

## Minimum Standards for Hair Testing

### Introduction:

Hair testing is an effective matrix to control the use of prohibited substances in horse racing and where required, Condition of Entry Hair Testing, may deem a horse ineligible to participate when found positive for these substances under this scope of analysis. The goal is to harmonize testing and expectations associated with different test types using hair as a matrix.

### Scope:

This document addresses minimum standards for hair testing as recommended by the Racing Medication and Testing Consortium (RMTC) which include harmonized sample collection, test type, expected turn-around-time, confirmatory analysis, split sample availability, and sample request form.

### General Information:

The purpose of hair sampling is to collect a usable cross-section of hair to test for prohibited (banned) substances.

As with all other biological sample collections, the integrity of the sample must be maintained, and chain of custody procedures must be followed.

If sampling multiple horses, you must clean the comb (or scissors, if used) between each horse.

At the time of sampling, if the condition of the hair appears abnormal (i.e., bleached or otherwise treated, brittle or broken) or has an unusual odor, this may be evidence of hair adulteration; **the sample(s) should not be collected**. These findings should be documented and reported to the Authority or State Racing Commission(s). The collector may consider sampling hair from an alternate location (i.e. tail, if evidence of hair adulteration to the mane)

After collection, samples should be kept in a secure location at room temperature until they are ready for transport. Note: Plastic bags may be acceptable for prompt shipment of samples but should not be used for long-term storage of hair.

A tracking number should be requested for all sample shipments.

### **Sample Collection:**

Verify the horse's identity - by tattoo, microchip, or markings from the official foal papers.

Wear clean, single-use, disposable gloves during sample collection. New gloves should be worn for each horse sampled.

The length of hair sample must be at least 4 inches, 10cm. If the mane is less than 4" in length, use a tail hair sample, which must also be at least 4".

The hair sample must be a minimum diameter of a No. 2 lead pencil.

Hair must be clean and dry prior to sample collection. (Do **not** sample wet hair)

Clean the comb (or scissors, if used) with alcohol and allow to air dry before sampling each horse.

The middle third of the neck on the underside of the mane is the recommended sampling site.

If sampling the tail, select hair near the base of the tail. If there is more than one hair color, dark hair is preferable to lighter colored hair, regardless of location.

Comb the hair in the area to be sampled, removing tangles, and aligning hairs in the same direction.

Poor quality hair samples (i.e., "wads, tangles, or wet") will not be tested.

Hair can be sampled by pulling or cutting, although pulling is recommended as it also results in the collection of a DNA sample that can be used to verify the horse of origin for the sample.

Note: Pay close attention to ensure appropriate thickness and avoid tangles, wads, or "rat's nest" when pulling sample.

When cutting samples, cut the hair as close to the skin as possible.

Note: Straight cuts are critical for a consistent sample.

Place a twist tie or binder around the cut end.

Loop the hair in a loose knot and place it into an evidence bag.

Seal the bag and adhere a sample ID number sticker to the bag.

Complete the sample submission form found in Appendix 1, at the end of this document. Have the witness sign it and record the witness' racing license number.

**Note:** Quality testing requires a quality sample – clean, dry, unadulterated, and the required length and diameter. Submitting samples that are too short, or of insufficient width can make testing ineffective. If the integrity of the sample is determined to be compromised or considered to be non-diagnostic, collection may be refused, or the sample not tested at the laboratory.

Minimum sample requirements:

- Hair must be clean and dry
- Four (4) inches (10cm) in length
- Diameter of a No. 2 lead pencil

### **Test Type:**

The party submitting the request for hair testing must indicate test type on the designated form which must accompany the hair sample(s), see Appendix 1. See below test types.

- Condition of Entry Testing
- Injury
- Post-mortem
- Veterinary List
- Post-Race
- Claim
- Out-of-Competition Testing
- Trials
- Clearance Testing
  - Transfer of Horse
  - Trainer-Initiated

Note: With clearance testing, the responsible person must indicate the substance or class of substance being requested for testing. The state racing authority may request medical records prior to approval for testing which would include but not limited to the following information, dose, dosing frequency, route of administration, and date of last administration. Clearance testing must be approved by the state racing authority prior to testing and must be conducted by authorized sample collection personnel.

### **Laboratory Reporting:**

Laboratories will analyze the hair sample in accordance with the requested test type. Qualitative results will be reported for hair testing. Please contact the laboratory directly to discuss any additional reporting needs.

### **Confirmatory Analysis:**

The party submitting the request for hair testing must indicate on the request form, Appendix 1., if confirmatory analysis will be required in the event of an adverse analytical finding. If confirmation is required, a split sample must be collected at the same time as the primary sample adhering to the same collection standards.

### **Turn-Around-Time:**

The minimum **required** turn-around-time for hair testing is 14 days. If you are requesting an expedited turn-around-time, please contact the laboratory directly for availability prior to submission.

### **Scope of Testing:**

Laboratories will analyze hair sample test types in accordance with the harmonized scope of analytes and sensitivity. Please contact laboratories directly to discuss the recommended scope of hair testing applied.



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## **Appendix 1. Request for Hair Sample Analysis Form**



## Request for Hair Sample Analysis Form

Date of Request \_\_\_\_\_

Party Submission Request: Regulatory Veterinarian ☐ Breed Association Representative ☐

Practicing Veterinarian ☐ Trainer ☐ Owner ☐ Other ☐ \_\_\_\_\_

Name: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

Breed: Quarter Horse ☐ Thoroughbred ☐ Standardbred ☐

Test Type: Condition of Entry ☐ Injury ☐ Post-mortem Injury ☐ Vet's List ☐ Post-Race ☐

Claim ☐ Out of Competition Testing ☐ Trials ☐ Transfer of horse/Trainer initiated ☐

(Must be sampled by regulatory veterinarian)

### Clearance Testing

Will the test selected require **confirmation**? Yes ☐ No ☐

If confirmation is required, will a **split sample** be available? Yes ☐ No ☐

### Hair Analysis

Sample collected by: Regulatory Veterinarian ☐ Other ☐ \_\_\_\_\_

### Sample Collection:

(choose one) Mane Tail ☐

(choose one) Pulled Cut ☐

Sample length: \_\_\_\_\_ Inches

Minimum required length is 4 inches of hair from proximal to distal.

### Sample Condition:

Dry ☐ Wet ☐

Texture: Normal ☐ Brittle ☐ Tangled ☐ Oily ☐

Odor: Normal ☐ Other \_\_\_\_\_

Laboratory may refuse testing of any hair sample if determined to be non-diagnostic.

Expected Turn-Around-Time: \_\_\_\_\_

Minimum **recommended/required** turn-around-time for hair testing is 14 days. If you are requesting an expedited turn-around-time please contact laboratory directly for availability.

### Analytes:

Laboratories will analyze hair sample test types in accordance with the harmonized scope of analytes and sensitivity. Please contact laboratories directly to discuss recommended scope of hair testing applied.