

**WITHDRAWAL TIME RECOMMENDATIONS
TURF PARADISE 2014-15 MEET**

IMPORTANT WARNING:

The information on drug withdrawal times does not constitute and is not a warranty, guarantee, assurance, undertaking or anything similar that the results of the use of any of the drugs in the manner set out will be as stated. The Arizona Department of Racing is not responsible for results differing in any way from the results stated herein.

Use of guidelines provided in this document does not relieve or lessen any trainer's responsibility for assuring that, during a horse race, a horse is free from any drug listed or below the appropriate threshold and for complying with provisions of the Arizona Rules of Racing and Statutes.

Owners, trainers or any other person in charge or having care of a race horse are strongly advised to consult their own veterinarian for advice and guidance in the use of all drugs. The guidelines in this document may not be consistent with regulations and laboratory methods in place in other jurisdictions.

The Department reserves the right to alter thresholds and withdrawal guidance as more scientific data becomes available.

NOTE:

There are a few changes from the 2013-14 withdrawal time recommendations and two new thresholds for 2014-15. **Changes have been highlighted in this document wherever possible.**

DRUG LISTING:

1. Acepromazine

Threshold—10 ng/ml in urine (metabolite)

Dose and/or route: 0.05 mg/kg as a single IV injection

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—0

Note: Caution should be taken when acepromazine is administered orally for an extended period of time. The drug and metabolites can be detected in the urine after repeated oral administration for as long as 30 days. If a horse requires repeated administration in order to better manage the animal, it is recommended that a sample be obtained and analyzed at the laboratory prior to entry in order to avoid inadvertent positive tests. RCI Class3; Penalty Class B

2. Albuterol

Threshold—1 ng/ml in urine

Dose and/or route: Oral or Inhalation

Recommended withdrawal time: 72 hours

Number of Positive Tests 2013-14 meet—0

Note: Recent studies have shown that albuterol administered orally to horses is ineffective as a bronchodilator. Administration via this route is not recommended as it serves no therapeutic purpose and carries a substantial risk of exceeding the threshold. RCI Class3; Penalty Class B

3. Atropine

Threshold—10 ng/ml in urine

Dose and/or route: Ophthalmic administration

Recommended withdrawal time: 96 hours

Number of Positive Tests 2013-14 meet—0

Note: Be extremely careful when administering herbal or holistic products containing the plant material from *Atropa belladonna*. Atropine is derived from this plant and administration may result in a positive test. Because many of these preparations contain unknown or inconsistent amounts of this plant, the above withdrawal guideline does not apply to any of these products. RCI Class3; Penalty Class B

4. Betamethasone

Threshold—10 pg/ml in serum/plasma

Dose and/or route: IA administration of 9 mg as Sodium Phosphate or Acetate

Recommended withdrawal time: 7 days

Number of Positive Tests 2013-14 meet— 0

Note: IM administrations are discouraged due to lengthy detection period. Other routes of administration require a 48 hour withdrawal period. RCI Class 4; Penalty Class C.

5. Boldenone

Threshold—100 pg/ml in serum/plasma; 15 ng/ml in urine of males other than geldings

Dose and/or route: 500 mg IM (single dose)

Recommended withdrawal time: 60 days

Number of Positive Tests 2013-14 meet— 0

Note: Boldenone has a very long detection period following a single dose. If a horse has been diagnosed with a condition that a veterinarian believes would benefit from the use of this drug it is recommended that the Department veterinarian be notified in order to place the horse on the Vet's list. It is recommended that only Equipoise® be used as compounded and generic formulations often have significant variability in absorption. RCI Class3; Penalty Class B

6. Butorphanol

Threshold—2 ng/ml in serum/plasma

Dose and/or route: 0.1 mg/kg (tartrate) IV as a single dose

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—0

Note: 96 hours for 10 mg IM. Class3; Penalty Class B

7. Clenbuterol

Threshold—2 pg/ml in serum/plasma

Dose and/or route: 0.8 mcg/kg PO BID

Recommended withdrawal time: 14 days

Number of Positive Tests 2013-14 meet— 1

Note: It is recommended that only Ventipulmin® be administered to horses in training. Other sources of clenbuterol are likely to have significant variations in mcg/ml strength and the withdrawal recommendation for these products cannot be guessed. Doses higher than 1.6 mcg/kg are not recommended and it should be noted that high doses of clenbuterol carry significant toxicity risks to the horse. RCI Class3; Penalty Class B

8. Dantrolene

Threshold—100 pg/ml in serum/plasma

Dose and/or route: 500 mg total dose PO

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—0

Note: New dosing and withdrawal guidance lowered to 48 hours from 72 hours based on information from the RMTC. RCI Class 4; Penalty Class C.

9. Detomidine

Threshold—20 pg/ml in serum/plasma

Dose and/or route: 15 mg IV, single dose or single sublingual dose of Domosedan gel at 40 mcg/kg

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—0

Note: RCI Class3; Penalty Class B

10. Dexamethasone

Threshold—5 pg/ml in serum/plasma

Dose and/or route: IM and IV administration of dexamethasone sodium phosphate or oral administration of dexamethasone at 0.05 mg/kg

Recommended withdrawal time: 72 hours

Number of Positive Tests 2013-14 meet—1

Note: Be exceptionally careful when administering dexamethasone orally as powder form in packets. The recommended withdrawal for oral administrations is a minimum of 72 hours but you may wish to consider adding time depending on the length of administration. RCI Class 4; Penalty Class C.

11. Diclofenac

Threshold—5 ng/ml in serum/plasma

Dose and/or route: 180 mg topically BID X 5 days (5" ribbon of Surpass)

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—0

Note: Withdrawal guidance lowered to 48 hours from 5 days based on information from the RMTC. RCI Class 4; Penalty Class C.

12. DMSO

Threshold—10 mcg/ml in serum/plasma

Dose and/or route: Oral or IV administration

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—0

Note: The stewards will be notified of any horse entering the paddock smelling of DMSO and it will be considered grounds for selection of the horse for post-race testing. Evidence of administration of DMSO by the oral or intravenous routes on raceday will be considered an aggravating factor in the consideration of the penalty for a positive test. RCI Class 4; Penalty Class C.

13. Firocoxib

Threshold—20 ng/ml in serum/plasma

Dose and/or route: 0.1 mg/kg PO SID X 14 days

Recommended withdrawal time: 14 days

Number of Positive Tests 2013-14 meet—0

Note: The withdrawal recommendation will be updated with guidance on the IV formulation when more data becomes available. RCI Class 4; Penalty Class B.

14. Flunixin

Threshold—50 ng/ml in serum/plasma

Dose and/or route: 1.1 mg/kg IV (single dose)

Recommended withdrawal time: 24 hours

Number of Positive Tests 2013-14 meet—2

Note: Flunixin administered IM, SQ or orally may result in positive tests due to slower absorption in the horse. Oral administration is not recommended. The Department does not allow “stacking” of NSAIDS on raceday. RCI Class 4; Penalty Class C.

15. Fluphenazine

Threshold—none

Dose and/or route: single dose

Recommended withdrawal time: 60 days

Number of Positive Tests 2013-14 meet—1

Note: Fluphenazine is detected in the plasma for an extended period of time following the administration of a single dose. Because it is an ARCI Class 2 substance, no threshold is permitted under Department rules. Fluphenazine should only be used in situations when the horse will not be entered for a significant period of time. RCI Class 2; Penalty Class A.

16. Furosemide

Threshold—100 ng/ml in serum or plasma

Dose and/or route: 150-500 mg IV (single dose)

Recommended withdrawal time: 4 hours

Number of Positive Tests 2013-14 meet—8

Note: The revised Department rules establish specific gravity and plasma thresholds for furosemide for the first time. Splitting the dose between IV and IM or “topping off” within the four hour time limit will result in overages of the threshold. These practices should be discontinued. Please see also the memo issued by ADOR regarding the proper site for IV administration.

17. Glycopyrrolate

Threshold—3.5 pg/ml in serum or plasma

Dose and/or route: 1 mg IV (single dose)

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—0

Note: RCI Class3; Penalty Class B

18. Isoflupredone

Threshold—100 pg/ml in serum or plasma

Dose and/or route: 10 mg total dose SQ or 20 mg total dose in one articular space

Recommended withdrawal time: 7 days

Number of Positive Tests 2013-14 meet—0

Note: New dosing and withdrawal guidance provided by an administration study conducted by the RMTC. RCI Class 4; Penalty Class C.

19. Isoxsuprine

Threshold—50 ng/ml in serum or plasma

Dose and/or route: 500 mg PO

Recommended withdrawal time: 96 hours

Number of Positive Tests 2013-14 meet—0

Note: RCI Class 4; Penalty Class C.

20. Ketoprofen

Threshold—10 ng/ml in serum or plasma

Dose and/or route: 2.2 mg/kg IV (single dose)

Recommended withdrawal time: 24 hours

Number of Positive Tests 2013-14 meet—0

Note: The Department does not allow “stacking” of NSAIDS on raceday. RCI Class 4; Penalty Class C.

21. Lidocaine

Threshold—20 pg/ml in serum or plasma

Dose and/or route: 200 mg (total dose) SQ

Recommended withdrawal time: 72 hours

Number of Positive Tests 2013-14 meet—0

Note: New threshold and withdrawal guidance for 2014-15. RCI Class 2; Penalty Class B.

22. Meclofenamic Acid

Threshold—1 mcg/ml in serum or plasma

Dose and/or route: 1 gram PO

Recommended withdrawal time: 72 hours

Number of Positive Tests 2013-14 meet—0

Note: The use of NSAIDS that are no longer available in equine formulations is not recommended. RCI Class 4; Penalty Class C.

23. Mepivacaine

Threshold—20 pg/ml in serum or plasma

Dose and/or route: 0.07 mg/kg SQ (distal limb)

Recommended withdrawal time: 72 hours

Number of Positive Tests 2013-14 meet—0

Note: New threshold and withdrawal guidance for 2014-15. RCI Class 2; Penalty Class B.

24. Methocarbamol

Threshold—1 ng/ml in serum or plasma

Dose and/or route: 15 mg/kg IV (single dose)

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—8

Note: Based on anecdotal reports from several Mid-Atlantic States over the summer, caution is urged when methocarbamol and phenylbutazone are administered together. It appears that phenylbutazone slows the elimination of methocarbamol from the blood and may result in unintentionally exceeding the threshold. Unfortunately, as of this writing, there is no specific guidance but would suggest, at a minimum, adding 48 hours to the recommended withdrawal time for methocarbamol when administering concurrently with

phenylbutazone. Additionally, be cautious when administering methocarbamol by the oral route. Based on a small study performed by the RMTC, a withdrawal time of at least 72 hours is recommended when methocarbamol is administered orally in repeated doses. RCI Class 4; Penalty Class C.

25. Methylprednisolone

Threshold—100 pg/ml in serum or plasma

Dose and/or route: 100 mg IA (single joint)

Recommended withdrawal time: 7 days

Number of Positive Tests 2013-14 meet—1

Note: Lower total dose for 2013-14. At the 100 mg experimental dose, the safe time for administration to meet the 100 pg/ml threshold was 21 days. The 7-day withdrawal guideline anticipates that protocols vary and a smaller dose may be utilized which may allow plasma concentrations to fall below the threshold more quickly. Anecdotal information suggests that the elimination period may be longer when joint spaces in rear limbs are injected. Much longer withdrawal times (up to 30 days) should be considered when multiple joints are injected. RCI Class 4; Penalty Class C.

26. Nandrolone

Threshold—100 pg/ml in serum or plasma (fillies, mares, geldings); 500 pg/ml (intact males); 1 ng/ml in urine (all)

Dose and/or route: 200 mg IM (single dose)

Recommended withdrawal time: 60 days

Number of Positive Tests 2013-14 meet—0

Note: If a horse has been diagnosed with a condition that a veterinarian believes would benefit from the use of this drug it is recommended that the Department veterinarian be notified in order to place the horse on the Vet's list. RCI Class 3; Penalty Class B.

27. Naproxen

Threshold—2 mcg/ml in serum or plasma

Dose and/or route: 5 mg/kg IV (single dose)

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—0

Note: The use of NSAIDS that are no longer available in equine formulations is not recommended. Naproxen can be detected for a long period of time when it is administered orally in repeated doses. This threshold has been lowered for the 2012-13 meet. RCI Class 4; Penalty Class C.

28. Prednisolone

Threshold—1 mcg/ml in urine

Dose and/or route: 300 mg PO

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—0

Note: RCI Class 4; Penalty Class C.

29. Phenylbutazone

Threshold—5 mcg/ml in serum or plasma

Dose and/or route: 2 grams IV (single dose)

Recommended withdrawal time: 24 hours

Number of Positive Tests 2013-14 meet—2

Note: The Department does not allow “stacking” of NSAIDS on raceday. If phenylbutazone is being administered orally during training it recommended that final dose be administered no closer than 72 hours prior to the race. RCI Class 4; Penalty Class C.

30. Procaine Penicillin G

Threshold—25 ng/ml in urine (procaine)

Dose and/or route: 22,000 IU/kg IM BID X 5 days

Recommended withdrawal time: 15 days

Number of Positive Tests 2013-14 meet—0

Note: RCI Class 3; Penalty Class B

31. Pyrilamine

Threshold—50 ng/ml in serum or plasma

Dose and/or route: 500 mg IV (single dose), 1 mg/kg PO X 3 days

Recommended withdrawal time: 72 hours

Number of Positive Tests 2013-14 meet—0

Note: RCI Class3; Penalty Class B

32. Reserpine

Threshold—none

Dose and/or route: single dose

Recommended withdrawal time: 60 days

Number of Positive Tests 2013-14 meet—0

Note: Reserpine is detected in the plasma for an extended period of time following the administration of a single dose. Because it is an ARCI Class 2 substance, no threshold is

permitted under Department rules. Reserpine should only be used in situations when the horse will not be entered for a significant period of time. RCI Class 2; Penalty Class A.

33. Stanazolol

Threshold—100 pg/ml in serum or plasma; 1 ng/ml in urine

Dose and/or route: 0.55 mg/kg IM (single dose)

Recommended withdrawal time: 30 days

Number of Positive Tests 2013-14 meet—0

Note: If a horse has been diagnosed with a condition that a veterinarian believes would benefit from the use of this drug it is recommended that the Department veterinarian be notified in order to place the horse on the Vet's list. RCI Class 3; Penalty Class B.

34. Testosterone

Threshold—100 pg/ml in serum or plasma (fillies, mares, geldings); 2 ng/ml in serum or plasma (intact males); 20 ng/ml in urine (geldings); 55 ng/ml in urine (fillies and mares)

Dose and/or route: 75 mg IM (single dose)

Recommended withdrawal time: 30 days

Number of Positive Tests 2013-14 meet—0

Note: If a horse has been diagnosed with a condition that a veterinarian believes would benefit from the use of this drug it is recommended that the Department veterinarian be notified in order to place the horse on the Vet's list. RCI Class 3; Penalty Class B.

35. Triamcinolone acetonide

Threshold—100 pg/ml in serum or plasma

Dose and/or route: Total dose of 9 mg in one articular space

Recommended withdrawal time: 7 days

Number of Positive Tests 2013-14 meet—2

Note: For the IV administration of a dose of 0.04 mg/kg, a withdrawal time of 48 hours can be used. IM administrations are discouraged due to lengthy detection period. Anecdotal information suggests that the elimination period may be longer when joint spaces in rear limbs are injected. RCI Class 4; Penalty Class C.

36. Xylazine

Threshold—10 pg/ml in serum or plasma

Dose and/or route: Single IV injection

Recommended withdrawal time: 48 hours

Number of Positive Tests 2013-14 meet—1

Note: RCI Class 3; Penalty Class B.