Kentucky Horse Racing Commission
Withdrawal Guidelines
Standardbred
KHRC 93-01 (4/12)

General Notice

The following withdrawal guidelines are voluntary and advisory. The guidelines are recommendations based on current scientific knowledge that will change over time. A licensee may present evidence of full compliance with these guidelines to the Kentucky Horse Racing Commission (the "Commission or "KHRC") and the stewards as a mitigating factor to be used in determining violations and penalties.

These withdrawal interval guidelines assume that administration of medications will be performed at doses that are not greater than the manufacturer's maximum recommended dosage. Medications administered at dosages above manufacturer's recommendations and/or in unusual compounded formulations, and/or administration inside the withdrawal interval may result in test sample concentrations above threshold concentrations that could lead to positive test results and the imposition of penalties. The time of administration of an orally administered substance, for the purposes of withdrawal interval, shall be considered to be the time of complete ingestion of the medication by the horse via eating or drinking.

Whenever a threshold level or withdrawal guideline contained in 811 KAR 1:090 is amended and whenever a concentration level or withdrawal guideline is added to 811 KAR 1:095, notice of the date that the new concentration level or new withdrawal guideline takes legal effect will be posted on the KHRC website and at all Kentucky race tracks at least two weeks before said date.

Withdrawal Guidelines

1) Furosemide shall be administered pursuant to current KHRC regulations for eligibility and dose for each breed.

2) The following substances may be administered or applied up to the scheduled paddock time of the race in which the horse is to compete:

- Topical applications such as liniments, leg paints, salves, and ointments which may contain antibiotics or DMSO, but do not contain steroids, anesthetics, or any other prohibited substances.

3) The following substance may be administered up to 24 hours prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines:

- Antibiotics (except those containing prohibited drugs such as Procaine);
- Antiprotozoals (Marquis, SMZ/Daraprim, etc.);
- Intravenous (IV) or Intramuscular (IM) Electrolytes and Vitamins, and/or other supplements/nutrients not containing drugs;
- Anti-Ulcer and Gastro-Protective Medications (specifically Omeprazole, Cimetidine, Ranitidine, and Sucralfate);
- Antifungal Agents (specifically Griseofulvin and Ketoconazole);
- Certain Inhalation Agents (specifically Intal, Mucomyst) that do not exhibit bronchodilator properties;
- Sodium Iodide (intravenously);
- Non-Androgenic Reproductive Hormones (HCG, Regumate, GnRH, etc.);
- Immunostimulants (Eqstim, etc.);
- Adequan Intramuscular (IM);
- Intravenous (IV) Hyaluronic Acid (Legend);
- Glycopyrrolate IV 2 mg IV; and
- Misoprostol.

4) Non steroidal anti-inflammatory drugs (NSAIDS):

A) ELECTED NSAID: Only one of the following three NSAIDS may be administered up to the manufacturer's maximum labeled dosage until 24 hours prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines:

- Phenylbutazone (Butazolidin) dose not to exceed 2 grams (Intravenous or Oral);
- Flunixin Meglumine (Banamine) dose not to exceed 500 mg (Intravenous Only); and
- Ketoprofen (Ketofen) dose not to exceed 1 gram (Intravenous Only).

B) The following withdrawal intervals shall be observed for all NSAIDS, except for the one selected in 4A above, for administration prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines:

- Flunixin Meglumine (Banamine) 0.5 mg/lb IV 48 hrs
- Phenylbutazone (Butazolidin) 2.0 mg/lb IV or PO 48 hrs

- Ketoprofen (Ketofen) 1.0 mg/lb IV — 48 hrs
- Diclofenac Sodium Topical (Surpass Cream) — 48 hrs
  Single 1" application
- Firocoxib* (Equioxx) .045 mg/lb
  Single oral or IV dose — 48 hrs
  Repeated daily administration — 14 days

5) The following substances may be administered up to 48 hours prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines:

- Betamethasone 35 mg IM;
- Dexamethasone (Azium SP) 25 mg IV/IM once or 10 mg PO for 5 days;
- Flumethasone (Flucort) 5 mg IV;
- Isoflupredone (Predef 2X) 20 mg IV or IM;
- Dantrolene (Dantrium);
- DMSO (Intravenous) 100 ml of a 99% solution;
- Ergot Alkaloids (Ergonovine, Methergine, etc.);
- Guaiacol Derivatives (Guaifenesin);
- Isoxsuprine;
- Methocarbamol (Robaxin-V) – Intravenous only;
- Detomidine (Dormosedan) 5 mg IV dose;
- Pentoxyfylline (Trental);
- Beta-2 agonists by inhalation (Allbuterol, terbutaline, salmeterol, fenotorol);
- Corticosteroids by inhalation (Azmacort, Beclovent); and
- Ipratropium.

6) The following substances may be administered up to 72 hours prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines:

- Detomidine (Dormosedan) 20 mg IV dose;
- Methocarbamol (Robaxin-V) – 3 g PO BID for 4 days;
- Romifidine (Sedivet) 50 mg IV dose;
- Tripelennamine HCl (Recover, etc.) 400 mg IM dose; and
- Clenbuterol 0.8 mcg/kg PO BID for no more than 7 consecutive days.

7) The following substances may be administered up to 96 hours prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines:

- Hydroxyzine (Atarax);
- Local Anesthetics (Lidocaine, Mepivicaine);

- Butorphanol;
- Pentazocine;
- Phenytoin (Dilantin);
- Pyrilamine; and
- Xylazine 500 mg IV.

8) The following substances may be administered up to 120 hours prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines.

- Acepromazine 30 mg IV.

9) The following substances may be administered up to 7 days prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines:

- Fluphenzine Decanoate (Prolixin); and
- Reserpine (Serpasil).

10) Any drug containing Procaine may be administered up to 21 days prior to the scheduled post time of the race in which the horse is to compete as long as its use follows the general notice on page 1 of these withdrawal guidelines.

11) The use of an extra corporeal shock wave therapy or radial pulse wave therapy machine must be done under current KHRC regulations and may be performed until 10 days prior to the scheduled post time of the race in which the horse is to compete.

12) The following substances may be administered up to 60 days prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines, and Section 9 of 811 KAR 1:090:

- Anabolic Steroids (Limited to Boldenone, Testosterone, and Nandrolone).

13) Intra-Articular (IA)/Intra-Thecal Injections:

- Any Intra-Articular (IA) or Intra-Thecal injection may be performed until 72 hours prior to the scheduled post time of the race in which the horse is to compete as long as their use follows the general notice on page 1 of these withdrawal guidelines.

14) Any horse that has been treated with therapeutic medications found in sections 6 through 10 of this document may, at the trainer's request and expense, and on permission of

the Commission veterinarian, have samples of blood and/or urine collected by the Commission veterinarian for analysis by the Commission authorized laboratory prior to entry to race in the state of Kentucky. As a condition of this elective testing, the trainer will be required to disclose the date and time, dose, and route of administration of the substance for which clearance testing is requested.

Available Threshold Levels Associated to KHRC Withdrawal Guidelines

Furosemide	100 nanograms per ml of serum
Phenylbutazone	5 micrograms per ml of serum
Flunixin	20 nanograms per ml of serum
Ketoprofen	10 nanograms per ml of serum
Clenbuterol	25 picograms per ml of serum
DMSO	10 micrograms per ml of serum
Diclofenac	5 nanograms per ml of serum
Firocoxib	20 ng/ml serum
Methocarbamol	1 ng/ml serum
Glycopyrrolate	1 ng/ml urine or 3.5 pcg/ml serum
Boldenone (free and conjugated):	
Male horses other than geldings	15 ng/ml in urine or 200 pg/ml serum
Nandrolone (free and conjugated):	
Geldings and female horses	1 ng/ml in urine or 50 pg/ml serum;
Male horses other than geldings	45 ng/ml of metabolite, 5å-estrane-3β, 17 å-diol in urine or a ratio in urine of 5å-estrane-3β, 17 å-diol to 5å-estrene-3β, 17 å-diol of >1:1;
Testosterone (free and conjugated)	
Geldings	20 ng/ml in urine or 25 pg/ml serum
Female horses	55 ng/ml in urine or 25 pg/ml serum

All other NSAID's not listed on the withdrawal guidelines have a threshold set at limit of detection.

Approved by the KHRC on April 16, 2012