

Supplementary Table 1. Contributory drug concentration table used to interpret forensic toxicological analyses and reports

Class of drugs	Drug name	Toxic/lethal range	Range to impact decision/ Drowning	Reference
Cannabinoids	Cannabis/THC		0.0021 mg/L (often report in ng/mL or ug/L: 2.1 ng/mL 2.1 ug/L)	[1, 2]
Benzodiazepines			Therapeutic or above	[2-4]
	Alprazolam	0.1 – 0.4 mg/L	0.005 – 0.05 mg/L	[3]
	Bromazepam + OH-	0.3 – 0.4 mg/L	0.08 – 0.2 mg/L	[4]
	Chlordiazepoxide	3.5 – 10 mg/L	0.4 – 3 mg/L	[4]
	Norchlordiazepoxide		0.3 – 2 mg/L	[3]
	Demoxepam		0.5 – 0.74 mg/L	[3]
	Clobazam	0.5	0.03 – 0.3 mg/L	[4]
	Norclobazam		2.0 – 4.0 mg/L	[3]
	Clonazepam	0.1 mg/L	0.02 – 0.08 mg/L	[4]
	Aminoclonazepam		0.02 – 0.07 mg/L	[3]
	Desalkylflurazepam		0.01 – 0.15 mg/L	[3]
	OH-ethylflurazepam		0.01 – 0.07 mg/L	[3]
	Lorazepam	0.3-0.5 mg/L	0.02 – 0.25 mg/L	[4]
	Lormetazepam		0.00-0.02	[4]
	Midazolam + OH-midazolam	1 – 1.5 mg/L	0.04 – 0.1 mg/L	[4]
	Nitrazepam	0.2-3 mg/L	0.03 – 0.1 mg/L	[4]
	Oxazepam		0.2 -1.5 mg/L	[4]
	Temazepam	> 1 mg/L	0.02 – 0.15mg/L	[4]
	Diazepam	3-5 mg/L	0.1-2 mg/L	[4]
	Nordiazepam	1.5 – 2 mg/L	0.2-0.8 mg/L	[4]
	Estazolam		0.055-0.2	[4]
Hypnotics	Zolpidem	0.5 mg/L	0.08 – 0.15 mg/L	[4]
	Zopiclone	0.15 mg/L	0.01 – 0.05 mg/L	[4]
Antidepressants	Fluoxetine	1-5.9 mg/L		[4]
	Norfluoxetine	1.0 – 5.6 mg/L		[5]

	Sertraline	0.29 mg/L		[5]
	Venlafaxine	1-1.5 mg/L		[4]
	O-desmethylnelafaxine	1 mg/L		[6]
	Citalopram	0.22 mg/L		[4]
	Mirtazipine	1 mg/L		[4]
	Amitriptyline	0.5-0.6 mg/L		[4]
	Nortriptyline	0.3-0.5 mg/L		[4]
	Paroxetine	0.35 – 0.4 mg/L		[4]
	Duloxetine	0.24 mg/L		[4]
	Dothiepin	0.3 – 0.8 mg/L		[4]
	Fluvoxamine	0.5 – 0.97 mg/L		[4]
Opioids	Codeine	0.5 - 1 mg/L	0.03-0.25	[4, 7, 8]
	Morphine	0.1 mg/L	0.01-0.1 mg/L	[4]
	Propoxyphene	0.6-1 mg/L	0.05 – 0.3 mg/L	[4]
	Methadone	> 0.2 mg/L	0.25-0.35 mg/L	[4, 9, 10]
	Oxycodone	0.2 mg/L	0.005-0.1 mg/L	[4]
	Fentanyl	0.003 – 0.3 mg/L	0.003 – 0.3 mg/L	[4]
	Tramadol	> 1 mg/L	0.1-1 mg/L	[4]
Analgesics/anti inflammatory	Paracetamol	100 – 150 mg/L		[11]
	O-desmethyl tramadol	> 0.1 mg/L		[6, 12]
Antipsychotic	Pericyazine	0.1 mg/L		[13]
	Clozapine	0.6 – 1 mg/L mg/L	0.1-0.6 mg/L	[4]
	Olanzapine	0.15 – 0.2 mg/L	0.02-0.08 mg/L	[4]
	Quetiapine	1-1.8 mg/L		[4]
Anti-convulsants	Carbamazepine	10 mg/L	2 – 9 mg/L	[4, 14] > 8 mg/L causes poor cognitive performance
	Phenobarbitone	30 – 40 mg/L		[9]

	Valproic Acid	150 - 200 mg/L		[4]
Amphetamines	Methylamphetamine	> 0.15 mg/L	0.1 mg/L	[4]
	3,4-Methylenedioxymethamphetamine (MDMA)	0.35-0.5 mg/L	0.1-0.35 mg/L	[4]
	Dexamphetamine		> 10 ng/L > 0.01 mg/L	[15] Drug effects felt after plasma concentration > 10 ng/L
	Amphetamine	0.2 mg/L	7.5 ng/mL 0.01 mg/L	[4, 16] Amphetamine group showed intoxication greater than control for more than 7 hours after administration, approximately 45 ng/mL
	Methylphenidate	0.1-0.5		[4]
Other	Amlodipine	0.088 mg/L		[4]
	Irbesartan	> 5.3 mg/L (therapeutic conc.)		[12]
	Flecainide	1-2		[4]
Cocaine	Cocaine	0.25-1 mg/L	50 ng/mL 50 ug/L 0.05 mg/L	[4, 17] Euphoric/behavioral/physiological effects returned to baseline 60 min after administration, approx. 50 ng/mL)
	Benzoyllecgonine		0.1 mg/L	[4]

SUPPLEMENTARY TABLE REFERENCES

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