

## **Current Cutoff Levels for Toxicology Tests**

(NOT RAPID TESTS)

Immunoassay (Initial/Screen Test)				
Drug Class	Analyte the Immunoassay is Most Reactive To	Cutoff Level (ng/mL)*		
Amphetamine/ Methamphetamine	+(d) Methamphetamine.	500		
Ecstasy	MDMA	500		
Barbiturates	Secobarbital	200		
Benzodiazepines	Lormetazepam	200		
Buprenorphine	Buprenorphine	5		
Cannabinoids	11-nor-Delta-9-THC-9- COOH	50		
Cocaine	BZE	150		
Cotinine	Cotinine	250		
Ethanol	Ethanol	0.010 g/100 mL		
Methadone	Methadone	300		
Opiates	Morphine	300		
Oxycodone	Oxycodone	100		
Oxidants	Nitrite	200		

Clinical/Medical/Pain Clinic Confirmation Cutoff Levels (GC-MS, LCMSMS, or LC QToF Methods)*				
Drug Class	Cutoff	Analyte(s) Confirmed		
Amines	50 ng/mL	Amphetamine, Methamphetamine, Ephedrine, Pseudoephedrine, Phentermine, MDA, MDEA and MDMA (Ecstasy)		
Barbiturates	60 ng/mL	Butalbital, Amobarbital, Pentobarbital, Secobarbital, and Phenobarbital		
Benzodiazepines	50 ng/mL	Desalkylflurazepam, Nordiazepam, 7-Aminoflunitrazepam, Oxazepam, Temazepam, Diazepam, 7-Aminoclonazepam, Lorazepam, Alphahydroxyalprazolam		
Buprenorphine	5 ng/mL	Buprenorphine, Norbuprenorphine		
Cannabinoids	4 ng/mL	Delta-9-THC-COOH, Cannabidiol (CBD)		
Cocaine	8 ng/mL	BZE		
Alcohol / Ethanol Biomarkers	Listed in () next to analyte. Unit = ng/mL	Ethyl glucuronide (250), Ethyl Sulfate (100)		
Fentanyl	5 ng/mL	Fentanyl		
Methadone	50 ng/mL	EDDP, Methadone		
Methylphenidate	50 ng/mL	Methylphenidate, Ritalinic Acid		
Opiates	50 ng/mL	Codeine, Morphine, Hydrocodone, and Hydromorphone		
6-MAM	4 ng/mL	6-Monoacetylmorphone (Heroin Metabolite)		
Oxycodone	50 ng/mL	Oxycodone and Oxymorphone		
Tramadol	25 ng/mL	Tramadol		
Oxidants	200 ug/mL	None – just confirms that the sample may have had oxidizing adulterants added that may have affected the test outcome		

<sup>\*</sup>NOTE: These tests use the laboratory's current experimentally determined Limit of Quantitation (LOQ) as the cutoff. These LOQ values change occasionally. Call the lab if there are questions.

Critical Value Testing			
Test			
Ethylene Glycol	This testing is performed at Mayo.		
Volatiles	This testing is performed at Mayo.		

Targeted Drug Panel (Test Code TDPU): Cutoff Levels by Analyte (LCMSMS Method)		
Analyte Confirmed	Cutoff	
Amphetamine	75	
Methamphetamine	50	
MDA	75	
MDMA	50	
MDEA	75	
Methylphenidate	75	
Ritalinic Acid	75	
7-Aminoclonazapam	50	
Lorazepam	25	
Oxazepam	50	
Alphahydroxyalprazolam	25	
Nordiazepam	25	
Temazepam	25	
Oxymorphone	50	
Morphine	50	
Hydromorphone	25	
Gabapentin	1,000	
Codeine	25	
NorTramdol	20	
6-MAM	4	
Oxycodone	50	
NorOxycodone	50	
Hydrocodone	25	
Tramadol	20	
NorBuprenorphine	6	
Buprenorphine	8	
NorFentanyl	10	
Fentanyl	6	
EDDP	50	
Methadone	50	