



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](http://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 AND  
TRACK SAFETY COMMITTEE**  
Commissioner Bo Derek, Chairman  
Commissioner Chuck Winner, Member  
Kirk E. Breed, Executive Director

STAFF ANALYSIS  
DISCUSSION REGARDING THE UNIFORM MEDICATION POLICIES  
UNDER CONSIDERATION NATIONALLY AND HOW  
THOSE POLICIES COULD BE IMPLEMENTED WITHIN  
THE CHRB'S REGULATORY STRUCTURE

Medication and Track Safety Committee Meeting  
April 10, 2013

BACKGROUND

Recent efforts by a number of interested groups have advocated a national uniform medication policy. The Racing Medication and Testing Consortium (RMTC) was established to promote national uniform medication policies and Association of Racing Commissioners International (ARCI) has long advocated for national uniform medication and regulatory policies. Over the last five or six years the RMTC has conducted withdrawal time research on a number of therapeutic medications commonly used in veterinary practice at race tracks. Similar research has been and is currently being conducted by the European Horseracing Scientific Liaison Committee (EHSLC) in Europe and the Rural Industries Research and Development Corporation (RIRDC) in Australia. RIRDC is funded and operated by the Australian government. RIRDC's published research is available at <https://rirdc.infoservices.com.au/items/11-117>. The RMTC has analyzed the available research to make regulatory threshold and withdrawal time recommendations which have subsequently been approved by the ARCI.

In 2012 The Jockey Club proposed the Reformed Racing Medication Rules ([http://www.jockeyclub.com/pdfs/reformed\\_rules.pdf](http://www.jockeyclub.com/pdfs/reformed_rules.pdf)) to spur the national uniform medication effort. The ARCI has reviewed The Jockey Club Reformed Racing Medication Rules and accepted a number of proposals including the concept of a list of drugs described as controlled medications. The medications would be regulated differently than non-controlled medications and somewhat similar to how the CHRB handles certain medication under Rule 1844, Authorized Medication. Additional medications could be added where a need is identified. The American Association of Equine Practitioners (AAEP) has already proposed adding a number of drugs to the list. The additional medications could be added to the list as research necessary to establish thresholds and withdrawal times becomes available. Controlled medications will be regulated by thresholds and restricted administration times; all other medications will be regulated at the laboratories limit of detection and non-specific restricted administration times. In California, that would be 48 hours unless otherwise specified. Last month, a group of 9 states from the mid-Atlantic region moved forward and agreed to work together to establish regional uniform medication regulations. Those states are New York, New Jersey, Pennsylvania, Virginia, Maryland, West Virginia, Delaware and Massachusetts. On April 2, 2013, the ARCI approved similar regulations as part of its model rule process.

The CHRB would need to add a regulation or amend Rule 1844 to add the additional controlled medications. That process should be relatively simple as a number of medications have been added to Rule 1844 over the years. What are new to the CHRB regulatory scheme are the restricted administration times for drugs that do not fit California's current 48 hour restricted

administration provisions. This is how New York regulates many medications. The proposed regulations are a combination of thresholds and restricted administration times. The CHRB may need to establish a new medication regulation to address those medications with restricted administration times or find another established regulation within the CHRB's current regulatory scheme.

#### RECOMMENDATION

This item is presented for Committee discussion and action.

**CHRB Regulatory Changes Needed to Adopt ARCI Proposed National Uniform Medication Regulations**

Drug	Threshold (Analyte)	Withdrawal	CHRB 1844 Regs	Administration Restrictions
Acepromazine	10 ng/mL in urine (HEPS)	48 hours	Current 1844(e )(1) would lower permitted level to 10ng/ml in urine	Current Regs
Betamethasone	10 pg/mL in plasma or serum	7 days	A new regulation would be required to regulate betamethasone in plasma at 10pg/ml similar to 1844(g) for clenbuterol	7 days for intra-articular administration
Butorphanol	300 ng/mL of total butorphanol in urine or 2 ng/mL of free butorphanol in plasma	48 hours	A new regulation would be required to add a urine threshold for butorphanol to 1844 (e) and a plasma level similar to 1844(g) for clenbuterol	Current Regs
Clenbuterol	140 pg/mL in urine; LOD in plasma	14 days	1844 (e ) (9) would be amended to 140pg/ml in urine and 1844 (g) would be eliminated and 1844(g) are currently suspended. Note: 1844 (e ) (9) and 1844(g) are currently suspended	14 Days
Dantrolene	0.1 ng/mL of 5-OH dantrolene in plasma or serum	48 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	Current Regs
Detomidine*	1 ng/mL carboxydetomidine in urine or LOD of detomidine in plasma	72 hours	A new regulation would be required to add a urine threshold for detomidine to 1844 (e) and a plasma level similar to 1844(g) for clenbuterol	72 Hours
Dexamethasone	5 pg/mL in plasma or serum	72 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	72 Hours
Diclofenac	5 ng/mL in plasma or serum	48 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	Current Regs
DMSO	10 mcg/mL plasma or serum	48 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	Current Regs
Firocoxib	20 ng/mL in blood; applies to EQUIOXX™ paste	14 days	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	14 Days
Flunixin	20 ng/mL plasma or serum	24 hours	Current Regs.	Current Regs
Lidocaine*	20 pg/mL of 3OH-Lidocaine in plasma or serum	72 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	72 Hours

Drug	Threshold	Withdrawal	CHRB 1844 Regs	Administration Restrictions
Mepivacaine	10 ng/mL in urine (total hydroxymepivacaine) or LOD in plasma (mepivacaine)	72 hours	Current Reg -1844(e)(2)	72 Hours
Methocarbamol	1 ng/mL in plasma or serum (IV or oral)	48 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	Current Regs
Methylprednisolone	100 pg/mL in plasma or serum	21 days	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	7 days for intra-articular administration
Furosemide	100 ng/mL in blood and urine specific gravity < 1.010	4 hours	Current Reg	Current Regs
Glycopyrrolate	3 pg/mL in plasma or serum	48 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	Current Regs
Ketoprofen	10 ng/mL in plasma or serum	24 hours	Current Regs	Current Regs
Omeprazole	1 ng/ml in urine (omeprazole sulfide)	24 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	Current Regs
Phenylbutazone	2 mcg/mL in plasma or serum	24 hours	Current Regs	Current Regs
Prednisolone	1 ng/mL of plasma or serum	48 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	Current Regs
Procaine/Procaine Penicillin	25 ng/mL of plasma or serum	Current Regs	Current Reg -1844(e)(2)	Current Regs
Triamcinolone Acetonide	100 pg/mL in plasma or serum	7 days	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	7 days for intra-articular administration
Xylazine*	10pg/ml plasma or serum	48 hours	A new regulation would be required to add a plasma level similar to 1844(g) for clenbuterol	Current Regs

\* Interim Recommendation



RACING COMMISSIONERS INTERNATIONAL

## Press Release

Tuesday, April 2, 2013

Contact: Ed Martin (859) 224-7070

### RCI Gives Final Approval to Uniform Drug Testing Policy and Thresholds

LEXINGTON, KY - Racing Commissioners International (RCI) today gave final approval to the "RCI Controlled Therapeutic Medication Schedule", setting the stage for uniform implementation of racing medication rules in the United States and beyond.

The RCI schedule is intended to be a guide for testing laboratories in determining the level at which the presence of a substance would violate the rules and become a violation. It also creates restrictions on administering medications within times certain prior to a race, creating a clear line that horsemen and veterinarians should not cross.

"For years we have talked about uniformity but today is the first day that we can say there is agreement as to what constitutes a violation," said RCI Chairman Duncan Patterson, who is also the chairman of the Delaware Thoroughbred Racing Commission.

Twenty-four (24) substances deemed appropriate for normal equine care are included on the RCI schedule. Additional substances may be considered for inclusion in the schedule upon recommendation from the American Association of Equine Practitioners or the Racing Medication and Testing Consortium.

According to RCI, approximately 75% of all medication rule violations each year are for overages associated with substances contained on the RCI Schedule.

RCI President Ed Martin said regulators are being encouraged to achieve uniformity by adding the RCI schedule to their rules "by reference", a common way to incorporate a nationally recognized standard into public policy.

"If everyone works from the same schedule, we will have uniformity," Martin said, noting that a movement coordinated by the Thoroughbred Horsemen's Association is already underway in several Mid-Atlantic states to implement the RCI schedule.

Substances not contained on the schedule will be considered "prohibited", meaning they should not be present in a post-race sample at any level or at levels exceeding defined limits found elsewhere in the rules. Patterson indicated that a proposal to address overages that may be caused by environmental contaminants submitted by the National Horseman's Protective and Benevolent Association (NHBPA) will be discussed at the RCI meetings commencing in New Orleans on April 23. Also to be discussed will be modifications to the recommended penalty guidelines.

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# RCI SCHEDULE OF CONTROLLED THERAPEUTIC SUBSTANCES - Version 1.0

(Adopted April 2, 2013 by Racing Commissioners International.)

Controlled Therapeutic Substance:	Threshold:	No pre-race treatment within:	Dosing Specifications:	Reference Notes	Note:
<b>Acepromazine</b>	10 ng/ml HEPS in urine	48 hours	Single IV dose of acepromazine at 0.05 mg/kg.	UC Davis project Drs. Knych & Stanley	Applicable analyte is metabolite HEPS
<b>Betamethasone</b>	10 pg/mL of plasma or serum.	7 days	IA administration of 9 mg of Betamethasone Sodium Phosphate and Betamethasone Acetate Injectable Suspension, USP (American Regent product #0517-0720-01) <sup>i</sup>	RMTC study Manuscript in preparation (Dr. Sams)	IA dosing only - applicable analyte is betamethasone in plasma or serum
<b>Butorphanol</b>	300 ng/mL of total butorphanol in urine or 2 ng/mL of free butorphanol in plasma.	48 hours	Single IV dose of butorphanol as Torbugesic <sup>®</sup> (butorphanol tartrate) at 0.1 mg/kg.	J. vet. Pharmacol. Therap. doi: 10.1111/j.1365-2885.2012.01385.x	Applicable analytes are total butorphanol (drug and conjugates) in urine and butorphanol in plasma (the drug itself, not any conjugate).

# RCI SCHEDULE OF CONTROLLED THERAPEUTIC SUBSTANCES - Version 1.0

(Adopted April 2, 2013 by Racing Commissioners International.)

Controlled Therapeutic Substance:	Threshold:	No pre-race treatment within:	Dosing Specifications:	Reference Notes	Note:
<b>Clenbuterol</b>	140 pg/mL of urine or LOD in plasma or serum.	14 Days	Oral administration of clenbuterol as Ventipulmin <sup>®</sup> syrup (Boehringer-Ingelheim Vetmedica Inc., NADA 140-973) at 0.8 mcg/kg twice a day	UC Davis Boehringer-Ingelheim Vetmedica, Inc.	Applicable analyte is clenbuterol.
<b>Dantrolene</b>	100 pg/mL 5-hydroxydantrolene in plasma or serum	48 hours	Oral administration of 500 mg of dantrolene as paste (compounding pharmacy) or capsule formulation (Proctor and Gamble)	J. vet. Pharmacol. Therap. 34, 238-246	
<b>Detomidine</b>	1 ng/mL of carboxydetomidine in urine; LOD for detomidine in plasma.	72 hours	Single sublingual dose detomidine (Domosedan <sup>®</sup> gel at 40 mcg/kg)	Vet. J. 2012 Oct. 10 <a href="http://dx.doi.org/10.1016/j.tvjl.2012.08.016">http://dx.doi.org/10.1016/j.tvjl.2012.08.016</a>	

# RCI SCHEDULE OF CONTROLLED THERAPEUTIC SUBSTANCES - Version 1.0

(Adopted April 2, 2013 by Racing Commissioners International.)

Controlled Therapeutic Substance:	Threshold:	No pre-race treatment within:	Dosing Specifications:	Reference Notes	Note:
<b>Dexamethasone</b>	5 pg/mL of plasma or serum	72 hours	IM and IV administration of dexamethasone sodium phosphate or oral administration of dexamethasone at 0.05 mg/kg. Regardless of route.	RMTC study  <u>J Vet Pharmacol Ther.</u> 2013 Apr;36(2):181-91.	Applicable analyte is dexamethasone in plasma or serum
<b>Diclofenac</b>	5 ng/mL of plasma or serum	48 hours	Five inch ribbon topical application of 1% diclofenac liposomal cream formulation. (Surpass Topical Anti-Inflammatory Cream, IDEXX Pharmaceuticals)	<i>Veterinary Therapeutics</i> 6: 57-66 (2005)	Applicable analyte is diclofenac in plasma or serum.
<b>DMSO</b>	10 mcg/mL of plasma or serum	48 hours	Oral or IV	ARCI model rule	Applicable analyte is DMSO in plasma or serum.

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(Adopted April 2, 2013 by Racing Commissioners International.)

Controlled Therapeutic Substance:	Threshold:	No pre-race treatment within:	Dosing Specifications:	Reference Notes	Note:
<b>Firocoxib</b>	20 ng/mL of plasma or serum	14 days	Oral administration of firocoxib as EQUIOXX oral paste at a daily dose of 0.1 mg/kg for four days	RMTC study	Applicable analyte is firocoxib in plasma or serum.
<b>Flunixin</b>	20 ng/mL of plasma or serum	24 hours	Single IV dose of flunixin as Banamine® (flunixin meglumine) at 1.1 mg/kg	ARCI model rule	<b>Secondary anti-stacking threshold:</b> 3.0 ng/mL in plasma (administration 48 hours prior).
<b>Furosemide</b>	100 ng/mL of plasma or serum	4 hours	Single IV dose of furosemide up to 500 mg	ARCI model rule	Must also have urine specific gravity < 1.010 for a violation.
<b>Glycopyrrolate</b>	3 pg/mL plasma or serum	48 hours	Single IV dose of 1 mg of glycopyrrolate as Glycopyrrolate Injection, USP (American Regent product # 0517-4601-25).	RMTC study; J. vet. Pharmacol. Therap. doi: 10.1111/j.1365-2885.2011.01272.x	Applicable analyte is glycopyrrolate in plasma or serum.

**RCI SCHEDULE OF CONTROLLED THERAPEUTIC SUBSTANCES - Version 1.0**

(Adopted April 2, 2013 by Racing Commissioners International.)

Controlled Therapeutic Substance:	Threshold:	No pre-race treatment within:	Dosing Specifications:	Reference Notes	Note:
<b>Ketoprofen</b>	10 ng/mL of plasma or serum	24 hours	Single IV dose of ketoprofen as Ketofen <sup>®</sup> at 2.2 mg/kg	ARCI model rule	
<b>Lidocaine</b>	20 pg/mL of total 30H-lidocaine in plasma	72 hours	200 mg of lidocaine as its hydrochloride salt administered subcutaneously	ESHLC data; Iowa State.	Applies to total major hydroxylated metabolite
<b>Mepivacaine</b>	10 ng/mL total hydroxymepivacaine in urine or above LOD of mepivacaine in plasma.	72 hours	Single 0.07 mg/kg subcutaneous dose of mepivacaine	EHSLC data Current CHRB Rule	
<b>Methocarbamol</b>	1 ng/mL of plasma or serum	48 hours	Single IV dose of 0.15 mg/kg methocarbamol as Robaxin <sup>®</sup> or 5 grams orally.	University of Pennsylvania	Applicable analyte is methocarbamol in plasma or serum.

# RCI SCHEDULE OF CONTROLLED THERAPEUTIC SUBSTANCES - Version 1.0

(Adopted April 2, 2013 by Racing Commissioners International.)

Controlled Therapeutic Substance:	Threshold:	No pre-race treatment within:	Dosing Specifications:	Reference Notes	Note:
<b>Methylprednisolone</b>	100pg/mL in plasma or serum	7 days	Total dose of Methylprednisolone acetate suspension in one articular space. <sup>ii</sup> The recommended withdrawal for methylprednisolone acetate is a minimum of 21 days at a 100mg dose.	RMTC February 2013 Directive	Applicable analyte is methylprednisolone.
<b>Omeprazole</b>	1 ng/mL of urine	24 hours	Single oral dose of omeprazole as Gastrogard® at 3.9 mg/kg		Applicable analyte is omeprazole sulfide in urine
<b>Phenylbutazone</b>	2 mcg/mL of plasma or serum	24 hours	Single IV dose of phenylbutazone at 2.2 mg/kg	ARCI model rule	<b><u>Secondary anti-stacking threshold:</u></b> 0.3 mcg/mL of plasma (Administration 48-hours prior).
<b>Prednisolone</b>	1 ng/mL serum or plasma	48 hours	1 mg/kg orally.		Applicable analyte is prednisolone in plasma or serum.

# RCI SCHEDULE OF CONTROLLED THERAPEUTIC SUBSTANCES - Version 1.0

(Adopted April 2, 2013 by Racing Commissioners International.)

Controlled Therapeutic Substance:	Threshold:	No pre-race treatment within:	Dosing Specifications:	Reference Notes	Note:
<b>Procaine penicillin</b> <i>(administration must be reported to Commission)</i>	25 ng/mL Plasma	Following entry to race.	Intramuscular	RMTC – reference notes online.	Mandatory surveillance of horse at owner's expense 6 hours before racing.
<b>Triamcinolone acetonide</b>	100 pg/mL of plasma or serum	7 days	Total dose of 9mg in one articular space. <sup>iii</sup>	EVJ 2013 Epub Knych	Applicable analyte is triamcinolone acetone in plasma or serum.
<b>Xylazine</b>	0.01 ng/mg of plasma or serum	48 hours	Intravenous		Applies to any xylazine and xylazine metabolite

<sup>i</sup> **Intramuscular** administration of **Betamethasone** will result in plasma or serum concentrations that will exceed the Regulatory Threshold for weeks or even months, making the horse ineligible to race for an extended period.

<sup>ii</sup> **Intramuscular** administration of **Methylprednisolone** will result in plasma or serum concentrations that will exceed the Regulatory Threshold for weeks or even months, making the horse ineligible to race for an extended period.

<sup>iii</sup> **Intramuscular** administration of **Triamcinolone acetonide** will result in plasma or serum concentrations that will exceed the Regulatory Threshold for weeks or even months, making the horse ineligible to race for an extended period.

## MID ATLANTIC UNIFORM MEDICATION PROGRAM

Drugs and medications will be divided into 2 categories—Therapeutic Substances and Non-Therapeutic or Prohibited Substances.

The Therapeutic Substances category will be comprised of 24 substances that have been identified and recognized as being necessary for the routine treatment of illness or injury in the horse. They are:

- Acepromazine
- Betamethasone
- Butorphanol
- Clenbuterol
- Dantrolene
- Detomidine
- Dexamethesone
- Diclofenac
- DMSO
- Firocoxib
- Flunixin
- Furosemide
- Glycopyrrolate
- Ketoprofen
- Lidocaine
- Mepivacaine
- Methocarbamol
- Methylprednisolone
- Omeprazole
- Phenylbutazone
- Prednisolone
- Procaine Penicillin
- Triamcinolone
- Xylazine

A recommended withdrawal time for each of these substances has been established. A uniform testing threshold to be employed by laboratories to detect each of these substances has also been established.

Penalties for violations involving Therapeutic Substances will reflect the fact that they involve therapeutic treatment. Penalties for violations involving Non-Therapeutic or Prohibited Substances will reflect that they are not permitted for therapeutic use and are forbidden to be present in the competing horse.

With respect to the Therapeutic Substances, there are new withdrawal times and testing detection levels for clenbuterol and the corticosteroids.

Clenbuterol may not be administered within 14 days of the race.

With respect to the corticosteroids, no intra-articular (IA) corticosteroid may be administered within 7 days of a race. For methylprednisolone specifically, the recommended withdrawal time is 21 days. Intramuscular (IM) administration of any of the long-acting corticosteroids (betamethasone, triamcinolone acetate, methylprednisolone) should be avoided as they remain in the horses system for months and could cause a positive test. The recommended withdrawal time for the systemic corticosteroids (dexamethasone) is 72 hours.

Given the need to get the horsemen and veterinarians to adjust to the new corticosteroid restrictions, the RMTC and ARCI recommend that enforcement action for these drugs be delayed until January 1, 2014 and that positive tests reported by the laboratory be investigated and remediated (similar to the manner in which the restrictions on the use of anabolic steroids were implemented).

Salix is the only drug that is permitted to be administered to a horse within 24 hours of a race. Pursuant to the national rule adopted in 2010, salix should only be administered by the racing commission under controlled conditions through a designated veterinarian.

The use of adjunct bleeder medications is prohibited.

To ensure testing uniformity, all laboratories performing drug testing for Mid Atlantic tracks must be accredited to ISO 17025 and the RMTC Code of Standards. These laboratories will also be required to participate in the RMTC's external quality assurance program. All such laboratories must utilize the latest technology in drug testing, including an LC/MS Triple Quadrupole.

STAFF ANALYSIS  
DISCUSSION REGARDING THE DEVELOPMENT OF  
WITHDRAWAL TIME RECOMMENDATIONS FOR  
CORTICOSTEROIDS REGULATION AND  
COMMUNICATING THOSE WITHDRAWAL TIMES TO HORSEMEN

Medication and Track Safety Committee Meeting  
April 10, 2013

## BACKGROUND

Current national discussions have suggested corticosteroid use be regulated by testing for these medications in blood beginning on January 1, 2014. The recommendations include a prohibition of all intra-articular corticosteroid injections within 7 days of racing and all corticosteroids within 72 hours of racing by any route of administration. The proposed thresholds are 100pg/ml in plasma for triamcinolone acetonide (Vetalog) and methylprednisolone acetate (Depo-Medrol), 10pg/ml for betamethasone sodium phosphate and/or betamethasone acetate (BetaVet, Celestone), 5pg/ml for dexamethasone, 1ng/ml for prednisolone. The threshold for isofluprodone (Pre-Def 2x) is pending.

While considerable effort has been directed at determining withdrawal time recommendations, it is impossible to reproduce all the scenarios in which corticosteroids, intra-articular or otherwise, are utilized in clinical practice at the race track. To assist veterinarians and trainers develop veterinary practices which will avoid unintended positives Drs. Arthur, Knych and Stanley are proposing the following programs:

1. Reporting samples that exceed the proposed threshold levels:

The Maddy laboratory will report to the official veterinarian when a sample exceeds the recommended threshold as determined by screening. This is proposed to start the beginning of Hollywood Park on April 26, 2013. The veterinarian will maintain a spreadsheet listing those horses treated with corticosteroids. Associated with this will be a requirement for veterinarians to report all corticosteroid injected under Rule 1842, Veterinarian Report, to include the date, horse, trainer, route of administration, sites injected, specific corticosteroid administered and dosage. Veterinarians or trainers would be able to obtain from their official veterinarian whether the horse they treated or the horse they train exceeded the proposed thresholds. A similar system has worked very well in Minnesota and has reduced inadvertent corticosteroid violations to a minimum. The laboratory reports will be available about 2-3 weeks after the race.

2. Prospective study to determine detection times:

The second approach will be a prospective study to determine detection times. This study would be done outside of the race testing and would require outside

funding. Veterinarians would enroll horses administered corticosteroids. A pre-administration blood sample would be drawn and post-treatment samples would be obtained by the practicing veterinarian at set times as determined by which corticosteroid was administered and by what route of administration. This study would be limited to the longer-acting corticosteroids triamcinolone acetonide, methylprednisolone acetate, betamethasone sodium phosphate/betamethasone acetate and isofluprodone.

#### RECOMMENDATION

This item is presented for Committee discussion.

STAFF ANALYSIS  
DISCUSSION REGARDING THE RECENT  
ZILPATEROL FINDINGS FROM CONTAMINATED FEED

Medication and Track Safety Committee Meeting  
April 10, 2013

BACKGROUND

On March 9, 2013 the Maddy Laboratory reported nine zilpaterol positives from six different trainers at Cal Expo from March 1 and 2, 2013. Given the unusual number of positive distributed over 6 different trainers the possibility of contamination of commonly used feed, feed supplements or medication was suspected from the outset. Heretofore, all zilpaterol positives have been associated with a single trainer. On March 9 extensive barn searches were conducted and investigators were instructed to obtain samples from feed and supplements while the official veterinarian conducted out of competition testing. Four feed samples collected at Cal Expo tested positive for zilpaterol, all were sweet feed products manufactured by Purina at their Turlock mill. Zilpaterol was not detected in any other evidence sample. The products identified as contaminated with zilpaterol were Purina Strategy, Purina Omoline-200, Country Acres Horse Feed and Country Acres Sweet-12. Country Acres is a Purina brand. Later investigations at Los Alamitos found zilpaterol in Purina Race Ready, a popular sweet feed at Quarter Horse and Thoroughbred tracks. The California Department of Food and Agriculture (CDFA) has jurisdiction over livestock feed contamination and was notified of the Maddy Lab's findings. CDFA began an investigation with the assistance of CHRB investigators and in collaboration with the toxicology laboratory at California Animal Health and Food Safety (CAHFS) at UC Davis. After completing its independent investigation CDFA confirmed zilpaterol was in the Purina sweet feed products at which time the CHRB issued its March 22, 2013 "An Advisory Regarding Tainted Feed Products." All the feed samples testing positive were manufactured at Purina's Turlock plant from mid-late February 2013. To date, no samples from feed in March 2013 have tested positive for zilpaterol.

When testing of the samples from the weekend of March 9 and 10 began, the extent of the distribution of the contaminated feed had affected all tracks in California. Ultimately, the laboratory confirmed zilpaterol in 48 urine samples: 38 from Cal Expo, 5 from Golden Gate Fields, 3 from Santa Anita and 2 from Los Alamitos. No additional zilpaterol positives have been reported after March 17, 2013. Based on the wide-spread nature of the contamination the Executive Director and Equine Medical Director recommended all cases be dismissed under Business & Professions Code section 19577 (d), which was supported by the Board.

On March 26, 2013, the CHRB issued an advisory of the dismissals and the Executive Director issued a directive instructing all CHRB licensed feed vendors to remove Purina & Country Acres feed products from CHRB facilities until such a time Purina can assure the CHRB its products are free of zilpaterol. Trainers and veterinarians were made aware of this advisory. During this episode CHRB, CDFA, CAHFS and Purina have worked cooperatively to identify the source of contamination. Purina mixes no zilpaterol containing feeds at its Turlock mill, but zilpaterol is added to cattle feed as a muscle growth promoter. One of the issues delaying confirmation of the

zilpaterol feed contamination was the sensitivity of testing at the Maddy laboratory exceeded FDA sensitivity criteria and exceeded the sensitivity of other laboratories doing the feed testing. That was corrected when the CDFA began using the toxicology laboratory at CAHFS at UC Davis for its feed sample and feed component testing. Early on in the investigation, the molasses used in the sweet feed product was suspect. Molasses is often used as a carrier to mix additional material into feed and was common to all samples testing positive for zilpaterol. In this specific case, the molasses supplier to the Purina plant produces a zilpaterol containing molasses for cattle feed mills other than Purina. CDFA's investigation has shown molasses delivered on February 14, 2013 was contaminated with zilpaterol; molasses samples prior to that date were clear. Similar to CHRB testing, Purina and CDFA were unable to find zilpaterol in any feed products manufactured in March and testing of the molasses tanks at its Turlock facility on March 18, 2013, showed no evidence of zilpaterol. All samples were tested at the CAHFS toxicology laboratory for the CDFA. As a safety measure, Purina emptied its molasses tanks and cleaned the associated plumbing and resumed manufacturing on March 27, 2013. Results of sample testing from feed produced after March 27, 2013 are pending as of April 1, 2013.

#### RECOMMENDATION

This item is presented for Committee discussion.



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April 1, 2013

Mr. Kirk Breed  
Executive Director  
California Horse Racing Board  
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Sacramento, CA 95825

Dear Mr. Breed,

This letter is to communicate findings from Purina Animal Nutrition's internal investigation around Zilpaterol contamination of Purina and Country Acres sweet horse feeds manufactured at the Purina Animal Nutrition (PAN) facility located in Turlock, CA. We thank the CHRHB for the opportunity to work together towards resolving this issue.

Please note PAN does not use Zilpaterol at any of our manufacturing facilities. Our investigation identified that a single shipment of molasses received at the Turlock mill on Feb. 14, 2013 was contaminated with Zilpaterol. A retained sample from this shipment which was collected and tested by the CDFA was found to contain 600 ppb Zilpaterol.

Testing at the California Animal Health & Food Safety (CAHFS) laboratory of finished feeds manufactured at the Turlock mill support the introduction of Zilpaterol through molasses on Feb. 14, 2013. Fifty (50) samples of selected sweet feed lots produced at the Turlock mill between Feb. 13 and Mar. 17, 2013 were tested for Zilpaterol. Test results of samples of sweet feed manufactured on Feb. 13, 2013 came back at non-detectable levels. Samples of sweet feeds manufactured at the Turlock mill between Feb. 14 and Feb. 27, 2013 tested between <5 to 29 ppb Zilpaterol. Samples of sweet feeds manufactured at the Turlock mill on or after Feb. 28, 2013 again came back at non-detectable levels.

Please also note that another sample of molasses collected from the Turlock mill by the CDFA on Mar. 18, 2013 did not contain detectable levels of Zilpaterol. As a precautionary measure, our Turlock facility emptied and cleaned its molasses tanks and piping system to eliminate the potential for any residual Zilpaterol. Production of sweet horse feed products then recommenced on Mar. 27, 2013.

Under these circumstances, we can assure the CHRHB that products made on or after Mar. 27, 2013 at our Turlock facility do not contain detectable levels of Zilpaterol and can be reliably fed to race horses. Thus, we request that the CHRHB allow Purina and Country Acres horse feeds



4001 Lexington Avenue North  
Arden Hills, MN 55126

Mailing, P.O. Box 64101  
St. Paul, MN 55164-0101

651-375-2222  
[www.landlakesinc.com](http://www.landlakesinc.com)

manufactured on or after Mar. 27, 2013 at the Turlock mill for sale at CA racetracks effective immediately.

As referenced above, we believe that no horse feeds manufactured at Turlock from Mar. 1 to Mar. 26, 2013 pose a Zilpaterol risk. Additional testing on product manufactured during this time frame in the Turlock mill is underway and we will be back in touch with you once we have those results in hand.

If you have further comments or concerns, please contact me at 651-233-8756. Again, thank you for the opportunity to work together towards resolving this issue.

Best regards,

A handwritten signature in dark ink, appearing to read 'B. R. Warren', with a horizontal line extending to the right.

Benjamin R. Warren, Ph.D.  
Director, Product Safety & Regulatory Affairs

1010 Hurley Way, Suite 300  
Sacramento, CA 95825  
(916) 263-6000  
Fax (916) 263-6042

**CALIFORNIA HORSE RACING BOARD**

Los Alamitos Race Course  
4961 E. Katella Avenue  
Los Alamitos, CA 90720

Contact: Mike Marten  
(714) 820-2748  
Cell: (714) 240-1870  
Fax (714) 821-6232

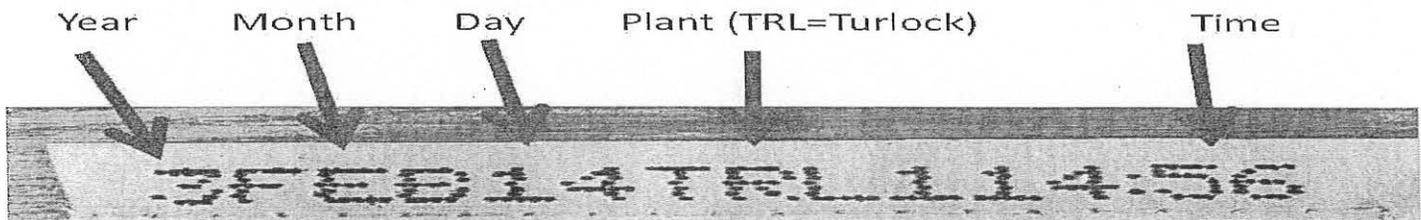
[www.chrb.ca.gov](http://www.chrb.ca.gov)

CHRB ADVISORY

MARCH 22, 2013

**ADVISORY REGARDING TAINTED FEED PRODUCTS**

The CHRB has concluded a number of sweet feed products containing a molasses base produced by Purina at their Turlock mill contain the prohibited drug zilpaterol. Purina produces a number of sweet feed products under their own name and under the Country Acres brand. To date, all the products were milled at the Turlock plant in February and have included Purina Race Ready, Purina Strategy, Purina Omoline-200, Country Acres Horse Feed and Country Acres Sweet-12. The Turlock plant is designated TRL on the lot number.

**Label Information**

The CHRB is particularly interested in Purina products from mid-February from Purina's Turlock mill. If any licensed trainer or feed company has an unopened bag of any Purina brand from mid-February milled at their Turlock plant, please contact their local CHRB investigator.

The CHRB has been working with the California Department of Food and Agriculture on this issue. Purina and the California Department of Food and Agriculture may have their own statements. The purpose of this notice is to avoid positive tests for zilpaterol. Zilpaterol is a beta-2 agonist used to promote weight gain in livestock. ARCI classifies zilpaterol as a Class 3 drug with a Category A penalty.

#

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CHRB ADVISORY

MARCH 26, 2013

**BOARD DISMISSING CASES RELATED TO FEED CONTAMINATION**

The California Horse Racing Board has determined that 48 positive tests for zilpaterol have resulted from feed contamination, as described in a CHRB advisory dated March 22 (attached). The positives involve horses at all California racetracks. The contamination of the feed appears to have occurred in mid-February and the first positive was detected from a race run March 1.

After reviewing the situation, the executive director with the concurrence of the equine medical director, as required by law, has recommended to the Board that the current cases related to the contaminated feed be dismissed. The Board has agreed and the cases from March 1 to this date have or will be dismissed.

The contaminated feed has been identified, as described in the March 22 advisory, and horsemen are or should be aware of the contaminated feed, so the problem should pass quickly. If trainers have removed the feed, residues of zilpaterol in horses should be eliminated by week's end.

#

## CALIFORNIA HORSE RACING BOARD

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

**Date** : March 26, 2013 **Directive:** 01-13

**To** : All CHRBR Licensed Feed Vendors  
Board of Stewards  
Official Veterinarians  
CHRBR Investigators

**From** : Kirk Breed, Executive Director  
Rick M. Arthur, DVM Equine Medical Director

**Subject** : Removal of Purina Products from CHRBR Facilities

All CHRBR licensed feed vendors are instructed to remove all Purina sweet feed products produced at Purina's Turlock plant from CHRBR facilities until such a time as Purina can assure the CHRBR those products do not contain the prohibited drug zilpaterol. This action is taken under CHRBR rule 1861- Vendors.

No vendor permitted on the grounds of an association shall sell or deliver any horse feed, feed supplement, tonic, veterinary preparation, medication, veterinary equipment or supplies, or any substance containing any prohibited drug, unless he shall have filed with the official veterinarian list of such items he intends to sell or deliver and has received the approval of the official veterinarian. Any vendor permitted regular access to the stable area shall obtain a license from the Board. The official veterinarian may restrict the sale of, prohibit the sale or delivery of, or place conditions on the sale or delivery of any item subject to approval.

Purina has notified horsemen anyone not comfortable with their products may return it to their distributor. Horsemen who have not already done so are advised to return any Purina or Country Acres sweet feed they have from Purina's Turlock plant to their feed vendor. The Turlock plant is designated TRL on the lot number on each bag of feed.

1010 Hurley Way, Suite 300, Sacramento, CA 95825

Phone: (916) 263-6000 • FAX: (916) 263-6042

STAFF ANALYSIS  
DISCUSSION REGARDING PROCEDURES FOR EQUINE SUDDEN DEATHS  
DURING RACING OR TRAINING AT CHRB FACILITIES

Medication and Track Safety Committee Meeting  
April 10, 2013

Sudden death is defined as acute death in a closely observed and previously healthy animal. The proportion of sudden deaths to all fatalities was reported to be 9% (58/659) in the first review of the CHRB/CAHFS-UC Davis necropsy program (Johnson et al, EVJ 26:327-330 1994). An international review of sudden death in Thoroughbred horses was recently published in 2011 (Lyle et al., EVJ 43:324-331 2011). In that study 60% (162/268) of the cases were contributed from the CHRB/CAHFS-UC Davis necropsy program with the rest from Hong Kong, Sydney, Victoria Pennsylvania and Japan. Sudden death was defined as acute collapse and death in a closely observed and previously apparently healthy Thoroughbred racehorse, during, or within one hour after, exercise. Inclusion in the study required a complete necropsy examination. The case number from California is not a reflection of a high rate of sudden deaths in California, but rather the length and completeness of the program. The overall proportion of sudden deaths in the CHRB/CAHFS-UC Davis necropsy program at the time of the study was 4%, markedly lower than the 9% reported in 1994. Table 2 below from Lyle et al., EVJ 43:324-331 2011.

TABLE 2: Table showing cause of death as determined by the attending pathologists in the 6 different racing jurisdictions (%; 95% confidence interval)

		California (%; 95% CI)	Pennsylvania (%; 95% CI)	Victoria (%; 95% CI)	
Cardiac and/or pulmonary failure	Cardiac failure	15 (9.3%, 4.8-13.7%)	0	1 (2.8%, 0.0-8.1%)	
	Cardiopulmonary failure	0	0	1 (2.8%, 0.0-8.1%)	
	Pulmonary failure	0	0	10 (27.8%, 13.1-42.4%)	
	Pulmonary haemorrhage	21 (13.0%, 7.8-18.1%)	16 (72.7%, 54.1-91.3%)	11 (30.6%, 15.5-45.6%)	
CNS trauma	Pulmonary thrombosis	1 (0.6%, 0.0-1.8%)	0	0	
	CNS haemorrhage	2 (1.2%, 0.0-2.9%)	0	1 (2.8%, 0.0-8.1%)	
	Cervical vertebral fracture	7 (4.3%, 1.2-7.5%)	0	4 (11.1%, 0.8-21.4%)	
	Skull fracture	1 (0.6%, 0.0-1.8%)	0	0	
	Skull and cervical vertebral fracture	1 (0.6%, 0.0-1.8%)	0	0	
	Vertebral instability	1 (0.6%, 0.0-1.8%)	0	0	
Haemorrhagic shock	Disseminated haemorrhage	4 (2.5%, 0.1-4.9%)	0	1 (2.8%, 0.0-8.1%)	
	Idiopathic extra-pulmonary vascular rupture	15 (9.3%, 4.8-13.7%)	2 (9.1%, 0.0-21.1%)	2 (5.6%, 0.0-13.0%)	
	Pelvic fracture	7 (4.3%, 1.2-7.5%)	0	1 (2.8%, 0.0-8.1%)	
	Pulmonary vessel rupture	0	0	0	
Miscellaneous	Miscellaneous	3 (1.9%, 0.0-3.9%)	0	2 (5.6%, 0.0-13.0%)	
Multiple	Pulmonary failure and CNS trauma	0	0	1 (2.8%, 0.0-8.1%)	
	Presumptive diagnosis	Presumptive cardiac failure	33 (20.4%, 14.2-26.6%)	0	0
Unexplained diagnosis	Presumptive cardiopulmonary failure	2 (1.2%, 0.0-2.9%)	0	0	
	Unexplained death	49 (30.2%, 23.2-37.3%)	4 (18.2%, 2.1-34.3%)	1 (2.8%, 0.0-8.1%)	
Total		162 (100%)	22 (100%)	38 (100%)	
		Sydney (%; 95% CI)	Hong Kong (%; 95% CI)	Japan (%; 95% CI)	Total (%; 95% CI)
Cardiac and/or pulmonary failure	Cardiac failure	0	0	0	16 (6.0%, 3.1-9.8%)
	Cardiopulmonary failure	0	0	1 (10.0%, 0.0-28.6%)	2 (0.7%, 0.0-1.8%)
	Pulmonary failure	0	0	1 (10.0%, 0.0-28.6%)	11 (4.1%, 1.7-6.5%)
	Pulmonary haemorrhage	0	2 (20.0%, 0.0-44.8%)	0	50 (18.7%, 14.0-23.3%)
CNS trauma	Pulmonary thrombosis	0	0	0	1 (0.4%, 0.0-1.1%)
	CNS haemorrhage	0	0	0	3 (1.1%, 0.0-2.4%)
	Cervical vertebral fracture	0	0	0	11 (4.1%, 1.7-6.5%)
	Skull fracture	1 (3.6%, 0.0-10.4%)	0	0	2 (0.7%, 0.0-1.8%)
	Skull and cervical vertebral fracture	0	0	0	1 (0.4%, 0.0-1.1%)
	Vertebral instability	0	0	0	1 (0.4%, 0.0-1.1%)
Haemorrhagic shock	Disseminated haemorrhage	0	0	0	5 (1.9%, 0.2-3.5%)
	Idiopathic extra-pulmonary vascular rupture	2 (7.1%, 0.0-16.7%)	1 (10.0%, 0.0-28.6%)	2 (20.0%, 0.0-44.8%)	24 (9.0%, 5.5-12.4%)
	Pelvic fracture	0	0	1 (10.0%, 0.0-28.6%)	9 (3.4%, 1.2-5.5%)
	Pulmonary vessel rupture	0	0	1 (10.0%, 0.0-28.6%)	1 (0.4%, 0.0-1.1%)
Miscellaneous	Miscellaneous	0	0	0	5 (1.9%, 0.2-3.5%)
Multiple	Pulmonary failure and CNS trauma	0	0	0	1 (0.4%, 0.0-1.1%)
	Presumptive diagnosis	Presumptive cardiac failure	0	3 (30.0%, 1.6-58.4%)	4 (40.0%, 9.6-70.4%)
Unexplained diagnosis	Presumptive cardiopulmonary failure	25 (89.3%, 77.8-100.0%)	0	0	27 (10.1%, 6.5-13.7%)
	Unexplained death	0	4 (40.0%, 9.6-70.4%)	0	58 (21.6%, 16.7-26.6%)
Total		28 (100%)	10 (100%)	10 (100%)	268 (100.0%)

CNS = central nervous system.

The CHRB has not reported sudden deaths separately in its annual report. A review of FY 11-12 indicates there were 16 sudden after deaths racing or training out of a total 278 fatalities and so far in FY 12-13 there have been 10 sudden deaths out of 108 fatalities in the first six months of the reporting period. Nor does the annual report of the post-mortem separate out sudden deaths. Sudden deaths are usually noted under the diagnosis categories in the post-mortem report by organ system. (See <http://www.chrb.ca.gov/veterinary.html> ; go to Post-mortem Examination Report by each fiscal year. The information is usually around pages 11-13). The most common causes of sudden death are cardio-vascular and pulmonary systems with unexplained sudden deaths included in the whole body category. Often, sudden deaths involve multiple organ systems. See Table 5 below from Lyle et al, EVJ 43:324-331 2011

TABLE 5: Table showing frequency of cardiopulmonary lesions recorded at *post mortem* examination by pathologists in the 6 different racing jurisdictions (%; 95% confidence interval)

	California (%, 95% CI)	Pennsylvania (%, 95% CI)	Victoria (%, 95% CI)	Sydney (%, 95% CI)	Hong Kong (%, 95% CI)	Japan (%, 95% CI)	Total (%, 95% CI)
Acute pulmonary congestion	117/162 (72.2%, 65.3-79.1%)	16/22 (72.7%, 54.1-91.3%)	35/36 (97.2%, 91.9-100.0%)	25/28 (89.3%, 77.8-100.0%)	3/10 (30.0%, 1.6-58.4%)	7/10 (70.0%, 41.6-98.4%)	203/268 (75.7%, 70.6-80.9%)
Acute pulmonary oedema	110/162 (67.9%, 60.7-75.1%)	3/22 (13.6%, 0.0-28.0%)	34/36 (94.4%, 97.0-100.0%)	27/28 (96.4%, 89.6-100.0%)	5/10 (50.0%, 19.0-81.0%)	0	179/268 (66.8%, 61.2-72.4%)
Acute pulmonary haemorrhage	98/162 (60.5%, 53.0-68.0%)	20/22 (90.9%, 79.9-100.0%)	35/36 (97.2%, 91.9-100.0%)	23/28 (82.1%, 68.0-96.3%)	10/10 (100.0%, 100.0-100.0%)	2/10 (20.0%, 0.0-44.8%)	188/268 (70.1%, 64.7-75.6%)
Chronic pulmonary lesions	41/162 (25.3%, 18.6-32.0%)	4/22 (18.2%, 2.1-34.3%)	22/36 (61.1%, 45.2-77.0%)	2/28 (7.1%, 0.0-16.7%)	3/10 (30.0%, 1.6-58.4%)	0	72/268 (26.9%, 21.6-32.2%)
Gross cardiac lesions	11/162 (6.8%, 2.9-10.7%)	0	2/36 (5.6%, 0.0-13.0%)	0	0	1/10 (10.0%, 0.0-28.6%)	14/268 (5.2%, 2.6-7.9%)
Histological cardiac lesions	51/162 (31.5%, 24.3-38.6%)	0	11/36 (30.6%, 15.5-45.6%)	0	2/10 (20.0%, 0.0-44.8%)	2/10 (20.0%, 0.0-44.8%)	66/268 (24.6%, 19.5-29.8%)

CAHFS pathologists have been interested in the sudden death syndrome for many years. CAHFS has protocols in place for a thorough examination of cardiac tissue. Since 2011, toxicology and drug testing have been better coordinated between the pathologists, the Equine Medical Director, toxicology lab and the Maddy lab. Toxicology and drug testing samples include organ tissues, urine and free blood when available, aqueous humor from the eyes and synovial fluid.

Cardiac lesions are frequently noted, but their significance is often unclear. A review of cardiac lesions is currently underway in an attempt to better understand how frequently they occur in horses dying of other causes, such as musculoskeletal injury. The general impression of many pathologists is that minor cardiac lesions often found during the extensive cardiac examinations for sudden deaths may or may not be associated with the sudden death.

## RECOMMENDATION

This item is presented for Committee discussion



# Sudden death in racing Thoroughbred horses: An international multicentre study of *post mortem* findings

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**Keywords:** horse; sudden death; *post mortem*; Thoroughbred; exercise

## Summary

**Reasons for performing study:** To improve the understanding of exercise related sudden death in Thoroughbred racehorses.

**Objectives:** To describe the *post mortem* findings in cases of sudden death associated with exercise in 268 Thoroughbred racehorses.

**Methods:** Gross and histological *post mortem* findings of 268 cases of sudden death were collated and reviewed. Cases originated from 6 racing jurisdictions around the world. Sudden death was defined as acute collapse and death in a closely observed and previously apparently healthy Thoroughbred racehorse, during, or within one hour after, exercise. Cause of death as determined by the attending pathologist was categorised as definitive, presumptive or unexplained and compared between the different populations. Cardiopulmonary lesions recorded at *post mortem* examination were compared between different populations.

**Results:** Pathologists recorded a definitive cause of death in 53% (143/268) of cases. Major definitive causes of sudden death included cardiac failure, apparent pulmonary failure, pulmonary haemorrhage, haemorrhage associated with pelvic fractures or with idiopathic blood vessel rupture, and spinal cord injury. A presumptive cause of death was made in 25% (67/268) of cases and death remained unexplained in 22% (58/268) of cases. There were several statistically significant inter-population differences in the cause of death and in reporting of cardiopulmonary lesions.

**Conclusions:** Sudden death can be attributed to a variety of causes. Causes of sudden death and the lesions found in cases of exercise-related sudden death are similar in different racing jurisdictions. However, the lesions are often not specific for the cause of death and determination of the cause of death is therefore affected by interpretation by the individual pathologist.

## Introduction

Sudden death has been defined as acute death in a closely observed and previously apparently healthy animal (Lucke 1987). Sudden death associated with exercise in the apparently healthy Thoroughbred racehorse appears to be a rare occurrence; however, the risk of such events has only been quantified in racehorses in Victoria, Australia. The risk of sudden death in that population was 0.08 per 1000 starts in flat races and 0.29 per 1000 starts in jump races, and the proportion of racing fatalities classified as sudden death (proportional mortality rate of sudden death) was 19% in flat races and 3.5% in jump races (Boden *et al.* 2006). In other Thoroughbred populations where proportional mortality rates have been recorded, similar proportions of racing fatalities were attributed to sudden death: 12% (256/1981) in the UK (2000-09) (data supplied by the British Horseracing Authority, reproduced with permission) and 9% (58/659) in California, USA (Johnson *et al.* 1994a).

Several studies have reported *post mortem* findings in cases of sudden and unexpected death in mixed equine populations (Platt 1982; Brown *et al.* 1988) and in exercising Thoroughbreds (Gelberg *et al.* 1985; Gunson *et al.* 1988; Johnson *et al.* 1994b; Kiryu *et al.* 1999; Boden *et al.* 2005). Unfortunately, these studies had small numbers of cases, variable histopathological sampling methods and drew different conclusions, attributing sudden death to cardiac arrhythmias (Kiryu *et al.* 1999), exercise-induced pulmonary haemorrhage (EIPH) (Gunson *et al.* 1988) and exercise-induced cardiovascular failure (Gelberg *et al.* 1985). Well populated *post mortem* studies of sudden death cases are problematic due to the rarity of sudden death and to the logistics and economics of transporting horses to *post mortem* examination centres and performing detailed and comprehensive gross and histological examinations. Furthermore, the absence of findings to explain death in many cases has also de-incentivised such investigations. Consequently, detailed *post mortem* examinations of

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[Paper received for publication 14.03.10; Accepted 18.05.10]

STAFF ANALYSIS  
DISCUSSION AND ACTION TO REQUIRE CONTINUING EDUCATION  
FOR CHRB LICENSED TRAINERS

Medication and Track Safety Committee Meeting  
April 10, 2012

## BACKGROUND

Business and Professions Code section 19520 provides that every person who participates in, or has anything to do with, the racing of horses including trainers shall be licensed by the Board pursuant to rules and regulations that the Board may adopt, and upon the payment of a license fee fixed and determined by the Board.

The California Horse Racing Board and the University of California, Davis, have collaborated to establish the Racing Injury Prevention Program. The program was initiated in 2011 due to race horse fatalities from musculoskeletal injuries and attrition due to mild injuries that adversely affect equine welfare.

Research conducted under the Racing Injury Prevention Program has uncovered new information that led to the design of a comprehensive learning program with the intent of educating CHRB licensees on injury prevention in equine athletes. Continuing education modules are being designed for trainers, vets and horsemen. The modules will consist of an overview, interactive information, how-to movies and self-assessment sections. Each module concentrates on a specific anatomical site such as the scapula, humerus, fetlock, etc.

The trainer's education modules are in depth and informative interactive web based programs that are intended to enhance the understanding of the factors which lead to career ending injuries and help in their prevention.

## ANALYSIS

To ensure that CHRB trainers are fully informed regarding the findings of the Racing Injury Prevention Program a regulatory proposal to require trainer continuing education is being developed. The proposal for such a regulation would require trainers and assistant trainers to view the continuing education modules in order to maintain their license. The trainer continuing education would be mandatory to ensure that as many horsemen as possible learn and apply the critical information being developed at UC Davis.

If the Board endorses trainer continuing education, and the development of a trainer continuing education rule, it would not be the first state with such requirements. Indiana has passed a rule that requires trainers to have four hours of education to maintain licensure in that jurisdiction. The Association of Racing Commissioners International

(ARCI) has written a model rule for other jurisdictions to use regarding trainer education. However, staff has determined that the Indiana and ARCI rules would not pass the requirements of the California Administrative Procedures Act. If California were to require trainer continuing education a rule original to this state must be written.

#### RECOMMENDATION

This item is presented for committee discussion and action. Staff recommends that the committee endorse the concept, and instruct staff to move forward with the development of a trainer continuing education rule for California.

# Indiana trainer continuing education rule.

## 71 IAC 5.5-3-1 Eligibility

Authority: IC 4-31-6-2

Affected: IC 4-31

Sec. 1. (a) An applicant for a license as trainer or assistant trainer shall:

- (1) be at least eighteen (18) years of age; and
- (2) be qualified, as determined by the stewards or other commission designee, by reason of experience, background, and knowledge of racing.

(b) A trainer's license from another jurisdiction, having been issued within a prior period as determined by the commission, may be accepted as evidence of experience and qualifications. Evidence of qualifications may require passing one (1) or more of the following:

- (1) A written examination.
- (2) An interview or oral examination.
- (3) A demonstration of practical skills in a barn test.

(c) An applicant not previously licensed as a trainer shall be required to pass a written or oral examination and a demonstration of practical skills, administered by the stewards, prior to being licensed as a trainer.

(d) Each licensed trainer is responsible for disclosure to the commission or its designee of the true and entire ownership of each of his or her horses registered with the racing secretary. Any change in ownership of a horse registered with the racing secretary shall be approved by the stewards. Each owner shall comply with all licensing requirements.

(e) Each licensed owner and trainer is responsible for disclosure to the commission or its designee of the true and bona fide trainer of each of his or her horses registered with the racing secretary. Any change in the trainer of a horse registered with the racing secretary shall be approved by the stewards. Each trainer shall comply with all licensing requirements.

(f) The commission or its designee may refuse, deny, suspend, or revoke a trainer's license for the spouse, member of the immediate family, or household of a person ineligible to be licensed as a trainer, unless there is a showing, by clear and convincing evidence, on the part of the licensed trainer, applicant, or licensed owner (and the commission determines) that participation in racing will not permit a person to serve as a substitute for an ineligible person. The transfer of a horse to a trainer who would circumvent the intent of a commission rule or ruling is prohibited.

(g) To the extent the commission or its designee obtains information that raises a reasonable suspicion that any other person may be serving as a substitute for a person ineligible to be licensed as a trainer, any horse that the substitute is training may be placed on the stewards' list. In such event, any horse involving an issue of the true and bona fide trainer is ineligible to race

until such time that the issue is proven by the entrant of the horse by clear and convincing evidence in accordance with the provisions of 71 IAC 7.5-5-2.

(h) Beginning no later than January 1, 2012, in order to maintain a current license, **2013**, trainers must complete at least **demonstrate, prior to licensure, that they have attended a** four (4) hours per calendar year of **hour** continuing education courses **course** approved by the commission **within the past two (2) calendar years. Trainers completing an approved continuing education course in 2011 or 2012 will have met this requirement through the 2014 racing season. The continuing education requirement does not apply to trainers who have started horses six (6) or fewer times in Indiana the previous year. Such trainers may start up to six (6) horses in a year before he or she must fulfill the continuing education requirement.**

*(Indiana Horse Racing Commission; 71 IAC 5.5-3-1; emergency rule filed Jun 15, 1995, 5:00 p.m.: 18 IR 2855, eff Jul 1, 1995; readopted filed Oct 30, 2001, 11:50 a.m.: 25 IR 899; emergency rule filed Mar 20, 2007, 1:43 p.m.: 20070404-IR-071070198ERA, eff Mar 16, 2007 [IC 4-22-2-37.1 establishes the effectiveness of an emergency rule upon filing with the Publisher. LSA Document #07-198(E) was filed with the Publisher March 20, 2007.]; readopted filed Mar 23, 2007, 11:31 a.m.: 20070404-IR-071070030RFA; emergency rule filed Mar 23, 2010, 1:27 p.m.: 20100331-IR-071100170ERA; emergency rule filed Mar 8, 2012, 11:43 a.m.: 20120321-IR-071120117ERA)*

**ARCI-008-020 Trainers****A. Eligibility**

- (1) An applicant for a license as trainer:
  - (a) be at least 18 years of age.
  - (b) shall, in the case of not being previously licensed, be qualified, as determined by the stewards or other commission designee, by reason of:
    - (A) at least 2 years experience as a licensed assistant trainer, or comparable experience in other equine disciplines, or college-level education in equine science and/or horsemanship.
    - (B) submission of two written statements from trainers currently licensed in that jurisdiction as to character and qualifications of the applicant, and one written statement from a currently licensed owner stating intent to place one or more horses with the applicant, when licensed.
    - (C) shall be required to pass a written examination, oral interviews with the stewards and regulatory veterinarian; and demonstrate practical skills.
- (2) A trainer licensed and in good standing in another jurisdiction, having been issued within a prior period as determined by the commission, may be accepted if evidence of experience and qualifications are provided. Evidence of qualifications shall require passing one or more of the following:
  - (a) A written examination;
  - (b) A demonstration of practical skills;
  - (c) An interview with the stewards.
- (3) Upon timely request to the stewards do to disability or other factors affecting the applicant's ability to effectively complete the trainer's test ( such as illiteracy or language barriers), reasonable accommodations may be made for the applicant including, but not limited to oral administration of the examination, use of a pre-approved translator, and aid from pre-approved assistant where deemed appropriate by the Stewards administering the examination.
- (4) Beginning no later than January 31, 2012, in order to maintain a current license, trainers must complete at least four (4) hours per calendar year of continuing education courses approved by the ARCI or the commission in that jurisdiction

STAFF ANALYSIS  
DISCUSSION AND ACTION BY THE BOARD REGARDING THE  
PROPOSED FEDERAL LEGISLATION,  
SAFEGUARD AMERICAN FOOD EXPORTS ACTION OF 2013 (H.R. 1094)  
WHICH WOULD PROHIBIT HORSE SLAUGHTER FOR HUMAN CONSUMPTION  
AND PROHIBIT THE TRANSPORT OF AMERICAN HORSES  
IN INTERSTATE OR FOREIGN COMMERCE FOR PURPOSES OF  
SLAUGHTER FOR HUMAN CONSUMPTION

Medication and Track Safety Committee Meeting  
April 10, 2013

## BACKGROUND

FEDERAL: House of Representatives (HR) 1094: Safeguard American Food Exports (SAFE) Act of 2013 was introduced on March 12, 2013. The proposed federal legislation would ban the export of American horses for slaughter, reinstitute a ban on slaughtering horses in the United States and protect the public from consuming “toxic” horse meat. HR 1094 is the result of a series of disclosures regarding the mislabeling of horse meat as beef in Europe. In 2012 more than 160,000 American horses were sent to slaughter. Horses used in show, sport, work and recreation are regularly administered drugs that are prohibited by current federal regulations for use in animals intended for human consumption. An example of such drugs is Phenylbutazone, which is reported to cause potentially dangerous adverse effects in humans. Most American horse owners do not imagine that their horses may be slaughtered for human consumption and almost universally give them medications, antibiotics, ointments, wormers and other substances that would otherwise not be administered to animals intended for human consumption. Such substances may remain in the body for long periods of time. In addition to public health concerns, horse slaughter is viewed by most persons as inherently inhumane. Horses are reported to suffer abuse before they arrive at the slaughterhouse, often shipped for long periods of time without food, water or rest, in overcrowded conditions where the animals are often injured – sometimes fatally – in transport. The SAFE Act of 2013 has been endorsed by leading animal welfare organizations, including the American Society for the Prevention of Cruelty to Animals, the Animal Welfare Institute, the Humane Society Veterinary Medical Association and Veterinarians for Equine Welfare.

STATE: The CHRB relies on a combination of State law and the Board’s rules and regulations to prohibit the illegal slaughter of horses and to act against any licensee who is found to have been party to the illegal slaughter of a horse.

On November 3, 1998, the people of the State of California approved Proposition 6, the Prohibition of Horse Slaughter and Sale of Horsemeat for Human consumption Act of 1998. This act added sections 598c to the California Penal Code to prohibit any person from possessing, transferring, receiving or holding any horse, pony, burro or mule with intent to kill it or have it killed, where the person knows or should know that any part of the animal will be used for human consumption. A violation of Penal Code section 598c constitutes a felony offense.

The act also added section 598d to the Penal Code to make the sale of horsemeat for human consumption a misdemeanor offense, with subsequent violations punished as felonies.

The CHRFB rules and regulations provide a framework that would allow the Board to take action against the license of any trainer or owner who was found to have violated California Penal Code section 598c and or 598d. Board Rule 1902, Conduct Detrimental to Horse Racing, states that no licensee shall engage in any conduct prohibited by this division nor shall any licensee engage in any conduct which by its nature is detrimental to the best interests of horse racing including indictment or arrest for a crime involving moral turpitude or which is punishable by imprisonment in the state or federal prison. Additionally, Board Rule 1489, Grounds for Denial or Refusal of License, states the Board may refuse to issue a license or deny a license to any person who has been convicted of a crime punishable by imprisonment in a California state prison.

The Board also has a regulation that addresses animal welfare. Board Rule 1902.5, Animal Welfare, prohibits any person under the jurisdiction of the Board from permitting or causing an animal under his control or care to suffer any form of cruelty, mistreatment, neglect or abuse. Nor shall such person abandon; injure; maim or kill an animal under his care.

#### RECOMMENDATION

This item is presented for committee discussion and action.

113TH CONGRESS  
1ST SESSION

# H. R. 1094

To prohibit the sale or transport of equines and equine parts in interstate or foreign commerce for human consumption.

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## IN THE HOUSE OF REPRESENTATIVES

MARCH 12, 2013

Mr. MEEHAN (for himself, Ms. SCHAKOWSKY, Mr. GRIMM, Mr. RAHALL, Mr. WHITFIELD, Mr. MORAN, Mr. YOUNG of Florida, Mr. CONYERS, Mr. GERLACH, Mr. GRIJALVA, Mr. LANCE, Mr. GEORGE MILLER of California, Mr. LOBIONDO, Mr. PETERS of Michigan, Mr. FITZPATRICK, Ms. ESHOO, Mr. CAMPBELL, Mr. KING of New York, Mr. GIBSON, Mr. JONES, and Mr. WILSON of South Carolina) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committee on Agriculture, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## A BILL

To prohibit the sale or transport of equines and equine parts in interstate or foreign commerce for human consumption.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the "Safeguard American  
5 Food Exports Act of 2013".

1 **SEC. 2. FINDINGS.**

2 Congress finds that—

3 (1) horses and other equines are domestic ani-  
4 mals that are used primarily for recreation, pleasure,  
5 and sport;

6 (2) unlike cows, pigs, and other domesticated  
7 species, horses and other members of the equidae  
8 family are not raised for the purpose of human con-  
9 sumption;

10 (3) equines raised in the United States are fre-  
11 quently treated with drugs, including phenylbuta-  
12 zone, acepromazine, boldenone undecylenate, omeprazole,  
13 ketoprofen, xylazine, hyaluronic acid, nitrofu-  
14 razole, polysulfated glycosaminoglycan, clenbuterol,  
15 tolazoline, and ponazuril, which are not approved for  
16 use in horses intended for human consumption;

17 (4) consuming parts of an equine raised in the  
18 United States likely poses a serious threat to human  
19 health and the public should be protected from these  
20 unsafe products; and

21 (5) the sale and transport of equines for the  
22 purpose of processing for human consumption, and  
23 the sale and transport of equine parts for human  
24 consumption, are economic in nature and substan-  
25 tially affect interstate and foreign commerce.

1 **SEC. 3. PROHIBITIONS.**

2 Section 301 of the Federal Food, Drug, and Cosmetic  
3 Act (21 U.S.C. 331) is amended by adding at the end the  
4 following:

5 “(cc)(1) Notwithstanding any other provision of law,  
6 the sale or transport of equines in interstate commerce,  
7 or the importing or exporting (or offering for import or  
8 export) of equines into or out of the United States, by  
9 any person who knows or reasonably should have known  
10 that such equines are to be slaughtered for human con-  
11 sumption as food.

12 “(2) Notwithstanding any other provision of law, the  
13 sale or transport of equine parts (including flesh, meat,  
14 and viscera) in interstate commerce, or the importing or  
15 exporting (or offering for import or export) of such parts  
16 into or out of the United States, by any person who knows  
17 or reasonably should have known that such equine parts  
18 are to be used for human consumption as food.”.

○



## HORSEMEAT POSES SERIOUS RISKS TO HUMAN HEALTH

**“The permissive allowance of such horsemeat used for human consumption poses a serious public health risk.”<sup>1</sup>**

The U.S. Food and Drug Administration currently bans the presence of 379 common equine drugs in animals slaughtered for human consumption. However, there is no procedure in place to ensure that American horses, sold to slaughterhouses and killed for human consumption, are free of these FDA-banned substances.

**There is currently no means of identifying whether a horse sent to slaughter has received dangerous, prohibited substances.** When a horse is sold, especially through an auction, there is no required transfer of information regarding the substances a horse received during his or her lifetime. Therefore, there is no mechanism in place to ensure horses frequently bought at auction by killer buyers have not been given dangerous substances before they become part of the food chain.

**Horses are routinely given substances that are dangerous to humans.** Most American horse owners do not imagine that their horses may someday be slaughtered for human consumption, and almost universally give their horses medications, antibiotics, ointments, wormers, and other substances labeled “not for animals intended for human consumption.” These substances may remain in the body for long periods of time.

**Phenylbutazone (bute) can be lethal if ingested by people.** A study published in May 2010 in the journal *Food and Chemical Toxicology* found that substances routinely given to American horses cause dangerous adverse effects in humans. The most serious effect of

phenylbutazone is bone-marrow toxicity, leading to agranulocytosis (failure to produce white blood cells, causing chronic infections) and aplastic anemia (insufficient production of red and white blood cells and platelets). Similar blood conditions such as leucopenia, hemolytic anemia, pancytopenia, and thrombocytopenia may also occur in people who consume bute. The National Toxicology Program has determined that bute is a carcinogen. For these reasons, the FDA bans this substance for human consumption.



John Murrell

**FDA-prohibited drugs are universally used at racetracks.** The February 28, 2010 *Paulick Report* published a study revealing that more than 9 out of 10 racehorses are commonly administered bute before they

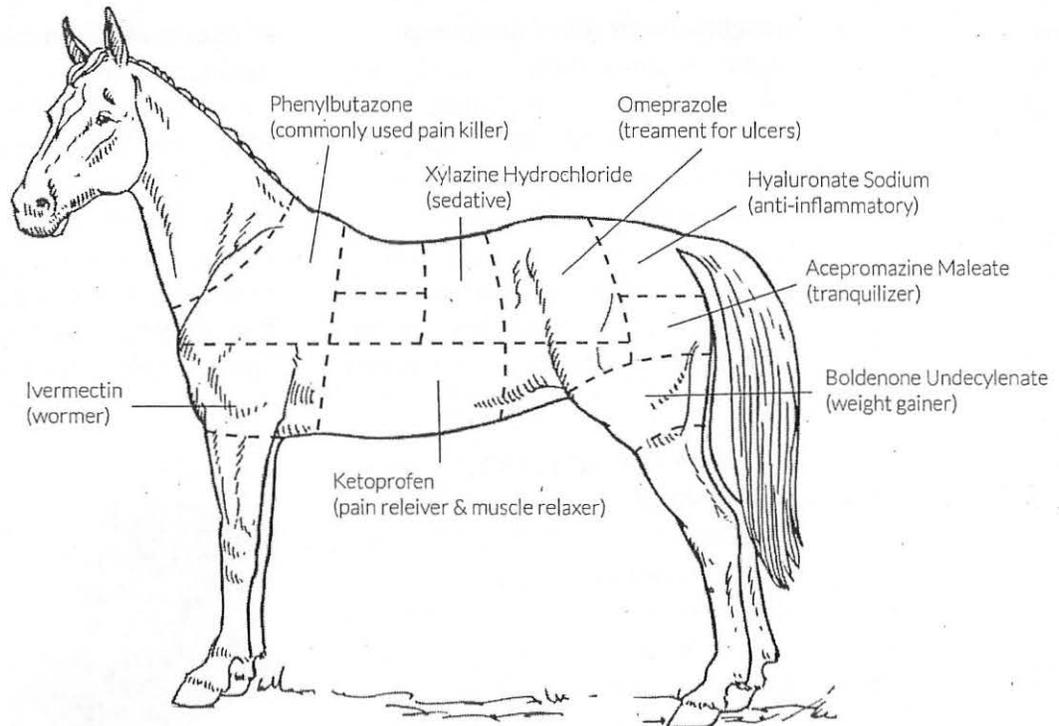
<sup>3</sup>Dodman, N., et al. 2010. Association of phenylbutazone usage with horses bought for slaughter: A public health risk. *Food Chem Toxicol.* 48(5):1270-4. doi: 10.1016/j.fct.2010.02.021

race. Racehorses are frequently shipped to Mexico and Canada to be slaughtered for human consumption when their performance flags, often within days or weeks of receiving their last dose of bute. Any consumer of this meat, which can be ground together with beef and offered to consumers without proper identification, could be unwittingly ingesting banned substances, with potentially lethal results.

**The European Union has a policy prohibiting importation of the meat of any horse who has ever received bute.** Nitrofurazone, the most common wound

ointment given to American horses, is also prohibited for use on any horse whose meat is shipped to the European community. The United States needs to close this loophole that currently puts consumers at risk, and ensure that meat from American horses is not jeopardizing the health and lives of consumers.

For additional information on horse slaughter, please visit [awionline.org/horseslaughter](http://awionline.org/horseslaughter) or contact Chris Heyde at (202) 446-2142 or [chris@awionline.org](mailto:chris@awionline.org).



### POISON: It's what's for dinner when horsemeat is on the menu

Those promoting horsemeat consumption claim horsemeat is leaner (and therefore, supposedly, healthier) than beef. What they fail to point out is that, unlike cattle, horses are not raised for meat, and are given hundreds of legal and illegal drugs rendering their meat unsafe for human consumption in the United States and

abroad. However, because of confusing and conflicting U.S. and foreign laws, horsemeat slips through the regulatory cracks and is consumed overseas by unsuspecting diners. The diagram shows just a few of the banned and dangerous drugs that consistently end up in horsemeat and on people's plates.

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[www.awionline.org](http://www.awionline.org)

## Myths and Facts Regarding Horse Slaughter

*Myth: Ending domestic horse slaughter has destroyed the U.S. horse market and led to fewer options for disposal of horses, causing neglect and abandonment.*

**Fact: Horse neglect and abandonment cannot logically be attributed to the closure of U.S. slaughter plants because the number of U.S. horses sent to slaughter has not decreased since domestic slaughter ceased in 2007.** If the end of domestic horse slaughter had caused an increase in horse neglect/abandonment cases, the number of horses slaughtered would have to have decreased and horse neglect/abandonment cases would have to have increased. Neither has occurred. Any downturn in the horse market is clearly related to the economic downturn that occurred the same year that the last slaughter plant closed. Historically, economic and weather patterns have a positive or negative impact on animal welfare and all animals – dogs, cats, horses, and even farm animals raised for food – face greater chances of neglect in a poor economy.

*Myth: Horse slaughter is a form of humane euthanasia.*

**Fact: Horse slaughter is the opposite of humane euthanasia.** “Euthanasia” is defined as a gentle, painless death provided in order to prevent suffering. Slaughter is not euthanasia—it is a brutal and terrifying end for horses and is not humane. Horses are shipped for more than 24 hours at a time in crowded trucks without food, water, or rest. Pregnant mares, foals, injured horses, and blind horses endure the journey. Once they arrive, their suffering intensifies. The methods used to kill horses rarely result in quick, painless deaths. Horses with no other options should be humanely euthanized (which costs approximately the amount of one month’s keep for a horse) by a licensed veterinarian, rather than crowded onto a truck to be cruelly transported and then butchered.

*Myth: The foreign-owned plants in the U.S. were regulated and therefore offered a humane alternative to horse slaughter plants over the border.*

**Fact: It was telling that even at a time of intense public controversy and scrutiny of this industry, government documents and undercover footage demonstrate that cruelty was rampant in USDA-inspected slaughter plants.** Footage shot at former U.S. horse slaughter plants exposed horrific suffering: Employees whipping horses in the face, pregnant mares giving birth on the killing floors, and many horses remaining conscious while shackled and hoisted by a rear leg to have their throats cut. USDA inspection documents and photos obtained from a USDA Freedom of Information Act request (FOIA Request 06-108) show horses with broken bones protruding from their bodies, eyeballs hanging by a thread of skin, and open wounds.

*Myth: It is possible to conduct commercial horse slaughter in a humane manner.*

**Fact: Horse slaughter, whether in U.S. or foreign plants, was never and cannot be humane due to the nature of the industry and the unique biology of horses.** Long distance transport leading to injuries is an inherent aspect of this industry because Americans will never create demand for it. Even if they did, the slaughter process cannot be done humanely for horses. The captive bolt method of stunning was not designed for horses, animals that have intense “fight or flight” responses and long necks that they toss when frightened. Their brains are also farther back in their skulls than those of cattle, making the target zone for stunning much smaller. These traits make accurate stunning very difficult. As a result, horses often endure repeated blows and sometimes remain conscious during dismemberment. Captive bolt was the method of stunning in horse slaughter plants in the U.S. in the past, and is the method horse slaughter proponents intend to use in the U.S. should horse slaughter plants reopen. Horse slaughter is a brutal and terrifying end for animals raised to trust people and it is motivated by greed, not compassion. We should not allow our horses to be subjected to this tremendous cruelty within or beyond our borders.

## Support the Safeguard American Food Exports Act (H.R. 1094 / S. 541)

***Protect America's horses from the cruelty of slaughter and protect consumers from toxic horsemeat.***

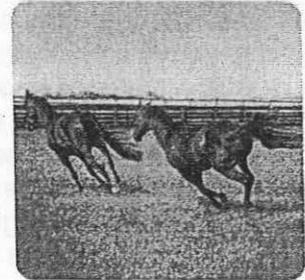
The Safeguard American Food Exports (SAFE) Act was introduced by Reps. Patrick Meehan (R-PA) and Jan Schakowsky (D-IL) in the House and Sens. Mary Landrieu (D-LA) and Lindsey Graham (R-SC) in the Senate.

### **What would the SAFE Act do?**

The SAFE Act will prohibit the slaughter of horses for human consumption in the U.S. and their export for that purpose abroad. This bill will protect our nation's horses from the predatory horse slaughter industry by ensuring American horses are not butchered in slaughterhouses, either on U.S. soil or abroad, while also protecting people from toxic horsemeat and protecting the reputation of USDA-inspected meat.

### **Why is horse slaughter any different than slaughter for other animals?**

Horse slaughter is inherently inhumane. Horses are fractious by nature and are extremely difficult to stun. The methods used to kill horses rarely result in quick, painless deaths, as they often endure repeated blows and sometimes are alive and kicking during dismemberment. Previous plants under USDA inspection had rampant cruelty violations, as detailed in government documents.



### **Why is horsemeat any different than beef or chicken?**

Horses are not raised for food in this country; they are routinely given hundreds of drugs and other substances, both legal and illegal, over their lifetimes that can be toxic to humans if ingested. Many of these substances have not been approved by the FDA for use in animals intended for human consumption. A recent New York Times article emphasized the hodgepodge of drugs regularly administered to American race horses and the resulting food safety threats. The shocking discovery of horsemeat in beef products in the U.K. and other European countries underscores the threat to American health that could result were horse slaughter proponents successful in bringing the grisly practice back to the U.S. Horse slaughter is bad for horses, bad for people, and bad for the communities that host them.

### **How do horse slaughter plants negatively affect the communities that host them?**

Slaughter plants inflict environmental harm, drain local economies, and diminish local property values. The overhyped employment opportunities related to the horse slaughter industry were vastly overshadowed by the direct harm to their employees due to hazardous conditions and the enormous burden and harm they inflicted on their local communities.

### **How do Americans feel about horse slaughter?**

A 2012 national poll revealed that 80% of Americans favor a ban on horse slaughter and recognize that we have a responsibility to protect these intelligent, sensitive animals from being butchered. Horses are our companions and a historically significant part of American culture. They deserve a more dignified end to their lives than to be inhumanely slaughtered and served up for foreign consumers.

### **History of Horse Slaughter Legislation**

- May 2012: The House Appropriations Committee adopted the Moran Amendment to defund horse slaughter inspections.
- November 2011: The Agricultural Appropriations bill was signed into law. Language that would have prevented millions of taxpayer dollars annually from funding USDA horsemeat inspections was not included, opening the door for slaughter to return to the U.S.
- September 2008: House Judiciary Committee passes ban on horse slaughter by voice vote.
- September 2007: U.S. Court of Appeals for the 7th Circuit upheld the State of Illinois' decision to ban the slaughter of horses for human consumption, shutting down the last of the plants located on US soil.
- April 2007: Senate Commerce Committee passed S. 311, a ban on horse slaughter, by a 15-7 vote.
- March 2007: U.S. Court of Appeals for the 5th Circuit upheld a 1949 Texas state law that outlawed the sale and possession with intent to sell horsemeat for human consumption. The Supreme Court denied a cert petition submitted by the horse slaughter plants.
- September 2006: A permanent ban on horse slaughter passed the House by a 263-146 vote.
- September 2005: Senate passed a funding limitation amendment to ban horse slaughter by a 69-28 margin, following a bipartisan House vote of 269-158 in June 2005. Funding limitations remained in place in the federal budget until 2011.

*MYTH: It would be better to allow US plants to operate because they could be regulated for humaneness and would be better than exporting horses to Mexican and Canadian slaughterhouses.*

**FACT: Horse slaughter, whether in U.S. or foreign plants, was never and cannot be humane, and Americans are overwhelmingly opposed to the practice.** This myth sounds a lot like the argument that we should bring child labor back to U.S. soil so we can regulate it. That doesn't make sense, given that we do not believe this is an acceptable practice. Even when horse slaughter plants were operating in the U.S., thousands of American horses were sent to Mexico and Canada for slaughter by these same methods every year. In 2006 when all three plants in the U.S. were operating, more than 37,000 horses were exported for slaughter. The plants located within the U.S. provided no guarantee of decent treatment and transport to those plants was just as agonizing – even though this issue was intensely controversial and those plants were under serious scrutiny. HSUS undercover footage shows horses being whipped, abused and injured while herded through holding pens, and ultimately hit multiple times with the captive bolt device, still kicking and thrashing while hoisted for their throats to be slit. Since the closure of the plants in the U.S., documents and photos released from the agency further demonstrate how very inhumane the plants in the US were, despite assurances from pro-slaughter organizations. See here [http://www.hsus.org/horses/equines/horse\\_slaughter/new\\_photos\\_expose\\_brutality.html](http://www.hsus.org/horses/equines/horse_slaughter/new_photos_expose_brutality.html) for more on how regulation cannot make horse slaughter illegal. USDA records also document repeated incidents of horses denied water, horses whipped in the face, horses hit with electric prods, and horses who flipped over backward and were injured due to rough and abusive handling. Many incidents of heavily pregnant mares giving birth to foals on the killing floor have been documented. The answer is not to return to subjecting our horses to abuse and unacceptable conditions at plants in the U.S., but to ban horse slaughter and the export of horses for slaughter altogether and provide our horses with a decent life and, when necessary, a decent death.

*MYTH: We don't have any other way of addressing an overpopulation of horses.*

**FACT: There are several ways to address homeless horse issues. We can**

- 1) limit overbreeding,**
- 2) provide shelter and**
- 3) expand adoption work.**

The idea that slaughtering companion animals is unacceptable to the American people and will never be embraced. A 2012 national poll found that 80% of Americans support a ban on horse slaughter for human consumption. There are countries who consume dogs, cats, and other pets as food, but we do not allow for their export for food purposes, even though there is a well-documented overpopulation issue to contend with for those animals. Horses are one of the most manageable species we deal with – we are able to completely control their numbers and we are also able to rehome them or euthanize them, if other humane options are not possible. They generally are not stray animals.

*MYTH: We have no other options, in the immediate future, for the horses currently going to slaughter each year.*

**FACT: If we banned horse slaughter today, the vast majority of those horses will go directly on to good homes from the same auctions where killer buyers currently are outbidding legitimate owners.** USDA found that more than 92% of horses sent to slaughter are in good condition so most will go on to good homes. Many good owners and rescuer operations are unable to compete with slaughter buyers at their local auctions. Using USDA's finding, only a tiny fraction (~7000-12,000 horses based on recent years) of the horse population will require the help of equine sanctuaries or humane euthanasia. That is less than 1/100th of the entire horse population. Horse slaughter is purely a function of supply and demand – not a disposal service for our horse community.

Historic View of Slaughter Numbers Tells the Story: The annual figure of horses sent to slaughter has been as high as 450,000 in the 1990s and as low as 42,000 five years ago with no resulting oversupply of horses. The current figure of 100,000 is less than 1% of the entire US horse population and can easily be reabsorbed into good homes. Not every horse currently going to slaughter will need to be placed with a rescue. USDA documents that 92.3% of all horses sent to slaughter are in good condition and therefore able to live out a productive life. Every week, killer buyers attend American auctions and outbid legitimate horse owners to fill their contracts with the foreign-owned plants. The vast majority will be sold to a new owner and others will be kept longer. For the small number unable to find a home or enjoy a good quality of life, a licensed veterinarian

can provide humane euthanasia for the same cost as one month's care for that horse. As a safety net, we have more than 400 horse rescue organizations across the country, with new ones forming all the time. The organizations leading the charge to ban horse slaughter are the same organizations actively working to provide humane solutions for horses.

*Myth: Horse slaughter will have no negative financial impact on American taxpayers.*

**Fact: Subsidizing horse slaughter cruelty will divert precious financial resources away from American products.** While authority to fund horse slaughter inspections was restored last year, no corresponding funds were allocated to oversee slaughter plant operations and to effectively regulate the transportation of slaughter-bound horses. Funds necessary to conduct horse slaughter inspections would be diverted from inspections of food items that Americans actually consume. Going further, on February 28<sup>th</sup> the USDA announced that it would be moving forward with processing the permit for a New Mexico horse slaughter plant – the same day that Secretary Vilsack announced that budget cuts associated with the sequester would necessarily require furloughing food safety inspectors. At a time when the nation is focused on fiscal responsibility, it is outrageous that Congress would spend tax dollars on horse slaughter, a cruel practice that benefits only foreign interests. Additionally, The EU is on the verge of tightening requirements for lifetime regulation of horses sent to slaughter, due to overwhelming evidence that drugs administered to American horses are toxic to humans. These new rules would require onerous and ever-evolving USDA oversight – at additional taxpayer expense – to ensure compliance.

*Myth: Banning horse slaughter would result in the shipment of horses to Mexico and Canada under false pretenses*

**Fact: Under the bill, American horses could not legally be exported for slaughter. Individuals attempting to do so would be held criminally liable.** The False Claims Act makes it illegal to falsify any information in statements made to the U.S. government. Further, any legislative change requires enforcement; the enforcement mechanism (the USDA and border agents) is already in place. Criminalizing the act of moving horses for slaughter will, at the very least, dramatically reduce the number of horses exported for slaughter. The animal protection community will continue its commitment to support funding for USDA's enforcement efforts.

*Myth: Horsemeat is safe for human consumption.*

**Fact: U.S. horsemeat is dangerous to humans because of the unregulated administration of numerous toxic substances to horses before slaughter.** In the U.S., horses are raised and treated as companion animals. This means that horses are not subject to USDA drug restrictions in place for food animals. Horses are routinely administered medicines that are toxic to humans - medicines banned for use in animals raised for human consumption. Because of growing concern about the health threats of drug-laced American horsemeat, the European Union (EU), a primary purchaser of American horsemeat, may soon require that American horsemeat imported into the EU be accompanied by lifetime medical records verifying that the animal was never administered toxic drugs. The U.S. currently has no means to trace the medical history of horses.

*Myth: The horsemeat scare in the U.K. is overblown – the levels of phenylbutazone (bute, known as "horse aspirin") found in the horsemeat there are too low to be harmful.*

**Fact: The Federal Drug Administration does not recognize a "safe" level of exposure to bute in humans; that is why the drug is banned for use in food animals.** The claims that the levels are "too low to be dangerous" have no basis in fact. Furthermore, bute is a known carcinogen with serious, long-term health effects. Additionally, bute is just one of a long and ever-expanding list of potentially toxic drugs regularly administered to horses. Bute, dewormer, fly spray – and hundreds more that are known to be toxic to humans when ingested.

*Myth: The federal government can ensure the safety of horsemeat.*

**Fact: The USDA has no system in place to track horses' lifetime medical histories.** Testing random samples of horsemeat overlooks the fact that every single horse has a unique, unknown past. Unlike animals raised for food, horses do not spend their lives being prepared for the food chain. Every horse is a pet, riding companion, race horse, show pony, or work partner. Each may be a single patient to any number of vets, and be transferred by any number of owners, and has a unique life story. Relying on random-sample testing of horsemeat is inadequate at best and dangerous at worst.

*Myth: Drugs given to race horses are pharmaceutical grade and administered by licensed veterinarians*

**Fact: Because many horses sold to slaughter come from our nation's tracks parks, regulators don't know what to test for, and consumers don't know what they are eating.** It isn't just routine drugs we should worry about, but new, illegal drugs as well, and USDA has no way to keep up with the drug race associated with some horse competitions. An extensive investigation by the New York Times uncovered shocking evidence that race horses are routinely given illegal drugs and bizarre concoctions such as cocaine and cobra venom to make them run faster and to mask injury-related pain. The financial incentive to win at all costs is driving the market for developing more powerful stimulants, legal or otherwise. Just last summer a new drug surfaced: demorphin ("tree frog juice") – an extract from South American tree frogs that when injected into horses acts as a painkiller 40 times more powerful than morphine. Food safety agencies have no means to test horsemeat for new substances such as demorphin, much less determine their toxicity to humans, therefore they can never confidently state that they're conducting all the right tests to ensure that horsemeat is safe for human consumption. The cost to develop and continually refine such tests would be enormous and unending.

*Myth: Simply stopping the administration of prohibited drugs to horses will make horsemeat safe for human consumption.*

**Fact: While each American horse has its own life story, they are all raised for pleasure or work, and are medically treated to keep them in shape for those tasks.** To relieve aches and pains associated with work, competition, and companionship, horses are routinely administered bute ("horse aspirin") – a drug prohibited from being given to animals destined for human consumption. Dewormers, fly sprays, etc., serve the same purpose: to keep horses healthy. It is entirely unrealistic to think that horse owners would be willing to stop using the array of products that contain substances banned for human consumption.

*Myth: Horse slaughter plants could stimulate the local economy.*

**Fact: Horse slaughter plants have proven to be economic and environmental nightmares.** These plants pollute local water, decrease property values, permeate the air with a foul stench, drain local economies, and damage the environment. The last three horse slaughter plants in the U.S. offered only a few low-income, dangerous jobs that did nothing to bolster local economies. Long before the plants closed in 2007, they had worn out their welcome. For example, in 2005, the city council of Kaufman, Texas, home to the Dallas Crown facility voted unanimously to implement termination proceedings against the plant. Paula Bacon, mayor of Kaufman stated "As a community leader where we are directly impacted by the horse slaughter industry, I can assure you the economic development return to our community is negative. The foreign-owned companies profit at our expense -- it is time for them to go." These foreign-owned horse slaughter plants were repeatedly fined for violations of local laws and for creating sewage overflows. The plants paid less annual local property taxes (\$7,500 for Dallas Crown) than average citizens in their communities. Even more shocking, Dallas Crown's income tax records revealed that in 2005 the plant paid a total of \$5.00 in income tax. There is no import or export tariff on horsemeat and most, if not all, of the profits were sent back to the parent companies in France and Belgium. Attracting new business was difficult for communities burdened with the presence of a horse slaughter plant because of the related negative stigma. Real estate values also plummeted. The minimal financial contributions of horse slaughter facilities are vastly outweighed by the enormous economic and development-suppressing burden they present.

*Myth: Ending horse slaughter will cause environmental harm because so many horse carcasses will be in need of disposal.*

**Fact: There is no evidence that a ban on horse slaughter will result in a carcass disposal crisis.** Roughly 900,000 horses die annually in the U.S. and are safely disposed of by means other than slaughter. Rendering, incineration, and burial are options, depending on local laws. More than one million cattle die on the farm each year—with no resulting environmental hazards.

*Myth: Banning horse slaughter undermines private property rights.*

**Fact: Private property rights do not grant owners the right to abuse their animals.**

Every state has anti-cruelty laws that mandate protections for animals. Owners will still have ample legal options of reselling, donating, or euthanizing their horses. In fact, allowing horse slaughter facilitates violation of property rights by encouraging the theft of privately owned horses for sale to slaughter. When domestic horse slaughter plants were operating, horses were stolen out of pastures and barns every year for the horsemeat trade. When California banned horse slaughter in 1998, the horse theft rate dropped 34%. Last year, Pennsylvania newspapers reported on a woman who, portraying herself as a rescuer who would help re-home individuals' horses, actually sold more than 100 horses to slaughter – a grisly end that their former owners never intended for them.

*Myth: A prohibition on horse slaughter would create a precedent to ban beef, pork and poultry production by legitimizing efforts to end consumption of food derived from any animal.*

**Fact: Americans don't eat horses and, unlike cows, pigs, and chickens, we don't breed them for human consumption.** Last year, more than 12 billion animals were bred and raised as food animals and consumed in America. It is irrational and misleading to assert that preventing horse slaughter for human consumption (a market that doesn't even exist in the U.S.) could possibly lead to a ban on hamburgers. Horses simply are not food animals in America. The American public overwhelmingly supports a ban on horse slaughter precisely because horses have a special place in our heritage and they are beloved companions to millions today.