

Washington State Patrol - Toxicology Laboratory Division

The list provides a general overview of analytes that may be tested for by the Toxicology Laboratory, with corresponding method information and estimated expanded uncertainty, where applicable. Case circumstances may require the testing of other compounds, either in-house or by an external laboratory. The Toxicology Laboratory reserves the right to decide which method(s) to use. Please contact the lab at 206-262-6100 with any questions.

POS: reported as positive only
Day of test: uncertainty calculated on a case-by-case basis

Analyte Name	Confirmation Method Name	Typical Reporting Limit	Expanded Uncertainty	Coverage factor
Volatiles				
acetone	Headspace GC	10 mg/dL	day of test	
butane	Headspace GC/MS	POS	n/a	
desflurane	Headspace GC/MS	POS	n/a	
difluoroethane	Headspace GC/MS	POS	n/a	
ethanol	Headspace GC	0.01-0.02 g/100 mL	8.20%	k=3, 99.73%
ethyl chloride	Headspace GC/MS	POS	n/a	
isopropanol	Headspace GC	10 mg/dL	day of test	
methanol	Headspace GC	10 mg/dL	day of test	
sevoflurane	Headspace GC/MS	POS	n/a	
toluene	Headspace GC/MS	POS	n/a	
Basic Drugs				
bupropion	GC/MS for basic drugs and metabolites	0.05-0.10 mg/L	18.93%	k=2, 95.45%
citalopram	GC/MS for basic drugs and metabolites	0.05-0.10 mg/L	18.93%	k=2, 95.45%
cyclobenzaprine	GC/MS for basic drugs and metabolites	0.05-0.10 mg/L	day of test	
dextromethorphan	GC/MS for basic drugs and metabolites	0.05-0.10 mg/L	18.93%	k=2, 95.45%
diphenhydramine	GC/MS for basic drugs and metabolites	0.05-0.10 mg/L	18.93%	k=2, 95.45%
ketamine	GC/MS for basic drugs and metabolites	0.05-0.10 mg/L	day of test	
methadone	LC/MS for methadone	0.01 mg/L	17.97%	k=2, 95.45%
phencyclidine (PCP)	GC/MS for phencyclidine	0.01 mg/L	15.66%	k=2, 95.45%
tramadol	GC/MS for basic drugs and metabolites	0.05-0.10 mg/L	18.93%	k=2, 95.45%
trazodone	LC/MS for trazodone	0.05 mg/L	12.45%	k=2, 95.45%
venlafaxine	GC/MS for basic drugs and metabolites	0.05-0.10 mg/L	18.93%	k=2, 95.45%
zolpidem	LC/MS for zolpidem	0.01 mg/L	19.18%	k=2, 95.45%
Acidic/Neutral Drugs				
acetaminophen	HPLC	5.0 mg/L	27.54%	k=2, 95.45%
carbamazepine	GC for acidic and neutral drugs	5.0 mg/L	26.11%	k=2, 95.45%
carisoprodol	GC/MS for carisoprodol and meprobamate	1.0 mg/L	27.74%	k=2, 95.45%
ibuprofen	GC for acidic and neutral drugs	POS (above 5.0 mg/L)	day of test	
lamotrigine	GC for acidic and neutral drugs	5.0 mg/L	26.11%	k=2, 95.45%
meprobamate	GC/MS for carisoprodol and meprobamate	1.0 mg/L	27.74%	k=2, 95.45%
phenytoin	GC for acidic and neutral drugs	5.0 mg/L	26.11%	k=2, 95.45%
topiramate	GC for acidic and neutral drugs	5.0 mg/L	26.11%	k=2, 95.45%
valproic acid	GC for valproic acid	10 mg/L	57.77%	k=2, 95.45%

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CNS stimulants				
amphetamine	GC/MS for amphetamines	0.05 mg/L	15.41%	k=2, 95.45%
ephedrine	GC/MS for amphetamines	0.05 mg/L	15.41%	k=2, 95.45%
MDA	GC/MS for amphetamines	0.05 mg/L	15.41%	k=2, 95.45%
MDMA	GC/MS for amphetamines	0.05 mg/L	15.41%	k=2, 95.45%
methamphetamine	GC/MS for amphetamines	0.05 mg/L	15.41%	k=2, 95.45%
pseudoephedrine	GC/MS for amphetamines	0.05 mg/L	15.41%	k=2, 95.45%
Barbiturates				
amobarbital	GC/MS for barbiturates	0.50 mg/L	17.54%	k=2, 95.45%
butalbital	GC/MS for barbiturates	0.50 mg/L	17.54%	k=2, 95.45%
pentobarbital	GC/MS for barbiturates	0.50 mg/L	17.54%	k=2, 95.45%
phenobarbital	GC/MS for barbiturates	0.50 mg/L	17.54%	k=2, 95.45%
secobarbital	GC/MS for barbiturates	0.50 mg/L	17.54%	k=2, 95.45%
Cocaine and metabolites				
benzoylecgonine	GC/MS for cocaine and metabolites	0.01 mg/L	12.13%	k=2, 95.45%
cocaethylene	GC/MS for cocaine and metabolites	0.01 mg/L	12.13%	k=2, 95.45%
cocaine	GC/MS for cocaine and metabolites	0.01 mg/L	12.13%	k=2, 95.45%
Antidepressants				
amitriptyline	LC/MS/MS for antidepressants	0.025 mg/L	12.90%	k=2, 95.45%
clomipramine	LC/MS/MS for antidepressants	0.025 mg/L	12.90%	k=2, 95.45%
desipramine	LC/MS/MS for antidepressants	0.025 mg/L	12.90%	k=2, 95.45%
desmethylclomipramine	LC/MS/MS for antidepressants	0.025 mg/L	12.90%	k=2, 95.45%
desmethyldoxepin	LC/MS/MS for antidepressants	0.025 mg/L	12.90%	k=2, 95.45%
desmethylsertraline	GC/MS for antidepressants (SSRI's)	0.025 mg/L	13.54%	k=2, 95.45%
doxepin	LC/MS/MS for antidepressants	0.025 mg/L	12.90%	k=2, 95.45%
fluoxetine	GC/MS for antidepressants (SSRI's)	0.025 mg/L	13.54%	k=2, 95.45%
imipramine	LC/MS/MS for antidepressants	0.025 mg/L	12.90%	k=2, 95.45%
norfluoxetine	GC/MS for antidepressants (SSRI's)	0.025 mg/L	13.54%	k=2, 95.45%
nortriptyline	LC/MS/MS for antidepressants	0.025 mg/L	12.90%	k=2, 95.45%
paroxetine	HPLC for antidepressants	POS (above 0.10 mg/L)	day of test	
sertraline	GC/MS for antidepressants (SSRI's)	0.025 mg/L	13.54%	k=2, 95.45%
trimipramine	LC/MS/MS for antidepressants	0.025 mg/L	12.90%	k=2, 95.45%
Benzodiazepines				
7-aminoclonazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	POS (above 0.01 mg/L)	n/a	
7-aminoflunitrazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	POS (above 0.01 mg/L)	n/a	
alpha hydroxy alprazolam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
alprazolam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
chlordiazepoxide	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%

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clonazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
desalkylflurazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
diazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
flunitrazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
flurazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
lorazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
midazolam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
nordiazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
oxazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
quetiapine	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.02 mg/L	15.41%	k=2, 95.45%
temazepam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
triazolam	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	0.01 mg/L	15.41%	k=2, 95.45%
zopiclone	LC/MS/MS for benzodiazepines, quetiapine, and zopiclone	POS (above 0.01 mg/L)	n/a	
Cannabinoids				
carboxy-THC	LC/MS/MS for cannabinoids	5.0 ng/mL	14.45%	k=2, 95.45%
THC	LC/MS/MS for cannabinoids	1.0 ng/mL	25.96%*	k=3, 99.73%
			*26% used for calculation on report	
Opiates				
6-acetylmorphine	LC/MS/MS for opiates	2 ng/mL	16.53%	k=2, 95.45%
codeine	LC/MS/MS for opiates	0.01 mg/L	16.53%	k=2, 95.45%
hydrocodone	LC/MS/MS for opiates	0.01 mg/L	16.53%	k=2, 95.45%
hydromorphone	LC/MS/MS for opiates	2 ng/mL	16.53%	k=2, 95.45%
morphine	LC/MS/MS for opiates	0.01 mg/L	16.53%	k=2, 95.45%
oxycodone	LC/MS/MS for opiates	0.01 mg/L	16.53%	k=2, 95.45%
oxymorphone	LC/MS/MS for opiates	0.01 mg/L	16.53%	k=2, 95.45%
Miscellaneous Compounds - not routinely tested for unless requested				
amantadine	By request: GC/MS		day of test	
brompheniramine	By request: GC/MS		day of test	
bupivacaine	By request: GC/MS		day of test	
buprenorphine	By request: LC/MS/MS	0.2 ng/mL	47.84%	k=2, 95.45%
carbon monoxide	By request: Co-oximetry	5% saturation	day of test	
chlorpheniramine	By request: GC/MS	POS	n/a	
cyanide	By request: Screen by Cyantesmo Test Strips	0.25 mg/L / POS	n/a	
diltiazem	By request: GC/MS		day of test	
doxylamine	By request: GC/MS		day of test	
ethylene glycol	By request: GC/MS	POS	n/a	
etizolam	By request: GC/MS		day of test	
fentanyl	By request: LC/MS/MS	0.5 ng/mL	31.24%	k=2, 95.45%
flubromazepam	By request: GC/MS		day of test	
gabapentin	By request: LC/MS	1.0 mg/L	18.49%	k=2, 95.45%
GHB	By request: GC/MS		day of test	

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guaifenesin	By request: GC/MS		day of test	
levetiracetam	By request: GC/MS		day of test	
lidocaine	By request: GC/MS		day of test	
loperamide	By request: LC/MS	POS	n/a	
meperidine	By request: GC/MS		day of test	
mesoridazine	By request: GC/MS		day of test	
metaxalone	By request: GC/MS		day of test	
methocarbamol	By request: GC/MS		day of test	
methylphenidate	By request: GC/MS		day of test	
metoclopramide	By request: GC/MS		day of test	
mirtazapine	By request: GC/MS	POS	n/a	
mitragynine (Kratom)	By request: GC/MS	POS	n/a	
naloxone	By request: LC/MS/MS	POS (above 0.2 ng/mL)	n/a	
nefazodone	By request: GC/MS		day of test	
norbuprenorphine	By request: LC/MS/MS	0.2 ng/mL	47.84%	k=2, 95.45%
norfentanyl	By request: LC/MS/MS	0.5 ng/mL	31.24%	k=2, 95.45%
oxcarbazepine	By request: GC/MS		day of test	
pentazocine	By request: GC/MS		day of test	
pheniramine	By request: GC/MS		day of test	
phentermine	By request: GC/MS		day of test	
phenylpropanolamine	By request: GC/MS		day of test	
primidone	By request: GC/MS		day of test	
procaine	By request: GC/MS		day of test	
promethazine	By request: GC/MS		day of test	
propoxyphene	By request: GC/MS		day of test	
salicylates	UV-VIS spectrophotometry for salicylates	100 mg/L	33.29%	k=2, 95.45%
strychnine	By request: GC/MS		day of test	
synthetic opioids	By request: LC/MS/MS	POS	n/a	
thioridazine	By request: GC/MS	POS	n/a	
verapamil	By request: GC/MS		day of test	
zonisamide	By request: GC/MS		day of test	
Synthetic cannabinoids ("Spice")	External Lab			
Synthetic cathinones ("Bath salts")	External Lab			
aripiprazole	External Lab			
baclofen	External Lab			
cetirizine	External Lab			
duloxetine	External Lab			
hydroxyzine	External Lab			
lithium	External Lab			
LSD	External Lab			
pregabalin	External Lab			
propofol	External Lab			

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psilocin	External Lab			
risperidone	External Lab			