



## **CONTROLES DE DOPAJE**

*Desde el Comité de Mushing os queremos hacer llegar la siguiente información respecto a los controles de dopaje, tanto en atletas como en perros.*

*Con el comienzo del nuevo año la IFSS nos actualiza la información sobre los listados de sustancias de uso bajo control y de sustancias de uso prohibido en perros para competiciones europeas y mundiales.*

*Matizar de suma importancia que el uso de sustancias que se encuentren en el listado de las llamadas "**Sustancias de uso bajo control**" implica tener correctamente el **Medication Vet Form 1**. Debido a que estos perros están bajo medicación, aun teniendo el formulario correspondiente correctamente relleno, el perro deberá sin falta pasar un examen por parte del veterinario de carrera que será el que en última instancia dé el visto bueno para que el perro pueda participar.*

**El tener relleno el "Medication Vet Form 1" por sí solo no asegura que el perro pueda participar.**

*Adjuntado se acompaña los siguientes archivos:*

- Listado sustancias prohibidas en perros 2016*
- Listado sustancias de uso bajo control 2016*
- Listado de sustancias prohibidas en atletas WADA 2016*

*Esperamos que la información sea de utilidad.*

*Estamos a disposición para cualquier aclaración al respecto.*

*Un saludo,*

*Comité de Mushing de la RFEDI.*



## **LIST OF PROHIBITED SUBSTANCES AND PROHIBITED METHODS FOR DOGS**

***As of January 1, 2016***

### **§ 1. SUBSTANCES AND METHODS PROHIBITED AT ALL TIMES (IN- and OUT-OF COMPETITION) (Note 1)**

A. **Substances** (and their metabolites), belonging to the following groups, whose use and/or presence in a Dog's sample are prohibited at all times (Article 2 of the IFSS Anti-Doping Rules for Dogs Participating in Sled Dog Sports) :

- Anabolic steroids and anabolic agents
- Hormones and related substances and their releasing factors other than as noted in the controlled list.
- Hormone antagonists and modulators and related substances other than as noted in controlled list
- Beta-antagonists
- Diuretics and other masking agents
- Substances having the same effects as those listed herein

B. **Methods** prohibited at all times:

- Enhancement of oxygen transfer ("blood doping")
- Chemical or physical manipulation destined to alter the integrity of Samples, including but not limited to catheterization, urine substitution or alteration
- Intravenous infusions are prohibited except during surgical procedures, medical emergencies or clinical investigations
- Gene doping
- Force feeding, use of a stomach tube, drenching or use of a baster (bulb syringe) to force food or fluids

### **§ 2. SUBSTANCES AND METHODS PROHIBITED IN COMPETITION (IC)**

A. **Substances** (and their metabolites), belonging to the following groups, whose use and/or presence in a Dog's sample are prohibited in competition. (Article 2 of the IFSS Anti-Doping Rules for Dogs Participating in Sled Dog Sports):

- Alcohol
- Anaesthetics
- Analgesics (*prescriptive and non-prescriptive*)
- Antibiotics other than as noted on Controlled List
- Anticholinergics
- Antihistamines
- Anti-inflammatory drugs including but not limited to:
  - *Corticosteroids (including but not limited to glucocorticoids) other than topicals as noted on Controlled List*
  - *Antiprostaglandins*
  - *Non Steroidal Anti-Inflammatory Drugs – NSAID - (including but not limited to ASA and other salicylates)*
  - *DMSO*
- Immunosuppressives or immunomodulators including but not limited to cyclosporine, oclacitinib, and similar medications.
- Bronchodilators
- Cough suppressants
- GI (gastrointestinal) motility modifiers including loperamide, any medication containing salicylates, diphenoxylate or atropine
- H<sub>2</sub>-receptor antagonists and proton pump inhibitors other than as noted on Controlled List
- Muscle relaxants
- Sedatives and narcotics (*including anti-epileptic phenobarbital and potassium bromide*)
- Stimulants (*specified and non-specified, including caffeine and theobromine*)
- Substances having the same effect as those listed herein

**B. Methods prohibited in competition (Note 2):**

- Injections of any substance, including vitamins, antibiotics, and rehydration fluids
- Acupuncture – including any form of stimulation of acupuncture points
- Laser therapy
- Infrared light therapy
- Therapeutic ultrasound
- Transcutaneous electrical nerve stimulation (TENS)
- Electromagnetic devices
- Chiropractic or other spinal manipulation treatments

**Important:**

**IFSS Anti-Doping Rules for Dogs participating in Sled Dog Sports, Article 2:**

**2.1.1** It is each *Athlete's* personal duty to ensure that no *Prohibited Substance* enters his or her *Dog's* body. *Athletes* are responsible for any *Prohibited Substance* or its *Metabolites* or *Markers* found to be present in their *Dog's Samples*. Accordingly, it is not necessary that intent, *Fault*, negligence or knowing *Use* on the *Athlete's* part be demonstrated in order to establish an anti-doping rule violation under Article 2.1.

**IFSS Anti-Doping Rules for Dogs participating in Sled Dog Sports, Article 4.3.3:**

".../...A major principle in the *Sled Dog Sports* has always been that no *Dog* must be made to perform beyond the limit of its natural capacity by any artificial means whatsoever."

While it is normal, when necessary, to provide veterinary treatment of a dog *out of competition*, as allowed in note (1) below, it is the *Athlete's* responsibility to ensure that all substances in any treatment (according to both § 1 and 2 above, *IN-* and *OUT-OF-COMPETITION*) have had sufficient time to be eliminated from the dog's body before returning the dog to competition.

*Athletes* should be aware that even products stated as being "natural" and not considered as medicine, can have the same effect as a *Prohibited Substance* and may lead to an *Adverse Analytical Finding*. An example of this would be certain "natural" or homeopathic remedies sold with a stated anti-inflammatory or painkilling effect.

*Athletes* should keep records of treatments given to their *dogs* over at least a 6-month period, preferably 12 months, in order to be able to provide this information (veterinary certificates, Medication Administration Forms, etc) if requested during *Doping Control*.

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Note 1 "**At all times**" does not override the ordinary principles of the care and well-being of the *Dog* and thus does not exclude treatment of a *Dog* with whatever *Substance* or *Method* is determined to be necessary by the *Dog's* veterinarian to allow the *Dog* to recover from a diagnosed medical condition. However, if the treatment includes a *Substance* or *Method* which is prohibited both *In* and *Out of Competition*, the following considerations and procedures will apply:

a) For *Athletes* and their *Dogs* on the RTP list:

Any *Dog* which for medical reasons requires treatment with a *Substance* or *Method* that is listed in § 1 above must be declared to the IFSS Antidoping Committee (*Dog's* Name and ID Number). The *Dog* will then be recorded as Temporarily Ineligible to Compete. When the *Dog* has completed the treatment and has fully recovered, the *Athlete* must provide the IFSS Antidoping Committee with a veterinary certificate detailing:

- the *Dog's* name and identity number (microchip or tattoo)
- the reason for treatment
- the *Substances* or *Methods* administered
- the dose and length of treatment
- the length of time needed for definite healing and rest after treatment
- an estimation of the clearance time necessary for the *Substance* to be completely eliminated from the *Dog's* body.

The IFSS Antidoping Committee will then decide upon the date of the *Dog's* reinstatement as being eligible for competition again.

b) For all other *Athletes*:

If for medical reasons a *Dog* requires treatment with a *Substance* or *Method* that is listed in § 1 above, the *Athlete* must be able to provide upon request (in particular during a *Doping Control*) a veterinary certificate detailing:

- the *Dog's* identity number (microchip or tattoo)
- the reason for treatment
- the *Substances* or *Methods* administered
- the length of treatment
- an estimation of the clearance time necessary for the *Substance* to be completely eliminated from the *Dog's* body.

The *Dog* must be withdrawn from the *Athlete's* team for the duration of treatment and clearance time, to ensure complete elimination of the treatment and a reasonable healing/resting time before returning to competition.

Note 2: "In competition" in that respect shall be understood as the period from the time the competitor arrives on the race site before the beginning of the competition until he/she leaves the race site after the competition is completed.



## **IFSS LIST OF CONTROLLED MEDICATION FOR DOGS (Controlled List") As of January 1<sup>st</sup> 2016**

Whenever a "Veterinary Medication Form" is requested here below, the rule is that the Form must be filled out by the treating veterinarian to indicate medication, dosage and reason for treatment. The Athlete must bring the Form – *in two copies* - to the race and submit it to the Race Veterinarian prior to the event, at least one hour before the initial veterinary check of the dogs. If the Dog is evaluated healthy enough to start and the application to use a Controlled Medication is approved, the Race Veterinarian must sign *both* copies, retain one, and return the other to the Athlete to show in case of a Doping Control.

Note 1: The fact that a treating veterinarian has filled out and signed a "VetMedForm" **does not guarantee** the Dog a right to start. It is always a decision of the Race Veterinarian of the actual race!

Note 2: If an Athlete has started with a Dog, medicated with any of the substances here below, requiring an approved "Veterinary Medication Form", without being able to show such an approved Form upon request, it is regarded as **DOPING**.

**1. Antibiotics administered orally.** If antibiotic treatment must be initiated on a Dog prior to an event, a "Veterinary Medication Form 1" should be filled out by the treating veterinarian. Upon review of the Form and examination of the Dog, the Race Veterinarian has the right to prevent the Dog from competing depending on the medical condition of the Dog or on local Animal Welfare Laws. It is recommended that the Athlete contact the Race Veterinarian in advance of the event.

**2. Topical eye, foot, or wound ointments or drops containing antibiotics** may be allowed with completion and submission of a "Veterinary Medication Form 1" and evaluation of the Dog by the Race Veterinarian.

**3. Topical eye or foot medications containing low levels of corticosteroids** may be allowed for specific medical reasons, and require completion and submission of "Veterinary Medication Form 1" and evaluation of the Dog by the Race Veterinarian.

**4. Antiulcer medications** – H2 antagonists and proton pump inhibitors may be allowed with completion and submission of a "Veterinary Medication Form 1".

**5. Thyroid hormone supplements** may be given orally if a "Veterinary Medication Form 2", *Authorization for administration of Thyroid Supplements*, is filled out and has supportive laboratory blood tests accompanying it. Supplements will **not** be allowed for low normal levels. Test results **must** be interpreted using the normal values for sled dogs listed on the "Veterinary Medication Form 2". These values are different than standard laboratory values.



Post-supplementation blood tests must show that the Dog is given an appropriate dosage, not over supplemented, and does not have a high level post-supplement using the sled dog values.

The form and the supportive documents **must be sent for approval** to the IFSS veterinarians in charge of the approval at [vetform2\\_approval@sleddogsport.net](mailto:vetform2_approval@sleddogsport.net) **at least one month prior to the first race** in which the concerned Dog will compete. The approval will be valid for one year from the date of approval and the form will not need to be submitted for approval again within that period, unless the dosage has been changed. In that case a new form and new supportive documents must be sent for approval.

**6. Reproductive hormones**, related substances, and their releasing factors, antagonists, modulators and related substances as listed below:

**Note:** For the substances listed under **a, b, c** and **d** below, **a minimum observation period of 28 days, before the dog returns to competition**, will be mandatory in order to ensure that there are no adverse side effects on the dog's health.

The Athlete must, at any time, be able to show a veterinary certificate or a Veterinary Medication Form 1, including the dog's chip number, about this need of, or reason for, treatment. This document must also certify that the dog has passed a check by the treating veterinarian at the end of the 28 days.

**a.** Treatments to suppress or delay the onset of heat cycles in bitches, continually or periodically, under veterinary prescription, will be tolerated, unless such treatments contain testosterone or testosterone-like substances (see WADA human Prohibited List). See note above.

**b.** The administration to bitches of prostaglandins or progesterone inhibitors such as *aglepriston*, under veterinary prescription, will be tolerated, if required due to an accidental mating. See note above.

**c.** The administration of prolactin inhibitors, *bromocriptine* or *cabergoline*, to suppress lactation in a bitch will be allowed. See note above.

**d.** The use of *deslorelin* implants in intact males or intact females for the purpose of contraception will be allowed. See note above.

**e.** The administration to spayed bitches of *estrogenic substances* under veterinary prescription, if required to avoid urinary incontinence. The Athlete must, at any time, be able to show a veterinary certificate or a Veterinary Medication Form 1, including the dog's chip number, about this need of treatment.

WORLD ANTI-DOPING CODE  
INTERNATIONAL  
STANDARD



# PROHIBITED LIST

JANUARY 2016



**WORLD  
ANTI-DOPING  
AGENCY**  
play true

The official text of the *Prohibited List* shall be maintained by WADA and shall be published in English and French.  
In the event of any conflict between the English and French versions, the English version shall prevail.

# SUBSTANCES & METHODS PROHIBITED AT ALL TIMES

(IN- AND OUT-OF-COMPETITION)

IN ACCORDANCE WITH ARTICLE 4.2.2 OF THE WORLD ANTI-DOPING CODE, ALL *PROHIBITED SUBSTANCES* SHALL BE CONSIDERED AS "*SPECIFIED SUBSTANCES*" EXCEPT SUBSTANCES IN CLASSES S1, S2, S4.4, S4.5, S6.a, AND *PROHIBITED METHODS* M1, M2 AND M3.

## PROHIBITED SUBSTANCES

### S0 NON-APPROVED SUBSTANCES

Any pharmacological substance which is not addressed by any of the subsequent sections of the *List* and with no current approval by any governmental regulatory health authority for human therapeutic use (e.g. drugs under pre-clinical or clinical development or discontinued, designer drugs, substances approved only for veterinary use) is prohibited at all times.

### S1 ANABOLIC AGENTS

Anabolic agents are prohibited.

#### 1. ANABOLIC ANDROGENIC STEROIDS (AAS)

##### a. Exogenous\* AAS, including:

**1-Androstenediol** (5 $\alpha$ -androst-1-ene-3 $\beta$ ,17 $\beta$ -diol);  
**1-Androstenedione** (5 $\alpha$ -androst-1-ene-3,17-dione);  
**1-Testosterone** (17 $\beta$ -hydroxy-5 $\alpha$ -androst-1-en-3-one);  
**4-Hydroxytestosterone** (4,17 $\beta$ -dihydroxyandrost-4-en-3-one);  
**19-Norandrostenedione** (estr-4-ene-3,17-dione);  
**Bolandiol** (estr-4-ene-3 $\beta$ ,17 $\beta$ -diol);  
**Bolasterone**;  
**Boldenone**;  
**Boldione** (androsta-1,4-diene-3,17-dione);  
**Calusterone**;  
**Clostebol**;  
**Danazol** ([1,2]oxazolo[4',5':2,3]pregna-4-en-20-yn-17 $\alpha$ -ol);  
**Dehydrochlormethyltestosterone** (4-chloro-17 $\beta$ -hydroxy-17 $\alpha$ -methylandrosta-1,4-dien-3-one);  
**Desoxymethyltestosterone** (17 $\alpha$ -methyl-5 $\alpha$ -androst-2-en-17 $\beta$ -ol);  
**Drostanolone**;  
**Ethylestrenol** (19-norpregna-4-en-17 $\alpha$ -ol);  
**Fluoxymesterone**;  
**Formebolone**;  
**Furazabol** (17 $\alpha$ -methyl [1,2,5]oxadiazolo[3',4':2,3]-5 $\alpha$ -androstan-17 $\beta$ -ol);

**Gestrinone**;  
**Mestanolone**;  
**Mesterolone**;  
**Metandienone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylandrosta-1,4-dien-3-one);  
**Metenolone**;  
**Methandriol**;  
**Methasterone** (17 $\beta$ -hydroxy-2 $\alpha$ ,17 $\alpha$ -dimethyl-5 $\alpha$ -androstan-3-one);  
**Methyldienolone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylestra-4,9-dien-3-one);  
**Methyl-1-testosterone** (17 $\beta$ -hydroxy-17 $\alpha$ -methyl-5 $\alpha$ -androst-1-en-3-one);  
**Methylnortestosterone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylestr-4-en-3-one);  
**Methyltestosterone**;  
**Metribolone** (methyltrienolone, 17 $\beta$ -hydroxy-17 $\alpha$ -methylestra-4,9,11-trien-3-one);  
**Mibolerone**;  
**Nandrolone**;  
**Norboletone**;  
**Norclostebol**;  
**Norethandrolone**;  
**Oxabolone**;  
**Oxandrolone**;  
**Oxymesterone**;  
**Oxymetholone**;  
**Prostanozol** (17 $\beta$ -[[tetrahydropyran-2-yl]oxy]-1'H-pyrazolo[3,4:2,3]-5 $\alpha$ -androstane);  
**Quinbolone**;  
**Stanozolol**;  
**Stenbolone**;  
**Tetrahydrogestrinone** (17-hydroxy-18 $\alpha$ -homo-19-nor-17 $\alpha$ -pregna-4,9,11-trien-3-one);  
**Trenbolone** (17 $\beta$ -hydroxyestr-4,9,11-trien-3-one);

and other substances with a similar chemical structure or similar biological effect(s).

**b. Endogenous\*\* AAS when administered exogenously:**

Androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol);  
Androstenedione (androst-4-ene-3,17-dione);  
Dihydrotestosterone (17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one);  
Prasterone (dehydroepiandrosterone, DHEA,  
3 $\beta$ -hydroxyandrost-5-en-17-one);  
Testosterone;

and their metabolites and isomers, including but not limited to:

3 $\beta$ -Hydroxy-5 $\alpha$ -androstan-17-one;  
5 $\alpha$ -Androstane-3 $\alpha$ ,17 $\alpha$ -diol;  
5 $\alpha$ -Androstane-3 $\alpha$ ,17 $\beta$ -diol;  
5 $\alpha$ -Androstane-3 $\beta$ ,17 $\alpha$ -diol;  
5 $\alpha$ -Androstane-3 $\beta$ ,17 $\beta$ -diol;  
5 $\beta$ -Androstane-3 $\alpha$ ,17 $\beta$ -diol;  
7 $\alpha$ -Hydroxy-DHEA;  
7 $\beta$ -Hydroxy-DHEA;  
4-Androstenediol (androst-4-ene-3 $\beta$ , 17 $\beta$ -diol)  
5-Androstenedione (androst-5-ene-3,17-dione);  
7-Keto-DHEA;  
19-Norandrosterone;  
19-Noretiocholanolone.  
Androst-4-ene-3 $\alpha$ ,17 $\alpha$ -diol;  
Androst-4-ene-3 $\alpha$ ,17 $\beta$ -diol;  
Androst-4-ene-3 $\beta$ ,17 $\alpha$ -diol;  
Androst-5-ene-3 $\alpha$ ,17 $\alpha$ -diol;  
Androst-5-ene-3 $\alpha$ ,17 $\beta$ -diol;  
Androst-5-ene-3 $\beta$ ,17 $\alpha$ -diol;  
Androsterone  
Epi-dihydrotestosterone;  
Epitestosterone;  
Etiocholanolone.

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**2. OTHER ANABOLIC AGENTS**

**Including, but not limited to:**

Clenbuterol, selective androgen receptor modulators (SARMs, e.g. andarine and ostarine), tibolone, zeranol and zilpaterol.

**For purposes of this section:**

- \* "exogenous" refers to a substance which is not ordinarily produced by the body naturally.
- \*\* "endogenous" refers to a substance which is ordinarily produced by the body naturally.

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**S2 PEPTIDE HORMONES, GROWTH FACTORS, RELATED SUBSTANCES AND MIMETICS**

The following substances, and other substances with similar chemical structure or similar biological effect(s), are prohibited:

1. Erythropoietin-Receptor agonists:
  - 1.1 Erythropoiesis-Stimulating Agents (ESAs) including e.g. Darbepoietin (dEPO); Erythropoietins (EPO); EPO-Fc; EPO-mimetic peptides (EMP), e.g. CNTO 530 and peginesatide; Methoxy polyethylene glycol-epoetin beta (CERA).
  - 1.2 Non-erythropoietic EPO-Receptor agonists, e.g. ARA-290; Asialo EPO; Carbamylated EPO.
2. Hypoxia-inducible factor (HIF) stabilizers, e.g. cobalt and FG-4592; and HIF activators, e.g. argon, xenon.
3. Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their releasing factors, e.g. buserelin, gonadorelin and triptorelin, in males.
4. Corticotrophins and their releasing factors, e.g. corticorelin.

5. Growth Hormone (GH) and its releasing factors including Growth Hormone Releasing Hormone (GHRH) and its analogues, e.g. CJC-1295, sermorelin and tesamorelin; Growth Hormone Secretagogues (GHS), e.g. ghrelin and ghrelin mimetics, e.g. anamorelin and ipamorelin; and GH-Releasing Peptides (GHRPs), e.g. alexamorelin, GHRP-6, hexarelin and pralmorelin (GHRP-2).

Additional prohibited growth factors:

**F**ibroblast Growth Factors (FGFs);

**H**epatocyte Growth Factor (HGF);

**I**nsulin-like Growth Factor-1 (IGF-1) and its analogues;

**M**echano Growth Factors (MGFs);

**P**latelet-Derived Growth Factor (PDGF);

**V**ascular-Endothelial Growth Factor (VEGF) and any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching.

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### S3 BETA-2 AGONISTS

All beta-2 agonists, including all optical isomers, e.g. *d*- and *l*- where relevant, are prohibited.

**Except:**

- Inhaled salbutamol (maximum 1600 micrograms over 24 hours);
- Inhaled formoterol (maximum delivered dose 54 micrograms over 24 hours); and
- Inhaled salmeterol in accordance with the manufacturers' recommended therapeutic regimen.

The presence in urine of salbutamol in excess of 1000 ng/mL or formoterol in excess of 40 ng/mL is presumed not to be an intended therapeutic use of the substance and will be considered as an *Adverse Analytical Finding (AAF)* unless the *Athlete* proves, through a controlled pharmacokinetic study, that the abnormal result was the consequence of the use of the therapeutic inhaled dose up to the maximum indicated above.

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### S4 HORMONE AND METABOLIC MODULATORS

The following hormone and metabolic modulators are prohibited:

1. Aromatase inhibitors including, but not limited to:
  - 4-Androstene-3,6,17 trione (6-oxo);**
  - Aminoglutethimide;**
  - Anastrozole;**
  - Androsta-1,4,6-triene-3,17-dione (androstatrienedione);**
  - Exemestane;**
  - Formestane;**
  - Letrozole;**
  - Testolactone.**
2. Selective estrogen receptor modulators (SERMs) including, but not limited to:
  - Raloxifene;**
  - Tamoxifen;**
  - Toremifene.**
3. Other anti-estrogenic substances including, but not limited to:
  - Clomiphene;**
  - Cyclofenil;**
  - Fulvestrant.**
4. Agents modifying myostatin function(s) including, but not limited, to: myostatin inhibitors.
5. Metabolic modulators:
  - 5.1 Activators of the AMP-activated protein kinase (AMPK), e.g. AICAR; and Peroxisome Proliferator Activated Receptor  $\delta$  (PPAR $\delta$ ) agonists, e.g. GW 1516;
  - 5.2 Insulins and insulin-mimetics;
  - 5.3 Meldonium;
  - 5.4 Trimetazidine.

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## S5 DIURETICS AND MASKING AGENTS

The following diuretics and masking agents are prohibited, as are other substances with a similar chemical structure or similar biological effect(s).

### Including, but not limited to:

- Desmopressin; probenecid; plasma expanders, e.g. glycerol and intravenous administration of albumin, dextran, hydroxyethyl starch and mannitol.
- Acetazolamide; amiloride; bumetanide; canrenone; chlortalidone; etacrynic acid; furosemide; indapamide; metolazone; spironolactone; thiazides, e.g. bendroflumethiazide, chlorothiazide and hydrochlorothiazide; triamterene and vaptans, e.g. tolvaptan.

### Except:

- Drosiprenone; pamabrom; and ophthalmic use of carbonic anhydrase inhibitors (e.g. dorzolamide, brinzolamide).
- Local administration of felypressin in dental anaesthesia.

The detection in an *Athlete's Sample* at all times or *In-Competition*, as applicable, of any quantity of the following substances subject to threshold limits: formoterol, salbutamol, cathine, ephedrine, methylephedrine and pseudoephedrine, in conjunction with a diuretic or masking agent, will be considered as an *Adverse Analytical Finding* unless the *Athlete* has an approved *TUE* for that substance in addition to the one granted for the diuretic or masking agent.

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## PROHIBITED METHODS

## M1 MANIPULATION OF BLOOD AND BLOOD COMPONENTS

### The following are prohibited:

1. The *Administration* or reintroduction of any quantity of autologous, allogenic (homologous) or heterologous blood, or red blood cell products of any origin into the circulatory system.
2. Artificially enhancing the uptake, transport or delivery of oxygen. Including, but not limited to: Perfluorochemicals; efaproxiral (RSR13) and modified haemoglobin products, e.g. haemoglobin-based blood substitutes and microencapsulated haemoglobin products, excluding supplemental oxygen.
3. Any form of intravascular manipulation of the blood or blood components by physical or chemical means.

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## M2 CHEMICAL AND PHYSICAL MANIPULATION

### The following are prohibited:

1. *Tampering, or Attempting to Tamper*, to alter the integrity and validity of *Samples* collected during *Doping Control*.  
Including, but not limited to:  
Urine substitution and/or adulteration, e.g. proteases.
2. Intravenous infusions and/or injections of more than 50 mL per 6 hour period except for those legitimately received in the course of hospital admissions, surgical procedures or clinical investigations.

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## M2 GENE DOPING

### The following, with the potential to enhance sport performance, are prohibited:

1. The transfer of polymers of nucleic acids or nucleic acid analogues;
2. The use of normal or genetically modified cells.

# SUBSTANCES & METHODS PROHIBITED IN-COMPETITION

IN ADDITION TO THE CATEGORIES S0 TO S5 AND M1 TO M3 DEFINED ABOVE, THE FOLLOWING CATEGORIES ARE PROHIBITED *IN-COMPETITION*:

## PROHIBITED SUBSTANCES

### S6 STIMULANTS

All stimulants, including all optical isomers, e.g. *d*- and *l*- where relevant, are prohibited.

#### Stimulants include:

##### a: Non-Specified Stimulants:

Adrafinil;  
Amfepramone;  
Amfetamine;  
Amfetaminil;  
Amiphenazole;  
**B**enfluorex;  
Benzylpiperazine;  
Bromantan;  
**C**lobenzorex;  
Cocaine;  
Cropropamide;  
Crotetamide;  
**F**encamine;  
Fenetylline;  
Fenfluramine;  
Fenproporex;  
Fonturacetam [4-phenylpiracetam (carphedon)];  
Furfenorex;  
**M**efenorex;  
Mephentermine;  
Mesocarb;  
Metamfetamine(*d*-);  
*p*-Methylamphetamine;  
Modafinil;  
**N**orfenfluramine;  
**P**hendimetrazine;  
Phentermine;  
Prenylamine;  
Prolintane.

##### b: Specified Stimulants.

Including, but not limited to:

**B**enzfetamine;  
**C**athine\*\*;  
Cathinone and its analogues, e.g. mephedrone, methedrone, and  $\alpha$ -pyrrolidinovalerophenone;  
**D**imethylamphetamine;  
**E**phedrine\*\*\*;  
Epinephrine\*\*\*\* (adrenaline);  
Etamivan;  
Etilamphetamine;  
Etilefrine;  
**F**amprofazone;  
Fenbutrazate;  
Fencamfamin;  
**H**eptaminol;  
Hydroxyamphetamine (parahydroxyamphetamine);  
Isometheptene;  
**L**evmetamfetamine;  
**M**eclofenoxate;  
Methylenedioxymethamphetamine;  
Methylephedrine\*\*\*;  
Methylhexaneamine (dimethylpentylamine);  
Methylphenidate;  
**N**ikethamide;  
Norfenefrine;  
**O**ctopamine;  
Oxilofrine (methylnephrine);  
**P**emoline;  
Pentetrazol;  
Phenethylamine and its derivatives;  
Phenmetrazine;  
Phenpromethamine;  
Propylhexedrine;  
Pseudoephedrine\*\*\*\*;  
**S**elegiline;

A stimulant not expressly listed in this section is a Specified Substance.

Sibutramine;  
Strychnine;  
Tenamfetamine (methylenedioxyamphetamine);  
Tuaminoheptane;

and other substances with a similar chemical structure or similar biological effect(s).

**Except:**

- Clonidine
- Imidazole derivatives for topical/ophthalmic use and those stimulants included in the 2016 Monitoring Program\*.

\* Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, and synephrine: These substances are included in the 2016 Monitoring Program, and are not considered *Prohibited Substances*.

\*\* Cathine: Prohibited when its concentration in urine is greater than 5 micrograms per milliliter.

\*\*\* Ephedrine and methylephedrine: Prohibited when the concentration of either in urine is greater than 10 micrograms per milliliter.

\*\*\*\* Epinephrine (adrenaline): Not prohibited in local administration, e.g. nasal, ophthalmologic, or co-administration with local anaesthetic agents.

\*\*\*\*\* Pseudoephedrine: Prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

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**S7 NARCOTICS**

**Prohibited:**

Buprenorphine;  
Dextromoramide;  
Diamorphine (heroin);  
Fentanyl and its derivatives;  
Hydromorphone;  
Methadone;  
Morphine;  
Oxycodone;  
Oxymorphone;  
Pentazocine;  
Pethidine.

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**S8 CANNABINOIDS**

**Prohibited:**

- Natural, e.g. cannabis, hashish and marijuana, or synthetic  $\Delta^9$ -tetrahydrocannabinol (THC).
- Cannabimimetics, e.g. "Spice", JWH-018, JWH-073, HU-210.

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**S9 GLUCOCORTICOIDS**

All glucocorticoids are prohibited when administered by oral, intravenous, intramuscular or rectal routes.

# SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

## P1 ALCOHOL

Alcohol (ethanol) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold is equivalent to a blood alcohol concentration of 0.10 g/L.

- Air Sports (FAI)
- Archery (WA)
- Automobile (FIA)
- Powerboating (UIM)

## P2 BETA-BLOCKERS

Beta-blockers are prohibited *In-Competition* only, in the following sports, and also prohibited *Out-of-Competition* where indicated.

- Archery (WA)\*
- Automobile (FIA)
- Billiards (all disciplines) (WCBS)
- Darts (WDF)
- Golf (IGF)
- Shooting (ISSF, IPC)\*
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerals/halfpipe and snowboard halfpipe/big air
- Underwater sports (CMAS) in constant-weight apnoea with or without fins, dynamic apnoea with and without fins, free immersion apnoea, Jump Blue apnoea, spearfishing, static apnoea, target shooting and variable weight apnoea.

\*Also prohibited *Out-of-Competition*

Including, but not limited to:

<b>A</b> cebutolol;	<b>L</b> abetalol;
<b>A</b> lprenolol;	<b>L</b> evobunolol;
<b>A</b> tenolol;	<b>M</b> etipranolol;
<b>B</b> etaxolol;	<b>M</b> etoprolol;
<b>B</b> isoprolol;	<b>N</b> adolol;
<b>B</b> unolol;	<b>O</b> xprenolol;
<b>C</b> arteolol;	<b>P</b> indolol;
<b>C</b> arvedilol;	<b>P</b> ropranolol;
<b>C</b> eliprolol;	<b>S</b> otalol;
<b>E</b> smolol;	<b>T</b> imolol.

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