

Drugs of Abuse Reference Guide

LabCorp encourages the use of an independent Medical Review Officer (MRO) to review all non-negative test results. The following are to be used as general guidelines only. Many variables may affect duration of detectability, such as drug metabolism and half-life, subject's physical condition, fluid balance and state of hydration, and route and frequency of ingestion.

Drug	LabCorp Standard Screening Cut-off Level	LabCorp Standard GC/MS Confirmation Cut-off Level	Detection Time in Urine
Stimulants			
Amphetamine Also known as: speed Pharmaceutical names: ¹ Dexedrine, Benzedrine	1000 ng/mL	500 ng/mL	1 to 2 days ²
Methamphetamine Also known as: speed, ice, crystal, crank Pharmaceutical names: ¹ Desoxyn, Methedrine	1000 ng/mL	500 ng/mL	1 to 2 days ²
MDMA (Methylenedioxymethamphetamine) Also known as: ecstasy, XTC, ADAM, lover's speed	500 ng/mL	250 ng/mL	1 to 2 days ²
Cocaine Also known as: coke, crack, rock cocaine	300 ng/mL	150 ng/mL	2 to 4 days ²
Hallucinogens			
Marijuana/Cannabinoids Also known as: dope, weed, hemp, hash, Colombian, sinsemilla Pharmaceutical name: ² Marinol	50 ng/mL	15 ng/mL	Single use: 2 to 7 days ¹ Prolonged use: 1 to 2 months ¹
Phencyclidine Also known as: PCP, angel dust	25 ng/mL	25 ng/mL	14 days ² up to 30 days in chronic users ²
Narcotics/Analgesics/Opiates			
Codeine	2000 ng/mL	2000 ng/mL	2 days ²
Morphine and/or Heroin Heroin also known as: smack, tar, chasing the tiger Pharmaceutical names: Duramorph ¹ , Roxanol ³	2000 ng/mL	2000 ng/mL	2 days ²
Methadone Also known as: fizzes Pharmaceutical names: ¹ Amidone, Dolophine	300 ng/mL	300 ng/mL	3 days ²
Propoxyphene Pharmaceutical names: ^{1,2} Darvon, Darvocet, Novopropoxyn	300 ng/mL	300 ng/mL	6 hours to 2 days ²
Depressants/Sedatives/Hypnotics			
Barbiturates Also known as: downers, barbs, goof balls, reds, yellow jackets Pharmaceutical names: ^{1,2} Amobarbital (Amytal), Butalbital (Fiorinal), Pentobarbital (Nembutal), Phenobarbital (Donnatal), Secobarbital (Seconal)	200 ng/mL	200 ng/mL	Short acting: 2 days ¹ Long acting: 1 to 3 weeks ¹
Benzodiazepines Also known as: bennies Pharmaceutical names: ^{1,2} Diazepam (Valium), Oxazepam (Serax), Chlordiazepoxide (Librium), Alprazolam (Xanax), Chlorazepate (Tranxene), Temazepam (Restoril)	200 ng/mL	200 ng/mL	Therapeutic dose: 3 days ² Extended dosage or chronic use (1 or more years): 4 to 6 weeks ²
Ethyl Alcohol Also known as: liquor, distilled spirits, beer, wine, booze, hooch Pharmaceutical names: Ethanol	0.02% (20 mg/dL)	0.02% (20 mg/dL)	In urine: 1 to 12 hours ² In serum and plasma: 1 to 12 hours ²
Specimen Validity Testing			
Validity Marker	Commercial Product	Method of introduction to urine	Mode of action
Creatinine	N/A	In vivo, or in vitro, this substance is always present in urine but is used to indicate dilute or substituted specimens.	Creatinine is excreted from the body at a constant rate and there are expected values for creatinine in urine. When abnormally large quantities of fluids are consumed (in vivo) the urine becomes dilute and the creatinine levels are substantially reduced, as well as other urine constituents including drugs and their metabolites. Alternately, a donor may try to beat a test by adding water to the urine cup (in vitro) to dilute the drug level. Creatinine levels are used in conjunction with a specific gravity determination to identify the specimen as dilute or substituted.
Nitrites	Klear, Whizzies	In vitro, donor adds potassium nitrite to urine in collection cup.	Nitrites are also oxidizing agents that attach the drug molecules when present at high concentrations. The key effect of nitrites is, when present, they will interfere with the GC/MS confirmation of a cannabinoid positive.
pH	N/A	In vivo by ingestion of materials that would change the urinary pH outside of a normal range (next to impossible) or in vitro, where the donor adds a substance to the urine to modify the pH of the specimen dramatically.	The pH of the sample may influence enzymatic test methods used in drug screening. An extreme pH, either very high (>11) or very low (<3) may depress the enzyme rate. Another influence is that extreme pH conditions may adversely affect the stability of the drug being tested, and the drug may not be detectable during retest or confirmation.
Specific Gravity	N/A	In vivo, donor consumes large quantities of liquids or in vitro, the donor adds something to the urine in the cup.	Normal urine has an expected range of specific gravity values. When donors consume large quantities of liquids to dilute their urine, their urine specific gravity may dip to low levels.

References:

- Baer DM, Paulson RA, Williams RH. Cut-off and toxicity levels for drugs-of-abuse testing. *Clin Lab Ref.* 2006-2007 Aug; (MLO Suppl): 12-13.
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- National Library of Medicine and the National Institutes of Health. Drug Information: Narcotic Analgesics for Pain Relief (systemic). Available at <https://www.nlm.nih.gov/medlineplus/print/druginfo/uspdi/202390.html>. Accessed October 11, 2006.

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