.2	200.2	
		11/06/2023	200.2	200.2	
		12/06/2023	199.1	199.1	
		13/06/2023	197.9	197.9	
		14/06/2023	197.9	197.9	
		15/06/2023	200.2	200.2	

	Pharmaceuticals	Sampling campaign	Date	Pharmacy dispensation data (mg/1000 hab/day)	Pharmacy dispensation data DID (DDD/1000 hab)	
		November 2023	09/11/2023	230.5	230.5	
			10/11/2023	229.4	229.4	
			11/11/2023	231.1	231.1	
			12/11/2023	231.1	231.1	
			13/11/2023	228.8	228.8	
			14/11/2023	243.6	243.6	
			15/11/2023	243.9	243.9	
		February 2024	08/02/2024	270.8	270.8	
			09/02/2024	286.5	286.5	
			10/02/2024	285.3	285.3	
			11/02/2024	285.3	285.3	
			12/02/2024	248.3	248.3	
			13/02/2024	258.8	258.8	
			14/02/2024	259.1	259.1	
	Lormetazepam	June 2023	09/06/2023	86.3	86.3	
			10/06/2023	89.8	89.8	
			11/06/2023	89.8	89.8	
			12/06/2023	92.1	92.1	
			13/06/2023	92.1	92.1	
			14/06/2023	92.1	92.1	
		November 2023	15/06/2023	97.8	97.8	
09/11/2023			92.0	92.0		
10/11/2023			89.6	89.6		
11/11/2023			89.6	89.6		
12/11/2023			89.6	89.6		
13/11/2023			90.8	90.8		
14/11/2023			92.6	92.6		
February 2024		15/11/2023	89.0	89.0		
		08/02/2024	84.5	84.5		
		09/02/2024	84.5	84.5		
		10/02/2024	84.5	84.5		
	11/02/2024	84.5	84.5			
	12/02/2024	83.3	83.3			
	13/02/2024	85.3	85.3			
ADHD	Methylphenidate	June 2023	14/02/2024	85.4	85.4	
			09/06/2023	23.0	0.8	
			10/06/2023	23.0	0.8	
			11/06/2023	34.5	1.2	
			12/06/2023	34.5	1.2	
			13/06/2023	34.5	1.2	
		November 2023	14/06/2023	34.5	1.2	
			15/06/2023	34.5	1.2	
			09/11/2023	116.7	3.9	
			10/11/2023	116.7	3.9	
			11/11/2023	116.7	3.9	
			12/11/2023	116.7	3.9	
			13/11/2023	116.7	3.9	
		February 2024	14/11/2023	120.6	4.0	
	15/11/2023		120.7	4.0		
	08/02/2024		81.0	2.7		
	09/02/2024		23.1	0.8		
				10/02/2024	23.1	0.8

	Pharmaceuticals	Sampling campaign	Date	Pharmacy dispensation data (mg/1000 hab/day)	Pharmacy dispensation data DID (DDD/1000 hab)	
	Lisdexamphetamine		11/02/2024	23.1	0.8	
			12/02/2024	23.1	0.8	
			13/02/2024	24.4	0.8	
			14/02/2024	24.4	0.8	
		June 2023	09/06/2023	391.3	13.0	
			10/06/2023	448.8	15.0	
			11/06/2023	448.8	15.0	
			12/06/2023	448.8	15.0	
			13/06/2023	448.8	15.0	
			14/06/2023	448.8	15.0	
			15/06/2023	483.3	16.1	
			November 2023	09/11/2023	589.6	19.7
				10/11/2023	589.6	19.7
				11/11/2023	589.6	19.7
				12/11/2023	589.6	19.7
				13/11/2023	589.6	19.7
				14/11/2023	609.0	20.3
			February 2024	15/11/2023	609.8	20.3
				08/02/2024	1446.8	48.2
		09/02/2024		1446.8	48.2	
		10/02/2024		1446.8	48.2	
11/02/2024	1446.8	48.2				
12/02/2024	1446.8	48.2				
Opioid	Methadone	June 2023	13/02/2024	1522.5	50.8	
			14/02/2024	1524.4	50.8	
			09/06/2023	1174.9	13.0	
			10/06/2023	1174.9	15.0	
			11/06/2023	1174.9	15.0	
			12/06/2023	1174.9	15.0	
		November 2023	13/06/2023	1174.9	15.0	
			14/06/2023	1174.9	15.0	
			15/06/2023	1174.9	16.1	
			09/11/2023	1053.1	19.7	
			10/11/2023	1053.1	19.7	
			11/11/2023	1053.1	19.7	
		February 2024	12/11/2023	1053.1	19.7	
			13/11/2023	1053.1	19.7	
			14/11/2023	1087.7	20.3	
	15/11/2023		1089.0	20.3		
	08/02/2024		907.4	48.2		
	09/02/2024		907.4	48.2		
	Morphine	June 2023	10/02/2024	907.4	48.2	
			11/02/2024	907.4	48.2	
			12/02/2024	907.4	48.2	
13/02/2024			954.9	50.8		
14/02/2024			956.1	50.8		
09/06/2023			0.0	-		
10/06/2023	0.0	-				
11/06/2023	0.0	-				
12/06/2023	0.0	-				
13/06/2023	0.0	-				
14/06/2023	0.0	-				

	Pharmaceuticals	Sampling campaign	Date	Pharmacy dispensation data (mg/1000 hab/day)	Pharmacy dispensation data DID (DDD/1000 hab)
		November 2023	15/06/2023	0.0	-
			09/11/2023	53.1	0.5
			10/11/2023	53.1	0.5
			11/11/2023	53.1	0.5
			12/11/2023	53.1	0.5
			13/11/2023	53.1	0.5
			14/11/2023	54.8	0.5
		15/11/2023	54.9	0.5	
		February 2024	08/02/2024	52.1	0.5
			09/02/2024	52.1	0.5
			10/02/2024	52.1	0.5
			11/02/2024	52.1	0.5
			12/02/2024	52.1	0.5
			13/02/2024	54.8	0.5
	14/02/2024		54.9	0.5	
	Codeine	June 2023	09/06/2023	0.0	-
			10/06/2023	0.0	-
			11/06/2023	0.0	-
			12/06/2023	0.0	-
			13/06/2023	0.0	-
		November 2023	14/06/2023	0.0	-
			15/06/2023	0.0	-
			09/11/2023	0.0	-
			10/11/2023	0.0	-
11/11/2023			0.0	-	
February 2024	12/11/2023	0.0	-		
	13/11/2023	0.0	-		
	14/11/2023	0.0	-		
	15/11/2023	0.0	-		
	08/02/2024	0.0	-		
	09/02/2024	0.0	-		
	10/02/2024	0.0	-		
Antidepressant	June 2023	11/02/2024	0.0	-	
		12/02/2024	0.0	-	
		13/02/2024	0.0	-	
		14/02/2024	0.0	-	
		09/06/2023	0.0	-	
	November 2023	10/06/2023	0.0	-	
		11/06/2023	0.0	-	
		12/06/2023	0.0	-	
		13/06/2023	0.0	-	
		14/06/2023	0.0	-	
Esketamine	February 2024	15/06/2023	0.0	-	
		09/11/2023	0.0	-	
		10/11/2023	0.0	-	
		11/11/2023	0.0	-	
		12/11/2023	0.0	-	
		November 2023	13/11/2023	0.0	-
			14/11/2023	0.0	-
		February 2024	15/11/2023	102.4	12.8
			08/02/2024	0.0	-
			09/02/2024	0.0	-

	Pharmaceuticals	Sampling campaign	Date	Pharmacy dispensation data (mg/1000 hab/day)	Pharmacy dispensation data DID (DDD/1000 hab)
			10/02/2024	0.0	-
			11/02/2024	0.0	-
			12/02/2024	0.0	-
			13/02/2024	0.0	-
			14/02/2024	0.0	-

ADHD: Attention deficit hyperactivity disorder

Table S5. DID (mg/day/1000 hab) values from national data (Spain) (<https://www.aemps.gob.es/medicamentos-de-uso-humano/observatorio-de-uso-de-medicamentos/informes/?lang=ca>) and average DID in prison / national DID.

Pharmaceuticals	DID (mg/day/1000 hab) Spain	DID prison / DID Spain
Pregabalin	6.4	3.6
Gabapentin	2.5	2.0
Alprazolam	15.5	12.2
Bromazepam	2.1	0.6
Clonazepam	1.4	13.3
Clorazepate	3.2	173.2
Diazepam	10.6	14.7
Lorazepam	22.5	10.4
Lormetazepam	24.4	3.6
Methylphenidate	0.6	3.3
Lisdexamphetamine	-	-
Methadone	-	-
Morphine	0.3	1.2
Codeine	-	-
Esketamine	-	-

Table S6. Concentrations of each drug or biomarker measured in all the analyzed samples (ng/L)

	Drug/biomarker	Sampling campaign	Date	Concentration (ng/L)
Gabapentinoids	Pregabalin	June 2023	09/06/2023	34,597.1
			10/06/2023	42,434.2
			11/06/2023	35,411.1
			12/06/2023	29,082.3
			13/06/2023	42,342.6
			14/06/2023	47,628.8
		15/06/2023	47,741.6	
		November 2023	09/11/2023	67,027.7
			10/11/2023	82,557.1
			11/11/2023	95,346.1
			12/11/2023	107,221.5
			13/11/2023	96,259.5
			14/11/2023	131,885.8
		February 2024	15/11/2023	97,173.0
			08/02/2024	156,794.9
			09/02/2024	189,102.6
			10/02/2024	171,153.8
			11/02/2024	208,846.2
	12/02/2024		226,794.9	
	Gabapentin	June 2023	13/02/2024	210,641.0
			14/02/2024	212,435.9
			09/06/2023	66,248.9
			10/06/2023	72,176.8
			11/06/2023	65,487.8
			12/06/2023	64,347.2
		November 2023	13/06/2023	50,741.0
			14/06/2023	74,455.8
			15/06/2023	70,199.1
			09/11/2023	36,982.8
			10/11/2023	49,389.0
11/11/2023			41,635.1	
February 2024	12/11/2023	53,265.9		
	13/11/2023	39,309.0		
	14/11/2023	56,367.4		
	15/11/2023	54,041.3		
	08/02/2024	65,257.4		
	09/02/2024	70,595.1		
α-Hydroxyalprazolam	June 2023	10/02/2024	80,380.9	
		11/02/2024	90,166.7	
		12/02/2024	84,829.0	
		13/02/2024	88,387.5	
		14/02/2024	89,277.1	
		09/06/2023	76.1	
		10/06/2023	143.4	
		11/06/2023	138.6	
		12/06/2023	104.2	
	November 2023	13/06/2023	131.4	
		14/06/2023	107.1	
		15/06/2023	119.0	
		09/11/2023	103.9	
		10/11/2023	91.9	
		11/11/2023	113.5	

	Drrug/biomarker	Sampling campaign	Date	Concentration (ng/L)
			12/11/2023	91.0
			13/11/2023	101.5
			14/11/2023	96.7
			15/11/2023	125.0
		February 2024	08/02/2024	41.2
			09/02/2024	97.5
			10/02/2024	83.0
			11/02/2024	119.3
			12/02/2024	90.7
			13/02/2024	113.5
			14/02/2024	94.1
			09/06/2023	34.0
			10/06/2023	46.2
			11/06/2023	37.8
Benzodiazepines	Alprazolam	June 2023	12/06/2023	35.0
			13/06/2023	43.7
			14/06/2023	44.2
			15/06/2023	37.3
			09/11/2023	47.4
			10/11/2023	57.3
		November 2023	11/11/2023	48.0
			12/11/2023	39.7
			13/11/2023	46.6
			14/11/2023	45.7
			15/11/2023	47.6
			08/02/2024	35.9
		February 2024	09/02/2024	49.0
			10/02/2024	40.6
11/02/2024	41.2			
12/02/2024	34.8			
13/02/2024	38.3			
14/02/2024	42.1			
09/06/2023	924.0			
10/06/2023	1076.7			
Benzodiazepines	Nordiazepam	June 2023	11/06/2023	952.0
			12/06/2023	824.9
			13/06/2023	877.5
			14/06/2023	799.1
			15/06/2023	1000.8
			09/11/2023	839.2
		November 2023	10/11/2023	845.0
			11/11/2023	789.7
			12/11/2023	883.2
			13/11/2023	851.8
			14/11/2023	907.7
			15/11/2023	790.7
		February 2024	08/02/2024	1473.6
			09/02/2024	884.1
10/02/2024	880.1			
11/02/2024	1083.4			
12/02/2024	929.5			
13/02/2024	823.3			
14/02/2024	978.6			

Drrug/biomarker	Sampling campaign	Date	Concentration (ng/L)
Diazepam	June 2023	09/06/2023	16.9
		10/06/2023	15.3
		11/06/2023	17.0
		12/06/2023	185.5
		13/06/2023	42.5
		14/06/2023	16.0
	November 2023	15/06/2023	23.0
		09/11/2023	15.3
		10/11/2023	28.8
		11/11/2023	16.4
		12/11/2023	14.3
		13/11/2023	15.3
	February 2024	14/11/2023	13.8
		15/11/2023	12.9
		08/02/2024	41.5
		09/02/2024	17.4
		10/02/2024	33.2
		11/02/2024	32.6
Oxazepam	June 2023	12/02/2024	30.6
		13/02/2024	13.4
		14/02/2024	14.7
		09/06/2023	6973.3
		10/06/2023	8712.6
		11/06/2023	8698.6
	November 2023	12/06/2023	7475.2
		13/06/2023	8297.3
		14/06/2023	7027.7
		15/06/2023	8636.9
		09/11/2023	5979.1
		10/11/2023	5052.1
	February 2024	11/11/2023	3886.2
		12/11/2023	5100.7
		13/11/2023	5189.4
		14/11/2023	6191.0
		15/11/2023	4015.1
		08/02/2024	4669.7
Temazepam	June 2023	09/02/2024	5533.2
		10/02/2024	3930.5
		11/02/2024	5988.8
		12/02/2024	5832.5
		13/02/2024	5081.7
		14/02/2024	6304.6
November 2023	09/06/2023	564.9	
	10/06/2023	805.8	
	11/06/2023	700.4	
	12/06/2023	595.0	
	13/06/2023	600.7	
	14/06/2023	612.9	
	15/06/2023	728.7	
	09/11/2023	562.8	
	10/11/2023	536.0	
11/11/2023	536.0		
12/11/2023	601.2		

Drrug/biomarker	Sampling campaign	Date	Concentration (ng/L)	
		13/11/2023	529.1	
		14/11/2023	598.8	
		15/11/2023	529.1	
		February 2024	08/02/2024	465.9
			09/02/2024	489.6
			10/02/2024	469.9
			11/02/2024	587.2
			12/02/2024	558.2
			13/02/2024	567.4
	14/02/2024		662.3	
	Lorazepam	June 2023	09/06/2023	493.5
			10/06/2023	574.3
			11/06/2023	315.4
			12/06/2023	353.9
			13/06/2023	418.8
			14/06/2023	321.4
		November 2023	15/06/2023	380.9
			09/11/2023	824.9
			10/11/2023	844.2
			11/11/2023	713.4
			12/11/2023	1036.0
			13/11/2023	917.0
		February 2024	14/11/2023	979.5
			15/11/2023	1166.8
			08/02/2024	716.0
	09/02/2024		582.2	
	10/02/2024		714.0	
	11/02/2024		733.7	
	Lormetazepam	June 2023	12/02/2024	908.8
			13/02/2024	863.5
14/02/2024			841.9	
09/06/2023			186.8	
10/06/2023			205.5	
11/06/2023			130.0	
November 2023		12/06/2023	197.6	
		13/06/2023	218.3	
		14/06/2023	178.8	
		15/06/2023	215.0	
		09/11/2023	127.8	
		10/11/2023	223.7	
February 2024		11/11/2023	135.5	
		12/11/2023	168.8	
		13/11/2023	152.3	
	14/11/2023	162.7		
	15/11/2023	135.5		
	08/02/2024	149.1		
		09/02/2024	119.5	
		10/02/2024	154.2	
		11/02/2024	166.3	
		12/02/2024	143.3	
		13/02/2024	136.7	
		14/02/2024	174.9	
		09/06/2023	131.7	

	Drrug/biomarker	Sampling campaign	Date	Concentration (ng/L)
ADHD	Ritalinic acid	June 2023	10/06/2023	147.8
			11/06/2023	100.8
			12/06/2023	105.5
			13/06/2023	147.7
			14/06/2023	100.0
		15/06/2023	93.9	
		November 2023	09/11/2023	161.7
			10/11/2023	160.7
			11/11/2023	206.6
			12/11/2023	225.8
			13/11/2023	332.3
		February 2024	14/11/2023	200.0
			15/11/2023	292.4
			08/02/2024	20.7
			09/02/2024	28.8
	10/02/2024		36.7	
	11/02/2024		80.3	
	12/02/2024		38.2	
	Amphetamine	June 2023	13/02/2024	22.1
			14/02/2024	55.0
			09/06/2023	391.3
			10/06/2023	448.8
			11/06/2023	448.8
			12/06/2023	448.8
		November 2023	13/06/2023	448.8
			14/06/2023	448.8
			15/06/2023	483.3
09/11/2023			589.6	
10/11/2023			589.6	
February 2024		11/11/2023	589.6	
	12/11/2023	589.6		
	13/11/2023	589.6		
	14/11/2023	609.0		
	15/11/2023	609.8		
	08/02/2024	1446.8		
	09/02/2024	1446.8		
Opioid	EDDP	June 2023	10/02/2024	1446.8
			11/02/2024	1446.8
			12/02/2024	1446.8
			13/02/2024	1522.5
			14/02/2024	1524.4
			09/06/2023	1407.9
	November 2023	10/06/2023	1220.0	
		11/06/2023	1595.6	
		12/06/2023	1142.9	
		13/06/2023	1161.5	
		14/06/2023	1360.7	
		15/06/2023	1256.9	
			09/11/2023	565.1
			10/11/2023	602.0
			11/11/2023	1120.5
			12/11/2023	633.9
			13/11/2023	559.2

	Ddrug/biomarker	Sampling campaign	Date	Concentration (ng/L)
			14/11/2023	597.7
			15/11/2023	1166.9
		February 2024	08/02/2024	652.8
			09/02/2024	1141.0
			10/02/2024	1158.0
			11/02/2024	1236.5
			12/02/2024	859.5
			13/02/2024	993.4
			14/02/2024	1127.8
			09/06/2023	710.2
		June 2023	10/06/2023	107.1
			11/06/2023	143.4
			12/06/2023	326.8
			13/06/2023	323.5
14/06/2023	232.8			
15/06/2023	1102.6			
November 2023	09/11/2023		861.8	
	10/11/2023		865.7	
	11/11/2023		636.5	
	12/11/2023		402.8	
	13/11/2023	1770.4		
	14/11/2023	1449.9		
	15/11/2023	776.2		
February 2024	08/02/2024	5162.9		
	09/02/2024	5100.0		
	10/02/2024	2560.7		
	11/02/2024	2632.5		
	12/02/2024	3135.8		
	13/02/2024	996.0		
	14/02/2024	1600.4		
Illicit drugs	Cocaine	June 2023	09/06/2023	4516.4
			10/06/2023	2743.3
			11/06/2023	641.1
			12/06/2023	1523.5
			13/06/2023	3112.2
			14/06/2023	2786.8
			15/06/2023	6000.8
		November 2023	09/11/2023	5771.0
			10/11/2023	4753.5
			11/11/2023	3823.1
			12/11/2023	2004.2
			13/11/2023	3660.3
			14/11/2023	7893.5
			15/11/2023	4189.3
		February 2024	08/02/2024	22354.1
			09/02/2024	22306.7
			10/02/2024	13817.1
			11/02/2024	8436.5
			12/02/2024	6541.3
			13/02/2024	2877.9
			14/02/2024	4588.4
MDMA	June 2023	09/06/2023	5.7	
		10/06/2023	4.4	
	Benzoylecgonine	June 2023	09/06/2023	4516.4
			10/06/2023	2743.3
			11/06/2023	641.1
			12/06/2023	1523.5
			13/06/2023	3112.2
			14/06/2023	2786.8
			15/06/2023	6000.8
		November 2023	09/11/2023	5771.0
			10/11/2023	4753.5
			11/11/2023	3823.1
			12/11/2023	2004.2
			13/11/2023	3660.3
			14/11/2023	7893.5
			15/11/2023	4189.3
February 2024	08/02/2024	22354.1		
	09/02/2024	22306.7		
	10/02/2024	13817.1		
	11/02/2024	8436.5		
	12/02/2024	6541.3		
	13/02/2024	2877.9		
	14/02/2024	4588.4		

Drrug/biomarker	Sampling campaign	Date	Concentration (ng/L)	
		11/06/2023	2.2	
		12/06/2023	3.8	
		13/06/2023	47.4	
		14/06/2023	30.6	
		15/06/2023	8.9	
	November 2023	09/11/2023	34.9	
		10/11/2023	29.2	
		11/11/2023	31.2	
		12/11/2023	11.3	
		13/11/2023	110.0	
	February 2024	14/11/2023	27.9	
		15/11/2023	24.3	
		08/02/2024	113.4	
		09/02/2024	58.8	
		10/02/2024	39.9	
	Metamphetamine	June 2023	11/02/2024	431.8
			12/02/2024	947.8
			13/02/2024	845.4
			14/02/2024	800.7
			09/06/2023	3.1
		November 2023	10/06/2023	2.4
11/06/2023			1.4	
12/06/2023			2.5	
13/06/2023			1.8	
14/06/2023			1.3	
February 2024		15/06/2023	1.1	
		09/11/2023	ND	
		10/11/2023	ND	
		11/11/2023	ND	
		12/11/2023	ND	
Ketamine	June 2023	13/11/2023	ND	
		14/11/2023	ND	
		15/11/2023	ND	
		08/02/2024	ND	
		09/02/2024	ND	
	November 2023	10/02/2024	ND	
		11/02/2024	ND	
		12/02/2024	ND	
		13/02/2024	ND	
	June 2023	14/02/2024	ND	
		09/06/2023	12.2	
		10/06/2023	58.6	
		11/06/2023	258.9	
		12/06/2023	116.3	
	November 2023	13/06/2023	85.1	
		14/06/2023	40.8	
		15/06/2023	55.4	
		09/11/2023	66.8	
		10/11/2023	65.0	
		11/11/2023	42.2	
		12/11/2023	40.7	
		13/11/2023	337.3	
		14/11/2023	196.2	

	Drrug/biomarker	Sampling campaign	Date	Concentration (ng/L)	
		February 2024	15/11/2023	108.7	
			08/02/2024	896.5	
			09/02/2024	1494.1	
			10/02/2024	1214.8	
			11/02/2024	558.9	
			12/02/2024	774.4	
			13/02/2024	525.0	
			14/02/2024	474.7	
	Δ9-THC-COOH	June 2023		09/06/2023	571.7
				10/06/2023	1142.4
				11/06/2023	606.2
				12/06/2023	1315.0
				13/06/2023	1128.6
				14/06/2023	390.9
				15/06/2023	735.9
				09/11/2023	1142.8
		November 2023		10/11/2023	1600.9
				11/11/2023	599.0
				12/11/2023	1222.7
				13/11/2023	1230.3
				14/11/2023	1105.7
				15/11/2023	528.1
				08/02/2024	1457.5
		February 2024		09/02/2024	980.2
				10/02/2024	1593.7
				11/02/2024	1273.5
				12/02/2024	1526.4
				13/02/2024	1466.1
	14/02/2024			1646.1	
	Morphine	June 2023		09/06/2023	1702.0
				10/06/2023	1032.5
				11/06/2023	729.9
				12/06/2023	523.7
				13/06/2023	321.2
				14/06/2023	81.1
				15/06/2023	175.9
				09/11/2023	131.8
		November 2023		10/11/2023	257.6
				11/11/2023	56.0
				12/11/2023	180.8
				13/11/2023	826.4
				14/11/2023	501.5
15/11/2023				1139.4	
08/02/2024				252.8	
February 2024			09/02/2024	173.5	
			10/02/2024	716.4	
			11/02/2024	586.7	
			12/02/2024	787.8	
			13/02/2024	435.6	
	14/02/2024		510.2		
Alcohol & Nicotine	Ethyl sulphate	June 2023	09/06/2023	2400.8	
			10/06/2023	1806.9	
			11/06/2023	1707.9	

Ddrug/biomarker	Sampling campaign	Date	Concentration (ng/L)	
		12/06/2023	2499.8	
		13/06/2023	2598.8	
		14/06/2023	2994.7	
		15/06/2023	2598.8	
	November 2023	09/11/2023	1905.9	
		10/11/2023	1509.9	
		11/11/2023	2697.8	
		12/11/2023	3588.6	
		13/11/2023	3291.7	
		14/11/2023	2697.8	
	February 2024	15/11/2023	2895.7	
		08/02/2024	2616.2	
		09/02/2024	2728.8	
		10/02/2024	4192.3	
		11/02/2024	3179.1	
		12/02/2024	1490.5	
	Cotinine	June 2023	13/02/2024	3066.5
			14/02/2024	1490.5
			09/06/2023	12617.6
			10/06/2023	18203.8
11/06/2023			14635.6	
12/06/2023			14114.4	
November 2023		13/06/2023	16306.1	
		14/06/2023	13887.2	
		15/06/2023	18243.9	
		09/11/2023	13498.2	
		10/11/2023	15728.3	
		11/11/2023	16169.0	
February 2024		12/11/2023	17531.1	
		13/11/2023	17731.4	
		14/11/2023	20388.9	
		15/11/2023	15594.8	
		08/02/2024	20892.4	
		09/02/2024	20865.5	
OH-cotinine		June 2023	10/02/2024	19201.5
			11/02/2024	20583.7
	12/02/2024		16745.7	
	13/02/2024		21670.7	
	14/02/2024		23214.0	
	09/06/2023		18884.2	
	10/06/2023		28303.3	
	November 2023	11/06/2023	25004.6	
		12/06/2023	20056.5	
		13/06/2023	23750.5	
		14/06/2023	21310.5	
		15/06/2023	26653.9	
		09/11/2023	19802.8	
		10/11/2023	24025.5	
	11/11/2023	27717.0		
	12/11/2023	29406.1		
	13/11/2023	24216.3		
	14/11/2023	29269.9		
	15/11/2023	21614.5		

	Drrug/biomarker	Sampling campaign	Date	Concentration (ng/L)
		February 2024	08/02/2024	32908.5
			09/02/2024	35882.2
			10/02/2024	37612.4
			11/02/2024	43978.8
			12/02/2024	31773.1
			13/02/2024	30624.1
			14/02/2024	34598.1

EDDP: 2-ethyliden-1,5-dimethyl-3,3- diphenylpyrrolidine; Δ^9 -THC-COOH: 11-Nor-9-carboxy- Δ^9 -tetrahydrocannabinol; MDMA: 3,4-methylenedioxyamphetamine; ND: not detected

Table S7. Calculated enantiomeric fractions in all the samples where amphetamine, methamphetamine and MDMA were detected

Sampling campaign	Date	Enantiomeric fraction (R)		
		Amphetamine	MDMA	Metamphetamine
June 2023	09/06/2023	0.19	0.53	0.0
	10/06/2023	0.14	0.55	0.0
	11/06/2023	0.15	0.56	0.0
	12/06/2023	0.22	0.55	0.0
	13/06/2023	0.22	0.51	0.0
	14/06/2023	0.30	0.54	0.0
	15/06/2023	0.39	0.55	0.0
November 2023	09/11/2023	0.28	0.54	-
	10/11/2023	0.25	0.56	-
	11/11/2023	0.30	0.65	-
	12/11/2023	0.28	0.55	-
	13/11/2023	0.22	0.51	-
	14/11/2023	0.23	0.48	-
	15/11/2023	0.29	0.56	-
February 2024	08/02/2024*	-	-	-
	09/02/2024	0.42	0.61	-
	10/02/2024	0.43	0.60	-
	11/02/2024	0.40	0.57	-
	12/02/2024	0.31	0.63	-
	13/02/2024	0.29	0.66	-
	14/02/2024	0.30	0.68	-

* This day was not considered because of an obstruction in the auto sampler.

MDMA: 3,4-methylenedioxymethamphetamine

Table S8. Population normalized daily loads (PNDLs) mg/day/1000 inhabitants

	Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)
Gabapentinoids	Pregabalin	June 2023	09/06/2023	9674.4
			10/06/2023	11670.6
			11/06/2023	9779.8
			12/06/2023	7529.9
			13/06/2023	14227.9
			14/06/2023	13044.5
		15/06/2023	14668.6	
		November 2023	09/11/2023	21025.2
			10/11/2023	24241.4
			11/11/2023	23836.5
			12/11/2023	27690.5
			13/11/2023	24178.4
			14/11/2023	36947.3
		15/11/2023	25359.8	
		February 2024	08/02/2024	
	09/02/2024		45.4	
	10/02/2024		49.7	
	11/02/2024		51.4	
	12/02/2024		56.7	
	13/02/2024	55.3		
	14/02/2024	59.4		
Gabapentin	June 2023	09/06/2023	18525.3	
		10/06/2023	19850.7	
		11/06/2023	18086.4	
		12/06/2023	16660.7	
		13/06/2023	17049.9	
		14/06/2023	20391.8	
	15/06/2023	21568.6		
	November 2023	09/11/2023	11600.7	
		10/11/2023	14502.2	
		11/11/2023	10408.8	
		12/11/2023	13756.2	
		13/11/2023	9873.6	
		14/11/2023	15791.1	
	15/11/2023	14103.5		
	February 2024	08/02/2024		
09/02/2024		17.0		
10/02/2024		23.4		
11/02/2024		22.2		
12/02/2024		21.2		
13/02/2024	23.2			
14/02/2024	25.0			
Benzodiazepines	α-Hydroxyalprazolam	June 2023	09/06/2023	21.3
			10/06/2023	39.4
			11/06/2023	38.3
			12/06/2023	27.0
			13/06/2023	44.2
			14/06/2023	29.3
			15/06/2023	36.6
	09/11/2023	32.6		

Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)
	November 2023	10/11/2023	27.0
		11/11/2023	28.4
		12/11/2023	23.5
		13/11/2023	25.5
		14/11/2023	27.1
		15/11/2023	32.6
	February 2024	08/02/2024	
		09/02/2024	23.4
		10/02/2024	24.1
		11/02/2024	29.4
		12/02/2024	22.7
		13/02/2024	29.8
		14/02/2024	26.3
		Alprazolam	June 2023
10/06/2023	12.7		
11/06/2023	10.4		
12/06/2023	9.1		
13/06/2023	14.7		
14/06/2023	12.1		
November 2023	15/06/2023		11.5
	09/11/2023		14.9
	10/11/2023		16.8
	11/11/2023		12.0
	12/11/2023		10.3
	13/11/2023		11.7
February 2024	14/11/2023		12.8
	15/11/2023		12.4
	08/02/2024		
	09/02/2024		11.8
	10/02/2024		11.8
	11/02/2024		10.1
Nordiazepam	June 2023	12/02/2024	8.7
		13/02/2024	10.1
		14/02/2024	11.8
		09/06/2023	258.4
		10/06/2023	296.1
		11/06/2023	262.9
	November 2023	12/06/2023	213.6
		13/06/2023	294.9
		14/06/2023	218.9
		15/06/2023	307.5
		09/11/2023	263.2
		10/11/2023	248.1
	February 2024	11/11/2023	197.4
		12/11/2023	228.1
		13/11/2023	214.0
		14/11/2023	254.3
		15/11/2023	206.4
		08/02/2024	
	February 2024	09/02/2024	212.3
		10/02/2024	255.8
		11/02/2024	266.5
		12/02/2024	232.5

Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)
Diazepam		13/02/2024	216.0
		14/02/2024	273.7
	June 2023	09/06/2023	4.7
		10/06/2023	4.2
		11/06/2023	4.7
		12/06/2023	48.0
		13/06/2023	14.3
		14/06/2023	4.4
		15/06/2023	7.1
		November 2023	09/11/2023
	10/11/2023		8.5
	11/11/2023		4.1
	12/11/2023		3.7
	13/11/2023		3.8
	14/11/2023		3.9
	February 2024	15/11/2023	3.4
		08/02/2024	
		09/02/2024	4.2
		10/02/2024	9.7
		11/02/2024	8.0
		12/02/2024	7.6
13/02/2024		3.5	
Oxazepam	June 2023	14/02/2024	4.1
		09/06/2023	1950.0
		10/06/2023	2396.2
		11/06/2023	2402.4
		12/06/2023	1935.5
		13/06/2023	2788.0
	November 2023	14/06/2023	1924.7
		15/06/2023	2653.7
		09/11/2023	1875.5
		10/11/2023	1483.5
		11/11/2023	971.6
		12/11/2023	1317.3
	February 2024	13/11/2023	1303.5
		14/11/2023	1734.4
		15/11/2023	1047.8
		08/02/2024	
		09/02/2024	1329.0
		10/02/2024	1142.3
Temazepam	June 2023	11/02/2024	1473.5
		12/02/2024	1459.0
		13/02/2024	1332.9
		14/02/2024	1763.5
		09/06/2023	158.0
		10/06/2023	221.6
	November 2023	11/06/2023	193.4
		12/06/2023	154.1
		13/06/2023	201.8
		14/06/2023	167.9
	15/06/2023	223.9	
	09/11/2023	176.5	
	10/11/2023	157.4	

Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)	
		11/11/2023	134.0	
		12/11/2023	155.3	
		13/11/2023	132.9	
		14/11/2023	167.8	
		15/11/2023	138.1	
	February 2024	08/02/2024		
		09/02/2024	117.6	
		10/02/2024	136.6	
		11/02/2024	144.5	
		12/02/2024	139.6	
		13/02/2024	148.8	
		14/02/2024	185.3	
	Lorazepam	June 2023	09/06/2023	138.0
			10/06/2023	157.9
			11/06/2023	87.1
			12/06/2023	91.6
			13/06/2023	140.7
			14/06/2023	88.0
		November 2023	15/06/2023	117.0
			09/11/2023	258.7
			10/11/2023	247.9
			11/11/2023	178.3
			12/11/2023	267.5
		February 2024	13/11/2023	230.3
			14/11/2023	274.4
15/11/2023			304.5	
08/02/2024				
09/02/2024	139.8			
10/02/2024	207.5			
Lormetazepam	June 2023	11/02/2024	180.5	
		12/02/2024	227.3	
		13/02/2024	226.5	
		14/02/2024	235.5	
		09/06/2023	52.2	
		10/06/2023	56.5	
	November 2023	11/06/2023	35.9	
		12/06/2023	51.2	
		13/06/2023	73.3	
		14/06/2023	49.0	
		15/06/2023	66.0	
	February 2024	09/11/2023	40.1	
		10/11/2023	65.7	
		11/11/2023	33.9	
		12/11/2023	43.6	
13/11/2023		38.3		
14/11/2023		45.6		
	15/11/2023	35.4		
	08/02/2024			
	09/02/2024	28.7		
	10/02/2024	44.8		
	11/02/2024	40.9		
	12/02/2024	35.9		
	13/02/2024	35.9		

	Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)
ADHD	Ritalinic acid	June 2023	14/02/2024	48.9
			09/06/2023	36.8
			10/06/2023	40.7
			11/06/2023	27.8
			12/06/2023	27.3
			13/06/2023	49.6
			14/06/2023	27.4
			15/06/2023	28.8
		November 2023	09/11/2023	50.7
			10/11/2023	47.2
			11/11/2023	51.7
			12/11/2023	58.3
			13/11/2023	83.5
			14/11/2023	56.0
			15/11/2023	76.3
		February 2024	08/02/2024	
			09/02/2024	6.9
			10/02/2024	10.7
	11/02/2024		19.7	
	12/02/2024		9.6	
	13/02/2024		5.8	
	Amphetamine	June 2023	09/06/2023	162.9
			10/06/2023	175.3
			11/06/2023	136.8
			12/06/2023	133.9
			13/06/2023	186.7
			14/06/2023	102.4
		November 2023	15/06/2023	316.6
			09/11/2023	202.7
			10/11/2023	187.0
11/11/2023			247.7	
12/11/2023			290.4	
February 2024		13/11/2023	153.1	
	14/11/2023	201.1		
	15/11/2023	225.3		
	08/02/2024			
	09/02/2024	338.6		
	10/02/2024	371.4		
Opioid	EDDP	June 2023	11/02/2024	343.4
			12/02/2024	190.4
			13/02/2024	284.4
			14/02/2024	278.1
			09/06/2023	393.7
			10/06/2023	335.5
			11/06/2023	440.7
			12/06/2023	295.9
		November 2023	13/06/2023	390.3
			14/06/2023	372.7
			15/06/2023	386.2
			09/11/2023	177.3
			10/11/2023	176.8
			11/11/2023	280.1

	Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)					
			12/11/2023	163.7					
			13/11/2023	140.4					
			14/11/2023	167.4					
			15/11/2023	304.5					
		February 2024			08/02/2024				
					09/02/2024	274.0			
					10/02/2024	336.5			
					11/02/2024	304.2			
					12/02/2024	215.0			
					13/02/2024	260.6			
					14/02/2024	315.5			
					Illicit drugs	Cocaine	June 2023	09/06/2023	198.6
								10/06/2023	29.4
								11/06/2023	39.6
12/06/2023	84.6								
13/06/2023	108.7								
14/06/2023	63.8								
November 2023			15/06/2023	338.8					
			09/11/2023	270.3					
			10/11/2023	254.2					
			11/11/2023	159.1					
			12/11/2023	104.0					
			13/11/2023	444.7					
February 2024			14/11/2023	406.2					
			15/11/2023	202.6					
			08/02/2024						
			09/02/2024	1224.9					
			10/02/2024	744.2					
			11/02/2024	647.7					
Benzoyllecgonine		June 2023	12/02/2024	784.4					
			13/02/2024	261.2					
			14/02/2024	447.7					
			09/06/2023	1262.9					
			10/06/2023	754.5					
			11/06/2023	177.1					
		November 2023			12/06/2023	394.5			
					13/06/2023	1045.8			
					14/06/2023	763.2			
					15/06/2023	1843.7			
					09/11/2023	1810.2			
					10/11/2023	1395.8			
		February 2024			11/11/2023	955.8			
					12/11/2023	517.6			
13/11/2023	919.4								
14/11/2023	2211.3								
15/11/2023	1093.3								
08/02/2024									
February 2024			09/02/2024	5357.6					
			10/02/2024	4015.6					
			11/02/2024	2075.7					
			12/02/2024	1636.3					
			13/02/2024	754.9					
			14/02/2024	1283.5					

Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)
MDMA	June 2023	09/06/2023	1.6
		10/06/2023	1.2
		11/06/2023	0.6
		12/06/2023	1.0
		13/06/2023	15.9
		14/06/2023	8.4
	November 2023	15/06/2023	2.7
		09/11/2023	10.9
		10/11/2023	8.6
		11/11/2023	7.8
		12/11/2023	2.9
		13/11/2023	27.6
	February 2024	14/11/2023	7.8
		15/11/2023	6.3
		08/02/2024	
		09/02/2024	14.1
		10/02/2024	11.6
		11/02/2024	106.2
Metamphetamine	June 2023	12/02/2024	237.1
		13/02/2024	221.8
		14/02/2024	224.0
		09/06/2023	0.9
		10/06/2023	0.7
		11/06/2023	0.4
	November 2023	12/06/2023	0.7
		13/06/2023	0.6
		14/06/2023	0.4
		15/06/2023	0.3
		09/11/2023	ND
		10/11/2023	ND
	February 2024	11/11/2023	ND
		12/11/2023	ND
		13/11/2023	ND
		14/11/2023	ND
		15/11/2023	ND
		08/02/2024	
Ketamine	June 2023	09/02/2024	ND
		10/02/2024	ND
		11/02/2024	ND
		12/02/2024	ND
		13/02/2024	ND
		14/02/2024	ND
	November 2023	09/06/2023	3.4
		10/06/2023	16.1
		11/06/2023	71.5
		12/06/2023	30.1
		13/06/2023	28.6
		14/06/2023	11.2
	15/06/2023	17.0	
	09/11/2023	21.0	
	10/11/2023	19.1	
	11/11/2023	10.5	
		12/11/2023	10.5

Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)	
		13/11/2023	84.7	
		14/11/2023	55.0	
		15/11/2023	28.4	
		February 2024	08/02/2024	
			09/02/2024	358.9
			10/02/2024	353.0
			11/02/2024	137.5
			12/02/2024	193.7
			13/02/2024	137.7
			14/02/2024	132.8
	Δ9-THC-COOH	June 2023	09/06/2023	159.9
			10/06/2023	314.2
			11/06/2023	167.4
			12/06/2023	340.5
			13/06/2023	379.2
			14/06/2023	107.1
		November 2023	15/06/2023	226.1
			09/11/2023	358.5
			10/11/2023	470.1
			11/11/2023	149.7
			12/11/2023	315.8
			13/11/2023	309.0
			14/11/2023	309.8
		February 2024	15/11/2023	137.8
			08/02/2024	
	09/02/2024		235.4	
	10/02/2024		463.2	
	11/02/2024		313.3	
	12/02/2024		381.8	
	13/02/2024		384.6	
Morphine Total	June 2023	14/02/2024	460.4	
		09/06/2023	475.9	
		10/06/2023	284.0	
		11/06/2023	201.6	
		12/06/2023	135.6	
		13/06/2023	107.9	
	November 2023	14/06/2023	22.2	
		15/06/2023	54.0	
		09/11/2023	41.3	
		10/11/2023	75.6	
		11/11/2023	14.0	
		12/11/2023	46.7	
		13/11/2023	207.6	
	February 2024	14/11/2023	140.5	
		15/11/2023	297.3	
		08/02/2024		
		09/02/2024	41.7	
		10/02/2024	208.2	
11/02/2024		144.4		
		197.1		
		114.3		
		142.7		
		0.0		

	Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)		
	Morphine therapeutic	June 2023	10/06/2023	0.0		
			11/06/2023	0.0		
			12/06/2023	0.0		
			13/06/2023	0.0		
			14/06/2023	0.0		
			15/06/2023	0.0		
		November 2023	09/11/2023	45.1		
			10/11/2023	45.1		
			11/11/2023	45.1		
			12/11/2023	45.1		
			13/11/2023	45.1		
			14/11/2023	46.6		
		February 2024	15/11/2023	46.6		
			08/02/2024			
			09/02/2024	44.3		
			10/02/2024	44.3		
			11/02/2024	44.3		
			12/02/2024	44.3		
		Alcohol & Nicotine	Ethyl sulphate	June 2023	13/02/2024	46.6
					14/02/2024	46.6
					09/06/2023	2592.6
10/06/2023	1919.1					
11/06/2023	1821.6					
12/06/2023	2499.5					
November 2023	13/06/2023			3372.3		
	14/06/2023			3167.4		
	15/06/2023			3083.6		
	09/11/2023			597.8		
	10/11/2023			443.4		
	11/11/2023			674.4		
February 2024	12/11/2023			926.8		
	13/11/2023			826.8		
	14/11/2023			755.8		
	15/11/2023			755.7		
	08/02/2024					
	09/02/2024			655.4		
June 2023	10/02/2024			1218.4		
	11/02/2024			782.2		
	12/02/2024			372.8		
	13/02/2024	804.3				
	14/02/2024	416.9				
	09/06/2023	3528.3				
November 2023	10/06/2023	5006.6				
	11/06/2023	4042.0				
	12/06/2023	3654.5				
	13/06/2023	5479.2				
	14/06/2023	3803.4				
	15/06/2023	5605.4				
Cotinine	09/11/2023	4234.1				
	10/11/2023	4618.3				
	11/11/2023	4042.3				
	12/11/2023	4527.5				
	13/11/2023	4453.8				

	Pharmaceuticals	Sampling campaign	Date	Concentration (ng/L)
			14/11/2023	5711.9
			15/11/2023	4069.9
			08/02/2024	
		February 2024	09/02/2024	5011.4
			10/02/2024	5580.4
			11/02/2024	5064.4
			12/02/2024	4189.0
			13/02/2024	5684.2
			14/02/2024	6493.4
	09/06/2023		5280.6	
	June 2023	10/06/2023	7784.2	
		11/06/2023	6905.8	
		12/06/2023	5193.0	
		13/06/2023	7980.6	
		14/06/2023	5836.5	
		15/06/2023	8189.4	
	OH-cotinine	November 2023	09/11/2023	6211.7
			10/11/2023	7054.7
			11/11/2023	6929.3
			12/11/2023	7594.3
			13/11/2023	6082.6
			14/11/2023	8199.8
			15/11/2023	5640.9
08/02/2024				
February 2024	09/02/2024	8618.1		
	10/02/2024	10931.0		
	11/02/2024	10820.5		
	12/02/2024	7948.2		
	13/02/2024	8032.7		
	14/02/2024	9677.7		

EDDP: 2-ethyliden-1,5-dimethyl-3,3- diphenylpyrrolidine; Δ^9 -THC-COOH: 11-Nor-9-carboxy- Δ^9 -tetrahydrocannabinol; MDMA: 3,4-methylenedioxymethamphetamine; ND: not detected

Table S9. Wastewater based consumption estimation

	Pharmaceuticals	Sampling campaign	Date	WBE consumption estimation (mg/day/1000inhab) * ml for alcohol	WBE consumption estimation (DID) DDD/day/1000 inhab
Gabapentinoids	Pregabalin	June 2023	09/06/2023	13447.5	44.8
			10/06/2023	16222.2	54.1
			11/06/2023	13593.9	45.3
			12/06/2023	10466.6	34.9
			13/06/2023	19776.8	65.9
			14/06/2023	18131.8	60.4
		15/06/2023	20389.3	68.0	
		November 2023	09/11/2023	29225.0	97.4
			10/11/2023	33695.6	112.3
			11/11/2023	33132.8	110.4
			12/11/2023	38489.7	128.3
			13/11/2023	33608.0	112.0
			14/11/2023	51356.8	171.2
		February 2024	15/11/2023	35250.1	117.5
			08/02/2024		
			09/02/2024	63131.5	210.4
			10/02/2024	69140.3	230.5
			11/02/2024	71424.3	238.1
	12/02/2024		78860.1	262.9	
	13/02/2024		76799.3	256.0	
	Gabapentin	June 2023	14/02/2024	82596.9	275.3
			09/06/2023	26120.6	14.5
			10/06/2023	27989.5	15.5
			11/06/2023	25501.8	14.2
			12/06/2023	23491.6	13.1
			13/06/2023	24040.4	13.4
		November 2023	14/06/2023	28752.4	16.0
			15/06/2023	30411.8	16.9
			09/11/2023	16357.1	9.1
			10/11/2023	20448.1	11.4
			11/11/2023	14676.4	8.2
			12/11/2023	19396.2	10.8
		February 2024	13/11/2023	13921.8	7.7
14/11/2023			22265.5	12.4	
15/11/2023			19885.9	11.0	
08/02/2024					
09/02/2024	23907.1		13.3		
10/02/2024	32938.3		18.3		
Benzodiazepines	Alprazolam (alprazolam, α -Hydroxyalprazolam)	June 2023	11/02/2024	31280.2	17.4
			12/02/2024	29920.8	16.6
			13/02/2024	32689.6	18.2
			14/02/2024	35211.1	19.6
			09/06/2023	83.2	83.2
			10/06/2023	141.9	141.9
			11/06/2023	133.1	133.1
			12/06/2023	98.1	98.1
			13/06/2023	160.2	160.2
			14/06/2023	112.2	112.2
			15/06/2023	130.9	130.9
			09/11/2023	128.3	128.3

Pharmaceuticals	Sampling campaign	Date	WBE consumption estimation (mg/day/1000inhab) * ml for alcohol	WBE consumption estimation (DID) DDD/day/1000 inhab	
	November 2023	10/11/2023	117.5	117.5	
		11/11/2023	109.3	109.3	
		12/11/2023	91.3	91.3	
		13/11/2023	100.5	100.5	
		14/11/2023	107.8	107.8	
		15/11/2023	122.2	122.2	
	February 2024	08/02/2024			
		09/02/2024	94.9	94.9	
		10/02/2024	96.9	96.9	
		11/02/2024	107.4	107.4	
		12/02/2024	85.2	85.2	
		13/02/2024	108.4	108.4	
	Lorazepam	June 2023	09/06/2023	183.5	73.4
			10/06/2023	210.1	84.0
			11/06/2023	115.8	46.3
			12/06/2023	121.9	48.7
			13/06/2023	187.2	74.9
			14/06/2023	117.1	46.8
		November 2023	15/06/2023	155.6	62.3
			09/11/2023	344.1	137.7
			10/11/2023	329.7	131.9
11/11/2023			237.2	94.9	
12/11/2023			355.8	142.3	
13/11/2023			306.4	122.5	
February 2024		14/11/2023	364.9	146.0	
		15/11/2023	405.0	162.0	
		08/02/2024			
		09/02/2024	186.0	74.4	
		10/02/2024	276.0	110.4	
		11/02/2024	240.1	96.0	
Lormetazepam	June 2023	12/02/2024	302.4	120.9	
		13/02/2024	301.3	120.5	
		14/02/2024	313.2	125.3	
		09/06/2023	65.3	65.3	
		10/06/2023	70.6	70.6	
		11/06/2023	44.9	44.9	
	November 2023	12/06/2023	64.0	64.0	
		13/06/2023	91.7	91.7	
		14/06/2023	61.2	61.2	
		15/06/2023	82.6	82.6	
		09/11/2023	50.1	50.1	
		10/11/2023	82.1	82.1	
	February 2024	11/11/2023	42.4	42.4	
		12/11/2023	54.5	54.5	
		13/11/2023	47.8	47.8	
		14/11/2023	57.0	57.0	
		15/11/2023	44.2	44.2	
		08/02/2024			
		09/02/2024	35.9	35.9	
		10/02/2024	56.0	56.0	

	Pharmaceuticals	Sampling campaign	Date	WBE consumption estimation (mg/day/1000inhab) * ml for alcohol	WBE consumption estimation (DID) DDD/day/1000 inhab
			11/02/2024	51.1	51.1
			12/02/2024	44.8	44.8
			13/02/2024	44.8	44.8
			14/02/2024	61.1	61.1
ADHD	Methylphenidate (Ritalinic acid)	June 2023	09/06/2023	56.0	1.9
			10/06/2023	61.8	2.1
			11/06/2023	42.3	1.4
			12/06/2023	41.5	1.4
			13/06/2023	75.4	2.5
		14/06/2023	41.6	1.4	
		15/06/2023	43.8	1.5	
		November 2023	09/11/2023	77.1	2.6
			10/11/2023	71.7	2.4
			11/11/2023	78.5	2.6
			12/11/2023	88.6	3.0
			13/11/2023	126.9	4.2
		14/11/2023	85.1	2.8	
		15/11/2023	116.0	3.9	
		February 2024	08/02/2024		
	09/02/2024		10.5	0.4	
	10/02/2024		16.2	0.5	
	11/02/2024		30.0	1.0	
	12/02/2024		14.5	0.5	
	13/02/2024	8.8	0.3		
	14/02/2024	23.4	0.8		
	Amphetamine	June 2023	09/06/2023	708.6	23.6
			10/06/2023	762.4	25.4
			11/06/2023	595.0	19.8
			12/06/2023	582.3	19.4
			13/06/2023	812.3	27.1
		14/06/2023	445.5	14.8	
		15/06/2023	1377.3	45.9	
November 2023		09/11/2023	881.6	29.4	
		10/11/2023	813.5	27.1	
		11/11/2023	1077.6	35.9	
		12/11/2023	1263.1	42.1	
		13/11/2023	665.8	22.2	
14/11/2023		875.0	29.2		
15/11/2023	979.9	32.7			
February 2024	08/02/2024				
	09/02/2024	1472.8	49.1		
	10/02/2024	1615.7	53.9		
	11/02/2024	1493.7	49.8		
	12/02/2024	828.2	27.6		
13/02/2024	1237.1	41.2			
14/02/2024	1209.8	40.3			
Opioid	Methadone (EDDP)	June 2023	09/06/2023	393.7	1338.6
			10/06/2023	335.5	1140.8
			11/06/2023	440.7	1498.3
			12/06/2023	295.9	1006.2
			13/06/2023	390.3	1327.0
			14/06/2023	372.7	1267.1

	Pharmaceuticals	Sampling campaign	Date	WBE consumption estimation (mg/day/1000inhab) * ml for alcohol	WBE consumption estimation (DID) DDD/day/1000 inhab
		November 2023	15/06/2023	386.2	1313.0
			09/11/2023	177.3	602.7
			10/11/2023	176.8	601.0
			11/11/2023	280.1	952.4
			12/11/2023	163.7	556.6
			13/11/2023	140.4	477.5
			14/11/2023	167.4	569.3
		15/11/2023	304.5	1035.4	
		February 2024	08/02/2024		
			09/02/2024	274.0	931.7
			10/02/2024	336.5	1144.2
			11/02/2024	304.2	1034.4
			12/02/2024	215.0	731.0
			13/02/2024	260.6	885.9
			14/02/2024	315.5	1072.5
Illicit drugs	Cocaine (benzoylecgonine)	June 2023	09/06/2023	4533.9	
			10/06/2023	2708.6	
			11/06/2023	635.6	
			12/06/2023	1416.1	
			13/06/2023	3754.3	
		14/06/2023	2740.0		
		15/06/2023	6619.0		
		November 2023	09/11/2023	6498.8	
			10/11/2023	5010.9	
			11/11/2023	3431.2	
			12/11/2023	1858.2	
			13/11/2023	3300.6	
		14/11/2023	7938.7		
		15/11/2023	3925.0		
		February 2024	08/02/2024		
	09/02/2024		19233.7		
	10/02/2024		14415.9		
	11/02/2024		7451.8		
	12/02/2024		5874.5		
	13/02/2024		2710.0		
	MDMA	June 2023	14/02/2024	4607.6	
			09/06/2023	7.1	
			10/06/2023	5.3	
			11/06/2023	2.7	
			12/06/2023	4.3	
		13/06/2023	70.1		
		14/06/2023	36.9		
15/06/2023		12.0			
November 2023		09/11/2023	48.1		
		10/11/2023	37.7		
		11/11/2023	34.3		
		12/11/2023	12.8		
	13/11/2023	121.6			
14/11/2023	34.4				
15/11/2023	27.9				
February 2024	08/02/2024				
	09/02/2024	62.2			

Pharmaceuticals	Sampling campaign	Date	WBE consumption estimation (mg/day/1000inhab) * ml for alcohol	WBE consumption estimation (DID) DDD/day/1000 inhab	
		10/02/2024	51.1		
		11/02/2024	467.5		
		12/02/2024	1043.3		
		13/02/2024	975.7		
		14/02/2024	985.5		
	Metamphetamine	June 2023	09/06/2023	2.1	
			10/06/2023	1.6	
			11/06/2023	0.9	
			12/06/2023	1.6	
			13/06/2023	1.5	
			14/06/2023	0.9	
		November 2023	15/06/2023	0.8	
			09/11/2023	ND	
			10/11/2023	ND	
			11/11/2023	ND	
			12/11/2023	ND	
		February 2024	13/11/2023	ND	
			14/11/2023	ND	
			15/11/2023	ND	
			08/02/2024		
	09/02/2024		ND		
	10/02/2024		ND		
	11/02/2024		ND		
	Ketamine	June 2023	12/02/2024	ND	
			13/02/2024	ND	
			14/02/2024	ND	
			09/06/2023	17.1	
			10/06/2023	80.6	
			11/06/2023	357.5	
		November 2023	12/06/2023	150.5	
			13/06/2023	142.9	
			14/06/2023	55.9	
			15/06/2023	85.1	
09/11/2023			104.8		
10/11/2023			95.5		
February 2024		11/11/2023	52.7		
		12/11/2023	52.6		
		13/11/2023	423.6		
	14/11/2023	274.8			
	15/11/2023	141.8			
	08/02/2024				
	09/02/2024	1794.3			
10/02/2024	1765.2				
Cannabis (Δ^9 -THC-COOH)	June 2023	11/02/2024	687.6		
		12/02/2024	968.6		
		13/02/2024	688.6		
		14/02/2024	664.0		
		09/06/2023	29094.1		
	10/06/2023	57185.4			
	11/06/2023	30472.7			
	12/06/2023	61967.2			
	13/06/2023	69017.2			

Pharmaceuticals	Sampling campaign	Date	WBE consumption estimation (mg/day/1000inhab) * ml for alcohol	WBE consumption estimation (DID) DDD/day/1000 inhab	
	November 2023	14/06/2023	19486.3		
		15/06/2023	41151.0		
		09/11/2023	65241.0		
		10/11/2023	85556.0		
		11/11/2023	27254.4		
		12/11/2023	57467.8		
		13/11/2023	56243.8		
		14/11/2023	56377.0		
		15/11/2023	25082.0		
		08/02/2024			
		09/02/2024	42846.3		
		10/02/2024	84294.0		
		11/02/2024	57027.9		
		12/02/2024	69496.4		
		13/02/2024	69988.2		
	14/02/2024	83799.1			
	Heroin (morphine)#	June 2023	09/06/2023	1461.1	
			10/06/2023	871.8	
			11/06/2023	618.9	
			12/06/2023	416.3	
			13/06/2023	331.3	
			14/06/2023	68.2	
		15/06/2023	165.9		
		November 2023	09/11/2023	ND	
			10/11/2023	93.7	
			11/11/2023	ND	
12/11/2023			4.9		
13/11/2023			498.8		
February 2024		14/11/2023	288.3		
		15/11/2023	769.7		
		08/02/2024			
	09/02/2024	ND			
10/02/2024	503.3				
11/02/2024	307.3				
12/02/2024	469.1				
13/02/2024	207.8				
14/02/2024	294.9				
Alcohol & Nicotine	June 2023	09/06/2023	2592.6		
		10/06/2023	1919.1		
		11/06/2023	1821.6		
		12/06/2023	2499.5		
		13/06/2023	3372.3		
		14/06/2023	3167.4		
	November 2023	15/06/2023	3083.6		
		09/11/2023	2308.7		
		10/11/2023	1712.2		
		11/11/2023	2604.6		
		12/11/2023	3579.1		
		13/11/2023	3193.0		
		14/11/2023	2918.7		
		15/11/2023	2918.5		
	08/02/2024				
Alcohol* (ethyl sulphate)	June 2023	09/06/2023	2592.6		
		10/06/2023	1919.1		
		11/06/2023	1821.6		
		12/06/2023	2499.5		
		13/06/2023	3372.3		
		14/06/2023	3167.4		
	November 2023	15/06/2023	3083.6		
		09/11/2023	2308.7		
		10/11/2023	1712.2		
		11/11/2023	2604.6		
		12/11/2023	3579.1		
		13/11/2023	3193.0		
		14/11/2023	2918.7		
		15/11/2023	2918.5		
	08/02/2024				

Pharmaceuticals	Sampling campaign	Date	WBE consumption estimation (mg/day/1000inhab) * ml for alcohol	WBE consumption estimation (DID) DDD/day/1000 inhab	
Nicotine (cotinine, OH-cotinine)	February 2024	09/02/2024	2531.0		
		10/02/2024	4705.2		
		11/02/2024	3020.7		
		12/02/2024	1439.9		
		13/02/2024	3106.3		
		14/02/2024	1610.0		
	June 2023	09/06/2023	11020.0		
		10/06/2023	15913.2		
		11/06/2023	13436.3		
		12/06/2023	11152.0		
		13/06/2023	16904.8		
		14/06/2023	12015.9		
	November 2023	15/06/2023	17318.0		
		09/11/2023	13105.8		
		10/11/2023	14559.8		
		11/11/2023	13459.0		
		12/11/2023	14916.5		
		13/11/2023	13357.8		
	February 2024	14/11/2023	17509.3		
		15/11/2023	12284.6		
		08/02/2024			
		09/02/2024	16340.0		
		10/02/2024	20725.2		
		11/02/2024	20515.7		
			12/02/2024	15069.8	
			13/02/2024	15230.1	
			14/02/2024	18349.0	

EDDP: 2-ethyliden-1,5-dimethyl-3,3- diphenylpyrrolidine; Δ9-THC-COOH: 11-Nor-9-carboxy-Δ⁹-tetrahydrocannabinol; MDMA: 3,4-methylenedioxyamphetamine; ND: not detected; #Zuccato et al.

Table S10. Comparison between WBE estimated consumption mean (mg/1000 inhab/day)

		Drug	Campaign		p	Significance
Pharmaceuticals	Gabapentinoids	Gabapentin	June_23	November_23	0.023	*
			June_23	February_24	0.824	ns
			November_23	February_24	0.001	**
		Pregabalin	June_23	November_23	0.081	ns
			June_23	February_24	<0,001	***
			November_23	February_24	0.145	ns
	Benzodiazepines	Alprazolam	June_23	November_23	1.000	ns
			June_23	February_24	0.106	ns
			November_23	February_24	0.515	ns
		Lorazepam	June_23	November_23	<0,001	***
			June_23	February_24	0.110	ns
			November_23	February_24	0.392	ns
		Lormetazepam	June_23	November_23	0.101	ns
			June_23	February_24	0.004	*
			November_23	February_24	1.000	ns
	ADHD	Amphetamine	June_23	November_23	0.408	ns
			June_23	February_24	0.001	**
			November_23	February_24	0.330	ns
		Methylphenidate	June_23	November_23	0.101	ns
			June_23	February_24	0.131	ns
			November_23	February_24	<0,001	***
Opioid	Methadone	June_23	November_23	0.001	**	
		June_23	February_24	0.169	ns	
		November_23	February_24	0.420	ns	
Illicit drugs	Cannabis ($\Delta 9$ -THC-COOH)	June_23	November_23	1.000	ns	
		June_23	February_24	0.131	ns	
		November_23	February_24	0.438	ns	
	Cocaine (benzoylecgonine)	June_23	November_23	0.776	ns	
		June_23	February_24	0.068	ns	
		November_23	February_24	0.698	ns	
	Heroin (morphine)	June_23	November_23	0.392	ns	
		June_23	February_24	1.000	ns	

	Drug	Campaign		p	Significance
	Ketamine	November_23	February_24	0.551	ns
		June_23	November_23	1.000	ns
		June_23	February_24	0.005	**
		November_23	February_24	0.010	*
	MDMA	June_23	November_23	0.570	ns
		June_23	February_24	0.002	**
		November_23	February_24	0.102	ns
Alcohol & Nicotine	Alcohol*	June_23	November_23	1.000	ns
		June_23	February_24	1.000	ns
		November_23	February_24	1.000	ns

*ml for alcohol

ADHD: Attention deficit hyperactivity disorder

Table S11. Comparison between Population-normalized daily loads (PNDL) (mg/1000 inhab/day)

	Drug	Campaign		p	Significance
Benzodiazepines	Diazepam	June_23	November_23	0.140	ns
		June_23	February_24	1.000	ns
		November_23	February_24	0.913	ns
	Nordiazepam	June_23	November_23	0.173	ns
		June_23	February_24	0.609	ns
		November_23	February_24	1.000	ns
	Oxazepam	June_23	November_23	0.004	**
		June_23	February_24	0.007	**
		November_23	February_24	1.000	ns
	Temazepam	June_23	November_23	0.080	ns
		June_23	February_24	0.023	*
		November_23	February_24	1.000	ns

*ml for alcohol

Table S12. Comparison between mean consumption (DDD/day/1000 inhab) ± SD of pharmacy data and wastewater based epidemiology data

Drug	Campaign	Pharmacy		WBE		p*
		Mean	SD	Mean	SD	
Pregabalin	June 2023	42.9	1.4	53.3	12.3	0.029
	November 2023	50.8	1.2	121.3	23.8	0.002
	February 2024	90.4	2.5	245.5	23.7	0.004
	Total	61.4	21.4	134.8	82.2	<0,001
Gabapentin	June 2023	8.0	0.2	148.1	1.4	0.001
	November 2023	3.7	0.3	10.1	0.2	0.001
	February 2024	3.2	0.4	17.6	2.2	0.009
	Total	5.0	2.3	13.9	3.5	<0,001
Alprazolam	June 2023	122.8	1.9	122.8	26.5	0.695
	November 2023	164.6	4.3	111.0	12.7	0.002
	February 2024	278.3	8.2	99.3	8.7	0.005
	Total	188.6	67.5	111.6	19.7	<0,001
Lorazepam	June 2023	199.1	1.1	62.4	15.4	0.028
	November 2023	234.1	6.7	133.9	21.1	0.004
	February 2024	270.6	15.6	107.9	19.5	0.7
	Total	234.7	31.2	101.1	35.8	1.0
Lormetazepam	June 2023	91.9	3.5	68.6	15.2	0.007
	November 2023	90.5	1.4	54.0	13.4	0.002
	February 2024	84.6	0.6	48.9	9.0	0.005
	Total	88.8	3.7	57.6	15.0	<0,001
Methylphenidate	June 2023	1.0	0.2	1.7	0.4	0.001
	November 2023	3.9	0.1	3.1	0.7	0.026
	February 2024	1.1	0.7	0.6	0.3	0.222
	Total	2.0	1.5	1.8	1.1	0.105
Lisdexamphetamine	June 2023	14.9	0.9	25.2	10.0	0.019
	November 2023	19.8	0.3	31.2	6.4	0.002
	February 2024	49.0	1.2	43.7	9.4	0.568
	Total	27.9	15.4	32.8	11.3	1.000
Methadone	June 2023	47.0	0.0	50.8	6.3	0.172
	November 2023	42.5	0.7	27.4	8.7	0.001
	February 2024	36.8	0.93	38.6	5.9	0.568
	Total	42.1	4.3	39.0	12.1	0.322

Table S13. Comparison between mean WBE consumption (DDD/day/1000 inhab) during weekend and workdays

		Drug	Mean WBE consumption estimation (mg/day/1000 inhab)		P*
			Weekend	Workday	
Pharmaceuticals	Gabapentinoids	Pregabalin	40333.9	40481.1	1
		Gabapentin	25297.1	24816.0	0.841
	Benzodiazepines	Alprazolam (alprazolam, OH-alprazolam)	113.3	111.9	1
		Lorazepam	239.2	258.4	0.659
		Lormetazepam	53.3	59.5	0.547
	ADHD	Methylphenidate (Ritalinic acid)	52.9	56.6	0.904
		Amphetamine	1135.6	920.7	0.628
	Opioid	Methadone (EDDP)	1054.5	939.9	0.952
Illicit drugs		Cannabis (Δ^9-THC-COOH)	52283.7	55381.8	0.841
		Cocaine (benzoylecgonine)	5083.5	5583.1	0.397
		Heroin (morphine)*	149.8	146.7	0.659
		Ketamine	499.4	400.5	0.718
		MDMA	95.6	247.6	0.239
		Metamphetamine	1.3	1.4	1
Alcohol & Nicotine	Alcohol	Alcohol*(Ethyl sulphate)	2941.7	2603.8	0.547
	Nicotine	Nicotine (Cotinine, OH-Cotinine)	16494.3	14586.9	0.647

ADHD: Attention deficit hyperactivity disorder