# factsheet DrugTesting

# INTERPRETING HAIR DRUG RESULTS & IMPORTANT CONSIDERATIONS

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Hair drug tests are often taken as black or white. This is not always the case.

For an accurate interpretation of results it is important o provide your clients:

- Current and recent medication
- History of illegal drug use
- · When drug use ceased
- Chemical treatments or dyes
- Possible passive smoke exposure

#### What drugs to test?

Not only should common drugs of abuse be considered but also prescription medication, synthetic cannabinoids and designer drugs. These can be far more destructive as they are specifically designed to be more potent and are used by people to avoid drug tests as well as offering a cheaper alternative. If you know a client is on a drug (i.e. Methadone) then it is important to test for this as well to assist interpretation of other drugs.



# To segment or not?

Ideally drug testing should always be segmented and for low exposure cases it is critical. As a minimum if the client has used drugs in the past then we recommend monthly segments in case there is any drug carry over. Please note it is not possible to segment body hair. The SoHT advise to test a maximum of 3cm (3 months) at a time. Therefore if 6 month history is required for a non-drug user it would be 2 x 3cm, for a previous or current drug user it would be 6 x 1cm segments.

# What affects the result?

There are a number of things that affect a hair drug result.

1. **Previous Drug Use** – If a client has been a chronic drug abuser it can take up to 6 months for the drugs to show as negative in a hair test. i.e If they stopped taking the drug in December it may mean that a hair test taken in June would show positive in increasing amounts back to January.

2. Chemical treatments – each time a person chemically treats their hair it can remove up to 80% of the drug from the hair. This affect is compounded by regular bleaching. After 4 attempts over a weekend you could remove all traces of the drug.

**3. Hair Colour** - studies have shown that thick dark hair incorporates drugs easier than thin blonde hair, if two people took the same level of drug and if they metabolised the drug at the same rate one with blonde hair may show as a low user and the one with black hair may show as a high user.

**4. Metabolisation** – an individuals' metabolisation rate affects how much of the drug will be deposited & then detected in hair.

**5. Passive Smoking** - if passive exposure to a drug is in question then the lab should also test and review the wash from the hair sample. When reviewed with the metabolite vs the parent drug this helps determine if passive exposure could be a cause.

### Tests based on averages

1. Hair Growth Rates - A 3 month drug test is conducted on a 3cm segment of hair as the average growth rate is 1cm per month. However growth rates vary between 0.5cm and 2cm in extreme cases, which means a 3cm segment could cover as little as 1.5months and as much as 6 months. This is especially the case in babies and teenagers. 2. Sleeping Hair - At any one time up to 15% of the hair is in a Sleeping phase. This means drug use from previous months may produce positive results in subsequent segments where no drugs have been consumed.

## **Understanding the result**

All drug testing is designed to confirm if someone has used a drug but cannot exclude its use. i.e. a Negative or not-detected result does not mean the client has not used the drug.

# Cut-Off Levels

Results are reported against a cut-off. If the result is above the cut-off it is considered positive for drug use. The SoHT have cut-off levels for workplace testing, but none for care proceedings. For example a client that uses a small amount of cocaine each week may show as negative against a certain cutoff even though the cocaine has been found in the hair.

**Not Detected** - The lab was not able to detect the drug in the hair sample provided.

**LOQ (below LOQ)** - Below LOQ means some drug may have been found but the lab can't guarantee the level or if it was consumption.

A value i.e 0.67 - If a drug is found above the LOQ then this is reported, depending on the value it could be a one off use or abuse.

**Positive** - When the value of the drug found is above the cut-off level for the test in question.



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