

CALIFORNIA HORSE RACING BOARD

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MEDICATION, SAFETY AND WELFARE COMMITTEE MEETING

of the **California Horse Racing Board** will be held on **Wednesday, February 22, 2017**, commencing at **11:00 a.m.**, in the **Baldwin Terrace Room** at the **Santa Anita Park Race Track, 285 West Huntington Drive, Arcadia, California**. Non-committee Board members attending the committee meeting may not participate in the public discussion, official committee vote, or committee closed session.

AGENDA

Action Items:

1. Discussion and action regarding a **report on shock wave therapy**.
2. Discussion and action regarding the **proposed amendment to CHRB Rule 1469, Safety of Race Course**, to prohibit an association from using the racing surface, (dirt or turf), for any purpose, other than renovation, maintenance, and training for at least 30 days prior to the start of a race meeting or at least 60 days prior to Breeders Cup Championship events at its race meeting.
3. Discussion and action regarding the **proposed amendment to CHRB Rule 1588, Horse Ineligible to Start in a Race**, to provide that a horse that has not raced for a specified number of consecutive days at a recognized race meeting is ineligible to enter a race until such horse has satisfactorily completed enhanced testing or evaluation and has been declared eligible to start by the Official Veterinarian.
4. Discussion and action regarding the **proposed amendments to CHRB Rules 1689, Safety Helmets Required; and Rule 1689.1, Safety Vest Required**, to require drivers' riding in a jog cart to wear a safety helmet and safety vest.
5. Discussion and action regarding the **proposed amendments to CHRB Rules 1858, Test Sample Required; 1859, Taking, Testing and Reporting of Samples; 1859.25, Split Sample Testing; 1867, Prohibited Veterinary Practices; and the proposed addition of CHRB Rules 1859.1, Out-of-Competition Testing Procedures and Requirements; and 1869, Prohibited Drug Substance in Out-of-Competition Testing**, to incorporate the Association of Racing Commissioners International (ARCI) model rule for out-of-competition testing into the CHRB's rules and regulations.

6. Discussion and action regarding the **proposed addition of CHRB Rule 1868, Authorized Medication During Workouts**, to establish threshold limits for the presence of certain drug substances and medication in official test samples taken from horses after they complete a timed workout.
7. Discussion and action regarding the **proposed amendment to CHRB Rule 1844, Authorized Medication**, to 1) provide that not more than one authorized corticosteroid anti-inflammatory drug substance may be administered to a horse that is entered to race and to; 2) identify the authorized drug substances.
8. **General Business:** Communications, reports, requests for future actions of the Committee.

Additional information regarding this meeting may be obtained from Jacqueline Wagner at the CHRB Administrative Office, 1010 Hurley Way, Suite 300, Sacramento, CA 95825; telephone (916) 263-6000; fax (916) 263-6042. A copy of this notice can be located on the CHRB website at www.chrb.ca.gov. *Information for requesting disability related accommodation for persons with a disability who require aids or services in order to participate in this public meeting, should contact Jacqueline Wagner.

**MEDICATION, SAFETY AND WELFARE
COMMITTEE**

Madeline Auerbach, Chairman
Alex Solis, Member
Rick Baedeker, Executive Director
Jacqueline Wagner, Assistant Executive Director

STAFF ANALYSIS
DISCUSSION AND ACTION REGARDING A REPORT ON SHOCK WAVE THERAPY.

Medication, Safety and Welfare Committee
February 22, 2017

BACKGROUND

Shockwave therapy is a relatively new technique for treating musculoskeletal injuries in race horses. The earliest articles on the subject appeared in the Proceedings of the American Association of Equine Practitioners (AAEP) in 2000, with peer-reviewed articles documenting therapeutic uses becoming available in PubMed around 2004. Since then, shockwave therapy has become commonly used in racetrack and other sport-horse veterinary practices.

When shockwave therapy was initially introduced at racetracks, concerns grew over the transitory analgesia commonly observed in some treatments. The Grayson Jockey Club Research Foundation funded emergency studies in order to better understand shockwave therapy's analgesic activity. That study (McClure, 2005) *Am J Vet Res.* 2005 Oct; 66 (10):1702-8) demonstrated analgesia for up to two days. Subsequent studies have also documented clinical analgesia for two to three days. In a non-clinical study, sensory nerve conduction velocity and histological disruption was noted up to 35 days post-shockwave treatment (Bolt, 2004).

Since 2006, the California Horse Racing Board (CHRB or Board) has required all shockwave treatments within CHRB inclosures to be reported to the Official Veterinarian. In calendar year 2016, 1,332 shockwave treatments were reported to CHRB Official Veterinarians. Initially, back in 2006, Santa Anita considered prohibiting shockwave machines on their grounds. Instead, however, the CHRB implemented a number of shockwave therapy policies and restrictions, including a minimum 10-day Veterinarian's List stand down period. Examples of those policies are included in this package. While staff believes there is considerable adherence to the CHRB's policies on shockwave treatments and equipment, concerns have been expressed by some licensees about recurring noncompliance by certain individuals.

A recent fatal musculoskeletal injury, suffered by a horse that had come off the Veterinarian's List for shockwave therapy the day before it raced, has led to a reevaluation and reassessment of current CHRB shockwave policies. In reviewing recent training and racing fatalities on the Southern California thoroughbred circuit, it was discovered that nine out of the last sixty-two fatalities were suffered by horses having a CHRB Veterinarian's List history of shockwave treatment. An expanded evaluation of the relationship between shockwave therapy history and subsequent fatal or non-fatal injuries is in the study-design stage.

CHRB-licensed attending veterinarians Dr. Jeff Blea and Dr. Ryan Carpenter were invited to provide a short overview of shockwave use for the CHRB. Their report is included in this package.

RECOMMENDATION

This item is presented to the Committee for discussion and action.

CALIFORNIA HORSE RACING BOARD

**M e m o r a n d u m**

Date : May 4, 2012

To : Official Veterinarians, Stewards, Practicing Veterinarians and Horsemen

From : Kirk Breed
Executive Director

Rick M. Arthur, DVM
Equine Medical Director

Subject: CHRB Shockwave Machines and Shockwave Treatment Policies

The attached information is to clarify existing policies concerning Extracorporeal Shockwave Therapy (ESWT) machine and ESWT treatments:

- All ESWT machines are to be registered with the official veterinarian responsible for the CHRB race track or training facility where the machine is used.
- Only CHRB licensed veterinarians are allowed to use ESWT machines within a CHRB racing inclosure.
- ESWT machines are not allowed in the stable area. All treatments are to be conducted in a designated area approved by the official veterinarian responsible for that CHRB race track or training facility.
- The treating veterinarian shall keep a log of all ESWT treatments. The log shall be available for inspection by the official veterinarian, Stewards or CHRB investigators. The log shall include the horse's tattoo or other identifying information if the horse is not tattooed, the anatomical area treated and the number of pulses administered.
- All ESWT treatments are to be reported on a separate Veterinary Confidential form (CHRB-24) to the official veterinarian by 10:00AM the day following treatment.
- Horses treated with ESWT will be placed on the Veterinarian's List for ESWT treatment for 10 days. The day after treatment is the first day on the Veterinarian's List. The horse will be automatically removed from the Veterinarian's List for ESWT on the 11th day. A horse on the Veterinarian's List for multiple reasons must meet whatever criteria is required for removal for those other reasons.

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Extracorporeal Shock Wave Therapy (ESWT)

BRIEF INTRODUCTION:

Dr. Ryan Carpenter
Dr. Jeff Blea

PURPOSE:

Upon meeting with Dr. Arthur, we were informed that the CHRB is discussing changes to the CHRB rule regarding policies and regulation of shock wave therapy. Based on scientific data and our clinical experience, we believe ESWT to be a valid and effective therapeutic option for treating race horses and any changes in this policy should reflect current scientific data.

The current regulations requiring a horse being placed on the vet's list for 10 days is more than adequate to mitigate any analgesic effects of the therapy. Based on the scientific literature and our clinical impression, analgesic effects post treatment is no longer clinically present after 72 hours. The 10-day vets list provides a more than adequate period to further provide safety of the horse and rider post treatment. Strict compliance of the current CHRB rule regarding ESWT is essential and has been strictly adhered to at CA tracks. The current regulation directly reflects the position of the American Association of Equine Practitioners (AAEP).

The AAEP is an equine veterinary professional association with an international membership of nearly 10,000 equine veterinarians, whose mission is to improve the health and welfare of the horse, to further the professional development of its members, and to provide resources and leadership for the benefit of the equine industry. In 2009 the racing committee, made up of 35 veterinarians from multiple racing jurisdictions, developed a white paper with the specific intent of establishing clinical guidelines and ESWT was specifically addressed by this committee. The following has been taken from the AAEP white paper for your review.

"Extracorporeal Shockwave Therapy: The extent and duration of the analgesic effect of ESWT is a matter of great interest and some controversy. Once scientific investigation of the analgesic effect of non-focused ESWT found no cutaneous analgesia. Two studies investigating the analgesic effect of focused extracorporeal shock wave therapy similarly found no significant analgesic effect. Other studies have demonstrated an analgesic effect with focused ESWT and radial pressure wave therapy that persisted for 2 or 3 days. This analgesic effect is likely related to decrease sensory nerve conduction velocity."

ARCI-011-015 (4) currently recommends that ESWT not be administered within 10 days of racing. Unless there are compelling reasons to the contrary, in circumstances where medication/treatment regulations require additional withdrawal time than that supported by scientific data, the AAEP encourages regulatory agencies to re-examine their position in light of current information. In the meantime, veterinarians must practice in accordance with existing regulations, which currently occurs in CA.

The aforementioned is also in compliance with the NTRA Safety and Integrity Alliance Code of Standards. In addition, Terry Meyocks, a leading representative of the Jockeys Guild, indicated, via personal communication, that the Jockey's Guild has full confidence in the CA ESWT rule currently in place.

SHOCKWAVE THERAPY:

The specific mechanism of action for ESWT is largely unknown. However, it is believed to increase blood supply through vasodilation and new vessel formation, contain anti-inflammatory effects by down-regulation of inflammatory mediators, activation and recruitment of autologous stem cells and up-regulation of a number of growth factors.

There are several documented uses in clinical practice and rehabilitation for the treatment of acute and chronic musculoskeletal injuries in racehorses including:

Periostitis (Bucked Shins)	Osteoarthritis	Sacroiliac/Back
Tendonitis	Navicular Disease	Cervical Facets
Suspensory desmitis	Bursitis/Curbs	Wound Healing

Scientific References: See Attached

Summary Recommendations:

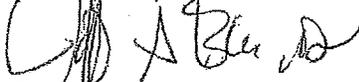
We believe the current model rule and the CHRB rule regarding regulation of ESWT more the adequately serves to protect the health and welfare of the horse, in addition to, the safety of the riders. We request that you review the submitted references. Based on scientific data and clinical experience, we strongly recommend that no changes be made to the current CHRB rule regarding the use of shock wave therapy on CHRB governed enclosures. Any changes to the current rule would be in direct contradiction of the recommendations of the AAEP and have no scientific or practical merit.

Respectfully Submitted,

Ryan Carpenter, DVM, MS, DACVS



Jeff A. Blea, DVM



References

1. Haupt G. Use of extracorporeal shock waves in the treatment of pseudoarthrosis, tendinopathy and other orthopedic diseases. *J Urol* 1997;158:4.
2. Gollwitzer, H. et al. Radial extracorporeal shockwave therapy (rESWT) induces new bone formation *in vivo*: results of animal study in rabbits. *Ultrasound Med Biol* 2013; 39:126-33.
3. Wang, CJ et al. Shock wave therapy induces neovascularization at the tendon-bone junction: A Study in Rabbits. *J Orthop Res* 2003; 21: 984-9.

4. Palmer, S. Treatment of dorsal metacarpal disease in the thoroughbred racehorse with radial extracorporeal shock wave therapy, in *Proceedings*. Am Assoc Equine Pract 2002; 318 -21.
5. Carpenter, R. How to treat dorsal metacarpal disease with regional tiludronate and extra corporeal shock wave therapies in thoroughbred racehorses, in *Proceedings*. Am Assoc Equine Pract 2012; 546-49.
6. Lischer, CJ, et al. Treatment of chronic proximal suspensory desmitis in horses using focused electrohydraulic shockwave therapy. *Schweiz Arch Tierheilkd*. 2006 Oct; 148(10):561-8.
7. Crowe, OM et al. Treatment of chronic or recurrent proximal suspensory desmitis using radial pressure wave therapy in the horse. *Equine Vet J* 2004; 36 (4) :313 – 6.
8. Boening, KJ et al. Radial extra corporeal shock wave therapy for chronic insertion desmopathy of the proximal suspensory ligament, in *Proceedings*. Am Assoc Equine Pract 2000; 203-7.
9. McClure, SR et al. Evaluation of analgesia resulting from extra corporeal shock wave therapy and radial pressure wave therapy in the limbs of horses and sheep. *American Journal of Veterinary Research*, 2005, Vol 66. No 10, Pages 1702-1708.
10. Morgan, DD et al. Effects of extra corporeal shock wave therapy on wounds of the distal portion of the limbs in horses. *Journal of the American Veterinary Medical Association* 234.9 (2009): 1154-61.
11. Johnson, JE, McClure, SR, Liskey, CC. Shockwave therapy for treatment of a burn injury in a horse. *Equine Veterinary Education* 2010; 67-72.
12. Clinical Guidelines for Veterinarians Practicing in a Pari-Mutual Environment, AAEP White Paper, 2009.
13. NTRA Safety and Integrity Code of Standards, April 2016.
14. ARCI-011-015. (4) Prohibited Practices

Am J Vet Res. 2005 Oct;66(10):1702-8.

Evaluation of analgesia resulting from extracorporeal shock wave therapy and radial pressure wave therapy in the limbs of horses and sheep.

McClure SR¹, Sonea IM, Evans RB, Yaeger MJ.

OBJECTIVE: To identify the duration and potential mechanisms of analgesia following extracorporeal shock wave therapy (ESWT) and radial pressure wave therapy (RPWT) in limbs of horses and sheep.

ANIMALS: 6 horses and 30 sheep.

PROCEDURE: An electrical stimulus was used to identify the nociceptive threshold for each horse daily for 3 days before treatment (baseline) with ESWT or RPWT, 8 hours after treatment, and at 24-hour intervals for 7 days after treatment. Testing was conducted for the treatment field (midmetacarpus or midmetatarsus) and nerve field (medial and lateral forelimb heel bulbs) distal to a treatment site that included the nerve on the abaxial surface of the proximal sesamoid bone. All 4 limbs of 30 sheep were treated with ESWT, RPWT, or a sham treatment. Two sheep were euthanized daily and tissue harvested for histologic evaluation of nerves, and concentrations of substance P and calcitonin gene-related peptide were measured in the skin and periosteum.

RESULTS: Values did not differ significantly between baseline and after treatment for the treatment field or nerve field sensation. There was a large difference in the slope when data for horses were plotted for the first 3 days after treatment, compared with the slope for days 4 to 7 after treatment. No differences were found in neuropeptide concentrations after treatment of the sheep, but there was an inflammatory response in the treated nerves.

CONCLUSIONS AND CLINICAL RELEVANCE: A small cutaneous analgesic effect may exist at the treatment site for approximately 3 days after ESWT or RPWT in horses

Am J Vet Res. 2009 Apr;70(4):449-54. doi: 10.2460/ajvr.70.4.449.

Evaluation of the effect of extracorporeal shock wave treatment on experimentally induced osteoarthritis in middle carpal joints of horses.

Frisbie DD¹, Kawcak CE, Mcllwraith CW.

OBJECTIVE-To assess the clinical, biochemical, and histologic effects of extracorporeal shock wave therapy (ESWT) in the treatment of horses with experimentally induced osteoarthritis (OA). **ANIMALS-**Twenty-four 2- to 3-year-old horses without evidence of lameness.

PROCEDURES-OA was induced arthroscopically in 1 middle carpal joint of each horse. Fourteen days after induction of OA, horses were treated with a sham ESWT probe (placebo; n = 8), polysulfated glycosaminoglycan (PSGAG) administered IM every 4 days for 28 days as a positive control treatment (8), or ESWT administered on days 14 and 28 with a focused shock wave unit (8). Evaluations included clinical assessments of degree of lameness every 2 weeks and weekly synovial fluid analyses. Horses were euthanized 70 days after induction of OA, and gross pathologic and histologic examinations of cartilage and synovial membrane specimens were performed at necropsy. A generalized linear mixed model was used to compare outcomes among treatment groups.

RESULTS-No adverse treatment-related events were detected in any horse. The degree of lameness in horses treated with ESWT improved significantly, compared with the degree of lameness in placebo- or PSGAG-treated horses. No disease-modifying effects were evident in results for synovial fluid, synovial membranes, or cartilage from the ESWT- or PSGAG-treated horses.

CONCLUSIONS AND CLINICAL RELEVANCE-Although a disease-modifying effect of ESWT was not detected, the significant clinical effect of ESWT suggested that this modality should be considered for treatment of horses with OA in combination with another modality that does affect the disease process

Vet J. 2009 Jan;179(1):50-9. Epub 2008 Feb 20.

Short term analgesic effect of extracorporeal shock wave therapy in horses with proximal palmar metacarpal/plantar metatarsal pain.

Imboden I¹, Waldern NM, Wiestner T, Lischer CJ, Ueltschi G, Weishaupt MA.

Abstract

Extracorporeal shock wave therapy (ESWT) is an accepted form of treatment for chronic cases of proximal suspensory desmitis (PSD). Subjective evaluation of horses shortly after being treated with ESWT has led clinicians to comment on an immediate reduction in lameness. This study aimed to evaluate the analgesic effect of ESWT on 16 horses with PSD or PSD-like pain in a fore- or hindlimb. To objectively assess lameness, gait analysis was performed on an instrumented treadmill before and 6, 24, 48 and 72h after ESWT of the origin of the suspensory ligament and the results compared to the effects of local anaesthesia. Stride frequency, stance duration, vertical impulse and peak vertical force were determined. Thermographic imaging and evaluation of skin sensitivity of the treated area were carried out before and after ESWT in the same interval as gait analysis. The results showed that there were no significant improvements in the investigated parameters at any time after ESWT; however, in horses with affected forelimbs the contralateral weightbearing asymmetry decreased significantly 72h after ESWT. Neither skin sensitivity nor thermographic imaging revealed changes that could be attributed to ESWT

Am J Vet Res. 2004 Dec;65(12):1714-8.

Determination of functional and morphologic changes in palmar digital nerves after nonfocused extracorporeal shock wave treatment in horses.

Bolt DM¹, Burba DJ, Hubert JD, Strain GM, Hosgood GL, Henk WG, Cho DY.

Abstract

OBJECTIVE: To determine functional and morphologic changes in palmar digital nerves after nonfocused extracorporeal shock wave (ESW) treatment in horses.

ANIMALS: 6 horses.

PROCEDURES: The medial and lateral palmar digital nerves of the left forelimb were treated with nonfocused ESWs. The medial palmar digital nerve of the right forelimb served as a nontreated control nerve. At 3, 7, and 35 days after treatment, respectively, 2 horses each were anesthetized and nerves were surgically exposed. Sensory nerve conduction velocities (SNCVs) of treated and control nerves were recorded, after which palmar digital neurectomies were performed. Morphologic changes in nerves were assessed via transmission electron microscopy.

RESULTS: Significantly lower SNCV in treated medial and lateral nerves, compared with control nerves, was found 3 and 7 days after treatment. A significantly lower SNCV was detected in treated medial but not lateral nerves 35 days after treatment. Transmission electron microscopy of treated nerves revealed disruption of the myelin sheath with no evidence of damage to Schwann cell bodies or axons, 3, 7, and 35 days after treatment.

CONCLUSIONS AND CLINICAL RELEVANCE: Nonfocused ESW treatment of the metacarpophalangeal area resulted in lower SNCV in palmar digital nerves. This effect likely contributes to the post-treatment analgesia observed in horses and may result in altered peripheral pain perception. Horses with preexisting lesions may be at greater risk of sustaining catastrophic injuries when exercised after treatment

Vet Surg. 2004 Jan-Feb;33(1):49-55.

Effect of focused and radial extracorporeal shock wave therapy on equine bone microdamage.

Da Costa Gómez TM¹, Radtke CL, Kalscheur VL, Swain CA, Scollay MC, Edwards RB, Santschi EM, Markel MD, Muir P.

OBJECTIVES: To determine whether bone microcracks are altered after application of focused and radial extracorporeal shock wave therapy (ESWT) to the equine distal limb.

STUDY DESIGN: An ex vivo experimental model.

SAMPLE POPULATION: A contralateral limb specimen was obtained from 11 Thoroughbred racehorses with a unilateral catastrophic injury. Distal limb specimens were also obtained from 5 non-racing horses.

METHODS: Three separate skin-covered bone segments were obtained from the mid-diaphysis of the metacarpus (MC3) or metatarsus (MT3). Focused (9,000 shockwaves, 0.15 mJ/mm², 4 Hz) and radial (9,000 shockwaves, 0.175 mJ/mm², 4 Hz) ESWT treatments were randomized to the proximal and distal segments and the middle segment was used as a treatment control for pre-existing microcracks. After treatment, bone specimens were bulk-stained with basic fuchsin and microcracks were quantified in transverse calcified bone sections.

RESULTS: ESWT had small but significant effects on microcracks. Microcrack density (Cr.Dn) and microcrack surface density (Cr.S.Dn) were increased after focused ESWT, whereas Cr.Le was increased after radial ESWT. In racing Thoroughbreds, Cr.Le increased with increased number of races undertaken. Cr.Dn and Cr.S.Dn were not significantly influenced by the number of races undertaken.

CONCLUSION: ESWT has small but significant effects on bone microcracking ex vivo.

CLINICAL RELEVANCE: These preliminary data suggest that ESWT has the potential to increase bone microcracking in equine distal limb bone in vivo. Such effects may be more pronounced in Thoroughbreds that are actively being raced, because in vivo microcracking increases with increased number of races undertaken.

Additional References:

Notarnicola A, Moretti B. Biological effects of extracorporeal shockwave therapy on tendon tissue. *Muscles Ligaments Tendons J* 2012;2:33-7.

Caminoto EH, Alves AL, Amorim RL, et al. Ultrastructural and immunocytochemical evaluation of the effects of extracorporeal shock wave treatment in the hind limbs of horses with experimentally induced suspensory ligament desmitis. *Am J Vet Res* 2005;66:892-6.

Dahlberg JA, McClure SR, Evans RB, et al. Force platform evaluation of lameness severity following extracorporeal shock wave therapy in horses with unilateral forelimb lameness. *J Am Vet Med Assoc* 2006;229:100-3.

McClure S, VanSickle D, White R. Extracorporeal shock wave therapy: what is it? What does it do to equine bone? *Proc Am Assoc Equine Pract* 2000;46:197.

McCarroll GD, McClure S. Extracorporeal shock wave therapy for treatment of osteoarthritis of the tarsometatarsal and distal intertarsal joints of the horse. *Proc Am Assoc Equine Pract* 2000;46:200-2.

Boening KJ, Löffel S, Weitkamp K, et al. Radial extracorporeal shock wave therapy for chronic insertion desmopathy of the proximal suspensory ligament. *Proc Am Assoc Equine Pract* 2000;46:203-7.

Lischer CJ, Ringer SK, Schnewlin M, et al. Treatment of chronic proximal suspensorydesmitis in horses using focused electrohydraulic shockwave therapy. *Schweiz Arch Tierheilkd* 2006;148(10):561-8.

Turner TA. Diagnosis and management of palmar foot pain. *Proc Am Assoc Equine Pract Focus Foot* 2013;24-9.

Allen AK, Johns S, Hyman SS, et al. How to diagnose and treat back pain in the horse. *Proc Am Assoc Equine Pract* 2010;56:384-8.

Carpenter RS. How to treat dorsal metacarpal disease with tiludronate and extracorporeal shock wave therapies in thoroughbred horses. *Proc Am Assoc Equine Pract* 2012;58:546-9.

Frisbie DD, Kawcak CE, McIlwraith CW. Evaluation of the effect of extracorporeal shock wave treatment on experimentally induced osteoarthritis in middle carpal joints of horses. *Am J Vet Res* 2009;70(4):449-54.

Link LA, Koenig JB, Silveira A, et al. Effect of unfocused extracorporeal shock wave therapy on growth factor expression in wounds and intact skin of horses. *Am J Vet Res* 2013;2:324-32.

Bolt, David Manuel. *The Effects of Non-Focused Extracorporeal Shock Waves on Neuronal Morphology, Function and Analgesia in Horses*. Diss. University of Bern, Switzerland, 1996, 2004.

Item 2

STAFF ANALYSIS

DISCUSSION AND ACTION REGARDING THE PROPOSED AMENDMENT TO CHRB RULE 1469, SAFETY OF RACE COURSE, TO PROHIBIT AN ASSOCIATION FROM USING THE RACING SURFACE, (DIRT OR TURF), FOR ANY PURPOSE, OTHER THAN RENOVATION, MAINTENANCE, AND TRAINING FOR AT LEAST 30 DAYS PRIOR TO THE START OF A RACE MEETING OR AT LEAST 60 DAYS PRIOR TO BREEDERS CUP CHAMPIONSHIP EVENTS AT ITS RACE MEETING.

Medication, Safety and Welfare Committee
February 22, 2017

ISSUE

Safety at racetrack facilities continues to be a major priority for the California Horse Racing Board (CHRB or Board). An important component of the Board's various safety programs is its attention to, and regulation of, racing surfaces. Given the extreme sensitivity of both dirt and turf racetracks, staff has grown concerned about the overuse of these surfaces immediately prior to the start of a race meet. Accordingly, staff has prepared this proposed regulatory amendment to restrict the uses of racing surfaces to renovation, maintenance, and training purposes only prior to the start of a licensed race meeting.

BACKGROUND

In California, every racetrack except Golden Gate Fields has an organic dirt track, and the majority of thoroughbred facilities have turf courses as well. These racing surfaces require constant maintenance, and they are easily affected by weather and overuse, which can cause track conditions to deteriorate over time. The potential inconsistency in organic dirt and turf racetracks is seen as a contributing factor for injuries and breakdowns in racehorses. This is also a concern for jockeys and other racing participants who face the possibility of serious injury when a horse goes wrong or breaks down during a race.

While daily fluctuations in track surfaces can be managed by constant tractor and water maintenance, staff has grown concerned about the potential long-term effects of heavy stress from non-racing activities occurring on racetracks immediately prior to the start of a race meet. Currently, several racing facilities use their tracks to host a variety of events between race meetings, exposing these surfaces to constant foot traffic and heavy machinery. When such events occur just before the start of a meet, there is concern that there is not sufficient time for the integrity of the racing surface to be fully restored before racing commences.

ANALYSIS

Business and Professions Code section 19440 provides that the Board shall have all powers necessary and proper to enable it to carry out fully and effectually the purposes of this chapter. Responsibilities of the Board shall include adopting rules and regulations for the protection of the public and the control of horse racing and pari-mutuel wagering. Business and Professions Code section 19562 states the Board may prescribe rules, regulations and conditions under which

all horse races with wagering on their results shall be conducted in California. Business and Professions Code section 19481 provides that the Board shall establish safety standards governing the uniformity and content of the track base and racing surface, amongst other responsibilities. Finally, Business and Professions Code section 19481.5 requires that no license be issued to conduct a horse racing meeting upon a track unless the track has been inspected and approved by the Board within 30 days of the start of the meet.

In order to avoid potential damage to racetracks prior to the start of a race meet, as described above, staff has drafted the attached proposed amendment to Rule 1469, Safety of Race Course. Specifically, the amendment prohibits a racing association from using racing surfaces for any other purpose except renovation, maintenance, and training for at least thirty (30) days prior to the start of its race meeting. Additionally, the amendment requires that the restriction apply for sixty (60) days prior to the start of the meet if a Breeders' Cup Championship event will be conducted during the course of the race meeting.

RECOMMENDATION

This item is presented to the Committee for discussion and action.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 3. RACING ASSOCIATION
PROPOSED AMENDMENT OF
RULE 1469. SAFETY OF RACECOURSE.

1469. Safety of Race Course.

(a) The association shall take cognizance of any complaint regarding the safety of its race course or premises, and shall maintain in safe condition the race course and all rails and other equipment required for the conduct of its races.

(b) No association shall use any racing surface, including turf courses, for any other purpose except renovation, maintenance, and training for at least thirty (30) days prior to the start of its race meeting.

(1) If an association is to host a Breeders' Cup Championship event at its race meeting, it shall not use any racing surface, including turf courses, for any other purpose except renovation, maintenance, training, and racing for at least sixty (60) days prior to the start of its race meeting.

Authority: Sections 19420, 19440, 19480, 19481 and 19481.5,
Business and Professions Code.

Reference: 19480, 19481 and 19481.5,
Business and Professions Code.

STAFF ANALYSIS

DISCUSSION AND ACTION REGARDING THE PROPOSED AMENDMENT TO CHRB RULE 1588, HORSE INELIGIBLE TO START IN A RACE, TO PROVIDE THAT A HORSE THAT HAS NOT RACED FOR A SPECIFIED NUMBER OF CONSECUTIVE DAYS AT A RECOGNIZED RACE MEETING IS INELIGIBLE TO ENTER A RACE UNTIL SUCH HORSE HAS SATISFACTORILY COMPLETED ENHANCED TESTING OR EVALUATION AND HAS BEEN DECLARED ELIGIBLE TO START BY THE OFFICIAL VETERINARIAN.

Medication, Safety and Welfare Committee
February 22, 2017

ISSUE

CHRB staff has recently discovered that nearly a fifth of all horses that suffer racing fatalities at California racetracks break down in one of their first three races back after coming off of an extended layoff. The proposed amendment to Rule 1588, Horse Ineligible to Start in a Race, is intended to help prevent such fatalities from occurring by requiring horses that come off of a layoff of a 120-days or more to undergo a special examination by either the Official Veterinarian or the Racing Veterinarian to verify that the horse is physically sound and able to safely and lawfully compete in a race.

BACKGROUND

Business and Professions Code section 19440 provides that the Board shall have all powers necessary and proper to enable it to carry out fully and effectually the purposes of this chapter. Responsibilities of the Board shall include adopting rules and regulations for the protection of the public and the control of horse racing and pari-mutuel wagering. Business and Professions Code section 19562 states the Board may prescribe rules, regulations and conditions under which all horse races with wagering on their results shall be conducted in California.

ANALYSIS

This year CHRB staff discovered that of the fatalities that occurred between 2013 and 2016, approximately 20% were suffered by horses that were racing after being laid up for 120 days or more. This statistic can be attributed to a variety of factors; however, many of these horses were shown to have had pre-existing conditions, veterinary treatments, or other injuries or illnesses necessitating the time off. Regardless the cause, it has become clear that horses which require a 120-day or greater break from racing should undergo an enhanced examination to verify that the horse is both raceably sound and in fit physical condition to exert its best effort before it is allowed to enter a race in California.

Accordingly, the proposed amendment to Rule 1588, Horse Ineligible to Start in a Race, would make a horse that has not raced at a recognized race meeting in 120 or more consecutive days ineligible to start until it has undergone an examination by the Official Veterinarian or the Racing Veterinarian prior to being entered into a race. Furthermore, the proposed amendment would give the Official Veterinarian the ability to have a horse returning from an extended layoff

to perform satisfactorily in a workout or qualifying race to demonstrate its physical fitness and then be tested in blood and/or urine.

RECOMMENDATION

This item is presented to the Committee for discussion and action.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 6. ENTRIES AND DECLARATIONS
PROPOSED AMENDMENT OF
RULE 1588. HORSE INELIGIBLE TO START IN A RACE.

1588. Horse Ineligible to Start in a Race.

In addition to any other valid ground or reason, a horse is ineligible to start in any race:

(a) if such horse is not registered by the Jockey Club if a thoroughbred, the United States Trotting Association if a standardbred, the American Quarter Horse Association if a quarter horse, the Appaloosa Horse Club if an appaloosa horse, the Arabian Horse Registry of America if an Arabian horse, or the American Paint Horse Association if a paint horse;

(b) if the parentage verification to both the sire and the dam of all horses foaled in 1992 and thereafter has not been certified by the Jockey Club if a thoroughbred, the United States Trotting Association if a standardbred, the American Quarter Horse Association if a quarter horse, the Appaloosa Horse Club if an appaloosa horse, the Arabian Horse Registry of America if an Arabian horse, or the American Paint Horse Association if a paint horse;

(c) if, unless the stewards permit otherwise, the certificate of foal registration, eligibility papers, or other registration issued by the official registry for such horse is not on file with the racing secretary at the time of entry;

(d) if such horse has been entered or raced at any recognized race meeting under any name or designation other than the name or designation duly assigned by and registered with the official registry;

(e) if the certificate of foal registration, eligibility papers or other registration issued by the official registry has been altered, erased, or forged;

(f) if the identification markings of the horse do not agree with the identification markings as set forth in the registration of such horse;

(g) unless he is eligible to enter said race and is duly entered for such race;

(h) when such horse is owned in whole or in part by an unlicensed person or is in the care of an unlicensed trainer;

(i) when such horse is on the Steward's List, the Starter's List or the Veterinarian's List;

(j) when, except with prior approval of the stewards for good cause, such horse is on the Veterinarian's List in another racing jurisdiction. Good cause includes:

(1) unforeseen administrative issues in removing the horse from the Veterinarian's List of another racing jurisdiction;

(2) the location of the horse prevents it from being evaluated by the official veterinarian of another racing jurisdiction and cleared from that jurisdiction's Veterinarian's List, and the horse is approved to race by a California official veterinarian; or

(3) any other unforeseen event or reason that would prevent a horse that would otherwise not be on a Veterinarian's List from being cleared from the Veterinarian's List of another racing jurisdiction.

(k) when, except with prior approval of the stewards, such horse has not been on the grounds of the association or its approved auxiliary stable area for at least 24 hours prior to the time the race is to be run.

(l) if such horse has not raced at any recognized race meeting in 120 or more consecutive days and has not raced in California since the conclusion of that absence, unless such horse has been examined prior to entry by the Official Veterinarian or the Racing Veterinarian and declared raceably sound and in fit physical condition to exert its best effort in a race. The Official Veterinarian may require such horse to perform satisfactorily in a workout or qualifying race to demonstrate its physical fitness, and if so a blood and/or urine post-work test sample shall be taken from the horse and the provisions of this article shall apply to such official workout in the same manner as to a scheduled race.

(1) For the purpose of this regulation, "workout" means an exercise session near full speed, or close to full speed.

NOTE: Authority cited: Sections 19440 and 19562, Business and Professions Code. Reference:

Sections 19440 and 19562, Business and Professions Code.

STAFF ANALYSIS

DISCUSSION AND ACTION REGARDING THE PROPOSED AMENDMENTS TO CHRB
RULE 1689, SAFETY HELMETS REQUIRED; AND RULE 1689.1, SAFETY VEST
REQUIRED, TO REQUIRE DRIVERS RIDING IN A JOG CART TO WEAR A SAFETY
HELMET AND SAFETY VEST.

Medication, Safety and Welfare Committee
February 22, 2017

ISSUE

CHRB Rule 1689, Safety Helmets Required, and Rule 1689.1, Safety Vest Required, both indicate that drivers shall wear a helmet and vest when mounted in or riding on a sulky; however, the rule does not include the same requirements when a driver is in a jog cart. Accordingly, the proposed amendments to Rules 1689 and 1689.1 are intended to close this loophole so that drivers are required to wear a safety vest and helmet at all times when mounted on or riding in a sulky or jog cart.

BACKGROUND

Business and Professions Code section 19440 provides that the Board shall have all powers necessary and proper to enable it to carry out fully and effectually the purposes of this chapter. Responsibilities of the Board shall include adopting rules and regulations for the protection of the public and the control of horse racing and pari-mutuel wagering. Business and Professions Code section 19481 states that the Board shall establish safety standards governing the equipment for horse and rider, amongst other responsibilities.

ANALYSIS

It was recently brought to the attention of CHRB staff that there is a loophole in current regulations which allows drivers to ride in jog carts without wearing safety vests and helmets. A "jog cart" is distinctive from a "sulky" both in construction and use. Jog carts are used solely for training purposes and are never used for racing. Because CHRB Rule 1420(y), Definitions, defines "sulky" as a "racing vehicle," a jog cart could not be considered a sulky under our current regulations.

Accordingly, staff is proposing that Rule 1689, Safety Helmets Required, and Rule 1689.1, Safety Vest Required, be amended to require use of helmets and vests when a person is mounted in or riding on a "sulky or jog cart." This would ensure that all persons riding behind a horse in a jog cart abide by the same safety standards established for drivers in sulkies.

RECOMMENDATION

This item is presented to the Committee for discussion and action.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 8. RUNNING THE RACE
PROPOSED AMENDMENT OF
RULE 1689. SAFETY HELMETS REQUIRED

1689. Safety Helmets Required.

(a) A racing association, fair, or authorized training facility may not permit any person to be mounted on a horse on the racetrack, be mounted in or riding on a sulky or jog cart, or work as a member of the gate crew unless the person is wearing a properly fastened safety helmet.

(1) For purposes of this regulation, a member of the gate crew means any person licensed as an assistant starter or any person who handles a horse at the starting gate.

(2) For purposes of this regulation, "racetrack" means the surface of the racing or training track.

(b) Safety helmets required under subsection (a) of this rule shall comply with one of the following product standards:

- (1) American Society for Testing Materials (ASTM) standard F-1163-04a, or
- (2) European Standard (EN) 1384:1996, or
- (3) Australian and New Zealand Racing Boards (AS/NZS) standard 3838:2006, or
- (4) Snell Memorial Foundation (Snell) Standard for Protective Headgear H2000.

NOTE: Authority cited: Sections 19420 and 19440, Business and Professions Code. Reference: Sections 19481 and 19460, Business and Professions Code.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 8. RUNNING THE RACE
PROPOSED AMENDMENT OF
RULE 1689.1. SAFETY VEST REQUIRED

1689.1. Safety Vest Required.

(a) No jockey or apprentice jockey shall ride in a race unless wearing a safety vest, nor shall a jockey, apprentice jockey, or exercise rider, train or exercise any horse on the grounds of a racing association, racing fair, or authorized training facility unless wearing a safety vest.

(1) Any person licensed by the Board mounted on a horse on a track of a racing association, racing fair, or authorized training facility shall wear a safety vest.

(b) No driver shall be mounted in or riding on a sulky or jog cart, nor shall an assistant starter handle any horse on the grounds of a racing association, racing fair, or authorized training facility unless wearing a safety vest.

(c) Safety vests required to be worn in accordance with this regulation shall:

(1) Provide a minimum of shock absorbing protection to the upper body, as evidenced by a label indicating that the safety vest meets one of the following standards:

(A) "Level 1" under the British Equestrian Trade Association (BETA) 2009 Standard for Horse Riders' Body and Shoulder Protectors, or

(B) American Society for Testing Materials (ASTM) standard F2681-08, or

(C) Shoe and Allied Trades Research Association (SATRA) (1999) Jockey Vest Standard, Document M6 Issue 3, Australian Racing Board (ARB) 3.

(2) Cover the entire torso from the collarbone to a line level with the hip bone allowing a vee opening in the front neckline;

(3) Weigh no more than 2 pounds.

(4) No vest shall be altered from its original manufactured design. This includes, but is not limited to:

- (A) Cutting the vest to customize fit.
- (B) Removal of manufacturer's labels.
- (C) Removal of protective padding.

(d) The weight of a safety vest shall not be included in the weight of a jockey or apprentice jockey when weighing out or weighing in or when adding weight to make up a weight assignment.

NOTE: Authority cited: Sections 19420, 19481 and 19562, Business and Professions Code.

Reference: Section 19481, Business and Professions Code.

STAFF ANALYSIS

DISCUSSION AND ACTION BY THE BOARD REGARDING THE PROPOSED AMENDMENTS TO CHRB RULES 1858, TEST SAMPLE REQUIRED; 1859, TAKING, TESTING AND REPORTING OF TEST SAMPLES; 1859.25, SPLIT SAMPLE TESTING; 1867, PROHIBITED VETERINARY PRACTICES; AND THE PROPOSED ADDITION OF CHRB RULES 1859.1, OUT-OF-COMPETITION TESTING PROCEDURES AND REQUIREMENTS; AND 1869, PROHIBITED DRUG SUBSTANCE IN OUT-OF-COMPETITION TESTING, TO INCORPORATE THE ASSOCIATION OF RACING COMMISSIONERS INTERNATIONAL (ARCI) MODEL RULE FOR OUT-OF-COMPETITION TESTING INTO THE CHRB'S RULES AND REGULATIONS.

Medication, Safety and Welfare Meeting
February 22, 2017

ISSUE

In December 2016 the Association of Racing Commissioners International (ARCI) adopted a robust Model Rule that establishes a uniform set of procedures and guidelines for out-of-competition testing. Additionally, the Model Rule introduced a broad set of prohibitions and restrictions regarding the use of certain medications, drugs, and other substances for horses that are engaged in racing but currently out-of-competition.

The proposed rule amendments and additions are intended to incorporate the substance of these Model Rules into the California Horse Racing Board's (CHRB or Board) existing regulatory scheme, and otherwise enhance the Board's current out-of-competition testing efforts.

BACKGROUND

Business and Professions Code section 19440 provides that the Board shall have all powers necessary and proper to enable it to carry out fully and effectually the purposes of this chapter. Responsibilities of the Board shall include adopting rules and regulations for the protection of the public and the control of horse racing and pari-mutuel wagering. Business and Professions Code section 19580 requires the Board to adopt regulations to establish policies, guidelines, and penalties relating to equine medication to preserve and enhance the integrity of horse racing in California.

Although the CHRB has been conducting out-of-competition testing for years now, there has been little occasion to use the results of those tests for anything beyond informational and research purposes. Upon discovering the presence of certain substances in an out-of-competition test, staff has only conducted follow-up investigations in those instances where it appeared the administration of a certain medication had not been properly reported. To date, however, the only drugs and medications that would trigger a complaint if found in an out-of-competition test sample, are those listed currently in CHRB Rule 1867, Prohibited Veterinary Practices (e.g. zilpaterol, ractopamine, snake venom, etc.).

ANALYSIS

The out-of-competition testing Model Rules adopted by the ARCI have been in development for several years by the Racing Medication and Testing Consortium (RMTC), and are based on the knowledge, expertise, and input of horse racing stakeholders throughout the country. In short, they accomplish two things: 1) a transparent and uniform process to be followed by racing commissions when collecting out-of-competition samples, and 2) an enhanced list of prohibited and/or restricted medications and drug substances for horses that are engaged in horse racing but not currently entered in any particular race (i.e. horses that are “out-of-competition”).

The proposed regulatory amendments and additions implement the substance of these Model Rules, and create a more effective mechanism for the CHRB to monitor and control the use of medications, drugs, and other substances in horses that will race in this State. This not only will enhance the safety and welfare of the horse, but will also ensure greater integrity in California racing.

The proposed amendment to Rule 1858, Test Sample Required, clarifies the Board’s authority to collect official blood, urine, and other biological test samples, as well as describes specifically which horses are eligible for out-of-competition testing. Additionally, the proposed amendment makes it a condition of a trainer and owner’s license that the Board be given consent to collect out-of-competition test samples at any location where an eligible horse is present.

The proposed amendment to Rule 1859, Taking, Testing and Reporting of Samples, makes minor technical changes to existing language to ensure out-of-competition testing does not conflict with existing official test sample collection processes.

The proposed addition of Rule 1859.1, Out-of-Competition Testing Procedures and Requirements, describes in detail the procedures by which the Board will collect out-of-competition test samples, as well as penalties for non-compliance. In practice, out-of-competition testing conducted pursuant to this regulation will be substantially similar to how it is currently done in California.

The proposed amendment to Rule 1859.25, Split Sample Testing, extends the same split sample process and rights currently in place for post-race testing to licensees who have a horse in their custody test positive for a prohibited substance in an out-of-competition sample.

The proposed amendment to Rule 1867, Prohibited Veterinary Practices, adds a number of medications and drug substances to the current prohibited list, and extends its application to substances detected in out-of-competition test samples.

The proposed addition of Rule 1869, Prohibited Drug Substances in Out-of-Competition Testing, lists all medications, drugs, and other substances that are prohibited from being present in an out-of-competition test sample. Additionally, the proposed rule includes exceptions for certain therapeutic medications in cases where specific procedural and reporting requirements are followed. Finally the proposed rule describes the liability and rights of trainers, owners, and other licensees who have the care and custody of a horse that tests positive for a prohibited substance in an out-of-competition test sample.

RECOMMENDATION

This item is presented to the Committee for discussion and action.



CRAIG R. FRAVEL

*President and
Chief Executive Officer*

February 9, 2017

Mr. Harold Coburn, Regulation Analyst
California Horse Racing Board
1010 Hurley Way, Suite 300
Sacramento, CA 95825
Email: haroldc@chrb.ca.gov

RE: Out-of-Competition Testing

Dear Mr. Coburn,

On behalf of Breeders' Cup Limited, I write in support of the proposed amendments to CHRB (1) Rule 1859.1 – Out of Competition Testing Procedures and Requirements and (2) Rule 1869 – Prohibited Drug Substances in Out-of-Competition Testing. We believe that the proposed amendments will bring the CHRB's rules further in line with the national and international movement towards out-of-competition testing and medication.

We believe that the continued safety and integrity of the horse is critical to our business. Enacting the proposed amendments which incorporates the Association of Racing Commissioners International's model rule for out-of-competition testing and medication is a critical component of Breeders' Cup in selecting future host sites and we urge adoption.

We look forward to conducting the Breeders' Cup World Championships in California at Del Mar in 2017 and in future years to come.

Very truly yours,

Craig Fravel
President and CEO
Breeders' Cup Limited

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
PROPOSED AMENDMENT OF
RULE 1858. TEST SAMPLE REQUIRED.

1858. Test Sample Required.

(a) Blood and urine test samples shall be taken daily from the winner of every race, from horses finishing second and third in any stakes race with a gross purse of \$75,000 or more, and from not less than six other horses designated for testing by the Equine Medical Director, the stewards or the official veterinarian.

(b) The Board may at any time on any date take official blood, urine or other biological samples, in accordance with Rules 1859 and 1859.1, from a horse to enhance the ability of the Board to enforce its medication and anti-doping rules.

(bc) Every horse within the inclosure, every horse registered to race at an inclosure, every horse under the care or control of a licensed trainer, or owned by a licensed owner, or nominated, pre-entered or entered in any race that will be held within a licensed inclosure is subject to pre-race, post-race, and out-of-competition testing by the Board. and nNo owner, trainer or other person having the care of a horse shall refuse to submit it for testing when directed by the Equine Medical Director, the Executive Director, the stewards or the official veterinarian.

(1) For the purposes of this regulation, a horse is "registered to race at an inclosure" when the horse's registration papers are on file with a racing association under the jurisdiction of the Board, and/or the horse has raced at a licensed inclosure within the previous 12 months.

(2) A horse is "out-of-competition" when it is not entered in a race as defined in this Article. This regulation does not permit out-of-competition testing outside of a licensed inclosure on weanlings, yearlings, or any horse proven to be no longer engaged in horse racing unless such

horse is entered in a horse sale authorized by the Board pursuant to Rule 1807.

(3) Persons who apply for and are granted a trainer or owner license shall be deemed to have given their consent, as a condition of licensure, for the Board and its representatives to access any location, whether inside or outside of a licensed inclosure, where a horse eligible for testing may be found for the purpose of collecting official out-of-competition test samples. Such consent, however, does not permit the Board or its representatives to search the surrounding premises when collecting a test sample from a horse not within a licensed inclosure. Licensees shall take any steps necessary to authorize access by Board representatives to any location where a horse eligible for testing is present, and no person shall knowingly interfere with or obstruct the collection of an official test sample.

NOTE: Authority cited: Sections 19440, 19562 and 19580, Business and Professions Code.

Reference: Section 19580(b), Business and Professions Code; and Sections 337f, 337g and 337h, Penal Code.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
PROPOSED AMENDMENT OF
RULE 1859. TAKING, TESTING AND REPORTING OF SAMPLES.

1859. Taking, Testing and Reporting of Samples.

(a) Urine, blood or other biological official test samples shall be taken under the direction of the official veterinarian, the Equine Medical Director or a person designated by the official veterinarian. All samples shall be taken in a detention area approved by the Board, unless it is an official out-of-competition test sample taken in accordance with Rule 1859.1, or the official veterinarian or the Equine Medical Director approves otherwise. The taking of any test sample shall be witnessed, confirmed or acknowledged by the owner or trainer of the horse being tested or his or her agent or employee, and may be witnessed by the owner, trainer or other person designated by them. All official test samples shall be sent to the official laboratory approved and designated by the Board, in such manner as the Board may direct. All required samples shall be in the custody of the official veterinarian, his or her assistants or other persons approved by the official veterinarian, from the time they are taken until they are delivered to the custody of the official laboratory.

(b) The Executive Director and the Equine Medical Director shall immediately be notified by the official laboratory of each finding that an official test sample contains a prohibited drug substance, as defined in this article. The official laboratory shall further provide all information and data on which the finding is based to the Equine Medical Director, and shall transmit its official report of the finding to the Executive Director within five working days after the initial notification is made.

(c) The Board has the authority to direct the official laboratory to retain and preserve by freezing samples for future analysis.

(d) The fact that purse money has been distributed prior to the issuance of a laboratory report shall not be deemed a finding that no drug substance prohibited by this article has been administered, in violation of these rules, to the horse earning such purse money.

NOTE: Authority cited: Sections 19420, 19440, 19562 and 19577, Business and Professions Code. Reference: Sections 19401, 19440 and 19577, Business and Professions Code.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
PROPOSED ADDITION OF
RULE 1859.1. OUT-OF-COMPETITION TESTING PROCEDURES AND REQUIREMENTS.

1859.1. Out-of-Competition Testing Procedures and Requirements

(a) Official out-of-competition test samples shall be collected under the supervision and direction of the official veterinarian, the Equine Medical Director, or a person designated by the official veterinarian or Equine Medical Director. All blood samples shall be collected by a veterinarian licensed by the Board, or by a veterinary technician licensed by the Board who is acting under the supervision of the official veterinarian or Equine Medical Director.

(b) Upon request of the Equine Medical Director, the Executive Director, the stewards or the official veterinarian, the trainer, owner, or their specified designee shall disclose the location of their horses eligible for out-of-competition testing as described in Rule 1858.

(c) The Board need not provide advance notice to the trainer or owner before arriving at any location, whether or not the location is within a licensed inclosure, to collect official out-of-competition test samples. However, if the trainer, owner, or their specified designee requests that the sample be collected in an alternative location, the Board may, in its sole discretion, collect the sample at an alternative time and location designated by the Board.

(d) The trainer, owner, or their specified designee shall cooperate with the person who collects official out-of-competition test samples on behalf of the Board, which shall include without limitation:

- (1) Assisting in the immediate location and identification of the horse;
- (2) Making the horse available as soon as practical upon arrival of the person who is responsible for collecting the samples;

(3) Providing a stall or other safe location to collect the samples;

(4) Assisting the person who is collecting samples in controlling the horse; and

(5) Witnessing the taking of samples, including sealing of sample collection containers.

(e) The management and employees of a licensed racetrack or training facility where a horse is located shall cooperate fully with any person collecting official out-of-competition test samples on behalf of the Board. The person who collects samples for the Board may require that the collection be done at a specified location on such premises.

(f) The Board may arrange to have test samples collected from a horse that is physically located outside of California, but otherwise subject to out-of-competition testing pursuant to Rule 1858. Such test samples may be collected by the racing commission or racing authority that regulates the jurisdiction in which the horse is physically located, or by any other person that the Board designates. Such racing commission or other designated person shall follow the collection procedures described in this regulation in order for the sample to be designated an official out-of-competition test sample.

(1) The test results of an official out-of-competition test sample collected outside of California may be made available, at the discretion of the Board, to each racing commission that participates in the process of collecting the sample.

(2) The Board, if requested and in its sole discretion, may permit the trainer, owner or their designee to transport their horse into California for out-of-competition testing at a time and place designated by the Board instead of having the horse tested outside of California.

(g) The person who collects official out-of-competition test samples for the Board shall, at the time of sample collection, provide their CHRB identification and disclose to the owner and/or trainer of the horse that the purpose of the sampling is for out-of-competition testing.

(h) If the trainer or any other person having care and custody of a horse selected for out-of-competition testing refuses or declines to make the horse available for test sample collection, the Board shall attempt to notify the owner and give them the opportunity to make the horse available for immediate testing.

(i) All available records demonstrating the chain of custody for an official out-of-competition test sample shall be made available to the trainer, owner, or their designee, at their request, when a complaint results from an out-of-competition test.

(j) Any licensee who willfully fails to make a horse available for out-of-competition testing, or commits other willfully deceptive acts in connection with out-of-competition testing, or causes interference or obstruction to the sampling process, shall receive a minimum penalty of a one-year license suspension.

(k) A horse that is not made available for out-of-competition testing when requested by the Board in accordance with this regulation shall be placed on the Steward's List for a minimum of 180 days. If the trainer, owner, or their designee refuses to submit their horse for out-of-competition testing based on their assertion that the horse is no longer engaged in horse racing activities, the horse shall be placed on the Steward's List for a minimum of 180 days.

NOTE: Authority cited: Sections 19420, 19440, 19562, and 19580, Business and Professions Code. Reference: Sections 19401, 19440, 19580, and 19583, Business and Professions Code.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
PROPOSED AMENDMENT OF
RULE 1859.25. SPLIT SAMPLE TESTING.

1859.25. Split Sample Testing.

(a) In addition to the blood, ~~and urine,~~ and other biological official test samples transmitted to the official laboratory for testing as provided in Rules 1859 and 1859.1 of this Article, the Board shall maintain a portion of the official test sample for each horse tested if sufficient sample is available after the official test samples are taken. That portion shall be designated the split sample. The Board makes no guarantee as to the amount of sample which will be available for the split sample. All samples taken by representatives of the Board are under the jurisdiction of and shall remain the property of the Board at all times. The Board shall ensure the security and storage of the split sample.

(b) When the Executive Director or the Executive Director's designee is notified of a finding by the official laboratory that a test sample from a horse ~~participating in any race~~ contained a prohibited drug substance as defined in this Article, the Executive Director, after consulting with the Equine Medical Director or the Equine Medical Director's designee as to the presence of the prohibited drug substance shall notify a Supervising Investigator. The owner and the trainer shall be confidentially notified of the finding by a Supervising Investigator or his/her designee and the owner and trainer shall each have 72 hours from the date he or she is notified to request that the split sample of the official test sample that was found to contain the prohibited drug substance(s) be tested by an independent Board-approved laboratory.

(c) If the owner or trainer wishes to have the split sample tested, he or she shall comply with the following procedures:

(1) The request shall be made on CHRB-56, (Rev. 5/97), Request to Release Evidence, which is hereby incorporated by reference. CHRB-56 shall be made available at all CHRB offices.

(2) The owner or trainer requesting to have the split sample tested shall be responsible for all charges and costs incurred in transporting and testing the split sample. By signing CHRB-56, the owner or trainer certifies he or she has made arrangements for payment to the designated Board-approved laboratory for laboratory testing services.

(3) Verification of payment for costs incurred in transporting and testing the split sample must be received by the CHRB within five (5) working days from the CHRB receipt of CHRB-56. If such verification of payment is not received, the split sample will not be released or shipped to the Board-approved laboratory designated by the owner or trainer to test the split sample and the owner and trainer will have relinquished his/her right to have the split sample tested. If a complaint issues, the only test results that will be considered will be the results from the Board's official laboratory.

(d) Upon approval by the Executive Director or the Executive Director's designated representative of a valid request on CHRB-56, CHRB-29 (Rev. 5/97), Authorization to Release Split Sample Urine Evidence, or CHRB-29A (Rev. 5/97), Authorization to Release Split Sample Blood Evidence, which are hereby incorporated by reference, shall be completed and the Board shall ensure that the split sample is sent to the designated laboratory for testing.

(1) If the findings by the independent Board-approved laboratory fail to confirm the findings of the prohibited drug substance as reported by the official laboratory, it shall be presumed that the prohibited drug substance was not present in the official sample.

(2) If the findings by the independent Board-approved laboratory confirm the findings of

the prohibited drug substance as reported by the official laboratory, the Executive Director shall report these findings to the Board within 24 hours after receiving confirmation of the prohibited drug substance in the split sample.

(e) If the owner or trainer fails to request the testing of the split sample in accordance with the procedures specified in this rule, they shall be deemed to have waived their rights to have the split sample tested.

(f) Results of the official test sample and the split sample shall be, and shall remain, confidential and shall be provided only to the Executive Director or the Executive Director's designee, the Board, the Equine Medical Director or the Equine Medical Director's designee, and to the owner and trainer, unless or until the Board files an official complaint or accusation.

NOTE: Authority cited: Sections 19420, 19440 and 19577, Business and Professions Code.
Reference: Sections 19420, 19440 and 19577, Business and Professions Code; and Section 603, Evidence Code.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
PROPOSED AMENDMENT OF
RULE 1867. PROHIBITED VETERINARY PRACTICES.

1867. Prohibited Veterinary Practices.

For purposes of this division, prohibited veterinary practices means:

(a) The possession and/or use on the premises of a facility under the jurisdiction of the Board of any drug, substance, doping agent, or medication specified below for which a recognized analytical method has not been developed to detect and confirm its administration; or the use of which may endanger the health and welfare of the horse, or the safety of the rider or driver, or alter equine performance.

(1) Erythropoietin (EPO) and analogs;

(2) Darbepoietin and analogs;

(3) Venoms or derivatives thereof~~Snake venom~~;

~~(4) Snail venom;~~

~~(45) Growth hormone and analogs, except platelet rich plasma and autologous conditioned plasma are permitted provided such treatment is pursuant to a valid veterinary prescription made in accordance with all rules and regulations in this division, and the treatment is reported to the Official Veterinarian on form CHRB-60 (Rev. 7/15) (Trainer Medication Report), regardless of whether or not the horse is treated within or outside of a licensed inclosure;~~

~~(56) Ractopamine and ractopamine metabolites or analogs;~~

~~(67) Zilpaterol and zilpaterol metabolites or analogs;~~

~~(7) Aminoimidazole carboxamide ribonucleotide (AICAR);~~

(8) Hemopure;

(9) Myo-Inositol Trispyrophosphate (ITPP);

(10) Oxyglobin;

(11) Thymosin beta;

(b) The possession and/or use on the premises of a facility under the jurisdiction of the Board of any drug, substance or medication that has not been approved by the United States Food and Drug Administration (FDA) for use in the United States.

(c) The presence of any drug, substance or medication described in subsections (a)(1) through (a)(513), and subsection (b) of this regulation in any test sample obtained consistent with Rules 1858, 1859, 1859.1, and 1859.25 of this article, and the provisions of this article, shall apply to such sample in the same manner as if the horse were entered to race (See Title 4, California Code of Regulations, section 1843.3). The Board may grant an exception to this subsection if the person or persons seeking the exemption submits written documentation that demonstrates an FDA exemption has been obtained pursuant to Guide 1240.3025 of the FDA Center for Veterinary Medicine (CVM) Program Policy and Procedures Manual, which is hereby incorporated by reference. Guide 1240.3025 of the FDA CVM Program Policy and Procedures Manual may be obtained at the California Horse Racing Board's headquarters office.

NOTE: Authority cited: Sections 19440, 19562, 19580, and 19582, Business and Professions Code. Reference: Sections 19580, 19581, and 19582, Business and Professions Code.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
PROPOSED ADDITION OF
RULE 1869. PROHIBITED DRUG SUBSTANCES IN OUT-OF-COMPETITION TESTING.

1869. Prohibited Drug Substances in Out-of-Competition Testing

(a) In addition to those drugs, substances, doping agents, and medications described in Rule 1867(a), the following substances are prohibited from being present in any official out-of-competition test sample collected in accordance with Rules 1859, 1859.1, and 1859.25:

(1) Anabolic androgenic steroids and their metabolites and isomers, except naturally occurring endogenous anabolic steroids as authorized in Rule 1844;

(A) Notwithstanding the foregoing, anabolic androgenic steroids may be used in a horse that is out-of-competition, provided that:

(i) The anabolic agent has been approved by the United States Food and Drug Administration (FDA) for use in the United States;

(ii) The administration is pursuant to a valid veterinary prescription, and both the administration and prescription are carried out in accordance with all rules and regulations in this division;

(iii) The administration is reported to an Official Veterinarian on form CHRB-60 (Rev. 7/15 (Trainer Medication Report), regardless of whether or not the horse is treated within or outside of a licensed inclosure;

(iv) The horse remains on the Veterinarian's List for a minimum of six months following the administration of the anabolic androgenic steroids, and shall be removed from the list only after the horse demonstrates, to the satisfaction of the official veterinarian or the racing veterinarian, that it is raceably sound and in fit physical condition to exert its best effort in a race

by performing satisfactorily in a workout or qualifying race. Additionally, a blood, urine and/or other biological test sample taken after such workout or qualifying race shall be free of all prohibited substances described in Rule 1843 before the horse can be removed from the Veterinarian's List.

(2) The following anabolic agents: selective androgen receptor modulators, tibolone, and zeranol;

(3) Erythropoietin-Receptor agonists;

(4) Hypoxia-inducible factor stabilizers, except out-of-competition blood samples may contain cobalt in an amount that does not exceed 50 nanograms per milliliter;

(5) Chorionic G
onadotropin and Luteinizing Hormone and their releasing factors;

(6) Corticotrophins and their releasing factors;

(A) Notwithstanding the foregoing, adrenocorticotrophic hormone (ACTH) may be used in a horse that is out-of-competition, provided that:

(i) The substance has been approved by the FDA for use in the United States;

(ii) The administration is pursuant to a valid veterinary prescription, and both the administration and prescription are carried out in accordance with all rules and regulations in this division;

(iii) The administration is reported to an Official Veterinarian on form CHRB-60 (Rev. 7/15 (Trainer Medication Report), regardless of whether or not the horse is treated within or outside of a licensed inclosure.

(7) Beta-2 agonists, including all optical isomers;

(A) Notwithstanding the foregoing, clenbuterol and albuterol may be used in a horse that

is out-of-competition, provided that the administration is pursuant to a valid veterinary prescription, and both the administration and prescription are carried out in accordance with all rules and regulations in this division.

(8) The following aromatase inhibitors: aminoglutethimide, anastrozole, androsta-1,4,6-triene-3,17-dione (androstatrienedione), 4-androstene-3,6,17 trione (6-oxo), exemestane, formestane, letrozole, testolactone;

(9) The following selective estrogen receptor modulators: raloxifene, tamoxifen, toremifene;

(10) The following anti-estrogenic substances: clomiphene, cyclofenil, fulvestrant;

(11) The following agents modifying myostatin function(s): myostatin inhibitors;

(12) The following metabolic modulators: activators of the AMP-activated protein kinase, Peroxisome Proliferator Activated Receptor δ (PPAR δ) agonists, insulins, trimetazidine, Thyroxine, and thyroid modulators/hormones containing T4 (tetraiodothyronine/thyroxine), T3 (triiodothyronine), or combinations thereof.

(A) Notwithstanding the foregoing, Thyroxine (T4) shall not be considered a prohibited substance provided that such treatment is made pursuant to a valid veterinary prescription, and both the administration and prescription are carried out in accordance with all rules and regulations in this division.

(B) Additionally, notwithstanding the foregoing, altrenogest shall not be considered a prohibited substance in fillies and mares, provided that such treatment is made pursuant to a valid veterinary prescription, and both the administration and prescription are carried out in accordance with all rules and regulations in this division.

(13) The following diuretics and masking agents: desmopressin, furosemide , plasma

expanders, probenecid, torsemide, acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, etacrynic acid, indapamide, metolazone, spironolactone, thiazides, triamterene, trichlormethiazide, vasopressin receptor antagonists, and vaptans.

(A) Notwithstanding the foregoing, furosemide and trichlormethiazide may be used in a horse that is out-of-competition, provided that the administration is pursuant to a valid veterinary prescription, and both the administration and prescription are carried out in accordance with all rules and regulations in this division.

(B) Additionally, notwithstanding the foregoing, the above diuretics may be administered in an emergency situation in order to safeguard the health of the horse, provided that such treatment is:

(i) Made pursuant to a valid veterinary prescription, and both the administration and prescription are carried out in accordance with all rules and regulations in this division, and

(ii) The administration is reported to the Official Veterinarian on either form CHRB-60 (Rev. 7/15) (Trainer Medication Report) by the trainer, or on form CHRB-24 (Rev. 7/15) (Veterinarian Report) by the treating veterinarian within twenty-four (24) hours.

(b) Therapeutic substances that are not otherwise prohibited pursuant to this regulation are permitted for use when a horse is out-of-competition, provided such substances have been approved by the FDA for use in the United States, and are prescribed and administered in accordance with all applicable federal and state laws and regulations, including all CHRB rules and regulations.

(c) A finding by the official laboratory that an official out-of-competition test sample taken from a horse contains a drug substance or its metabolites or analogues which is prohibited under this regulation shall be prima facie evidence that the trainer and/or any other licensee

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. In such an event, the trainer, owner, foreman in charge of the horse, groom, and/or any other person shown to have had the care or attendance of the horse may be fined, and/or have his/her license suspended or revoked.

(1) The trainer is the absolute insurer of and responsible for the condition of the horses under his/her care while such horses are physically located within a licensed inclosure, regardless of the acts of third parties, except as otherwise provided in this article.

(2) The owner of a horse that is not physically located within a licensed inclosure and is not under the care and custody of another person licensed by the Board shall be the absolute insurer of and responsible for the condition of the horse, regardless of the acts of third parties.

(3) The defenses described in Rule 1888 shall be available to any person charged with a violation of this regulation.

(c) The Board, the board of stewards, the hearing officer, or the administrative law judge shall assess a penalty for violation of this section based upon the classifications and penalties set forth in Rules 1843.2 and 1843.3.

(d) A race day prohibition or restriction of a substance under this Article is not applicable to an out-of-competition test unless otherwise stated.

NOTE: Authority cited: Sections 19420, 19440, 19562, and 19580, Business and Professions Code. Reference: Sections 19440, 19580 and 19583, Business and Professions Code.

Item 6

STAFF ANALYSIS

DISCUSSION AND ACTION REGARDING THE PROPOSED ADDITION OF CHRB RULE 1868, AUTHORIZED MEDICATION DURING WORKOUTS, TO ESTABLISH THRESHOLD LIMITS FOR THE PRESENCE OF CERTAIN DRUG SUBSTANCES AND MEDICATIONS IN OFFICIAL TEST SAMPLES TAKEN FROM HORSES AFTER THEY COMPLETE A TIMED WORKOUT.

Medication, Safety and Welfare Committee
February 22, 2017

**Please note that the California Horse Racing Board voted to send this proposed regulation out for public comment at its December 2016 Regular Meeting. Although the 45-day public comment period has not yet commenced, the Medication, Safety and Welfare Committee has requested that this item be placed on the Agenda for further discussion of the proposed regulation.*

ISSUE

The California Horse Racing Board (CHRB or Board) currently employs a rigorous post-race testing program intended to prevent and detect the unauthorized use of certain medications and drug substances during horse races. The purpose of these efforts is twofold: to guard the health and welfare of horse and rider, and to ensure the integrity of horse racing in this State so as to protect participating licensees and the wagering public.

To date, however, the industry has gone without similar protections when horses complete timed workouts at licensed racing facilities.¹ The proposed addition of Rule 1868, Authorized Medication During Workouts, is thus intended to address this issue by establishing restrictions on the use of local anesthetics, narcotic analgesics, and non-steroidal anti-inflammatory drug substances (NSAID) for horses engaging in timed workouts.

BACKGROUND

Business and Professions Code section 19440 provides that the Board shall have all powers necessary and proper to enable it to carry out fully and effectually the purposes of this chapter. Responsibilities of the Board shall include adopting rules and regulations for the protection of the public and the control of horse racing and pari-mutuel wagering. Business and Professions Code section 19562 states the Board may prescribe rules, regulations and conditions under which all horse races with wagering on their results shall be conducted in California. Business and Professions Code section 19580 requires the Board to adopt regulations to establish policies, guidelines, and penalties relating to equine medication to preserve and enhance the integrity of horse racing in California.

Historically, the Board has focused its regulatory and enforcement efforts on preventing and penalizing the unauthorized use of certain medications and drug substances surrounding the running of a race via post-race testing.

¹ The one exception is that a horse required to complete a timed workout for removal from the Veterinarian's List is subject to the same medication restrictions as a horse participating in a race, pursuant to CHRB Rule 1866(e).

One major purpose of this program has been to prevent horses from being administered medications that could increase the likelihood of them becoming injured during a race. These same risks exist, however, during timed workouts. In a timed workout, a horse will run at full speed or near full speed, meaning the same concerns about certain medications increasing the chance of injury during a race are equally applicable. One such medication is non-steroidal anti-inflammatory drug substances (NSAID). NSAIDs are typically used to treat musculoskeletal and inflammatory processes in horses, but can also mask a horse's pain when used excessively. Such use potentially allows horses to train and race while injured and before they are fully healed. Masking a horse's condition with medications has the potential to obscure lameness and cause additional injuries to occur. Using pain-masking medications before a horse is fully healed can place a horse at a higher risk for breakdown, which can cause injury to horse and rider. Local anesthetics and narcotic analgesics can have similar masking-effects by deadening or reducing pain from an injury. The ability to detect signs of inflammation and/or lameness is critical for trainers, jockeys and other licensees to detect injuries, and thereby prevent injured horses from training.

Another primary purpose of the CHRB's post-race drug testing program is to ensure that horses do not have their performances enhanced, hindered, or altered by the use of unauthorized medications. Such efforts can give horses an unfair advantage or disadvantage in a race, which not only may impact the other trainers and owners with competing horses, but also defrauds the public wagering on the outcome of the race. Similar fraud, however, can result when the timed workout performance of a horse is enhanced, hindered, or altered as well. Many handicappers rely on the past performance of race horses to determine what they predict the order of finish will be in a particular race. Past performances often include the results of timed workouts, which means when these workouts are altered by the overuse of pain-masking medications, the wagering public is still being deceived as to the natural skill and ability of the horse over time.

ANALYSIS

The proposed addition of Rule 1868, Authorized Medication During Training, would address the issues described above by placing certain restrictions on the use of NSAIDs, local anesthetics, and narcotic analgesics for horses completing timed workouts. Specifically, the proposed rule would prohibit the administration of local anesthetics and narcotic analgesics to horses within 24 hours of their completing a timed workout. Furthermore, the rule would impose the same post-race testing threshold limitations for NSAIDs on horses having just completed a timed workout. The goal of these amendments would be to eliminate the overuse of pain-masking medications that increase the chance of injury for a horse running at full speed, and to prevent deception on the public as to the natural ability and skill of a horse that may be wagered on.

RECOMMENDATION

This item is presented to the Committee for discussion and action.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
PROPOSED ADDITION OF
RULE 1868. AUTHORIZED MEDICATION DURING TRAINING.

Rule 1868. Authorized Medication During Workouts

(a) No person shall administer a local anesthetic or narcotic analgesic to any horse within 24 hours of a timed workout, nor shall any horse participating in a timed workout carry in its body any local anesthetic or narcotic analgesic.

(b) Not more than one approved non-steroidal anti-inflammatory drug substance (NSAID) may be detected in an official test sample taken from a horse after it completes a timed workout, and shall be only one of the following authorized drug substances:

(1) Phenylbutazone in a dosage amount that the test sample shall contain not more than 2 micrograms of the drug substance per milliliter of blood plasma or serum.

(2) Flunixin in a dosage amount that the test sample shall contain not more than 20 nanograms of the drug substance per milliliter of blood plasma or serum.

(3) Ketoprofen in a dosage amount that the test sample shall contain not more than 2 nanograms of the drug substance per milliliter of blood plasma or serum.

(4) Metabolites or analogues of approved NSAIDs may be present in test samples collected after a timed workout.

(c) If the official laboratory reports that a blood test sample collected from a horse after it completes a timed workout contains an authorized NSAID in excess of the limit for that drug substance under this rule, the official veterinarian shall, in conjunction with the veterinarian who administered or prescribed the authorized drug substance, establish a dosage amount or time of administration of the drug substance that will comply with the limits under this rule; or the

official veterinarian may, if in his/her judgment no such reduced dosage amount or amendment to time of administration will result in a test sample level within the limits of this rule, withdraw authorization for the use of any one NSAID.

(d) If a blood and/or urine test sample is taken from a horse after a timed workout, the penalty provisions of this article shall apply to such timed workout in the same manner as to a scheduled race.

(e) For the purpose of this regulation, "timed workout" means an exercise session, run in compliance with Rule 1878, in which a horse runs full speed or close to full speed for the purpose of having their performance officially timed and reported.

Authority cited: Sections 19440, 19562, and 19580, Business and Professions Code.

Reference cited: Section 19580, Business and Professions Code.

STAFF ANALYSIS

Item 7

DISCUSSION AND ACTION REGARDING THE PROPOSED AMENDMENT TO CHRB RULE 1844, AUTHORIZED MEDICATION, TO 1) PROVIDE THAT NOT MORE THAN ONE AUTHORIZED CORTICOSTEROID ANTI-INFLAMMATORY DRUG SUBSTANCE MAY BE ADMINISTERED TO A HORSE THAT IS ENTERED TO RACE AND TO; 2) IDENTIFY THE AUTHORIZED DRUG SUBSTANCES.

Medication, Safety and Welfare Committee
February 22, 2017

ISSUE

Corticosteroid anti-inflammatory drug substances (“corticosteroids”) can effectively and safely treat a number of conditions common in race horses, but for many years there has been concern over their potential promotion of degenerative joint disease, especially with some corticosteroid formulations, and misuse that can mask more serious injuries. For this reason, existing California Horse Racing Board (CHRB or Board) regulations establish threshold limits for individual corticosteroids; however, they do not prohibit the “stacking” of these drug substances, which can potentially achieve a cumulative effect similar to higher dosages of individual substances. This proposed regulatory amendment is intended to address that issue.

BACKGROUND

Corticosteroids, administered via intra-articular and otherwise, are commonly used in race horses. Corticosteroids can effectively and safely treat a number of conditions common in race horses, but for many years there has been concern over their potential promotion of degenerative joint disease, especially with some corticosteroid formulations, as well as misuse that can mask more serious injuries. Dr. Wayne McIlwraith published two reviews on corticosteroid pharmacology and the clinical use of corticosteroids.¹ More recently Dr. Chris Whitton was able to associate intra-articular corticosteroid use to subsequent career-ending musculoskeletal injury, even though cause and effect was not well established.²

Prior to adoption of the National Uniform Medication Program (NUMP), corticosteroids were loosely regulated in the United States, including California. Beginning in October 2014, however, the Board introduced thresholds for commonly used corticosteroids. Much of the foundational research was conducted by Dr. Heather Knych at the Kenneth L. Maddy Equine Analytical Chemistry Laboratory.³ A pre-regulation educational effort minimized the opposition

¹ McIlwraith, C.W.; The use of intra-articular corticosteroids in the horse: What is known on a scientific basis? *Equine vet. J.* (2010) 42 (6) 563-571

McIlwraith, C.W.; Principles and practices of joint disease treatment. M.W. Ross, S.J. Dyson (Eds.), *Diagnosis and Management of Lameness in the Horse*, Elsevier Saunders, St. Louis, Missouri (2011), pp. 840–852

² Whitton, R.C et al.; Musculoskeletal injury rates in Thoroughbred racehorses following local corticosteroid injection. (2014) *The Veterinary Journal* 200, 71–76.

³ Knych et al.; Pharmacokinetics of Betamethasone in Plasma, Urine and Synovial Fluid Following Intra-Articular Administration to Exercised Thoroughbred Horses. *Drug Test Anal.* 2017 Jan 24. doi: 10.1002/dta.2170. [Epub ahead of print]

to the new regulation, and in general, its implementation went better than as expected. Part of that effort included monitoring a large number of clinical cases within CHRB inclosures.⁴

Recently, however, staff has grown concerned about the practice of “stacking” corticosteroids (i.e. using multiple drugs of similar method of action so that each corticosteroid individually falls below the regulatory threshold). The table below demonstrates multiple corticosteroids in most of the reported cases.

TABLE 3: Time at which corticosteroid concentrations fell below the ARCI regulatory threshold following administration of various combinations of clinical doses of triamcinolone acetonide, methylprednisolone acetate, betamethasone and isoflupredone acetate to a total of 82 Quarter Horse racehorses

Drugs	Dose range (mg)	Time until below RCI regulatory threshold	
		Day 7	Day 10
Betamethasone (n = 3)	12-24	3/3	
Isoflupredone + Betamethasone (n = 29)	4-26 12-42	29/29 29/29	
MPA + Betamethasone (n = 1)	40	1/1	
	24	1/1	
TCA + Betamethasone (n = 3)	10-20	3/3	
	6-12	2/3	3/3
TCA + Isoflupredone + Betamethasone (n = 24)	10-24 2-20	24/24 24/24	
	6-36	24/24	
MPA + Isoflupredone + TCA + Betamethasone (n = 17)	20-40 5-30	16/17 17/17	17/17
	10-40	17/17	
	6-30	17/17	
TCA + MPA + Isoflupredone (n = 3)	2-20 20-40	3/3 3/3	
	8-25	3/3	
TCA + MPA + Betamethasone (n = 2)	20-40 20-40	2/2 2/2	
	18-30	2/2	

Knych, H.K., Vidal, M.A., Casbeer, H.C, McKemie, D.S. Pharmacokinetics of Triamcinolone Acetonide Following Intramuscular and Intra-articular Administration to Exercised Thoroughbred Horses. *Equine Vet J.* 2013, 45, 715.

Knych, H.K., Harrison, L.M., Casbeer, H.C., McKemie, D.S. (2014) Disposition of Methylprednisolone Acetate in Plasma, Urine, and Synovial Fluid Following Intra-articular Administration to Exercised Thoroughbred Horses. *J Vet Pharmacol.* 2014, 37, 125.

Knych, H.K., Harrison, L.M., White, A., McKemie, D.S. (2016) Disposition of Isoflupredone Acetate In Plasma, Urine And Synovial Fluid Following Intra-Articular Administration To Exercised Thoroughbred Horses. *Drug Test Anal.* 2015, 7, 39.

⁴ Knych, H. K., Blea, J. A., Arthur, R. M., Overly, L. R. and McIlwraith, C. W. (2016), Clearance of corticosteroids following intra-articular administration of clinical doses to racehorses. *Equine Vet Educ*, 28: 140-144.

With similar method of action for all commonly used corticosteroids, it is reasonable to expect that the effect is cumulative. The primary concern is multiple corticosteroid use in intra-articular (i.e. joint) injections.

A number of racing jurisdictions have addressed the use of intra-articular corticosteroids by requiring horses not to race or receive other intra-articular therapies for a certain number of days after treatment. New York, for instance, initially adopted a five-day stand down restriction for intra-articular corticosteroid administrations, but has recently increased the stand down period to seven days. Alternatively, the International Federation of Horseracing Authorities (IFHA) animal welfare guidelines recommend a fourteen-day stand down period between intra-articular corticosteroid administrations and/or any other intra-articular therapy and racing.

After reviewing Kentucky's data, Dr. Mary Scollay, Equine Medical Director for the Kentucky Horse Racing Commission (KHRC) estimates only about 1% of their samples suggest stacking. Dr. Stanley is presently analyzing CHRB samples and expects to have information by the time of this month's Committee meeting.

On February 6, 2017, the Racing Medication and Testing Consortium referred the corticosteroid stacking issue to their Scientific Advisory Committee which includes Drs. Arthur, Stanley, Knych and Blea from California. The issues they will evaluate will be whether additional regulations are warranted, and, if so, what would be the most reasonable way to regulate multiple intra-articular corticosteroid use and/or multiple corticosteroid administrations.

ANALYSIS

Business and Professions Code section 19440 provides that the Board shall have all powers necessary and proper to enable it to carry out fully and effectually the purposes of the Horse Racing Law. Responsibilities of the Board include adopting rules and regulations for the protection of the public and the control of horse racing and pari-mutuel wagering. Business and Professions Code section 19562 states the Board may prescribe rules, regulations and conditions under which all horse races with wagering on their results shall be conducted in California. Business and Professions Code section 19580 requires the Board to adopt regulations to establish policies, guidelines, and penalties relating to equine medication to preserve and enhance the integrity of horse racing in California. Business and Professions Code section 19581 provides that no substance of any kind shall be administered by any means to a horse after it has been entered to race, unless the Board has, by regulation, specifically authorized the use of the substance and the quantity and composition thereof. Board Rule 1844, Authorized Medication, names drug substances and medications authorized by the Board that may be administered to safeguard the health of the horse entered to race. The rule lists the drug substances and medications that may be found in official test samples, as well as the maximum levels at which such substances may be detected.

CHRB staff proposes that this Committee consider the proposed amendment to Rule 1844, Authorized Medication, included in this package. Specifically, the amendment would prohibit the use of multiple corticosteroids once a horse is entered to race, and authorize only one of six corticosteroids to be present in post-race blood plasma or serum test samples, up to the specified thresholds.

The Board adopted a similar regulation when it prohibited the use of multiple non-steroidal anti-inflammatory drug substances (NSAIDs) in post-race test samples under Rule 1844(c). The proposed amendment is therefore constructed to mirror those provisions for consistency.

RECOMMENDATION

This item is presented to the Committee for discussion and action.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
PROPOSED AMENDMENT OF
RULE 1844. AUTHORIZED MEDICATION

1844. Authorized Medication.

Consistent with the intent of these rules, drug substances and medications authorized by the Board for use may be administered to safeguard the health of the horse entered to race provided that:

(a) No person shall administer a drug substance to any horse entered to race except upon authorization of the official veterinarian in conformance with these rules.

(b) No drug substance, other than authorized bleeder medication, shall be administered to a horse entered to race within 24 hours of the race in which entered.

(c) Not more than one approved non-steroidal anti-inflammatory drug substance (NSAID) may be administered to a horse that is entered to race and shall be only one of the following authorized drug substances:

(1) Phenylbutazone in a dosage amount that the test sample shall contain not more than 2 micrograms of the drug substance per milliliter of blood plasma or serum.

(2) Flunixin in a dosage amount that the test sample shall contain not more than 20 nanograms of the drug substance per milliliter of blood plasma or serum.

(3) Ketoprofen in a dosage amount that the test sample shall contain not more than 2 nanograms of the drug substance per milliliter of blood plasma or serum.

(4) Metabolites or analogues of approved NSAIDs may be present in post race test samples.

(d) Not more than one authorized corticosteroid anti-inflammatory drug substance may be administered to a horse that is entered to race, and shall be only one of the following authorized drug substances in blood plasma or serum:

- (1) Bethamethasone; 10 picograms per milliliter
- (2) Dexamethasone; 5 picograms per milliliter
- (3) Methylprednisolone; 100 picograms per milliliter
- (4) Prednisolone; 1 nanogram per milliliter
- (5) Triamcinolone Acetonide; 100 picograms per milliliter
- (6) Isoflupredone; 100 picograms per milliliter

(ed) If the official chemist reports that a blood test sample contains an authorized NSAID or corticosteroid anti-inflammatory drug substance in excess of the limit for that drug substance under this rule, the official veterinarian shall, in conjunction with the veterinarian who administered or prescribed the authorized drug substance, establish a dosage amount or time of administration of the drug substance that will comply with the limits under this rule; or the official veterinarian may, if in his/her judgment no such reduced dosage amount or amendment to time of administration will result in a test sample level within the limits of this rule, withdraw authorization for the use of any one NSAID or corticosteroid anti-inflammatory drug substance.

(fe) Official urine test samples may contain one of the following drug substances, their metabolites and analogs, in an amount that does not exceed the specified levels:

- (1) Acepromazine; 10 nanograms per milliliter
- (2) Mepivacaine; 10 nanograms per milliliter
- (3) Albuterol; 1 nanograms per milliliter
- (4) Procaine; 25 nanograms per milliliter

- (5) Salicylates; 750 micrograms per milliliter
- (6) Clenbuterol; 140 picograms per milliliter, except in quarter horses for which no level of clenbuterol is authorized.
- (7) Omeprazole; 1 nanogram per milliliter
- (8) Nandrolone; 1 nanograms per milliliter for geldings, fillies and mares; 45 nanograms for males other than geldings.
- (9) Boldenone; 15 nanograms per milliliter in males other than geldings.
- (10) Testosterone; 20 nanograms per milliliter in geldings.
- (A) Testosterone at any level in males other than geldings is not a violation of this regulation.
- (11) Testosterone; 55 nanograms per milliliter in fillies or mares.
- (12) Butorphanol 300 nanograms per milliliter
- (g) Official blood test samples may contain the following drug substances, their metabolites and analogs, in an amount that does not exceed the specified levels in serum or plasma:
 - (1) ~~Bethamethasone; 10 picograms per milliliter~~
 - (12) Dantrolene; 100 picograms per milliliter
 - (23) Detomidine; 1 nanogram per milliliter
 - (4) ~~Dexamethasone; 5 picograms per milliliter~~
 - (35) Diclofenac; 5 nanograms per milliliter
 - (46) Dimethylsulfoxide (DMSO); 10 micrograms per milliliter
 - (57) Firocoxib; 20 nanograms per milliliter
 - (68) Lidocaine; 20 picograms per milliliter

~~(79)~~ Methocarbamol; 1 nanogram per milliliter

~~(10)~~ Methylprednisolone; 100 picograms per milliliter

~~(811)~~ Glycopyrrolate; 3 picograms per milliliter

~~(12)~~ Prednisolone; 1 nanogram per milliliter

~~(13)~~ Triamcinolone Acetonide; 100 picograms per milliliter

~~(914)~~ Xylazine; 10 picograms per milliliter of serum or plasma

~~(1015)~~ Butorphanol; 2 nanograms per milliliter

~~(16)~~ Isoflupredone; 100 picograms per milliliter

~~(hg)~~ Official blood test samples shall not contain any of the drug substances, or their metabolites or analogs listed in subsection ~~(fe)~~-(1)(12).

~~(ih)~~ Procaine, following administration of procaine penicillin, is an authorized medication provided:

(1) Official blood test samples shall not contain any procaine, or its metabolites or analogs in excess of 25 nanograms per milliliter.

(2) all procaine penicillin administrations have been reported pursuant to Rule 1842 of this division,

(3) procaine penicillin was not administered after entry to race,

(4) the horse was under surveillance for a minimum of six hours prior to racing.

~~(ji)~~ All expenses related to surveillance and testing for procaine under subsection ~~(ih)~~ of this regulation shall be paid by the owner of the horse.

NOTE: Authority cited: Sections 19440 and 19562, Business and Professions Code. Reference: Sections 19580 and 19581, Business and Professions Code.