

Hair drug testing vs nail drug testing



Ashley Hodgkinson, Sample Collections Manager at AlphaBiolabs, discusses hair drug testing and nail drug testing, together with the benefits of each test.

When a person consumes drugs, they are broken down by the liver and a proportion of the parent drug and its metabolites are released into the bloodstream, with a small amount being excreted by the body in a variety of ways.

Whereas urine and oral fluid (saliva) drug testing methods provide us with a 'narrow-window' of detection for drug use (from a few hours up to a few days), hair drug tests and nail drug tests offer what is known as a 'wide-window' of detection (up to 12 months).

This is due to the way in which drugs are retained in the hair and nails long after substances were first consumed.

Hair drug testing

Hair drug testing provides one of the most effective ways of determining an individual's pattern of drug use over time and is routinely used in family law.

When a person consumes drugs, a proportion of the parent drug and its metabolites finds its way to the hair follicle, becoming trapped in the medulla – the innermost layer of the hair shaft – and remains in the hair as it grows.

There are two methods of analysis available for head hair drug testing: segmented or overview analysis.

The rate at which head hair grows enables us to determine a pattern of drug use over a defined period, for a month-by-month profile, depending on the length of hair selected (1cm of hair = one month of growth). This is known as segmented analysis and is the most detailed form of hair strand testing for drugs.

Overview analysis provides a more general insight into a person's drug use.

This is because any episodes of drug use are averaged out over the period being tested.

The maximum length of hair that can be tested to provide an overview of drug use is 3cms, which provides an overview of three months. An overview of 12 months can also be provided but would be reported as 4 x 3-month overviews (4 x 3cms), rather than one 12-month overview.

If head hair is not available for drug testing, a sample of body hair can be collected instead, from the underarm, chest, or leg. However, this cannot be segmented and can only be used to provide up to a 12-month overview of drug use.

Nail drug testing

Similar to what we see in hair, when a person consumes drugs, a proportion of the parent drug and its metabolites finds its way to the nail bed, becoming trapped in the keratin fibres along the entire length of the nail.

This makes nail drug testing an extremely reliable and effective method for identifying historic drug use.

Either fingernail clippings or toenail clippings can be used for nail drug testing, however the two sample types cannot be mixed at the laboratory. This is because fingernails and toenails grow at different rates, with each offering differing insight into drug use – an overview of up to 6 months for fingernails, and an overview of up to 12 months for toenails.

Unlike head hair, which can be segmented to provide a month-by-month insight into drug use (depending on the length of hair available), nail clippings cannot be segmented. This means that only an overview of drug use can be provided for the

period prior to samples being collected (up to 12 months).

Any artificial nail applications including acrylics, gels, polish, and nail extensions must also be completely removed prior to testing, so as not to impact the results.

Which method is best?

Both hair drug testing and nail drug testing can provide an extremely valuable insight into a person's historic drug use. However, which method you choose will depend on your client's circumstances, and the requirements of the court.

To identify trends in drug use, such as an increase or decrease over time, or to highlight intermittent use, segmented analysis using head hair is highly recommended.

Overview analysis using hair or nails is useful if you require a more general insight into a person's drug use over a certain period (up to 12 months).

AlphaBiolabs' nationwide network of professional sample collectors are trained to collect a variety of samples under chain of custody, including hair and nail samples for drug testing, and our test results are accepted by Family Courts, the Ministry of Justice and the Child Maintenance Service.

We also offer free sample collection for legally-instructed drug tests from our 13 walk-in centres, operating across the UK and Ireland.

Legal clients can claim 15% off AlphaBiolabs' drug testing until 30 April 2023. Simply cite DRUG15 when requesting your quote.

Sign up now and join Ashley for one of our FREE AlphaBiolabs breakfast webinars on Wednesday 22 March or Thursday 23 March, we will be taking a more in-depth look at drug testing. You can register for either session at www.alphabiolabs.co.uk/learning-centre/webinars/.

For expert advice on which test is best for your client, call our Customer Services team on 0333 600 1300 or email testing@alphabiolabs.com and a member of our Legal team will be in touch.

Ashley Hodgkinson, Sample Collections Manager at AlphaBiolabs



Ashley oversees the day-to-day management of AlphaBiolabs' sample collections department and a team of specially trained clinicians who operate across the UK. She also hosts AlphaBiolabs' legal webinars and has delivered several bespoke training sessions on DNA, drug and alcohol testing to the Judicial College.

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