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**hairconfirm**<sup>TM</sup>  
hair follicle multi-drug test kit



# What is Hair Testing?

## INTRODUCTION

Hair drug testing measures the drug molecules embedded inside the hair shaft, eliminating external contamination as a source of a positive result. Since hair growth is fed by the bloodstream, the ingestion of drugs of abuse is revealed by analyzing a small sample of hair. HairConfirm test results cannot be altered with shampoos, bleaches or other external chemicals.

To date most drug screening has been done by testing urine samples, but it is not possible to detect most drugs in urine after 48-72 hours since the majority of drugs are out of the body by then. This makes it difficult to detect drug use by random testing or to monitor the success of treatment in a clinical setting, and impossible to prove use or non-use historically.

Hair analysis is proven to solve these problems, providing a secure, retrospective window of detection. Hair can show the trend of a habit over time and accurately determine what drugs were used. Just as importantly, it will show definitively if someone has not been taking any illicit substances.

## KEY FACTS

- \* Hair drug testing is the most effective test for long term drug use.
- \* 25% of high school seniors admitted using an illicit drug in the past month.
- \* A recent survey reported that nearly 16 million Americans had used illicit drugs in the previous month.
- \* The most commonly used drugs of abuse are marijuana and cocaine.
- \* In the first half of 2002 there were over 300,000 visits to emergency rooms related to use of illegal drugs or non-medical use of a legal drug.

Hair testing is the most accurate and effective method of finding users of drugs of abuse. Using a small sample of hair cut at the scalp, hair analysis evaluates the amount of drug metabolites embedded inside the hair shaft.

## THEORETICAL BASIS OF DETECTION

Traditional methods of drug detection involve the analysis of urine. Most drugs however disappear from urine within 2-3 days of use, so intermittent use is easily concealed. Hair analysis provides a much better approach. Most drugs are deposited permanently within the hair shaft in small but measurable amounts, enabling an accurate, dignified screening program that will detect drug use for months or years prior to the test.

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### DETECTION OF DRUGS IN HAIR

In addition, sophisticated drug users can substitute a bogus urine specimen unless collection is directly witnessed, which is invasive. The improved detection rate over urine testing (5-10 times greater) provides a definitive cost-effective procedure. Just one hair test can produce the same amount of information as 6 urine samples. Only 4 samples spread over the year give absolute confidence of total illicit drug abstinence.

Hair provides a window of detection measured in months not days as in the case of urine. There are numerous benefits from the knowledge of the history of drug taking.

### ADVANTAGES OF HAIR TESTING

- » Longer window of detection, months instead of 48-72 hours.
- » Cost-effective and time-saving - one hair test vs. 18 urine samples for 3-month profile.
- » Eliminates the need for random testing.
- » 5-10 times more sensitive test than urinalysis, and proven in a court of law.
- » Easier to collect, store and transport.
- » More dignified method to use.
- » Differentiates between one-off incidents and addictive behavior.

### INCORPORATION OF DRUGS INTO HAIR

Hair grows at an average rate of ½ inch (1.3 cm) a month. Every single hair follicle has its own blood supply, which provides the hair with the relevant nutrients in order to grow. Once a drug is taken, it is absorbed into the blood stream and circulated around the body. As the hair grows, it takes drugs from the blood supply and incorporates them into the hair follicle. The drugs can remain in the hair almost permanently. A 1.5 inch section of hair can provide an historic 3 month profile of drug use or abstinence.

When compared to the more traditional forms of testing, i.e. urine testing, hair samples can detect a longer period of drug use. With urine, most drugs are undetectable if urinalysis is done more than 2-3 days after use, with the exception of marijuana, which may be detected for a slightly longer period of time. After the 2-3 day period, a urine donor will test negative and slip through the urine screening process. With hair samples, the only time limitation for detecting drug usage is imposed by the length of the donor's hair. Each ½ inch of head hair provides a 30-day history of drug use. The standard for the industry is to test 1.5 inches, which provides a 90-day history of the donor's drug use.

If no head hair is available, body hair can be used. Bleaches, shampoos and external contaminants (i.e. marijuana smoke) have no known impact on test results.

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The logo for hairconfirm features a stylized orange and yellow arc above the text "hairconfirm" in a blue, lowercase sans-serif font. Below this, the text "hair follicle multi-drug test kit" is written in a smaller, black, lowercase sans-serif font.

The logo for CONFIRM BIOSCIENCES consists of a blue triangle with a yellow triangle inside it, pointing downwards. Below the triangle, the words "CONFIRM" and "BIOSCIENCES" are stacked in a bold, black, uppercase sans-serif font.