

Myers Counseling Group

ABOUT URINALYSIS

When a urine sample is to be collected for testing, there are several important factors that individuals need to know. A **chain of custody** is required by the laboratory which will perform the actual testing. This means that the sample is required to be monitored during all aspects of the collection and testing. This necessitates a **witness** be present to observe the client providing the specimen and to ensure the sample is unaltered. Once the sample is collected, the witness must make sure the sample is sealed properly in the presence of the client and placed in a locked and refrigerated location until the laboratory courier is able to pick it up. Once at the lab, the specimen is handled with a strict chain of custody code requiring each individual who comes in contact with the specimen to sign for it. This safeguard against any tampering or alteration of the specimen. Courts and places of employment require proper chain of custody protocols to ensure reliable results that will hold up under court scrutiny.

Turn around time is the time it takes for the lab to test specimens and report the results (negative or positive). Usually it takes two to five working days for the results to be confirmed and reported. Factors that could influence time include what time of day the sample is collected, when the courier picks it up, when the laboratory receives and tests it, and how many confirmation tests need to be performed on the sample. Original specimens are tested with Emit testing. This is a less expensive testing procedure. The accuracy rate for Emit is approximately 95%. Each sample that initially tests positive is retested and sent through a more expensive and elaborate test (GCMS) that is able to detect specific amounts of the drug. GCMS has been gaged around 99% accuracy. The higher the number of nanograms per milliliter detected in the urine, the higher the

concentration of the drug there is in the urine sample.

A **negative** result simply means that no substance was present in the sample in sufficient quantity to be detected by the test. It does not mean that the individual has not used illegal substances. The more testing that is performed, the surer one can be that a negative result means the individual is currently not using illegal substances. A **positive** result does mean that the individual has used that particular substance. A positive result does not necessarily mean that the individual was intoxicated at the time the sample was collected as there is no established relationship between amount of a drug in urine and level of intoxication. **High positive** or **low positive** readings could be interpreted several different ways. A high reading could mean that the individual used drugs or alcohol in large quantity or shortly before the sample was collected. There are some drugs that stay in the body longer, however, and may be detected by testing several days or weeks following their use. Concentration of substances in urine may also vary widely because of an individual's excretion patterns, metabolic rate, fluid intake, diet, and body weight. Each of these factors influences low positive readings also. Clearly then, the amount of a substance detected in a sample cannot be interpreted precisely. A more accurate gauge would be tests given on a regular basis which are better able to determine the extent of drug and alcohol use and patterns. Urinalysis should not be used as the sole criteria for determining substance use. It should be used as another tool in evaluating someone's drug and alcohol use.

Specimen integrity refers to whether or not a sample appears to be pure urine. Tests are run on the sample to determine if the specimen may have been adulterated. Possible means of adulteration are numerous, but proper witness protocol and chain of custody help to reduce these possibilities. A specimen may be altered intentionally or unintentionally. It is difficult at times to determine which has occurred. If the integrity of the specimen is in question, the general procedure is to request another sample as quickly as possible for a second test.

Passive inhalation refers to absorption of THC (active ingredient of marijuana) into the bloodstream of a non-smoker in close contact with others who are smoking marijuana. When THC is detected in the urine, the probability of passive inhalation is low. Research does not support the common occurrence of this phenomenon. A person who may test positive due to passive inhalation is probably deriving the effects of use without direct inhalation. However, as passive inhalation is a remote possibility, individuals would be wise to avoid contact with persons using marijuana. Courts and places of employment will not usually consider passive inhalation a reason for a positive result, assuming that a person in such close proximity to the use of illegal substances would themselves be using those substances.

Random urinalysis refers to specimen testing at infrequent intervals to prevent an individual from being able to predict when a test will take place. This could mean that not all specimens would be sent to the lab, that specimens could be collected at intermittent time periods, or that specimens could be collected only when an individual is suspected of using. It is essential in random urine testing that clients provide specimens whenever requested, having the time period between the request and the actual sample collection be no more than a few hours. **Scheduled urinalysis** would require very frequent (at least three times weekly) sample collection as the person being tested would know the schedule and could adjust their pattern of use to avoid detection. In either random or scheduled urinalysis, the refusal to provide a specimen at the time it is requested must be considered by the agency collecting the sample as an admission of illegal substance use.

The following names of substances will appear on the written results of the test.

Amphetamines: (Speed, Uppers) Dexamyl, Benzedrine, Dexedrine, Metheldrine, Ritalin, and Preludin

Barbiturates: (Downers, Depressants) Sodium Amytal, Phenobarbital, Talbutal, and Tuinal

Benzodiazepines: (Mild Depressants, Sedatives) Valium, Dalmane, Librium and Serax

Cocaine: Coke, Crack, Rock, Freebase

Methadone: Dolophine, used for treatment of narcotics addiction, narcotic analgesic

Methaqualone: Quaaludes, narcotic depressant

Opiates: Morphine, Codeine, Percodan and Tylox, narcotic analgesic

Phencyclidine: (PCP) Hallucinogen, similar to LSD

Propoxyphene: Darvon, Darvacet, narcotic, analgesic, similar to methadone

Cannabinoids: Marijuana, Hashish

Ethyl Alcohol: Drinking alcohol