

# Identifying drug abuse - the right test at the right time

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Too often it seems it is necessary to obtain evidence in family law matters to either support or refute a claim of excessive alcohol use or misuse, or to determine the chronic use of legal and/or illegal drugs.

As practitioners, we are then asked to consider, either by the Court or by our clients, what the substance sought to be identified is, and what appropriate method of testing shall result in probative evidence being placed before the Court.

This Alert poses the question - what tests do we need to arrange, and when?

## Testing for the use of illicit substances

A hair sample drug test can be used to determine the chronic use of legal and/or illegal drugs. Hair drug testing looks back in time, providing evidence of use by a party over weeks rather than days. This method of drug detection is particularly useful if there is a concern with respect to the reliability or integrity of urine test results.

Any body hair can be tested for the presence of drugs, but head hair has the most reliable growth characteristics and hence is best for determining when drugs were used. The subject providing the sample will need to attend at a forensic pathologist and provide a hair sample of minimum 1cm and up to 3cm in length. The approximate cost of each test is \$650 which, whilst costly, is a thorough testing option.

## Limitations and considerations

A limitation of hair testing is that any drug used within three to four weeks immediately prior to sample collection cannot be detected. This is due to the fact that any drug used in this time interval will still be in the part of the hair shaft which is within the follicle, and it will not yet have emerged from the scalp. As the collection of the sample entails cutting the hair close to the scalp and not plucking the whole hair, the most recently used drugs are therefore invisible.

The time covered by the hair testing may also be an issue. The laboratory analyses only the three centimetres closest to the scalp because this avoids dealing with hair which has undergone more deterioration from exposure to sunlight, pool chlorine, shampoo or colouring agents. This means that not only are the most recent three to four weeks invisible, but so too are drugs used prior to the growing time of the hair tested. This approach approximately samples from a month prior to hair collection back as far as four months prior to hair collection depending on the length of the hair sample.

Hair testing does not tell us when, within the interval of hair growth undergoing testing, the drug use occurred. It cannot differentiate between relatively heavy use early in the growth period with subsequent abstinence, from less heavy but relatively regular use through the period. In cases concerning family law clients, if the cessation of drug use does not extend back to further than four months prior to sample collection, the subject may argue that any drug found reflects use prior to the time of cessation.

A further consideration with respect to hair testing is the sensitivity of the test. The test will not detect single use of a drug. Cocaine and methamphetamine are probably the most readily

incorporated into hair and they are likely to return a positive test if used more than three times during the growing period, while most other drugs must be used at least a dozen times within the time for detection. In general, this is not an issue with regular or heavy drug users.

The presence of cannabis metabolites, amphetamines, heroin metabolites and many “party drugs” are readily detectable in the hair of users. However gamma-hydroxy butyrate (“GHB”, “grievous bodily harm”, “liquid ecstasy”) will not be detected by either hair testing or even routine urine drug testing.

### **Urine testing for illicit drugs**

Urine drug screening, or urinalysis, is commonly used to detect the use of drugs such as cannabis, methamphetamine (Speed, ICE), heroin, morphine, codeine, cocaine and/or benzodiazepines (Valium, Xanax) in the day or days prior to the sample collection. Most national pathology laboratories conduct these tests for approximately \$150 on each occasion. For best results, a request to attend for testing should be random, with 8 hours notice provided to the subject to be tested.

### **Limitations and considerations**

A major consideration in relation to the use of urine drug testing is the range of substances detected and reported, and the time of detection after use.

Urine testing is held to be the most prone to tampering and sample substitution. However for court purposes, national pathology laboratories (such as QML) use “level 1 supervision”. This refers to direct supervision of the passage of the urine from the urinary meatus to the collection vessel, thus eliminating most opportunities for tampering. Practitioners should note that there are still potential difficulties relating to subjects with nursing or medical training, where some qualified subjects have been found to catheterise themselves when called to provide the sample, instil drug-free urine into their own bladder, and then produce this sample under direct supervision shortly afterwards.

### **Testing for excessive alcohol use or misuse**

Testing to support or refute a claim of excessive alcohol use or misuse can be undertaken by urinalyses, liver function test (LFT, also called serum chemistry) and/or carbohydrate deficient transferrin (CDT) test. Most national pathology laboratories offer these tests for approximately \$150 and in some cases this cost may be subsidised by Medicare via GP referral.

A urinary alcohol screen typically remains positive for alcohol for an hour or two longer than the blood alcohol. For example, if alcohol from a previous evening would have been cleared from the blood by 0800 hours the next morning, the urinary alcohol will be clear before 1000 hours. Of course the subject has control over the timing of sample collection and could simply delay the time of collection as much as possible within the constraints of the orders. Therefore, in order to determine total abstinence from alcohol use at all, frequent blood or urine testing is recommended. Pragmatically, the test should be requested at least weekly but at times not under the control of the subject, hoping to “catch the subject out” if he or she drinks irregularly.

By comparison, carbohydrate deficient transferrin changes slowly over time, and tests for excessive alcohol use, not for abstinence. The results of CDT testing therefore reflect the average daily alcohol consumption over the two to three weeks prior to the time of sample collection. Consideration should be given to the following issues:

Subjects that consume up to an average of two standard drinks (20 grams) of alcohol daily have the same CDT distribution pattern as teetotallers;

Approximately half of subjects consuming an average of 60 grams of alcohol a day have results in the high/normal range (while the others are simply elevated); and

Subjects consuming an average 80 grams of alcohol a day essentially all have elevated CDT values. When CDT testing is used to monitor alcohol use, it is customary to repeat the test at intervals at three weeks or so to determine if a significant episode or regular excessive alcohol use occurred in the intervals of the previous test.

### **Conclusion**

What is clear is that any testing has to be arranged around the expectations of the Court and the parties. An additional challenge that family law practitioners must also consider is that in many circumstances the parties cannot afford to meet the costs of regular and ongoing drug testing. In some cases this will result in the undesirable situation where the court is forced to draw an adverse inference against a party in the absence of evidence to the contrary.

For more information or discussion, please contact the HopgoodGanim [Family Law](#) team.

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