

Frequently asked questions

Hair drug testing

Q: Why drug test?

A: Employee drug use can put employers at a risk of increased accidents and absenteeism, lower productivity, and higher insurance costs. Hair testing, like all drug testing methodologies, helps to mitigate these risks by identifying and deterring drug users within an employer's workforce.

Q: Why hair testing?

A: Hair testing for drugs of abuse is the only drug testing method available that provides up to a 90-day history of repetitive drug use (eg, a "lifestyle" test). Hair testing requires a small sample of hair that is collected under direct supervision which deters would-be cheaters. When compared with urine testing, hair testing tends to provide a greater number of positives due to its longer detection window and the observed collection process.

Q: What sets Quest Diagnostics hair testing apart?

A: Quest is the only Substance Abuse and Mental Health Services Administration-certified and CAP-FDT-accredited laboratory to offer in-house testing for all 3 of the most popular drug test types: urine, oral fluid, and hair. We have a long-standing reputation for accuracy, reliability, and industry-leading turnaround times. Our scientists and experts provide data and insights to help employers design effective workforce drug testing programs.

Q: What hair testing panels and cutoffs are offered by Quest?

A: Quest tests for the standard 5 illicit drug classes: amphetamines (methamphetamine/MDMA), opiates (codeine/morphine/6-AM), cocaine, marijuana metabolite (THC carboxylic acid metabolite), and PCP. We also offer screening and confirmation testing for expanded opiates (hydromorphone, hydrocodone, oxycodone, and oxycodone). Effective June 7, 2021, Quest also offers specific screening for amphetamine and MDA.

Q: How do Quest panel cutoffs compare to the proposed Federal cutoffs?

A: Quest designed its panels to support the [proposed Federal guidelines](#) for hair drug testing, specifically the proposed cutoffs for amphetamines, cocaine/metabolite, and opiates.

Q: What drug testing situations are best suited to hair testing?

A A hair test is the most effective way to evaluate long-term patterns of use, making it an excellent option for pre-employment and random testing programs. Because hair testing detects a pattern of repetitive drug use over a longer period, usually up to 90 days, it is not an appropriate method for post-accident or reasonable suspicion testing. In both situations, the drug testing procedure should detect the drug as close as possible to the time of the incident, making urine or oral fluid testing a better choice. However, hair tests are appropriate for random testing protocols—especially if hair was used for the pre-employment test and/or the employee has been working for more than 90 days since an earlier urine or fluid drug test.

Q: Can hair drug test results reflect drug use over the past 90 days?

A: Yes. Hair follicles underneath the scalp are surrounded by a dense network of capillary blood vessels. Drugs in the bloodstream can incorporate and bind to the growing hair follicles underneath the scalp. Based on the average rate of growth of head hair, it takes

approximately 5-10 days for hair containing drugs to reach the surface of the scalp where it can be collected. Head hair, from the crown or vertex of the scalp, grows approximately 1.3 cm or a ½ inch per month. The standard length of hair tested by the laboratory is the first 3.9 cm or 1½ inches from the root end. Therefore, a head hair analysis of 3.9 cm covers a time span of approximately 90 days and detects a pattern of repetitive drug use over this timeframe. Many employers find it useful to test both hair and urine (or oral fluid) for pre-employment purposes. Urine (or oral fluid) is useful for detecting recent or new drug use (the last 1 to 3 days) and hair for providing an approximate 3-month history of repetitive drug use.

Q: What are the hair testing analytes and cutoffs?

| DRUG CLASS | SCREEN CUTOFF | CONFIRMATORY CUTOFF |
|-----------------------------------|------------------|---------------------|
| METHAMPHETAMINE | 500 pg/mg | 500 pg/mg |
| MDMA | 500 pg/mg | 500 pg/mg |
| | | |
| AMPHETAMINES | 500 pg/mg | 500 pg/mg |
| MDA | 500 pg/mg | 500 pg/mg |
| | | |
| | | |
| COCAINE / METABOLITES | 500 pg/mg | |
| Cocaine | | 500 pg/mg |
| Cocaethylene | | 500 pg/mg |
| Norcocaine | | 500 pg/mg |
| | | |
| BENZOYLECGONINE | 500 pg/mg | 500 pg/mg |
| | | |
| MARIJUANA METABOLITE | 1.0 pg/mg | 0.1 pg/mg |
| | | |
| OPIATES (MOR &/OR HYM) | 200 pg/mg | |
| Morphine | | 200 pg/mg |
| Hydromorphone ² | | 200 pg/mg |
| | | |
| | | |
| OPIATES (COD &/OR HYC) | 200 pg/mg | |
| Codeine | | 200 pg/mg |
| Hydrocodone ² | | 200 pg/mg |
| | | |
| 6-ACETYLMORPHINE (6-AM) | 200 pg/mg | 200 pg/mg |
| | | |
| OXYCODONE² | 200 pg/mg | 200 pg/mg |
| OXYMORPHONE² | 200 pg/mg | 200 pg/mg |
| | | |
| PHENCYCLIDINE (PCP) | 300 pg/mg | 300 pg/mg |
| | | |

¹AMP/MDA-specific screening available as an add-on.

²Expanded Opiates-specific screening available as an add-on.

Q: What is the standard turnaround time for a hair drug test result?

A: Dependable turnaround times drive timely decisions. Hair specimens are sent to Quest by overnight delivery and are typically tested on the day they arrive at our laboratory. Negative results are often released within 24 hours. Non-negative specimens undergo confirmatory testing requiring additional time.

Q: What certifications do Quest Diagnostics workforce drug testing labs maintain?

A: Our Lenexa, KS laboratory has certifications and accreditations that lead the industry and include SAMHSA (urine), CAP-FDT (hair, oral fluid, and urine), Florida (hair and urine), and New York State (hair, oral fluid, and urine). Our hair testing procedures have been published in peer-reviewed journals and presented at scientific meetings.

Q: What is the window of detection if hair from an alternate body location (eg, chest, arm, etc) is used?

A: The growth rate and rates of incorporation of drugs into hair from locations other than the head has not been studied as extensively as that of head hair. Moreover, unlike head hair which continues to grow, body hair tends to grow to a certain length and then stop growing. Consequently, one cannot reliably determine the window of detection of drugs using hair from alternative body sites.

Q: Is it appropriate to analyze segments of hair to identify specific time periods of drug use?

A: No. While head hair grows at approximately ½ inch per month, the rate of growth is not constant between or within individuals. Consequently, we are of the opinion that segmental analysis should not be used to identify specific intervals of drug use in a forensically defensible manner.

Q: Describe the "wash" procedures used by Quest.

A: Hair is thoroughly washed for external contamination. The drug is isolated from the hair through Quest's proprietary extraction techniques. The isolated drug/metabolite is analyzed by GC-MS, GC-MS/MS, or LC-MS/MS. All presumptive positive hair specimens identified during screening are pulled for confirmation and specimen identification is manually and electronically verified again, and a second portion of the original hair specimen is tested. The confirmatory testing instrumentation is calibrated with each batch of hair specimens and performance is verified prior to use. In each batch of specimens, 1 to 3 calibrators (depending upon the assay) and a minimum of 10% quality control samples are included.

Q: How are the results reported?

A: As with all laboratory-based drug testing, hair drug test results are logged into the laboratory information system and reported to the client by direct interface, confidential fax, or through the Employer Solutions Portal (ESP). Laboratory testing records are maintained on file for a minimum of two (2) years.

Q: How long does the laboratory retain positive (non-negative) hair specimens?

A: Non-negative hair specimens are retained for a minimum of 13 months (the same as non-negative urine and oral fluid specimens).

Hair drug testing collections

Q: Can a hair test be beaten or adulterated?

A: We have not found any adulterants that can beat the test at this time. Moreover, the risk of cheating is minimized because every hair collection is directly and easily observed.

Q: How is a hair specimen collected?

A: We must have enough hair to repeat assays if necessary. Therefore, the requested amount of hair is approximately 100 mg made up of the first 1-½ inches (from the root end) of the hair specimen. Since hair weight varies by individual and collectors do not have access to sensitive scales, it is easier to visualize in terms of the width or diameter of the hair specimen collected.

- If the hair is more than four (4) inches long, we require approximately 120 strands.
- If placed in a bundle this quantity of hair would resemble the circumference of a pencil; or if laid flat, would be approximately 1 cm in width. It is critical that the root ends of the cut hair are aligned and placed with the root ends extending about ¼ inch beyond the pointed portion of the arrow formed by the foil in the collection kit. In order to approximate time of use (prior 90 days), the laboratory will cut and use about 1½ inches from the root end.
- If the collected hair is shorter than four (4) inches, but longer than one-half inch, additional strands of hair (+120), or a larger quantity of hair, is required to ensure an adequate amount is received to complete testing. If the hair is curly, root ends do not have to be kept aligned and the specimen size should resemble the size of a standard cotton ball.
- If the donor has no head hair or hair shorter than ½ inch long, the collector may use chest, underarm, leg, or facial hair—in that order of preference. The amount collected should resemble a standard cotton ball. Collectors should note the source of the specimen on the hair collection envelope. This will aid in a more accurate interpretation of the drug test result. If body hair is collected, collectors make sure to collect as much as possible. This hair is usually lighter in weight and more is needed for testing.

Q: What is the difference between hair testing and hair follicle testing?

A: Calling a hair test a hair follicle test is a common misnomer. The hair follicle is the pocket, below the scalp, from which the hair strand grows. During a hair drug test collection, the hair is cut as close to the scalp as possible, but only the hair above the scalp is tested, not the follicle. True hair follicle testing requires the hair to be “plucked” rather than cut which can lead to extreme donor discomfort.

Q: Can a hair drug test be performed on a person with little or no hair?

A: Yes. If a donor has little or no hair, hair can be collected from various locations and then combined. However, head should not be mixed with body hair—eg, it is acceptable to combine hair collected from various locations on the scalp but not from different areas of the body (eg, scalp and leg or leg and arm).

Q: Can hair collected from a brush be used for a drug test?

A: No. Quest Diagnostics requires the hair specimen to be collected directly from the donor’s head following standard collection protocols.

Q: How is a collection performed on an individual with an artificial hairpiece or attachment to their own hair?

A: The drug test collection process requires the collector to ensure that the specimen collected is the donor’s hair. Body hair may be collected if head hair is not available.

Q: Does Quest drug test hair from an alternative body site?

A: Yes. We will test hair from alternative body sites and the laboratory report clearly indicates the hair source (eg, head, underarm, chest, etc).

Q: Can products and treatments impact hair drug test results?

A: When tested under worst-case scenario conditions, most treatments had minimal or no impact on test results for the majority of drugs. More specifically:

- When shampoos, sprays, or gels were applied to cut hair samples, they had little or no effect on positive or negative hair specimens
- When normal hair treatments, including bleaching or dyeing, were applied to cut hair samples, they typically did not interfere with the test results or change the reporting category—eg, positive to negative

Q: Is there a risk a hair test result could be affected by environmental contamination?

A: No. Quest Diagnostics utilizes several independent approaches, in various combinations, to rule out the possibility of a positive result from external contamination.

- All samples are washed prior to analysis
- Some confirmatory assays involve analysis of the wash solution and a “wash correction”
- Some confirmatory assays require presence of metabolite to be reported positive

Taken together these procedures are designed to avoid false positives due to external contamination.

Q: What reasons would the lab reject a specimen for hair testing?

A: The following are reasons for rejecting a hair specimen

- No Custody and Control Form (CCF)
- No way to link a hair specimen with the accompanying CCF (i.e., donor)
- Quantity of hair insufficient for analysis (QNS)
- Length of hair less than 1 cm
- Hair submitted in envelopes, but not wrapped with the foil jacket
- Hair submitted in containers other than approved envelopes (eg, urine bottles)
- Hair contaminated with lice or other parasites

Q: How many sites can complete collections for Quest hair drug testing?

A: Quest offers more than 3,000 hair testing sites across the US, making it simple for your company and convenient for your employees. Our collectors complete online training and adhere to the highest standards of quality to provide a professional experience for every hair drug test collection.

Q: Can hair testing be used for the US Department of Transportation (DOT) testing?

A: No, the US Department of Transportation has not approved hair testing at this time. That said, the Substance Abuse and Mental Health Services Administration (SAMHSA), HHS (Health and Human Services Department) proposed scientific and technical guidelines for the inclusion of hair specimens in its [Mandatory Guidelines for Federal Workplace Drug Testing Programs](#) on September 10, 2020. This is an early step to authorize hair specimens for regulated drug testing of Federal agencies and contractors.

Q: Does hair testing withstand legal and/or administrative challenges?

A: Yes. We have been performing hair testing for drugs of abuse for more than 15 years. From the beginning, we have stood behind every hair test result reported by our lab. Our results have successfully withstood legal challenges in workplace drug testing, military proceedings, and other civil jurisdictions. Our proven legal track record of success supports the fact that we provide reliable, accurate hair testing results that you can depend on.

Q: What Custody and Control Form (CCF) is used for a hair drug test?

A: There is an Alternative Specimen Custody and Control Form that should be used which is intended for the lab-based testing of both hair and oral fluid specimens. Moreover, our eCCF systems support the collection of hair, oral fluid, and urine specimens with a standard set of tamper-evident seals that can be used for all collections.

Q: Can the hair test be completed if I use the regular CCF by mistake or if I run out of alternate specimen CCF?

A: It is important that the hair specimen is properly sealed, meaning it is tamper-evident and the barcode information is readable. The tamper-evident seal on the urine Custody and Control Form is designed for the urine bottle and is too long for the hair testing envelope.

Q: How do I order the hair collection kits?

A: Hair collection kits and supplies are provided for a hair test at collection sites. Yet, employers can order hair kits from Quest. Each hair test collection kit contains a specimen transportation bag, a hair specimen collection envelope, an alcohol pad, and aluminum foil. Additionally, you will receive air bills for shipping the specimens to the Lenexa, KS, laboratory. Contact us at ES.Orders@QuestDiagnostics.com or 1.800.877.7484. *Please note that Custody and Control Forms must be ordered separately.*

Q: What is the positivity rate for hair drug tests?

A: The [Quest Diagnostics Drug Testing Index™](#) (DTI) shows current data for positivity for hair drug testing. The DTI reveals insights into patterns of drug use among the US workforce and is published as a public service for government, employers, policymakers, media, and the public.

To start hair drug testing with Quest, [contact us online](#) or call **1.800.877.7484**.