

ChemaTox Blood Drug Testing - DRE Categories (Updated June 15th, 2015)

Below are the drugs ChemaTox currently tests for listed by the 7-Category Drug Matrix employed by Drug Recognition Experts. Please contact the ChemaTox Laboratory directly if you are a DRE with questions regarding our testing capabilities, or with any case-specific questions or concerns.

Email: DREtox@chematox.com; **Phone:** (303) 440-4500

NOTE: All units are ng/mL unless noted

CNS Depressants

ELISA Screens: Barbiturates, Benzodiazepines, Carisoprodol, Citalopram, Tricyclic Antidepressants, Zolpidem

Other Screens: GC/MS Scan, LC/MSMS Benzodiazepines

Drug Name	Subcategory	LOD Confirm	Therapeutic Range*	Analytical Considerations
Alprazolam	Anti-Anxiety Tranquilizers	10	25 - 102	
Amitriptyline	Anti-Depressants	20	120 - 250	
Bromazepam	Anti-Anxiety Tranquilizers	200		Reported as positive/negative only
Butalbital	Barbiturates	500	1700 - 2600	
Carisoprodol	Non-Barbiturates	200	10000 - 40000	
Chlordiazepoxide	Anti-Anxiety Tranquilizers	200	670 - 3100	
Citalopram	Anti-Depressants	50	81 - 160	
Clonazepam	Anti-Anxiety Tranquilizers	3	7 - 75	Unlikely to trigger Benzo ELISA
Cyclobenzaprine	Anti-Depressants	10	15 - 36	
Demoxepam	Anti-Anxiety Tranquilizers	200		Reported as positive/negative only
Diazepam	Anti-Anxiety Tranquilizers	20	20 - 4000	
Diphenhydramine	Non-Barbiturates	50	25 - 110	Screened by GC/MS
Doxepin	Anti-Depressants	50	100 - 250	
Doxylamine	Non-Barbiturates	50	69 - 138	Screened by GC/MS
Escitalopram	Anti-Depressants		see citalopram	
Estazolam	Anti-Anxiety Tranquilizers	200	42 - 100	Reported as positive/negative only
Flurazepam	Anti-Anxiety Tranquilizers	200	0.5 - 28	Reported as positive/negative only
Lorazepam	Anti-Anxiety Tranquilizers	10	10 - 240	Unlikely to trigger Benzo ELISA
Lormetazepam	Anti-Anxiety Tranquilizers	200		Reported as positive/negative only
Meprobamate	Anti-Anxiety Tranquilizers	500	2000 - 26000	
Midazolam	Anti-Anxiety Tranquilizers	20	8 - 25	
Mirtazepine	Anti-Depressant	50	39 - 180	Screened by GC/MS
Nitrazepam	Anti-Anxiety Tranquilizers	200		Reported as positive/negative only
Nordiazepam	Anti-Anxiety Tranquilizers	50	20 - 1800	

Drug Name	Subcategory	LOD Confirm	Therapeutic Range*	Analytical Considerations
Nortriptyline	Anti-Depressant	200	50 - 375	
Oxazepam	Anti-Anxiety Tranquilizers	50	150 - 1400	
Phenobarbital	Barbiturates	500	10000 - 40000	
Phenytoin	Barbiturates	500	10000 - 20000	
Promethazine	Non-Barbiturates	50	6 - 99	Screened by GC/MS
Quetiapine	Anti-Psychotic Tranquilizers	50	195 - 632	Screened by GC/MS
Temazepam	Anti-Anxiety Tranquilizers	50	400 - 900	
Trazodone	Anti-Depressant	200	700 - 4980	Screened by GC/MS
Triazolam	Anti-Anxiety Tranquilizers	200	20	Reported as positive/negative only
Zolpidem	Non-Barbiturates	20	29 - 272	

CNS Stimulants

ELISA Screens: Amphetamine/MDA, Cocaine, Methamphetamine/MDMA

Drug Name	Subcategory	LOD Confirm	Therapeutic Range*	Analytical Considerations
Amphetamine	Amphetamines	25	30 - 110	
Benzoylcegonine	Cocaine	25		
Cocaethylene	Cocaine	20		Formed only when Cocaine is consumed with alcohol
Cocaine	Cocaine	20		
Methamphetamine	Amphetamines	25	10 - 50	

Hallucinogens

ELISA Screens: Amphetamine/MDA, Methamphetamine/MDMA

Drug Name	Subcategory	LOD Confirm	Therapeutic Range*	Analytical Considerations
MDA	Synthetic	25		
MDEA	Synthetic	25		Screened by LC/MS; Analog of MDMA
MDMA	Synthetic	25		

Dissociative Anesthetics

ELISA Screens: Ketamine

Other Screens: GC/MS Scan

Drug Name	Subcategory	LOD Confirm	Therapeutic Range*	Analytical Considerations
Dextromethorphan		50	380	Screened by GC/MS
Phencyclidine		10		Screened by GC/MS
Ketamine		10		

Narcotic Analgesics

ELISA Screens: Buprenorphine, Fentanyl, Methadone, Opiates, Oxycodone, Tramadol

Other Screens: GC/MS Scan

Drug Name	Subcategory	LOD Confirm	Therapeutic Range*	Analytical Considerations
6-MAM		15		Metabolized very quickly to Morphine
Buprenorphine	Opiates	1	14 - 110	
Codeine	Opiates	15	30 - 340	
<i>Diacetylmorphine*</i>	Opiates			Heroin is metabolized quickly in the body (to 6-MAM and then to Morphine)
Fentanyl	Synthetic	1	10 - 100	
Hydrocodone	Opiates	25	30 - 250	
Hydromorphone	Opiates	50	8 - 49	
Meperidine	Synthetic	100	70 - 800	
Methadone	Synthetic	30	75 - 1100	
Morphine	Opiates	10	100	
Oxycodone	Opiates	50	10 - 100	
Oxymorphone	Opiates	25		A metabolite of Oxycodone
Tapentadol	Synthetic	50		
Tramadol	Synthetic	50	100 - 600	

Cannabis

ELISA Screens: Cannabinoids

Drug Name	Subcategory	LOD Confirm	Therapeutic Range*	Analytical Considerations
Delta-9-THC		1		
Delta-9-THC-COOH		5		"Carboxy THC" - inactive metabolite

Inhalants

Other Screens: Toxic Vapors GC-FID

Drug Name	Subcategory	LOD Confirm	Therapeutic Range*	Analytical Considerations
Polyfluorinated Ethanes (DFE/PFE)	Aerosols	0.005 g/100mL		Reported as positive/negative only; Most commonly found in "Dust Off"
Toluene, Acetone	Volatile Solvents	0.005 g/100mL		

*Therapeutic ranges are from Winek Tox Data 2001 [http://www.abmdi.org/documents/winek_tox_data_2001.pdf]
Therapeutic ranges listed when available and applicable.

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