

**MEDICATION AND
TRACK SAFETY COMMITTEE**

Madeline Auerbach, Chairman

Alex Solis, Member

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DISCUSSION REGARDING THE FEASIBILITY OF AMENDING
CHRB RULE 1658, VESTING OF TITLE TO CLAIMED HORSE,
TO REQUIRE THE TRAINER OF RECORD OF THE HORSE THAT WAS CLAIMED
TO PROVIDE TO THE NEW OWNER, A RECORD OF ALL
JOINT INJECTIONS WITHIN THE LAST 30 DAYS

Medication and Track Safety Committee Meeting
March 16, 2016

BACKGROUND

Knowledge of a horse's previous medical history is important in planning future veterinary treatment to best care for its health and well-being. Between November 30, 2011 and March 18, 2012, 21 horses died or were euthanized while racing at Aqueduct Race Track. New York Governor Andrew Cuomo appointed a task force to investigate the deaths. One of the many findings during the investigation concerned the lack of prior medical history when horses are claimed from one trainer to another:

"The Task Force is also greatly concerned that in claiming races, there is no way for a successful claimant to determine if the horse he/she has claimed has been recently injected with an intra-articular corticosteroid, putting that horse at risk for redundant medical treatment as well as preventing an accurate assessment of the horse's soundness. The Task Force believes that in this limited instance, it is appropriate that the New York State Racing and Wagering Board, by regulation, institute a reporting requirement that provides disclosure to the successful claimant of any intra-articular corticosteroid injection performed within 30 days of the race. The Task Force believes that this appropriately establishes accountability for subsequent medical decisions and is in the best interests of the racing safety of the horse and rider¹."

Subsequently, the New York Gaming Commission amended its claiming rule to require trainers to provide the new trainer with a history of intra-articular cortisone injections.

Rules and Regulations, Chapter I (Division of Horse Racing and Pari-Mutuel Wagering)
Subchapter A (Thoroughbred Racing) 9 NYCRR §§ 4000-4082.3.

§ 4038.5. Requirements for claim; determination by stewards.

(c) The previous trainer of a claimed horse shall, within 48 hours after the race is made official, provide to the new owner an accurate record of all corticosteroid joint injections that were administered to the horse within 30 days before the race.

The Stronach Group, owners of several racetracks including Santa Anita and Golden Gate Fields in California, instituted a similar "house rule" at Gulfstream Park in Florida in 2016. The Gulfstream Park rule (below) was provided by Dr. Robert Oneil, Director of Equine Health & Safety for The Stronach Group at Gulfstream Park:

¹ <http://www.governor.ny.gov/sites/governor.ny.gov/files/archive/assets/documents/Report.pdf>

JOINT INJECTIONS CONCERNING HORSES CLAIMED

Concerning a Claimed horse; the Trainer of record of the horse that was claimed shall have his Veterinarian supply the Equine Health & Safety Director within 72 hours a report in writing or (email) the joint(s) injection(s) performed on said animal within the last 30 days. Report will include joint(s) involved, medication used (Depo-Medrol, Hyaluronic acid, etc.) and the dose used. This data will be shared with the party who claimed the said animal.

In 2015 at the four major California racetracks, Santa Anita, Golden Gate Fields, Los Alamitos and Del Mar, there were 1669 successful claims with horses changing trainers and owners that would be subject to this regulation.

RECOMMENDATION

This item is presented for Committee discussion.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 7. CLAIMING RACES.
RULE 1658. VESTING OF TITLE TO CLAIMED HORSE.

Medication and Track Safety Committee Meeting
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1658. Vesting of Title to Claimed Horse.

(a) Title to a horse which is claimed shall be vested in the successful claimant from the time the field has been dispatched from the starting gate and the horse becomes a starter; and said successful claimant becomes the owner of the horse unless voided by the stewards under the provisions of this article. Only a horse which is officially a starter in the race may be claimed. A subsequent disqualification of the horse by order of the stewards or the Board shall have no effect upon the claim.

(b) The stewards shall void the claim and return the horse to the original owner if:

(1) The horse suffers a fatality during the running of the race, dies, or is euthanized before leaving the track, or

(2) The racing or official veterinarian determines the horse will be placed on the Veterinarian's List as unsound or lame before the horse is released to the successful claimant.

(c) The stewards shall not void the claim if, prior to the race in which the horse is claimed, the claimant elects to claim the horse regardless of whether the racing or official veterinarian determines the horse will be placed on the Veterinarian's List as unsound or lame.

(1) An election made under subsection (c) of this rule shall be entered on the form CHRB-11(Rev. 8/14) Agreement to Claim, in accordance with section 1656 of this article.

(d) The claim shall be void if the race is called off, canceled, or declared no contest in accordance with Rule 1544 of this division.

Authority: Sections 19420 and 19440,
Business and Professions Code.

Reference: Section 19562,
Business and Professions Code.

DISCUSSION REGARDING REQUIRING TRAINERS TO MAINTAIN
FULL AND ACCURATE RECORDS OF ALL TREATMENTS GIVEN TO A HORSE,
INCLUDING VETERINARY PROCEDURES PERFORMED AND ALL
MEDICATIONS ADMINISTERED;
SUCH RECORDS TO BE AVAILABLE FOR INSPECTION BY
REPRESENTATIVES OF THE CHRB IN THEIR OFFICIAL DUTIES

Medication and Track Safety Committee Meeting
March 16, 2016

BACKGROUND

An accurate and complete medical history is considered an important element of good veterinary care. The International Federation of Horse Racing Authorities (IFHA) and the British Horse Racing Authority (BHA) require trainers to maintain records of all veterinary procedures and medications administered to horses under their care. The records are subject to inspection by persons acting on behalf of the racing authority. Most well run stables have some measure of veterinary medical records as would be expected. A regulation in California similar to IFHA & BHA would be in the best interest of horse health, and would facilitate pre-race veterinary examinations. Such a regulation would also simplify medication violation investigations. Most medication violations before the CHRB can be best described as medication administration errors. When a case is reviewed at hearings there is usually little written documentation of when a prohibited drug was administered, at what dose, and by whom. The prescribing veterinarian is often challenging to sort out, which currently requires comparing prescribed medication labels and the confidential veterinary reports submitted under Board Rule 1842, Veterinary Report, through form CHRB-24, Confidential Veterinarian Report. A recordkeeping requirement would provide an additional level of attention to the use of otherwise prohibited medications in racing. A further benefit would be access to a horse's recent medical history by the pre-race examining veterinarians. Such access on the part of examining veterinarian is part of the Hong Kong Jockey Club's pre-race inspection program. Individual veterinarians are required to maintain medical records of horses they treat, but where multiple veterinarians treat horses from different medical practices, the complete medical record for the horse would not be held by any individual veterinarian, nor would such a record be readily available for inspection. The BHA requires trainers to record the following information:

- Name of the horse;
- Date of commencement and prescribed duration of any Treatment;
- Name (description) of the Treatment;
- Route and dosage per day;
- Name of the Person administering the Treatment,
- Name of the Person authorizing or prescribing the Treatment.

The BHA does not require a specific format. While a specific format would be ideal, as long as the information is complete and can be readily reviewed that may not be necessary. The medical record information being required would be amenable to configuring to various electronic formats for those trainers wishing to do so. The draft form below is an example template that would provide the needed information:

Horse: _____

Date	Treatment/Medication/Prescription	Route of <u>Administration</u> Times per Day	Person Administering	Authorized/ Prescribed By	Time of day

RECOMMENDATION

This item is presented for Committee discussion.

International Federation of Horseracing Authorities (IFHA) Medication Reporting Regulation

Article 6D – MEDICATION IN TRAINING

CODE OF MEDICATION PRACTICE FOR HORSES IN TRAINING

Definition of Treatment

For the purpose of this Article, the term treatment includes:

- a. The administration of any substance (including any medication) to a horse and;
- b. The administration or application of any physical procedure or therapy to a horse intended to have an effect.

Guiding Principles

The following guiding principles apply to the treatment of horses in training:

- c. All treatments are the responsibility of the trainer and must be administered under veterinary supervision.
- d. Every treatment must be administered in the best health and welfare interests of the horse.

Accordingly:

- e. The trainer must obtain veterinary advice from the attending veterinarian on the management, treatment and appropriate level of training for a sick or injured horse.
- f. Treatment of a horse by the administration of a substance or a medication containing a prohibited substance may only be performed on the advice of a veterinarian with appropriate knowledge of the condition, health status and management of the individual horse. In the case of substances controlled by government regulation, these may only be administered by, or on the prescription of, a veterinarian.
- g. The trainer is responsible for creating and maintaining full and accurate records of all treatments given to a horse, including all veterinary procedures performed and all medications administered. These records must be kept for a minimum of 12 months and be readily available for inspection by regulatory officials when requested.
- h. With the exception of normal feed and water by mouth, no substance shall be administered to any horse on race day before the race in which it is entered, unless such treatment is authorized by the Horseracing Authority. This includes any substance administered by injection, into the mouth, by inhalation, topically or by any other method of administration.
- i. The trainer must comply with mandatory horse rest periods for specific drugs or treatments, as enforced by the Horseracing Authority.
- j. Horses that are unable to be trained due to injury or illness must be taken out of training and given appropriate veterinary treatment and/or rest. All treatments must be administered in the best interests of the horse and not to facilitate the continuation of training.

British Horseracing Authority Rules

13. Duty to keep medication records

13.1 A record of any Treatment administered to a horse under the care or control of a Licensed Trainer or Permitted Trainer must be kept by the trainer for a period of not less than one year.

13.2 Each record must include at least the following information

13.2.1 date of commencement and prescribed duration of any Treatment,

13.2.2 name of the horse,

13.2.3 name of the Treatment used,

13.2.4 route and dosage per day of the Treatment,

13.2.5 name of the Person administering the Treatment, and

13.2.6 name of the Person authorising or prescribing the Treatment.

13.3 The records must be made available for inspection

13.3.1 by any approved Person authorised to enter the trainer's premises under Part (A)5, and

13.3.2 in accordance with any directions given by the Authority when conducting an enquiry under

that Part of that Manual into a possible contravention of these Rules.

13.4 **Treatment** means any medication or treatment containing a Prohibited Substance administered to a horse under the care of a Licensed Trainer or Permitted Trainer whether or not currently in training.

DISCUSSION REGARDING REQUIRING ALL
VETERINARY TREATMENTS AND PROCEDURES THAT ARE
ADMINISTERED BE IN THE BEST INTEREST OF THE HORSE;
EVERY TREATMENT IS JUSTIFIED BY A
MEDICAL CONDITION AND BASED ON ADVICE FROM A VETERINARIAN

Medication and Track Safety Committee Meeting
March 16, 2016

BACKGROUND

Board Rule 1843, Medication, Drugs and Other Substances, requires “ No person other than a licensed veterinarian or animal health technician shall have in his/her possession any drug substance which can be administered to a horse, except such drug substance prescribed by a licensed veterinarian for a specific existing condition of a horse and which is properly labeled. “ Similarly, the British Horse Racing Authority requires “every treatment must be fully justifiable by the medical condition of the horse receiving the treatment.” Rule 1843 also requires that every treatment be fully justifiable by the medical condition of the horse and all treatments and medications administered to a horse are given in the interests of its best health and welfare. California Veterinary Medical Board regulations specify medical decision be made based on a sufficient examination to make a preliminary diagnosis and in conjunction with a veterinary client patient relationship. While the treatment is expected to be consistent with the medical condition, there is no requirement such treatment be in the interests of the horse’s best health and welfare. Such a requirement for both trainers and veterinarians, and possibly owners, would support the industry’s focus on horse welfare.

RECOMMENDATION

This item is presented for Committee discussion.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
RULE 1843. MEDICATION, DRUGS AND OTHER SUBSTANCES

Medication and Track Safety Committee
March 16, 2016

1843. Medication, Drugs and Other Substances.

It shall be the intent of these rules to protect the integrity of horse racing, to guard the health of the horse, and to safeguard the interests of the public and the racing participants through the prohibition or control of all drugs, medications and drug substances foreign to the horse. In this context:

(a) No horse participating in a race shall carry in its body any drug substance or its metabolites or analogues, foreign to the horse except as hereinafter expressly provided.

(b) No drug substance shall be administered to a horse which is entered to compete in a race to be run in this State except for approved and authorized drug substances as provided in these rules.

(c) No person other than a licensed veterinarian or animal health technician shall have in his/her possession any drug substance which can be administered to a horse, except such drug substance prescribed by a licensed veterinarian for a specific existing condition of a horse and which is properly labeled.

(d) A finding by an official chemist that a test sample taken from a horse contains a drug substance or its metabolites or analogues which has not been approved by the Board, or a finding of more than one approved non-steroidal, anti-inflammatory drug substance or a finding of a drug substance in excess of the limits established by the Board for its use shall be prima facie evidence that the trainer and his/her agents responsible for the care of the horse has/have been

negligent in the care of the horse and is prima facie evidence that the drug substance has been administered to the horse.

Authority: Sections 19440, 19580, 19581 and 19582,
Business and Professions Code.

Reference: Sections 19401, 19440, 19580, 19581 and 19582,
Business and Professions Code;
Sections 337f, g and h, Penal Code.

British Horseracing Authority Rules

28. Veterinary treatment and medication

28.1 A Trainer must ensure that all treatments and medication administered to a horse under his care or control are given in the interests of its best health and welfare.

28.2 Accordingly

28.2.1 every treatment must be fully justifiable by the medical condition of the horse receiving the treatment,

28.2.2 horses that are not trainable as a result of injury or disease must be given appropriate veterinary treatment before training is resumed, and

28.2.3 the Trainer must obtain advice from the Veterinary Surgeon prescribing a treatment as to the appropriate level of training during the duration of the treatment.

28.3 Rule 33 contains further provision in respect of treatment which applies when a horse is on Racecourse Property.

28.4 Schedule (B)3 7.1 contains a restriction in respect of the giving to a horse of any substance on the day of a race.

DISCUSSION REGARDING THE EXPANSION OF
OUT OF COMPETITION TESTING
INCLUDING A BAN ON
ANABOLIC STEROIDS

Medication and Track Safety Committee Meeting
March 16, 2016

BACKGROUND

Out-of-competition testing (OOCT) has become a key element of human anti-doping programs. There are a number of drugs which can be used well before completion to enhance athletic performance which are no longer detectable in post-race testing. Erythropoiesis-stimulating agents such as Epogen and anabolic steroids in general are the most commonly cited examples. The California Horse Racing Board (CHRB) has one of the more robust OOCT programs in United States horse racing. The CHRB's OOCT program has used long-existing regulations, not specifically written for OOCT testing to conduct its program. Board Rule 1858, Test Sample Required, is fairly broad in granting the CHRB access to horses within the official racing and training inclosures. It does not address access to those horses outside of CHRB inclosures as is commonly seen with Quarter Horses and Standardbreds. OOCT testing for Breeders' Cup races and for major stakes often relies on the cooperation of local racing jurisdictions under their local authority. In addition, the CHRB is limited in what action can be taken based on OOCT findings. Board Rule 1866, Veterinarian's List, specifies a very narrow list of just seven substances that are prohibited at all times. The World Anti-doping Agency (WADA), which oversees human sport drug testing, produces an expansive list of substance prohibited at all times. The Racing Medication and Testing Consortium (RMTC) is an industry group consisting of 23 racing industry stakeholders and organizations that represent Thoroughbred, Standardbred, American Quarter Horse and Arabian racing. The organization works to develop and promote uniform rules, policies and testing standards at the national level; coordinate research and educational programs that seek to ensure the integrity of racing and the health and welfare of racehorses and participants; and protect the interests of the racing public. California based organizations which are members are The Stronach Group (Santa Anita & Golden Gate Fields), Del Mar Turf Club, Oak Tree, Thoroughbred Owners of California and California Thoroughbred Trainers. The RMTC appointed a sub-committee chaired by UCD-SVM/ CHRB equine Medical Director Dr. Rick Arthur to develop a comprehensive OOCT program for horse racing. In Late February, 2016, the RMTC voted unanimously to recommend to send the Association of Racing Commissioners International (RCI) the expanded and more comprehensive OOCT model rule for horse racing that was developed. The recommended model rule addresses sampling procedures and defines what substances are prohibited in a Prohibited Substance List. The Prohibited Substance List is modeled on the WADA Prohibited Substances List—taking into account substances unique to horses' health under specified conditions.

RECOMMENDATION

This item is presented for Committee discussion.

Out of Competition Testing (Draft Model Rule)

1. Prohibited Substances and Practices - the following shall be deemed a violation of this section:
 - a. The presence of any substance prohibited pursuant to the then current Prohibited Substance List at the time of sampling;
 - b. The possession or use of:
 - i. erythropoietin, darbopoetin, hemoglobin-based oxygen carriers;
 - ii. naturally produced venoms, synthetic analogues of venoms, derivatives of venoms, synthetic analogues of derivatives of venoms; and
 - iii. growth hormones, or beta-2 agonists that are not subject to regulatory thresholds (e.g., ractopamine/zilpaterol)on the grounds of a licensed facility under the regulatory authority's jurisdiction; and
 - c. The possession at any time of whole blood or packed red blood cells on the grounds of a licensed facility under the regulatory authority's jurisdiction by anyone other than a licensed veterinarian or a technician under the direct supervision of the veterinarian rendering emergency treatment to a horse on the licensed facility grounds. The attending veterinarian shall notify the commission veterinarian of the intent to administer whole blood or packed red blood cells prior to his or her collection or possession of the whole blood or packed red blood cells.
2. Horses Eligible for Out-of-Competition Testing: Any horse eligible to race in the jurisdiction shall be subject to testing without advance notice. A horse is presumed eligible to race in the jurisdiction if:
 - a. It is under care, custody, or control of a licensed trainer;
 - b. It is owned by a licensed owner;
 - c. It is nominated to race at a licensed premises;
 - d. It has raced at a licensed premises within the jurisdiction within the previous 12 months;
 - e. It is stabled on a licensed premises or training facility; or
 - f. It is nominated to the state thoroughbred development, breeder's award fund, or Standardbred state sires stakes.

Horses eligible for testing pursuant to the above qualifications may be selected by the stewards, the Executive Director, the Equine Medical Director/State Veterinarian, a designee of any of the foregoing, or as otherwise authorized by regulation within the jurisdiction.

3. Sampling Location and Procedures:

Upon request of a representative of the racing jurisdiction trainers, owners, or their specified designee shall provide the location of their horses eligible for Out-of-Competition testing.

The trainer, owner, or specified designee shall make the horse available for Out-of-Competition testing as follows:

- a. Licensed Facilities
 - i. Trainers, owners, or their specified designees must make the horse available as soon as practical upon request of a regulatory authority representative if the horse is located at a licensed facility.
- b. Off-Track Stabling Facilities or Other Locations
 - i. If the horse is not located at a licensed facility:
 - 1. the trainer, owner, or their specified designees shall make the horse available as soon as practical upon arrival of regulatory authority representatives at the off-track stabling facility or other location at which the horse is located; or
 - 2. The trainer, owner, or their specified designees shall bring the horse to a licensed facility within 24 hours of receiving notification of out of competition sampling, or
 - 3. The trainer, owner, or their specified designees may bring the horse to another location that is acceptable to the commission for such sampling to occur.
 - ii. If collecting at a site other than a licensed racetrack or training facility – sampling can only occur during standard business hours but not earlier than 6 a.m. nor later than 6 p.m. Under this subsection, the veterinarian collecting the samples or his/her designee must notify the owner/trainer/individual exercising care and control of horse a minimum of 1 hour prior to arrival.

4. Persons to Collect Samples

- a. Horses Located in the Requesting Jurisdiction
 - i. Samples shall be collected under the direction of the official veterinarian, the Equine Medical Director, a person designated by the official veterinarian, or a person designated by the racing authority. Any individual directing the collection of samples shall be licensed by the Racing Commission.
- b. Horses Located Outside of the Requesting Jurisdiction
 - i. If the horse is located outside the jurisdiction, the racing authority may request that the sampling be completed by a veterinarian who is:
 - 1. Licensed to practice by the veterinary medical board in the state in which the sampling is to occur; and
 - 2. Authorized by the requesting racing authority to perform sampling.
 - ii. Such authorization shall be provided by the executive director, equine medical director/state veterinarian, stewards, or their respective designees.

5. Samples and Sample Handling

- a. Samples to be collected: blood, urine, hair, or other biological official test samples may be collected.
- b. The trainer, owner, or their designee shall witness the sample collection including sealing sample collection containers. The chain of custody for the sample (including a split sample

where appropriate) must be maintained and available for inspection by the trainer, owner, or their designee. The chain of custody record will be available for inspection where a complaint or regulatory action occurs as a result of the out of competition test.

6. Penalties

- a. Willful failure to make a horse available for sampling or other willfully deceptive acts or interference in the sampling process shall carry a minimum penalty equivalent to a Class A penalty for the first violation. License revocation shall occur for second offense. A horse that is not produced for out of competition testing shall be placed on the Veterinarian's List for a minimum of 6 months.
- b. Penalties for a finding of a prohibited drug or substance:
 - i. The penalty for a finding for a drug or substance prohibited at all times on the Prohibited List in an Out-of-Competition Testing sample shall apply in the same manner as to a scheduled race.
 - ii. Penalties for a finding of a prohibited drug or substance are subject to inclusion in the Multiple Medication Violation Penalty Point System.
- c. Persons eligible to receive penalties:
 - i. The trainer of record of a licensed horse;
 - ii. The owner of record of a licensed horse if the horse is not under the care, custody, or control of a licensed trainer; and
 - iii. If a horse had not been in the care, custody, and control of a licensed trainer for the seven days prior to Out-of-Competition testing the owner and trainer shall be equally liable.

THE 201X PROHIBITED LIST

Valid 1 January
201X

In accordance with ARCI-011-015/ARCI-025-015 all substances in the categories below shall be strictly prohibited unless otherwise noted. Any reference to substances in this section does not alter the requirements for testing concentrations in race day samples.

<p>SUBSTANCES AND METHODS PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)</p>

PROHIBITED SUBSTANCES

Nothing in this list shall alter the requirements of post-race testing.

S0. NON-APPROVED SUBSTANCES

Any pharmacologic substance which is not addressed by any of the subsequent sections of the List and with no current approval by any governmental regulatory health authority for human or veterinary use (e.g., drugs under pre-clinical or clinical development, discontinued drugs, and designer drugs) is prohibited at all times.

S00. THERAPEUTIC SUBSTANCES

Therapeutic substances that are not otherwise prohibited pursuant to this list are permitted provided such substances:

- Have current approval for use in human, horse, or other animal by any governmental regulatory health authority in the jurisdiction where the horse is located

S1. ANABOLIC AGENTS

Anabolic agents are prohibited.

1. Anabolic Androgenic Steroids (AAS)

1.1. Exogenous* AAS, including:

1-androstenediol (5 α -androst-1-ene-3 β ,17 β -diol); 1-androstenedione (5 α - androst-1-ene-3,17-dione); bolandiol (estr-4-ene-3 β ,17 β -diol); bolasterone; boldenone; boldione (androsta-1,4-diene-3,17-dione); calusterone; clostebol; danazol ([1,2]oxazolo[4',5':2,3]pregna-4-en-20-yn-17 α -ol); dehydrochlormethyltestosterone (4-chloro-17 β -hydroxy-17 α -methylandrosta- 1,4-dien-3-one); desoxymethyltestosterone (17 α -methyl-5 α -androst-2-en- 17 β -ol); drostanolone; ethylestrenol (19-norpregna-4-en-17 α -ol); fluoxymesterone; formebolone; furazabol (17 α -methyl[1,2,5]oxadiazolo[3',4':2,3]-5 α -androst-17 β -ol); gestrinone; 4- hydroxytestosterone (4,17 β -dihydroxyandrost-4-en-3-one); mestanolone; mesterolone; metandienone (17 β -hydroxy-17 α -methylandrosta-1,4-dien-3- one); metenolone; methandriol; methasterone (17 β -hydroxy-2 α ,17 α - dimethyl-5 α -androst-3-one); methyldienolone (17 β -hydroxy-17 α - methylestra-4,9-dien-3-one); methyl-1-testosterone (17 β -hydroxy-17 α -methyl-5 α -androst-1-en-3-one); methylnortestosterone (17 β -hydroxy-17 α -methylestr-4-en-3-one); methyltestosterone; metribolone (methyltrienolone, 17 β -hydroxy-17 α -methylestra-4,9,11-trien-3-one); mibolerone; nandrolone; 19-norandrostenedione (estr-4-ene-3,17-dione); norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; prostanazol (17 β -[(tetrahydropyran-2-yl)oxy]-1'H-pyrazolo[3,4:2,3]-5 α - androstane); quinbolone; stanozolol; stenbolone; 1-testosterone (17 β - hydroxy-5 α -androst-1-en-3-one); tetrahydrogestrinone (17-hydroxy-18 α - homo-19-nor-17 α -pregna-4,9,11-trien-3-one); trenbolone (17 β -hydroxyestr-4,9,11-trien-3-one); and other substances with a similar chemical structure or similar biological effect(s).

b. Endogenous** AAS or their synthetic esters when administered exogenously:

androstenediol (androst-5-ene-3 β ,17 β -diol); androstenedione (androst-4-ene-3,17-dione); dihydrotestosterone (17 β -hydroxy-5 α -androst-3-one); prasterone (dehydroepiandrosterone, DHEA, 3 β -hydroxyandrost-5-en-17-one); testosterone;

and their metabolites and isomers, including but not limited to:

5 α -androstane-3 α ,17 α -diol; 5 α -androstane-3 α ,17 β -diol; 5 α -androstane-3 β ,17 α -diol; 5 α -androstane-3 β ,17 β -diol; 5 β -androstane-3 α , 17 β -diol,

androst-4-ene-3 α ,17 α -diol; androst-4-ene-3 α ,17 β -diol; androst-4-ene-3 β ,17 α -diol; androst-5-ene-3 α ,17 α -diol; androst-5-ene-3 α ,17 β -diol; androst-5-ene-3 β ,17 α -diol; 4-androstenediol (androst-4-ene-3 β ,17 β -diol); 5-androstenedione (androst-5-ene-3,17-dione); androsterone (3 β -hydroxy-5 α -androstan-17-one); epi-dihydrotestosterone; epitestosterone; etiocholanolone; 7 α -hydroxy-DHEA ; 7 β -hydroxy-DHEA; 7-keto-DHEA; 19-norandrosterone; 19-noretiocholanolone.

2. Other Anabolic Agents, including but not limited to:

Clenbuterol, selective androgen receptor modulators (SARMs e.g., andarine and ostarine), ractopamine, tibolone, zeranol, zilpaterol.

For purposes of this section:

* "exogenous" refers to a substance which is not ordinarily produced by the body naturally.

** "endogenous" refers to a substance which is ordinarily produced by the body naturally.

Notwithstanding the foregoing, anabolic agents may be used out of competition provided:

- The anabolic agent has current approval for use in human, horse, or other animal by any governmental regulatory health authority in the jurisdiction where the horse is located;
- The administration is pursuant to a valid veterinary prescription;
- The treatment plan is filed **at the time of administration** as required by the racing authority in the state in which the horse is located; and
- The horse shall remain on the Veterinarian's List for 6 months after the last administration of an anabolic agent.

Notwithstanding the preceding sections of subdivision 2, Clenbuterol is permitted provided the treatment is:

- Pursuant to a valid veterinary prescription; and
- The treatment plan is filed **at the time of administration** as required by the racing authority in the state in which the horse is located.

S2. PEPTIDE HORMONES, GROWTH FACTORS AND RELATED SUBSTANCES

The following substances, and other substances with similar chemical structure or similar biological effect(s), are prohibited:

1. Erythropoietin-Receptor agonists:
 - 1.1 Erythropoiesis-Stimulating Agents (ESAs) including, e.g., darbepoetin (dEPO); erythropoietins (EPO); EPO-Fc; EPO-

mimetic peptides (EMP), e.g., CNTO 530 and peginesatide; and methoxypolyethylene glycol-epoetin beta (CERA); and

- 1.2 Non-erythropoietic EPO-Receptor agonists, e.g., ARA-290, asialo EPO and carbamylated EPO;
2. Hypoxia-inducible factor (HIF) stabilizers, e.g., cobalt (when found in excess of regulatory authority limits) and roxadustat (FG-4592); and HIF activators, (e.g., argon, xenon);
3. Chorionic Gonadotropin (CG) and Luteinizing Hormone (LH) and their releasing factors, in males;
4. Corticotrophins and their releasing factors;

Notwithstanding the preceding section of **S2** subdivision 4, ACTH is permitted provided the treatment is:

- Pursuant to a valid veterinary prescription; and
 - The treatment plan is filed **at the time of administration** as required by the racing authority in the state in which the horse is located.
5. Growth Hormone (GH) and its releasing factors including Growth Hormone Releasing Hormone (GHRH) and its analogues, e.g., CJC-1295, sermorelin and tesamorelin; Growth Hormone Secretagogues (GHS), e.g., ghrelin and ghrelin mimetics, e.g., anamorelin and ipamorelin; and GH-Releasing Peptides (GHRPs), e.g., alexamorelin, GHRP-6, hexarelin and pralmorelin (GHRP-2);
 6. Venoms and toxins including but not limited to venoms and toxins from sources such as snails, snakes, frogs, and bees as well as their synthetic analogues such as ziconotide.

In addition, the following growth factors are prohibited

Fibroblast Growth Factors (FGFs), Hepatocyte Growth Factor (HGF), Insulin-like Growth Factor-1 (IGF-1) and its analogues, Mechano Growth Factors (MGFs), Platelet-Derived Growth Factor (PDGF), Vascular-Endothelial Growth Factor (VEGF) and any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularization, energy utilization, regenerative capacity or fiber type switching.

Notwithstanding the foregoing, the platelet rich plasma (PRP) and autologous conditioned plasma (IRAP) are permitted provided such treatment is:

- Pursuant to a valid veterinary prescription; and
- Reported at the time of sampling.

S3. BETA-2 AGONISTS

All beta-2 agonists, including all optical isomers (i.e. *d*- and *l*-) where relevant, are prohibited except clenbuterol and albuterol provided the treatment is:

- Pursuant to a valid veterinary prescription; and
- Filed with the racing authority at the time of treatment if required by S1 subd.2 above.

S4. HORMONE AND METABOLIC MODULATORS

The following are prohibited:

1. Aromatase inhibitors including, but not limited to: aminoglutethimide, anastrozole, androsta-1,4,6-triene-3,17-dione (androstatrienedione), 4-androstene-3,6,17 trione (6-oxo), exemestane, formestane, letrozole, testolactone;
2. Selective estrogen receptor modulators (SERMs) including, but not limited to: raloxifene, tamoxifen, toremifene;
3. Other anti-estrogenic substances including, but not limited to: clomiphene, cyclofenil, fulvestrant;
4. Agents modifying myostatin function(s) including, but not limited, to: myostatin inhibitors;
5. Metabolic modulators:
 - 5.1. Activators of the AMP-activated protein kinase (AMPK), e.g., AICAR; and Peroxisome Proliferator Activated Receptor δ (PPAR δ) agonists (e.g. GW 1516);
 - 5.2 Insulins;
 - 5.3 Trimetazidine; and
 - 5.4 Thyroxine, and thyroid modulators/hormones including but not limited to those containing T4 (tetraiodothyronine/thyroxine), T3 (triiodothyronine), or combinations thereof.

Notwithstanding the foregoing thyroxine (T4) shall not be considered a prohibited substance provided that such treatment is:

- Pursuant to a valid veterinary prescription; and
- The administration is pursuant to prior approval of regulatory authority.

Additionally, notwithstanding the foregoing, altrenogest shall not be considered a prohibited substance in fillies and mares provided that such treatment is:

- Pursuant to a valid veterinary prescription.

S5. DIURETICS AND OTHER MASKING AGENTS

The following diuretics and masking agents are prohibited, as are other substances with similar chemical structure of similar biological effect(s):

Including but not limited to:

- desmopressin, plasma expanders (e.g. glycerol; intravenous administration of albumin, dextran, hydroxyethyl starch and mannitol), probenecid, torsemide, and other substances with similar biological effect(s).

Furosemide and trichlormethiazide are permitted out of competition provided the treatment is:

- Pursuant to a valid veterinary prescription; and
- Reported at the time of sampling if given within 24 hours of sampling.

Prohibited diuretics include:

Acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, etacrynic acid, indapamide, metolazone, spironolactone, thiazides (e.g. bendroflumethiazide, chlorothiazide, hydrochlorothiazide), torsemide, triamterene, vasopressin receptor antagonists or vaptans (e.g., tolvaptan); and other substances with a similar chemical structure or similar biological effect(s).

Notwithstanding the above, other diuretics may be administered in an emergency case provided notification of administration to the racing regulatory veterinarian within 24 hrs, and provided the treatment is:

- Pursuant to a valid veterinary prescription

If diuretics have been given within 24 hours of sample collection, the regulatory authority has the discretion to delay collection or to collect a sample and collect an additional sample at a later time.

PROHIBITED METHODS

M1. MANIPULATION OF BLOOD AND BLOOD COMPONENTS

The following are prohibited:

1. The administration or reintroduction of any quantity of autologous, allogenic (homologous) or heterologous blood or red blood cell products of any origin into the circulatory system.
2. Artificially enhancing the uptake, transport or delivery of oxygen, including, but not limited to, perfluorochemicals, efaproxiral (RSR13) and modified hemoglobin products (e.g. hemoglobin-based blood substitutes, microencapsulated hemoglobin products), excluding supplemental oxygen.
3. Any form of intravascular manipulation of the blood or blood components by physical or chemical means.

M2. CHEMICAL AND PHYSICAL MANIPULATION

The following are prohibited:

1. *Tampering*, or attempting to tamper, in order to alter the integrity and validity of *Samples* collected during *Doping Control*. These include but are not limited to urine substitution and/or adulteration (e.g. proteases).

M3. GENE DOPING

The following, with the potential to enhance sport performance, are prohibited:

1. The transfer of polymers of nucleic acids or nucleic acid analogues without prior approval from the racing authority regulatory veterinarian and notification to the state regulatory authority.
2. The use of normal or genetically modified hematopoietic cells is prohibited. Mesenchymal stem cells for treatment of musculo-skeletal disorders is not prohibited and may be used provided that such treatment is:
 - Recorded and the record is subject to inspection;
 - Pursuant to a valid veterinary prescription; and
 - Reported at the time of sampling