



RMTC Best Practices for Out-of-Competition Testing

Background:

Establishing an effective Out-of-Competition (OOC) testing protocol requires consideration of multiple sampling strategies such as:

1. Random selection of horses that are not entered to race in the next 1-2 days;
2. Random selection of horses that have recently raced;
3. Selection of all horses housed in a randomly selected barn;
4. Selection of horses that are nominated, qualified for, or entered to race in specific stakes races;
5. Selection of horses from a specific barn where increased surveillance may be warranted (*e.g.*, abnormally high win percentage, previous positive findings in post-race or OOC samples, unexplained horse death, etc.).

The most effective overall strategy is to combine all of these strategies. OOC testing is intended to be a deterrent. The goal is for stakeholders to be unable to predict which horses are likely to be sampled for OOC and when the sampling will occur.

Moreover, it is important that each jurisdiction cooperate in sampling for other racing jurisdictions. If cross-jurisdictional sampling is refused, it creates an incentive for the less-ethical horseman to house and manage horses beyond the reach of the regulator. This prevents OOC testing from acting as a deterrent.

Practical considerations:

Regulatory Authorities should expect vigorous legal challenges to OOC positive findings in light of the associated penalties. Many of these challenges will be directed at sample collection and processing procedures, and chain of custody protocols. It is therefore critical that regulatory authorities establish and consistently apply protocols that will withstand legal scrutiny to the collection, processing, and management of out of competition samples.

A defensible chain of custody for out of competition samples requires thoughtful advance planning. To minimize errors, it is desirable that all jurisdictions conducting out of competition testing use harmonized sample collection and processing protocols. This can be achieved, but to do so will require the cooperation of racing regulatory authorities and drug testing laboratories.

For some jurisdictions, statute or regulation specifies the matrix to be analyzed; others may be constrained by their laboratory's scope of ISO 17025 accreditation. Despite the effort required, harmonization of out of competition sampling and testing protocols is achievable and should be a priority for racing regulators. If implemented, it will reduce the risk of findings being rescinded as a result of procedural lapses and result in more efficient use of limited testing budgets.

Further, a program similar to that utilized by the United States Equestrian Federation, could be implemented whereby third-party veterinarians and veterinary technicians (if permitted by regulation/statute) undergo training and receive proficiency certification. A roster of certified individuals could then be established and maintained as a resource to racing authorities.

Pending the harmonization of out of competition sampling and testing protocols, this document is intended to provide guidance in developing defensible practices.

Sampling Considerations:

Unlike post-race samples that are collected in the restricted enclosure and highly controlled environment of the Test Barn, out of competition samples may be collected under a range of conditions and in a variety of environments, including:

- in state/province, on-site at facilities where live racing is being conducted;
- in-state/province, off-site at facilities under the jurisdiction of the regulatory authority;
- in-state/province, off-site at private facilities not under the jurisdiction of the regulatory authority
- out of state/province or, country

What you will need to take defensible samples:

Each sampling scenario presents unique challenges that must be recognized and addressed. However, some general considerations apply to all sample collections.

1. **Horse Identification:** Horses must be unequivocally identified. The individual performing sample collection must be provided adequate information to confirm the horse's identity. Physical description, as recorded on the horse's breed registry certificate, tattoo, microchip or freeze brand can be used. As tattoos and brands can be difficult to read, it is advisable to always provide a physical description.
2. **Stakeholder Witness:** The collection and sealing of samples must be observed by the trainer or designated representative. Unattended horses should not be sampled. This may require some advance notice that the horse has been identified for out-of-competition testing. Regulations may specify the timing of such notifications, but it is preferable that stakeholder receive minimal notice to prevent deliberate and calculated delays in making a horse available.

Affording a stakeholder the opportunity to delay, or direct the timing of, sample collection from a selected horse is not advisable as it opens the door for the licensee to make the horse available for sampling after the detection window for a banned substance has closed—based on the trainer’s knowledge of an illicit administration.

3. **Sample Materials:** It may be possible to use blood or urine collection materials conventionally used by the individual performing the sampling. Verify that sampling materials (tube type and volume) meet the requesting regulatory authority and testing laboratory’s requirements. This determination should be made prior to the collection of any samples.

If supply sharing is not possible, the requesting regulatory authority should provide sampling and shipping supplies – collection tubes, collection needles, tamper-evident seals, sample ID cards, chain of custody documentation, insulated shipping container, freezer packs, and pre-paid overnight shipping labels – to the sampling veterinarian in a timely manner. Proper planning can avoid the expense and inefficiency of shipping empty blood tubes by overnight express.

A universal out-of-competition sample ID card (below) can be distributed electronically and the numbered bar code for labeling sample containers provided by either the requesting authority or sampling authority (when possible).

Universal Out Of Competition Sampling Form		Affix Sample ID Barcode Here
On behalf of _____ <small>(Regulatory Authority)</small>	as requested by _____ <small>(Regulatory Authority’s representative)</small>	
Horse: _____ Tattoo: _____ Age/Gender/Color: _____		
Date: _____ Location: (Track/Barn/Stall): _____		
Sampled by _____ <small>(Print name)</small>	_____ <small>(Signature)</small>	
Sampling witnessed by: _____ <small>(Signature)</small>	License _____ <small>(Issuing State and Number)</small>	

4. **Instructions:** Step-by-step sample collection, processing, and shipping instructions.

Note: It is helpful to have an individual unfamiliar with the regulatory authority’s protocols attempt to collect a sample using only the guidance in the instructions. This will identify any lack of clarity and allow for corrections in the instructions – before they are distributed and sampling errors occur.

Particularly when utilizing independent third-party sample collectors, assume nothing with respect to their understanding of chain of custody. Instructions should be clear, concise and unambiguous.

It is also helpful to provide guidance for events that may arise, such as, what to do if:

- the trainer states the horse won't be running;
- the trainer declines to make the horse available for sampling;
- the horse is not at the location, has shipped elsewhere, or is in transit.

5. The Regulation: A copy of the requesting authority's out-of-competition regulation that establishes a horse's eligibility for testing;

6. Contact Information: Contact information should be provided for:

- Trainer(s) associated with horse(s) identified for sampling, and instructions for communicating with those trainers;
- A representative of the regulatory authority who will be available (including on weekends) should the sampling veterinarian have questions.

The following offers guidance on the collection, processing, and management of out-of-competition samples under various scenarios.

I. In-state/province, on-site at facilities where live racing is being conducted under the jurisdiction of the regulatory authority

Sampling is typically performed in the stable area by employees of the regulatory authority who are:

- known to horsemen (nonetheless, sampling personnel should present credentials issued by the regulatory authority);
- proficient in collecting and processing samples per the regulatory authority's protocols; and
- familiar with the associated forms and documentation protocols.

Defensible chain of custody must be initiated and maintained from the time a sample is collected until it is transferred to the Test Barn where existing standard chain of custody protocols—consistent with those applied to post-race samples can be implemented.

If multiple horses are to be sampled, it is advisable to have a security officer, or other representative approved by the regulatory authority, present to secure previously collected samples while the phlebotomist is occupied with sample collection from another horse.

Samples should not be left outside a stall unattended or unobserved. In a hearing, the phlebotomist must be able to credibly testify that samples were in his care, custody and control from the time of collection up until they were transferred to Test Barn personnel for processing.

II. In-state/province, off-site at facilities (training centers and racetracks) under the jurisdiction of the regulatory authority

An employee of the regulatory authority or an independent third-party veterinarian or veterinary technician (as permitted by regulations) may be utilized for sample collection.

Accepting that employees of the regulatory authority are proficient in sample collection and processing, the main consideration for off-site sampling is maintaining chain of custody and sample integrity. If samples are to be delivered to the Test Barn, an insulated cooler with cold packs should be used for sample transport. A Chain of Custody log should be initiated, recording the time and location of sample collection and time of sample delivery to the Test Barn. The time interval recorded should be consistent with prompt transport post-collection.

It is preferable that samples be transferred to the Test Barn the day of collection. Overnight storage in a vehicle or home refrigerator can represent substantial vulnerability in the chain of custody.

If a third party is employed for sampling, that individual should not have a business relationship with the owner and/or trainer of horses identified for sampling. The appearance of a conflict of interest, or the potential for a client to influence sampling procedures is unacceptable.

When a third-party performs sampling, it is important to fully train that individual, with emphasis placed on the vulnerabilities that arise when established protocol is not followed. Training should include horse identification, execution of administrative tasks, sample collection protocols, sample management pending shipment, and maintenance of chain of custody. The third-party should be provided with clear, written instructions covering all tasks associated with sampling AND contact information for a representative of the regulatory authority who is available for consultation should questions arise.

The regulatory authority should expect to compensate a third-party sample collector commensurate with local fee structures.

III. In-state/province, off-site at facilities not under the jurisdiction of the regulatory authority

In addition to the considerations described above, permission must be sought and received for the sample collector to access private property. It is advisable to secure this permission in writing or digital recording should the right to have accessed the property later be challenged.

IV. Out of state/province, on-site at facilities where live racing is being conducted

Presumably this sampling will be performed by racing regulatory veterinarians, and thus the primary considerations in this situation will be in the shipment of the samples.

Will split samples be:

- Sent to the official laboratory? (Is this standard practice for all samples, or specific to OOC samples? If specific to OOC samples, it may be advisable to draft a protocol that is mutually agreed to by the regulatory authority and the laboratory?)
- Sent to the requesting regulatory authority?
- Retained by the sampling regulatory authority? (The sampling authority should be advised of the requesting authority's expectations with respect to testimony and legal support should a positive test arise.)

The timing of shipments should be relevant to the official laboratory's hours of operation. Samples should not be shipped on Fridays unless the laboratory is available to receive shipments on Saturdays. Samples collected one or more days prior to shipment should be retained in a locked refrigerator (blood) or freezer (urine) pending shipping. The chain of custody log should reflect the location and duration of storage, and the names of the individuals who stored and retrieved the samples.

The requesting authority should afford some latitude in the scheduling of sample collections. It may not be possible for horses to be sampled on 'dark' days when the sampling authority does not have personnel on site or on particularly busy race days when the sampling authority's personnel cannot be diverted from ongoing duties. Last-minute or 'emergency' sampling requests can be difficult to accommodate.

V. Out of state/province, off-site at facilities under the jurisdiction of the sampling regulatory authority

It is advisable to consult the sampling authority in advance to determine personnel availability. Due to staffing limitations, it may not be possible to have samples collected off-site on a day when live racing is being conducted. Alternatively, a third-party collection can be utilized. (See Section II.)

VI. Out of state/province, off-site at facilities not under the jurisdiction of a regulatory authority

It is advisable to consult the sampling jurisdiction to determine its authority to access horses located on private property. Some regulations provide sampling constraints that would not allow that jurisdiction to honor a sampling request for a horse located on private property. Under those circumstances, a third-party is the only option AND advance permission must be secured to access the facility and the horse(s) selected for sampling.

Permission to access private property should be secured by the regulatory authority requesting the sampling, rather than expecting the third-party collector to make the request.

VII. Out of the country

Identify any language barriers that may exist between the requesting and the sampling authority. It may be necessary to provide translations for instructions or other regulatory documents.

International shipments of biologic samples require a United States Department of Agriculture (USDA) import permit, and in many cases, export permission from the source country's agriculture agency. Failure to have the required documentation can result in shipping delays, or a complete refusal to ship. Securing these permissions may take weeks, so advance planning is required. Further, shipping requirements may change in response to evolving disease outbreaks. A good working relationship with the USDA Area Veterinarian In Charge (AVIC) will minimize delays.

Even with the necessary documentation, international shipping can take days. Overnight shipping—other than from Canada or Mexico—is an unrealistic expectation so effort should be taken to support sample integrity for a longer period of time with additional insulation and freezer packs.