



Maryland Racing Commission Medication Guidelines

August 1, 2015

Maryland Racing Medication Guidelines

The Mid Atlantic racing states have joined together to implement a uniform medication and drug testing program. The following Maryland Racing Commission rules and procedures are in place in the state of Maryland as of August 1, 2015:

1. Salix® (furosemide), pursuant to Commission supervised administration, is the only medication that can be administered to a horse within 24 hours of its race.
2. The administration of any adjunct medication within 24 hours of a horse's race is strictly forbidden.
3. There is a category of medications called **Controlled Therapeutic Substances**. This category contains a list of 26 therapeutic medications that have been recognized as necessary in the routine treatment of illness or injury in the horse. Withdrawal time guidance and uniform laboratory detection thresholds for these medications are being provided as a safe harbor for horsemen. You are strongly encouraged to restrict your use of medications to those on the Controlled Therapeutic Substances list, which will be amended from time-to-time. The current Controlled Therapeutic Substances list, together with recommended withdrawal times, dosage and testing detection thresholds is as follows:
4. Although five nonsteroidal anti-inflammatory drugs (NSAIDs) are contained on the Controlled Therapeutic Substances list - diclofenac, firocoxib, flunixin, ketoprofen, phenylbutazone - they should not be used in combination and **only one of these NSAIDs may be present in a post-race sample.**

ACEPROMAZINE

<u>Withdrawal time:</u>	48 hours
<u>Threshold:</u>	10 ng/ml HEPS in urine
<u>Dosage:</u>	Single IV dose of acepromazine at 0.05 mg/kg

ALBUTEROL

<u>Withdrawal time:</u>	72 hours
<u>Threshold:</u>	1 ng/ml HEPS in urine
<u>Dosage:</u>	720 micrograms total dose intra- nasal only. Based upon dosing up to 4 times per day

BETAMETHASONE

<u>Withdrawal time:</u>	7 days
<u>Threshold:</u>	10 pg/mL of plasma or serum
<u>Dosage:</u>	IA administration of 9 mg of Betamethasone Sodium Phosphate and Betamethasone Acetate Injectable Suspension, USP (American Regent product #0517-0720-01) in one articular space

BUTORPHANOL

<u>Withdrawal time:</u>	48 hours
<u>Threshold:</u>	300 ng/mL of total butorphanol in urine or 2 ng/mL of free butorphanol in plasma or serum
<u>Dosage:</u>	Single IV dose of butorphanol as Torbugesic® (butorphanol tartrate) at 0.1 mg/kg

CLENBUTEROL

<u>Withdrawal time:</u>	14 Days
<u>Threshold:</u>	140 pg/mL of urine or LOD in plasma or serum
<u>Dosage:</u>	Oral administration of clenbuterol as Ventipulmin® syrup (Boehringer-Ingelheim Vetmedica Inc., NADA 140-973) at 0.8 mcg/kg twice a day

DANTROLENE

<u>Withdrawal time:</u>	48 hours
<u>Threshold:</u>	100 pg/mL 5-hydroxydantrolene in plasma or serum
<u>Dosage:</u>	Oral administration of 500 mg of dantrolene as paste (compounding pharmacy) or capsule formulation (Proctor and Gamble)

DETOMIDINE

<u>Withdrawal time:</u>	72 hours
<u>Threshold:</u>	1 ng/mL of carboxydetomidine in urine; LOD for detomidine in plasma or serum
<u>Dosage:</u>	Single sublingual dose detomidine (Dormosedan® gel at 40 mcg/kg)

DEXAMETHASONE

<u>Withdrawal time:</u>	72 hours
<u>Threshold:</u>	5 pg/mL of plasma or serum
<u>Dosage:</u>	IM and IV administration of dexamethasone sodium phosphate or oral administration of dexamethasone at 0.05 mg/kg regardless of route

DICLOFENAC

<u>Withdrawal time:</u>	48 hours
<u>Threshold:</u>	5 ng/mL of plasma or serum
<u>Dosage:</u>	Five inch ribbon topical application of 1% diclofenac liposomal cream formulation. (Surpass Topical Anti-Inflammatory Cream, IDEXX Pharmaceuticals)

DMSO - DIMETHYL SULFOXIDE

<u>Withdrawal time:</u>	48 hours
<u>Threshold:</u>	10 mcg/mL of plasma or serum
<u>Dosage:</u>	Intravenous

FIROCOXIB

<u>Withdrawal time:</u>	14 days
<u>Threshold:</u>	20 ng/mL of plasma or serum
<u>Dosage:</u>	Oral administration of firocoxib as EQUIOXX oral paste at a daily dose of 0.1 mg/kg for four days

FLUNIXIN

<u>Withdrawal time:</u>	32 hours
<u>Threshold:</u>	20 ng/mL of plasma or serum
<u>Dosage:</u>	Single IV dose of flunixin as Banamine® (flunixin meglumine) at 1.1 mg/kg

FUROSEMIDE

<u>Withdrawal time:</u>	4 hours
<u>Threshold:</u>	100 ng/mL of plasma or serum
<u>Dosage:</u>	Single IV dose of furosemide up to 500 mg

GLYCOPYRROLATE

<u>Withdrawal time:</u>	48 hours
<u>Threshold:</u>	3 pg/mL plasma or serum
<u>Dosage:</u>	Single IV dose of 1 mg of glycopyrrolate as Glycopyrrolate Injection, USP (American Regent product # 0517-4601-25)

ISOFLUPREDONE

<u>Withdrawal time:</u>	7 days
<u>Threshold:</u>	100 pg/mL plasma or serum
<u>Dosage:</u>	10 milligrams total dose subcutaneous or 20 milligrams total dose in one articular space

KETOPROFEN

<u>Withdrawal time:</u>	24 hours
<u>Threshold:</u>	2 ng/mL of plasma or serum
<u>Dosage:</u>	Single IV dose of ketoprofen as Ketofen® at 2.2 mg/kg

LIDOCAINE

<u>Withdrawal time:</u>	72 hours
<u>Threshold:</u>	20 pg/mL of total 3OH-lidocaine in plasma or serum
<u>Dosage:</u>	200 mg of lidocaine as its hydrochloride salt administered subcutaneously

MEPIVACAINE

<u>Withdrawal time:</u>	72 hours
<u>Threshold:</u>	10 ng/mL total hydroxymepivacaine in urine or above LOD of mepivacaine in plasma or serum
<u>Dosage:</u>	Single 0.07 mg/kg subcutaneous dose of mepivacaine

METHOCARBAMOL

<u>Withdrawal time:</u>	48 hours
<u>Threshold:</u>	1 ng/mL of plasma or serum
<u>Dosage:</u>	Single IV dose of 15 mg/kg methocarbamol as Robaxin® or 5 grams orally

METHYLPREDNISOLONE (DEPO-MEDROL®)

The testing threshold for methylprednisolone acetate (Depo-Medrol) is 100 pg/ml plasma. This testing threshold is based upon the administration of a total dose of 100 mg methylprednisolone as methylprednisolone acetate in one articular space. The recommended withdrawal time for this administration is a minimum of at least 21 days, but there is a footnote warning that intramuscular (IM) administrations can result in plasma concentrations that can exceed the testing threshold for weeks or months. It is important to understand that the testing threshold can be exceeded if there is: 1) an IM injection; 2) an injection in more than one articular space, 3) a different formulation (e.g., compounded) of methylprednisolone, and 4) an injection into a subcutaneous space, i.e. not injecting into the right spot. This is of particular concern when injecting stifles and hocks, as a portion of the medication often is inadvertently deposited into tissues outside the joint capsule. It is important to understand that when a portion of this drug is placed outside the joint capsule of any joint, an intra-muscular or subcutaneous injection will be the result.

Accordingly, it is recommended that 1) Depo-Medrol should not be

administered to any horse a trainer wishes to race in the Mid-Atlantic region – New York, New Jersey, Pennsylvania, Delaware, Maryland, West Virginia and Virginia; and 2) a trainer who chooses to race a horse that has been treated with Depo-Medrol despite this warning should, at his/her expense, get the horse tested prior to entry to ensure that the horse will test below the testing threshold of 100 pg/ml plasma. The testing threshold of 100 pg/ml plasma will be enforced.

OMEPRAZOLE

Withdrawal time: 24 hours
Threshold: 1 ng/mL of urine
Dosage: Single oral dose of omeprazole as Gastrogard® at 3.9 mg/kg

PHENYLBUTAZONE

Withdrawal time: 24 hours
Threshold: 2 mcg/mL of plasma or serum
Dosage: Single IV dose of phenylbutazone at 4.0 mg/kg

PREDNISOLONE

Withdrawal time: 48 hours
Threshold: 1 ng/mL serum or plasma
Dosage: 1 mg/kg orally

PROCAINE PENICILLIN

(administration within 30 days of a race must be reported to the Stewards and the horse must be submitted to 6-hour pre-race surveillance)

Withdrawal time: May not be administered following entry into a race
Threshold: 25 ng/mL plasma or serum
Dosage: Intramuscular

TRIAMCINOLONE ACETONIDE

Withdrawal time: 7 days
Threshold: 100 pg/mL of plasma or serum
Dosage: Total dose of 9mg in one articular space

XYLAZINE

Withdrawal time: 48 hours
Threshold: 0.01 ng/mg of plasma or serum
Dosage: Intravenous

PLEASE NOTE - All horses used in the administration studies exceeded 1,000 lbs. When dosing a horse smaller than 1,000 lbs, trainers and veterinarians may need to consider decreasing the total dose or increasing the time of dosing prior to racing.

5. It is recognized that there are medications that may be used in the treatment of illness or injury in the horse that are not on the Controlled Therapeutic Substances List and for which no treatment guidance or uniform testing levels are provided. **Horsemen and veterinarians are strongly cautioned to withdraw a horse from racing for a sufficient period of time after the administration of a medication not on the Controlled Therapeutic Substances list to ensure against a positive drug test.** Substances that do not affect the organ systems of a horse such as antibiotics, anti-microbials, vaccines, etc. (except for procaine penicillin and levamisole) are not prohibited and are not the subject of testing.
6. Clenbuterol may not be administered to a horse within 14 days of its next race.

Cobalt

A blood specimen from a horse found to contain cobalt in excess of 25 nanograms per milliliter of blood plasma or serum shall be considered a positive finding. The Stewards and Judges shall be instructed to apply this regulation in the following manner:

- 1) A horse which tests for cobalt between 25 nanograms per milliliter of blood plasma or serum and 50 nanograms per milliliter of blood plasma or serum shall be placed on the vets list and not be permitted to start in a race until the horse tests for cobalt below 25 nanograms per milliliter of blood plasma or serum. All costs associated with any retesting shall be paid for by the owner of the horse.
- 2) A horse whose cobalt level exceeds 50 nanograms per milliliter of blood plasma or serum shall be disqualified, the trainer of the horse shall be suspended and/or fined at the discretion of the Stewards or Judges and assessed points under the multiple medication violation point system. As previously stated the horse shall be placed on the vets list and not permitted to start in a race until the horse tests for cobalt below 25 nanograms per milliliter of blood plasma or serum. All costs associated with retesting the horse shall be paid for by the owner of the horse.

THIRD PARTY LASIX ADMINISTRATION PROCEDURES

The administration of Salix® (furosemide), to a horse on race-day will be by a Maryland Racing Commission designated veterinarian and according to the following rules and procedures:

1. The only medication allowed to be administered to a horse within 24 hours of its race is Salix® (furosemide).
2. The administration of any adjunct medication within 24 hours of the horse's race is strictly forbidden.
3. A Commission designated veterinarian who does not practice on the grounds will be administering Salix®.
4. All horses shall be administered Salix® on the grounds of the operating racetrack in their assigned stall.
5. All horses declaring the use of Salix® must be on the grounds of the operating track at least 4 hours prior to post time for their race.
6. Trainers or their representative not requesting the use of Salix® shall declare their horse off of Salix® at the time of entry.
7. Trainers or their representative are responsible to contact and inform the Salix® Clerk at the operating track the dosage of Salix® their horse is to receive.
8. The Salix® Clerk will prepare a list of all horses scheduled to receive Salix®, their dosage and their location at the operating racetrack.
9. The Veterinarian designated to administer Salix® will identify the horse by its tattoo number, record the dosage and time of administration for each horse treated and make a written report to the Stewards and the State Veterinarian.
10. Trainers are responsible for having their representative present and available when the designated Veterinarian arrives to treat their horse.

11. If the Veterinarian designated to administer Salix® cannot locate a horse for treatment or the trainers representative, the Veterinarian will contact the stewards and relay the information.
12. It is recommended that a horse receive Salix® 4 hours prior to its race, at a dosage between 2 cc's and 10 cc's. **Salix® will be administered IV only.**
13. Under no circumstance will Salix® be permitted to be administered to a horse within 3 hours of its race.
14. A horse that is entered on Salix® and does not receive Salix® will not be permitted to run.
15. The State Veterinarian is responsible for determining a horses' eligibility for the use of Salix® and also obtaining and verifying the proper documentation for a first-time Salix® horse.

Salix® Dosage Information

Any horse entered to run in Maryland and designated to use Salix® will be administered Salix® by First Equine Horse Health Services LLC.

The trainer or authorized agent is responsible for providing the Salix® Clerk with the proper dosage information for their horse.

It is recommended that the Salix® Clerk be contacted immediately upon the horse's entry:

MRC Salix® Clerk
Melanie Martin – 443-631-4891 or
(301) 725-0400 ex. 8329

Salix[®] Treatment Schedule

Race	Post	Treatment
1	12:35	8:35 - 9:35
2	1:03	9:03 -10:03
3	1:31	9:31 -10:31
4	1:59	9:59 -10:59
5	2:28	10:28 -11:28
6	2:56	10:56 -11:56
7	3:35	11:25 -12:25
8	3:55	11:55 -12:55
9	4:24	12:24 -1:24

Times are approximate.

No horse will be treated within 3 hours of post time

MULTIPLE MEDICATION VIOLATION SYSTEM

1. A trainer who receives a penalty for a medication violation based upon a horse testing positive for a Class 1—5 medication with Penalty Class A—D, as provided in the most recent version of the Association of Racing Commissioners International Uniform Classification Guidelines for Foreign Substances, shall be assigned points as follows:

Penalty / Class	Points for Controlled Medication	Points for Non Controlled Medication
Class A	n/a	6
Class B	2	4
Class C	1	2
Class D	1/2	1

2. The points assigned to a medication violation by the stewards or judges shall not be applied until a final adjudication of the enforcement of any such violation.
3. A trainer's cumulative points for violations in all racing jurisdictions shall be maintained by the Association of Racing Commissioners International. Once all appeals are waived or exhausted, the points shall immediately become part of the trainer's official record and shall be considered by the Commission in its determination to subject the trainer to the mandatory enhanced penalties by the stewards or judges as provided in this regulation.
4. Multiple positive tests for the same medication incurred by a trainer prior to delivery of the official notice by the laboratory may be treated as a single violation. In the case of a positive test indicating multiple substances found in a single post-race sample, the stewards or judges may treat each substance found as an individual violation for which points will be assigned.
5. The stewards or judges shall consider all points for violations in all racing jurisdictions as contained in the trainer's official record when determining whether the mandatory enhancements provided in this regulation shall be imposed.

6. In addition to the penalty for the underlying offense, the following penalty shall be imposed upon a licensed trainer based upon the cumulative points contained in their official record:

Points	Suspension in Days
3 - 5.5	30
6 - 8.5	60
9 - 10.5	180
11 or more	360

7. Multiple medication points are not a substitute for the current penalty system and are intended to be an additional uniform penalty when the licensee: (a) Has more than one violation for the relevant time period; and (b) Exceeds the permissible number of points.
8. The suspension periods, as provided in §C(6) of this regulation, shall run consecutive to any suspension imposed for the underlying offense.
9. The stewards' or judges' ruling shall distinguish between the penalty for the underlying offense and any penalty based upon a steward's or judge's review of a the trainer's cumulative points and regulatory record, which may be considered an aggravating factor in a case.
10. Any trainer who has received points for a medication violation shall have their points expunged from their record as follows:

Penalty Classification	Time to Expungement
A	Permanent
B	3 years
C	2 years
D	1 year

Maryland's Thoroughbred Racetracks:



pimlico

Pimlico Race Course
5201 Park Heights Avenue
Baltimore, MD 21215
(410) 542-9400



Laurel Park
198 Laurel Race Track Road
Laurel, MD 20724
(301) 725-0400

Timonium

Maryland State Fair
2200 York Road
Timonium, MD 21093
(410) 252-0200

Maryland's Standardbred Racetracks:



Rosecroft Raceway
6336 Rosecroft Drive
Fort Washington, MD 20744
(301) 567-4500



Ocean Downs Racetrack
10218 Race Track Rd
Berlin, MD 21811
(410) 641-0600



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