Hair Follicle Testing
Frequently Asked Questions & Information Sheet

What is Hair Follicle testing?

- Hair Follicle testing is used to detect historical drug use by analysing the drugs inside the hair shaft. When an individual ingests a drug, it enters the bloodstream and is absorbed into the hair follicle (as hair growth is a direct result of the body's blood supply). This allows for testing through the analysis of a small sample of hair. The laboratory testing method measures the drug molecules found inside the hair shaft which eliminates external contamination such as shampoos or other adulterant products from significantly altering results.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The most accurate and effective method of finding users of drugs of abuse</td>
<td>• Does not identify current impairment as it takes approximately 5-10 days from the time of drug use for the hair containing drug to grow above the scalp where it can be collected</td>
</tr>
<tr>
<td>• Detects historical drug use (1-12months)</td>
<td>• Increased result turnaround time (7-10 business days)</td>
</tr>
<tr>
<td>• There are no known adulterants. Drugs cannot be masked by bleaches, shampoos or external contaminants</td>
<td>• More invasive as a minimum of 0.5 inches of hair must be collected</td>
</tr>
<tr>
<td>• Hair testing has been proven as acceptable evidence in court systems worldwide</td>
<td></td>
</tr>
</tbody>
</table>

What is the collection process?

- A certified hair collector will take a small sample of hair by cutting the hair with scissors as close to the root as possible (hair will not be pulled out by the root). The hair is typically taken from the crown of the head however, head hair can be collected from different areas on the head if the donor has hair loss/balding around the crown area. For the standard 90 day timeframe, approximately 90-150 stands of hair (the diameter of a small straw) are needed for a successful test. The cut hair should not be noticeable after the appropriate amount is collected.

- As express/instant testing is not available for hair samples, the collector will complete a Chain of Custody and package the sample to be sent to a certified laboratory for analysis.

What is the testing process?

- Hair samples are first screened at the laboratory using Enzyme-Linked Immunosorbent Assay (ELISA) methodology, which has been proven reliable for routine drug testing. Any samples that test presumptively positive in the screening process are then subjected to gas chromatography/mass spectrometry (GC/MS), gas chromatography/tandem mass spectrometry (GC/MS/MS), or liquid chromatography/tandem mass spectrometry (LC/MS/MS) confirmation testing.

What drugs are detected?

<table>
<thead>
<tr>
<th>Analyte</th>
<th>5 Panel</th>
<th>5 Panel-Extended Opiates</th>
<th>Screening Cut off</th>
<th>Confirmation Cut off</th>
</tr>
</thead>
<tbody>
<tr>
<td>THC/Marijuana</td>
<td>✓</td>
<td>✓</td>
<td>1.00 pg/mg</td>
<td>0.10 pg/mg</td>
</tr>
<tr>
<td>Cocaine</td>
<td>✓</td>
<td>✓</td>
<td>500 pg/mg</td>
<td>500 pg/mg</td>
</tr>
<tr>
<td>Opiates</td>
<td>✓</td>
<td>✓</td>
<td>200 pg/mg</td>
<td>200 pg/mg</td>
</tr>
<tr>
<td>Codeine, Morphine, Heroin (6-AM)</td>
<td>✓</td>
<td>✓</td>
<td>200 pg/mg</td>
<td>200 pg/mg</td>
</tr>
<tr>
<td>PCP</td>
<td>✓</td>
<td>✓</td>
<td>300 pg/mg</td>
<td>300 pg/mg</td>
</tr>
<tr>
<td>Amphetamine</td>
<td>✓</td>
<td>✓</td>
<td>500 pg/mg</td>
<td>500 pg/mg</td>
</tr>
<tr>
<td>Methamphetamines, MDMA (Ecstacy)</td>
<td>✓</td>
<td>✓</td>
<td>500 pg/mg</td>
<td>500 pg/mg</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>✓</td>
<td>✓</td>
<td>200 pg/mg</td>
<td>200 pg/mg</td>
</tr>
<tr>
<td>Oxycontin, Percocets</td>
<td>✓</td>
<td>✓</td>
<td>200 pg/mg</td>
<td>200 pg/mg</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>✓</td>
<td>✓</td>
<td>200 pg/mg</td>
<td>200 pg/mg</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>✓</td>
<td>✓</td>
<td>200 pg/mg</td>
<td>200 pg/mg</td>
</tr>
</tbody>
</table>
What is the minimum amount of hair required?

- For head hair, the minimum length required is 0.5 inches and 270-390 strands (enough to fill 3 straws). This will provide an approximate 30 day results timeframe.

What is the industry standard timeframe?

- The industry standard timeframe to test for is 90 days. The minimum length of hair required for this timeframe is 1.5 inches and 90-150 stands (enough to fill 1 straw).

What other timeframes can be tested for?

- **60 Day Head Hair Test**
  - Requires a minimum of 1 inch of head hair and 180-270 strands (enough to fill 2 straws)
  - Results are reported as a single 60 day timeframe
- **6 Month Head Hair test**
  - Requires a minimum of 3 inches of hair and 90-150 stands of hair (enough to fill 1 straw)
  - Results are broken into two 90 day reports
- **1 Year Head Hair test**
  - Requires a minimum of 6 inches of head hair and 90-150 stands of hair (enough to fill 1 straw)
  - Results are broken down into four 90 day reports
- **Segmented Head Hair Testing**
  - Any timeframe may be segmented into 30 day increments
  - Segmented testing is not recommended due to the variability of hair growth but can be completed if requested for an additional fee

Can body hair be tested?

- Body hair can be tested if the donor does not have sufficient head hair however, it is not recommended for the following reasons:
  - Body hair is dormant hair and cannot provide an exact timeframe for results
  - Drug metabolites will only be detected in the hair if the drug was used while the hair was growing
  - Body hair is tested at its full length and results in an approximate 1 year timeframe and cannot be broken down into smaller segments
- If body hair is used, it can be taken from the legs, arms, chest, back and armpits in the amount equivalent to the size of a cotton ball. Facial hair is not collected as it grows too quickly and does not provide accurate results.

What happens if the donor arrives at the appointment with insufficient hair for the requested timeframe?

- **Recommended**: donor/recruiter can decide not to complete hair testing and re-book once the hair has grown to the required length. Full testing rate will apply. *Please note this is the only option for court ordered testing. If hair is insufficient, no collection will occur- full rates apply.*
- SureHire can collect head hair and ask the laboratory to test the full length even though it will not meet the desired timeframe. **Warning**: this option may result in a false negative, meaning it may not pick up on drug use within the timeframe requested. Cost of testing remains the same.
- Donor/recruiter can decide to proceed with body hair collection. Limitations of body hair testing must be thoroughly explained prior to collection. **Warning**: timeframe for results is approximately one year and may produce a positive result that may not have presented in the originally requested timeframe. Cost of testing remains the same.

How long does it take to receive results?

- Results typically take 7-10 business days.
- Result turnaround times may vary due to shipping delays, confirmation testing and MRO process (up to 72 hours to make contact with donor).

Can anonymous hair testing be completed (ex. hair taken from a brush)?

- No, hair must be collected directly from the donor by a certified collector. All donors are required to sign a Chain of Custody which is a legally binding document stating that the sample is in fact his/her hair and that they authorize the lab to analyze it for drugs of abuse.

Can second hand contamination or external exposure to drugs effect the test results?

- No, the hair sample is tested for the metabolite of the drug which can only be detected inside the hair follicle once the drug has been ingested. Upon receiving the hair sample, the laboratory performs a wash procedure prior to testing to remove possible external contamination.
How does the laboratory establish cut off levels?

- Currently, there are no mandatory cut off levels to be followed so laboratories may set their own. The laboratory used by SureHire closely follows the recommended guidelines proposed in the 2004 Substance Abuse and Mental Health Services Administration (SAMHSA) guidelines.

What is the purpose of a Medical Review Officer (MRO)?

- A MRO is a licensed physician who is responsible for receiving and reviewing laboratory results and evaluating medical explanations for certain drug test results.
- MRO’s are independent and impartial and advocate for the accuracy and integrity of the drug testing process. They can determine if there is a legitimate medical explanation for laboratory confirmed positive results.
- SureHire’s MRO’s are certified by the American Association of Medical Review Officers.

Will prescription medications produce positive results?

- A report will be sent to the Medical Review Officer (MRO) identifying all drugs detected by the laboratory. The MRO will review the report and contact the donor within 72 hours, using the information provided on the Chain of Custody form. The MRO will confirm any prescriptions to determine whether the positive drug screen was due to legitimate prescription drug use or if it was due to illegal drug use or prescription drug abuse.
- If there are no prescriptions or if the MRO is unable to make contact with the donor within 72 hours, the results will be reported as positive.

What is required for court ordered testing?

- A copy of the filed court order must be provided to SureHire at the time of booking an appointment. *Written agreements between two people that are not signed by a judge are not considered court documents.
- In order to schedule a court ordered hair test, the following information should be provided on the court order:
  * SureHire may request an amendment to the court order if adequate information is not provided
    - Names of both parties and who is required to provide the hair sample
    - Who has access to schedule the testing appointment
    - Who will be paying for the hair test
    - Type of testing required:
      - The timeframe must be specified:
        - 30 days
        - 60 days
        - 90 days
        - 6 months
        - 1 Year
      - The drug testing panel must be specified:
        - Hair Lab 5 Panel
        - Hair Lab 5 Panel-Extended Opiates
    - Who is authorized to receive test results:
      - Donor
      - Donor’s lawyer
      - Other party
      - Other party’s lawyer
    - Who is not authorized to receive test results
- Please be aware that in order to protect the donor’s privacy, information will only be released to those outlined in the court order. If no information is outlined, only the donor will have access to their appointment and result information.
- *SureHire will not provide hair drug testing to anyone under the age of 18 unless specified by a court order.

Whom can I speak with if I have any questions/comments and/or concerns?

- Please contact SureHire at 1-866-944-4473 or visit our website at www.surehire.ca.