Toxicology Testing for Attorneys: The Basics for Drug and Alcohol Related Cases

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A toxicology report states that a client tested "positive" for one of the drugs included on a urine toxicology screening test (otherwise known as a urine drug screen or "UDS"). A screening test is not a confirmatory test. It is just telling the health care providers if a client may need confirmatory (more exact) toxicology testing. Keep in mind that one, not every toxicology screening test detects the same drugs, and two, not every screening test has the same cut-off values to yield a positive result. What does a "positive" result tell us? It tells us that some point in time (and this is key), a client used the drug in question. But even then, that's a maybe. There are "false positives". That is, there are toxicology screens that will show a positive result for a drug that a client never even took. For example, some toxicology screens will show a client is positive for "amphetamines" but the client never used amphetamines. Depending on the test used, over-the-counter nasal decongestants, some antidepressants (eg, trazodone, bupropion), or over-the-counter acid reducers such as ranitidine may yield a positive amphetamine result.[1] A client may yield a positive result for phencyclidine, otherwise known as "angel dust" or "PCP", if they have used over-the-counter cough medicine (eg, dextromethorphan) or ibuprofen.[1] Some antibiotics may yield a false positive for opiates.[1,2] Situations like these should prompt a confirmatory test. Is there a confirmatory test in your client's medical chart?

A toxicology drug screen is not a definitive test. Confirmatory tests are helpful if we want to know if a client used a drug at some point in time and what the level actually is (from blood or urine). But there may not be scientific information to connect the drug level to how the client would be expected to act. A word of caution when reviewing drug levels: always verify the units of measurement. Do not assume that all laboratories report their drug levels with the same units. Some laboratories provide "normal ranges". What these normal ranges mean in relation to impairment varies widely and it's best to consult a toxicologist in this area. Keep in mind that the predictive value of drug levels related to impairment is limited. This is why drug levels alone do not assess a client's level of impairment. Clinical observations by health care providers and behavioral observations by law enforcement become important in assessing impairment along with drug levels. There are more data on alcohol levels related to level of impairment than there are for many classes of drugs.

Drug levels are not always useful in pinpointing when a drug was used, what dose was taken, or what the expected effect on a client could be. However, attorneys should know that sometimes an expert can make an educated guess to these unanswered questions based on client characteristics (body weight, medical history, behavior at the time of the incident in question) and specific pharmacokinetic information on the drug (if available).

There are also "false negatives". A negative toxicology report does not mean that no drugs were in the body. It may simply mean that the particular test used didn't screen for the

drugs in question or the amount of the drugs in question were below the minimum cut-off detection value for that test. A client may have used a drug in the amphetamine class such as "ecstasy" or "molly" but was negative for amphetamines on the toxicology screen. A client may be taking lorazepam but the toxicology screen was negative for benzodiazepines.[3] False negatives are more of a concern for physicians monitoring a client's therapeutic use of a drug rather than for attorneys involved in drug related cases. But the point to illustrate here is that toxicology screens do not tell the whole story. Toxicology screens need to be followed by confirmatory testing for specific drugs if there are unanswered questions.

References:

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