

DRUG SAFETY PROGRAM



DRUG TYPE	PHARMACEUTICAL NAME	DETECTION TIME	SIGNS OF USE
AMPHETAMINE (AMP)			
Speed, Bennies Dexies, Uppers Footballs	Dexedrine, Benzedrine, Dextrostat, Adderall Biphetamine	2-4 days; cutoff level: 1000 ng/mL	Dilated pupils, decreased appetite; dry mouth and nose, bad breath; frequent lip licking, talkative, nervous; increase in heart rate and blood pressure
BUPRENORPHINE (BUP)			
Bupe, subs, Subbies, Orange Guys	Buprenex, Suboxone, Subutex, Temgesic	1-6 days	Symptoms vary: flu-like symptoms, headaches, sweating, aches and pains, sleeping difficulties, nausea, mood swings, loss of appetite
METHAMPHETAMINE (MET)			
Ice, Crystal, Meth, Doe	Desoxyn, Methedrine	2-4 days; cutoff level: 1000 ng/mL	Same as amphetamines; overdose cause elevated body temp
ECSTASY (MDMA)			
XTC, Adam, Blue Lips, Blue Kisses, Disco Biscuits, X-ing, Doctor, Molly	None	1-3 days; cutoff level: 500 ng/mL	Some as amphetamines; may grind teeth and clench jaw, sweating and increase in body temp
COCAINE (COC)			
Coke, Crack, Snow, Flake, Rock, Nose Candy, Powder, Blow	None	2-4 days; cutoff level 300 ng/mL	Dilates pupils, increased heart rate and BP; anesthesia, euphoria, sensitive to sound and touch, less need for food, cardiotoxic
MARIJUANA (THC)			
Weed, Pot, Grass, Reefer, Hash, Mary Jane, Cannabis, Columbian, Acapulco Gold, Ganja, Bhang	Marinol, Sativex and Dronabinol/ Marinol	1-2 joints; 2-3 days; Oral Ingestion: 1-5 days; Moderate Smoker: 5 days; Heavy smoker (daily) 10 days; Chronic smoker-5 joints per day; 14-18 days or as long as a month; cutoff level: 50 ng/mL	Increased appetite, altered perception, memory loss, bloodshot eyes, giggle frequently, trouble walking, disorientation; increased heart rate, vasodilation, dry mouth and throat, decreased respiratory rate, panic attacks and paranoia
METHADONE (MTD)			
Amidone, Fizzes	Dolophine, Methadone, L-Polamidon, Physeptone	2-3 days; cutoff level: 300 ng/mL	Similar to heroin but less intense; sedation analgesia, same as other opiates
METHYLPHENIDATE			
Vitamin R; R-Ball; Smart drug, Crackers, ones and Ones, Rids, Pineapple, Uppers, Jif, Rball	Ritalin hydrochloride, methylphenidate hydrochloride Phencyclidine (PCP)	1-2 days	Nervousness, insomnia, loss of appetite, dizziness, headaches, high bp, psychotic episodes, rapid heartbeat, sweating, paranoid schizophrenia
PHENCYCLIDINE (PCP)			
Veterinary Anesthetic, Angel, Dust, Hog, Killer Weed	Sernylan	Up to 14 days; up to 30 days with chronic users; cutoff level: 25 ng/mL	Dissociative anesthesia-analgesia and amnesia, dissociated from environment but not asleep, pulse and BP elevated, coma
OPIATES (OPI)			
(Heroin- and morphine-based drugs), Smack, H, Skag, Dope, Junk, Horse	Hydromorphone, (Dilaudid), Codeine, Tylenol with Codeine, Morphine, (Avinza), Kadian, MS Contin, Oramorph SR, Hydroco- done (Vicodin): Pos. at 300 cutoff	1-2 days; cutoff level: 2000 ng/mL or 300 ng/mL	Pupils constricted, pulse and BP lowered, body temp. lowered, euphoria initially and then drowsy, respiratory depression, convulsions, constipation, coma

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OXYCODONE (OXY)			
OXY, OC, OX, Oxycotton, Hillbilly Heroin, Killer	OxyContin, Percodan, Percocet, Roxicodone, Tylox, OxyContin is a time-released form of Oxycodone	1-3 days; OxyContin longer detection times; cutoff level: 100 ng/mL	Same as Opiates
PROPOXYPHENE (PPX) ← No Longer Produced			
Yellow Footballs	Darvon, Darvocet	3-4 Days; cutoff level: 300 ng/mL	Same as Opiates
BARBITURATES (BAR)			
Barbs, Downers, Tranqs, Blue Dolls Bluebirds, Rainbows, Yellows, Reds, Red Devils, M&Ms	Nembutal, Luminal, Seconal, Tuinal, Fiorinal, Neodorm, Immenoctal	Short acting: 1 day (Seconal, Nembutal); Long acting: 2-3 weeks (Phenobarb); cutoff level: 300 ng/mL	Pupils normal, but reaction to light slow, pulse, BP and respiratory rate lowered, sedation, stupor, coma
BENZODIAZEPINES (BZO)			
Bennies, Rophies	Librium, Valium, Ativan, Halcion, Vivol, Novo-poxide, Remestan, Rohypnol, Xanax, Tranxene, Restoril, Versed, Klonopin, Rivotril, Dalmane, Serax	Normal dose: 2-3 days; Chronic use (1 or more yrs): 4-6 weeks; cutoff level: 300 ng/mL	Drowsiness, dizziness, muscle relaxation, hangover effect after large dose, Rohypnol used as a date rape drug
TRICYCLIC ANTIDEPRESSANTS (TCA)			
	Amitriptyline (Elavil, Endep), Cyclobenzaprine (Flexeril), Clomipramine (Anafranil), Perphenazine (Trilafon), Desipramine (Norpramin), Imipramine (Tofranil), Nortriptyline (Pamelor), Protriptyline (Vivactil), Trimipramine (Surmontil), Promazine (Sparine), Nordoxepin, Doxepin (Sinequan)	Therapeutic dose: 3 days; Extended use: 4 weeks; cutoff level: 1000 ng/mL	Elevated body temperature, elevated pulse and BP, pupils dilated, agitation, delirium, seizures, constipation, dry/flush skin
FENTANYL (FEN)			
Apache, China White, China Girl, China Town, Dance Fever, Goodfellas, Great Bear, He-man, King Ivory, Murder 8, Perc-a-Pop, Poison, T.N.T, Jackpot, Friend	Abstral, Actiq, Duragesic, Fentora	Fentanyl is rapidly metabolized by the liver to the inactive metabolites, Norfentanyl, Hydroxyfentanyl, and Hydroxy Norfentanyl. Approximately 85% of an intravenous dose is excreted in urine over a 3 & 4 day period, with 0.4 – 6% of the drug excreted unchanged, 26 – 55% excreted as Norfentanyl, and unknown amounts of Hydroxyfentanyl, and Hydroxy Norfentanyl excreted	Dizziness and lightheadedness, Dry mouth, Retention of urine, Suppression of breathing, Severe constipation, Itching or hives, Nausea and vomiting, Loss of appetite, Weight loss, Headache, Difficulty seeing, Depression, Hallucinations, Bad dreams, Difficulty sleeping, Sweating, Shaking, Swollen extremities

Adulteration Testing / Specimen Validity Testing

Adulteration is the tampering of a urine specimen with the intention of altering the test results. The use of adulterants can cause false negative test results in drug tests by either interfering with the screening test or destroying the drugs present in urine.

CREATININE (DILUTION): Dilution is the most common type of adulteration. Dilution can be either “in vivo” (consuming excessive quantities of fluids in an attempts to dilute the urine) or “in vitro” (introducing liquid into a specimen that has already been collected). The intention of dilution is to make the concentration of drug in the urine lower than the detection limit (cutoff) of the test.

Creatinine testing in conjunction with specific gravity testing is a good indication of the urine sample. The absence of Creatinine (<5 mg/dl) is indicative of a specimen not consistent with human urine.

SPECIFIC GRAVITY: Specific gravity tests for sample dilution. Values outside the normal range may be the result of specimen dilution or adulteration. pH: pH tests for the presence of acidic or alkaline adulterants in urine. Values outside the normal range may indicate that the specimen has been altered or spiked with acidic or alkaline compounds.

NITRITE: Nitrite is a compound that is introduced into a urine specimen after collection. Nitrite works by oxidizing the major cannabinoid (THC-COOH) metabolite and making it undetectable. While this mechanism does work, the time needed for the reaction to occur is usually several hours. This means that after collection of the urine the rapid test may be positive and when the sample is tested at the laboratory the nitrate will have modified the THC metabolite making it undetectable. Some commonly used commercial adulterants that contain nitrates are “Klear, Whizzes, Mary Jane 13”. Nitrites are sometimes found in people with urinary tract or bacterial infections.

GLUTARALDEHYDE: Glutaraldehyde is an older adulterant that is introduced into the urine specimen after collection. It is not believed to affect the performance of lateral flow tests. Glutaraldehyde denatures the enzyme used in EMIT - like auto-analyzer reagents. Adulterants such as ketoacidosis (fasting, uncontrolled diabetes, high-protein diets) may interfere with the test results.

OXIDANTS/PYRIDINIUM CHLOROCHROMATE (PCC): Like nitrite, oxidants and PCC are introduced into a specimen after collection and are primarily meant to alter the structure of THE-COOH. Some commonly used oxidants are bleach, hydrogen peroxide and Urine Luck. Normal human urine should not contain oxidants or PCC. The presence of high levels of antioxidants in the specimen, such as ascorbic acid, may result in false negative results.