

AMENDMENTS TO PROHIBITED SUBSTANCE REGULATIONS

At its meeting on 10 April 2014, the Board of HRNZ approved amendments to the Prohibited Substance Regulations. This was based on a review that has been undertaken over the last three months by HRNZ's legal advisor (Mr Chris Lange) in conjunction with the Veterinary Advisor to the Equine Codes (Dr Andrew Grierson) and the Chief Analyst from the New Zealand Racing Laboratory (Rob Howitt).

The main purpose of the review was to incorporate the complete ban on anabolic steroids as previously approved by the Board which takes effect from 1 May 2014. At the same time, it was agreed that the Regulations would be reviewed to update these with recent developments in pharmaceutical substances and to reflect changes recently made in Article 6 of the International Federation of Horse Racing Authorities.

It was also agreed that a renumbering of the agreement would take place to allow for easier reference and a re-ordering to provide a more logical flow through the document. The principle of the Regulations is unchanged in that horses are to be presented for racing free of prohibited substances and substances for which there is no therapeutic reason to be administered to a horse are banned for out of competition purposes.

Owners and trainers should obtain veterinary advice before the use or administration of substances to horses under their care and control.

The Rules of Harness Racing requires that all horses race free of prohibited substances. If anyone has information in relation to the use of prohibited substances this should be passed on to the RIU on a confidential basis if required.

Following are the amended Regulations that take effect from 1 May 2014.



Edward Rennell
Chief Executive

PROHIBITED SUBSTANCE REGULATIONS
Approved by HRNZ Board effective 1 May 2014

These Regulations made by the Board pursuant to the Rules of Harness Racing shall be referred to as the Prohibited Substance Regulations.

- 1 The following shall be prohibited substances:
 - 1.1 Substances capable at any time of causing either directly or indirectly an action or effect, or both an action or effect within one or more of the following mammalian body systems:-
 - 1.1.1 the blood system;
 - 1.1.2 the cardiovascular system;
 - 1.1.3 the digestive system;
 - 1.1.4 the endocrine system;
 - 1.1.5 the immune system;
 - 1.1.6 the musculoskeletal system;
 - 1.1.7 the nervous system;
 - 1.1.8 the respiratory system;
 - 1.1.9 the reproductive system;
 - 1.1.10 the urinary system.
 - 1.2 Substances falling within the following categories of substances:-
 - 1.2.1 acidifying agents;
 - 1.2.2 adrenergic blocking agents;
 - 1.2.3 adrenergic stimulants;
 - 1.2.4 agents affecting calcium and bone metabolism;
 - 1.2.5 alcohols;
 - 1.2.6 alkalinising agents;
 - 1.2.7 anabolic agents;
 - 1.2.8 anaesthetic agents;
 - 1.2.9 analgesics;
 - 1.2.10 antiangina agents;
 - 1.2.11 antianxiety agents;
 - 1.2.12 antiarrhythmic agents;
 - 1.2.13 anticholinergic agents;
 - 1.2.14 anticoagulants;
 - 1.2.15 anticonvulsants;
 - 1.2.16 antidepressants;
 - 1.2.17 antiemetics;
 - 1.2.18 antifibrinolytic agents;
 - 1.2.19 antihistamines;
 - 1.2.20 antihypertensive agents;
 - 1.2.21 anti-inflammatory agents;

- 1.2.22 antinauseants;
- 1.2.23 antineoplastic agents;
- 1.2.24 antipsychotic agents;
- 1.2.25 antipyretics;
- 1.2.26 antirheumatoid agents;
- 1.2.27 antispasmodic agents;
- 1.2.28 antithrombotic agents;
- 1.2.29 antitussive agents;
- 1.2.30 blood coagulants;
- 1.2.31 bronchodilators;
- 1.2.32 bronchospasm relaxants;
- 1.2.33 buffering agents;
- 1.2.34 central nervous system stimulants;
- 1.2.35 cholinergic agents;
- 1.2.36 corticosteroids;
- 1.2.37 cytotoxic agents;
- 1.2.38 depressants;
- 1.2.39 diuretics;
- 1.2.40 endocrine secretions and their synthetic counterparts;
- 1.2.41 erectile dysfunction agents;
- 1.2.42 fibrinolytic agents;
- 1.2.43 haematopoietic agents;
- 1.2.44 haemostatic agents;
- 1.2.45 hormones (including trophic hormones) and their synthetic counterparts;
- 1.2.46 hypnotics;
- 1.2.47 hypoglycaemic agents;
- 1.2.48 hypolipidaemic agents;
- 1.2.49 immunomodifiers;
- 1.2.50 masking agents;
- 1.2.51 muscle relaxants;
- 1.2.52 narcotic analgesics;
- 1.2.53 neuromuscular agents;
- 1.2.54 oxygen carriers;
- 1.2.55 plasma volume expanders;
- 1.2.56 respiratory stimulants;
- 1.2.57 sedatives;
- 1.2.58 stimulants;
- 1.2.59 sympathomimetic amines;
- 1.2.60 tranquillisers;
- 1.2.61 vasodilators;
- 1.2.62 vasopressor agents;
- 1.2.63 Out of Competition prohibited substances.

- 2 The metabolites, artefacts, isomers and analogues of the prohibited substances prescribed in paragraph 1 are prohibited substances.

- 3 The following substances and their metabolites and artefacts are excluded from paragraphs 1:
- 3.1 antimicrobials (antibiotics) and other anti-infective agents with the exception of procaine penicillin;
 - 3.2 antiparasitics that are ACVM registered for use in horses;
 - 3.3 altrenogest when administered to mares and fillies;
 - 3.4 ambroxol;
 - 3.5 bromhexine;
 - 3.6 chondroitin sulphate;
 - 3.7 dembexine;
 - 3.8 glucosamine;
 - 3.9 hyaluronic acid;
 - 3.10 licensed vaccines against infectious agents that are ACVM registered for use in horses;
 - 3.11 omeprazole;
 - 3.12 polysulphated glycosaminoglycan;
 - 3.13 pentosan polysulphate;
 - 3.14 ranitidine.
- 4 The following substances are not prohibited when present at or below the following thresholds:-
- 4.1 alkalinising agents, when evidenced by total carbon dioxide (TCO₂) at a concentration of 35.0 millimoles per litre in plasma;
 - 4.2 arsenic at a mass concentration of 0.30 milligrams of total arsenic per litre in urine;
 - 4.3 boldenone in urine of male horses other than geldings (including free boldenone and boldenone liberated from its conjugates) at a mass concentration of 15.0 micrograms per litre of urine;
 - 4.4 dimethyl sulphoxide at a mass concentration of 15 milligrams per litre in urine, or 1.0 milligrams per litre in plasma;
 - 4.5 5 α -estrane-3 β , 17 α -diol in (including both the free substance and that liberated from its conjugates) in male horses other than geldings at a mass concentration:
 - 4.5.1 of 45.0 micrograms per litre of urine; or
 - 4.5.2 at a mass concentration less than that of 5(10) estrene-3 β , 17 α -diol in urine (including both the free substance and that liberated from its conjugates);

- 4.6 hydrocortisone at a mass concentration of 1.00 milligrams per litre in urine;
 - 4.7 3-methoxytyramine (including free 3-methoxytyramine and 3-methoxytyramine liberated from its conjugates) at a mass concentration of 4.0 milligrams per litre of urine;
 - 4.8 salicylic acid at a mass concentration of 750 milligrams per litre in urine, or 6.5 milligrams per litre in plasma;
 - 4.9 testosterone- (including both free testosterone and testosterone liberated from its conjugates):
 - 4.9.1 at a mass concentration of 20.0 micrograms per litre in urine in geldings;
 - 4.9.2 at a mass concentration of 55.0 micrograms per litre in urine in fillies and mares;
 - 4.9.3 in fillies and mares that have been notified as pregnant at any concentration.
 - 4.10 theobromine at a mass concentration of 2.0 milligrams per litre in urine.
5. The following shall be Out of Competition Prohibited Substances:
- 5.1 any substance for which there is no generally accepted equine veterinary therapeutic purpose;
 - 5.2 any substance defined as a controlled drug by the Misuse of Drugs Act 1975;
 - 5.3 agents modifying myostatin function, including but not limited to myostatin inhibitors;
 - 5.4 AMPK activators, including but not limited to AICAR (5-amino-1 - β -D-ribofuranosyl-imidazole-4-carboxamide);
 - 5.5 anabolic androgenic steroids (other than an anabolic androgenic steroid which is present at or below the relevant concentrations set out in 4.3, 4.5 and 4.9 above);
 - 5.6 aromatase inhibitors;

- 5.7 beta-2 agonists, unless the substance is prescribed by a veterinarian as a bronchodilator and administered at the dose rate and frequency prescribed;
- 5.8 cannabinoids;
- 5.9 endorphins;
- 5.10 erythropoiesis-stimulating agents, including but not limited to erythropoietin (EPO), epoetin alfa, epoetin beta, darbepoetin alfa, and methoxy polyethylene glycol-epoetin beta (*Mircera*);
- 5.11 growth hormones and growth hormone releasing factors;
- 5.12 hypoxia inducible factor (HIF)-1 stabilisers, including but not limited to ITPP (myo-inositol trispyrophosphate);
- 5.13 insulin-like growth factor-1 (IGF-1) and other growth factors;
- 5.14 insulins;
- 5.15 agents that directly or indirectly affect or manipulate gene expression;
- 5.16 oxygen carriers including but not limited to perfluorochemicals, eflaproxiral, and modified haemoglobin products;
- 5.17 peroxisome proliferator activated receptor δ (PPAR δ) agonists, including but not limited to GW 1516;
- 5.18 selective androgen receptor modulators (SARMS);
- 5.19 selective estrogen receptor modulators (SERMS) and other anti-estrogenic substances;
- 5.20 selective opiate receptor modulators (SORMS);
- 5.21 synthetic proteins and peptides and synthetic analogues of endogenous proteins and peptides not registered for medical or veterinary use;
- 5.22 thymosin beta;
- 5.23 venoms of any species or derivatives thereof.

6. The metabolites, artefacts, isomers and analogues of the prohibited substances prescribed in paragraph 5 are Out of Competition Prohibited Substances.

7. The following substances when prescribed by a veterinarian and used for therapeutic use and their metabolites and artefacts, are excluded from paragraph 5:
 - 7.1 butorphanol;
 - 7.2 codiene;
 - 7.3 3-(2-dimethylaminoethyl)-4-hydroxyindole;
 - 7.4 N,N-dimethyltryptamine;
 - 7.5 fentanyl
 - 7.6 ketamine;
 - 7.7 methadone;
 - 7.8 morphine;
 - 7.9 pethidine;
 - 7.10 pholcodine;
 - 7.11 platelet rich plasma (PRP) and interleukin 1 receptor antagonist protein (IRAP);
 - 7.12 secoborbital.

8. The following substances and their metabolites and artefacts are excluded from paragraphs 1 and 5 when present in urine or plasma as a result of normal feeding:
 - 8.1 bufotenine;
 - 8.2 hordenine.

9. In these regulations:-
 - 9.1 ACVM registered means any animal compound registered under the Agricultural Compounds and Veterinary Medicines Act 1997 for use in horses.
 - 9.2 Total carbon dioxide (TCO₂) means the total carbon dioxide released upon sample acidification as measured by ion-selective electrode.