

# Conference of Parties to the International Convention against Doping in Sport

First Session

Paris, UNESCO Headquarters  
5-7 February 2007

## Excerpt:

### **Item 5 – Approval of the 2007 Prohibited List International Standard**

Pursuant to Article 34.1 of the Convention and following WADA's communication of the 2007 Prohibited List to the UNESCO Director-General, the Secretariat submitted document ICDS/1CP/Doc.4 to the Conference of Parties for approval.

During the ensuing debate, a number of States Parties stressed the need for a chronological update of the Prohibited List on the one hand and of the procedures for their adoption in accordance with the provisions of Article 34.1 of the Convention on the other.

The Conference of Parties thus approved the resolution concerning the Prohibited List and an amendment to the proposed draft, taking into account the change from the 2005 List to the 2007 List.



# The World Anti-Doping Code

# THE 2007 PROHIBITED LIST INTERNATIONAL STANDARD

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.

**This List shall come into effect on 1 January 2007**

# THE 2007 PROHIBITED LIST WORLD ANTI-DOPING CODE

Valid 1 January 2007

The use of any drug should be limited to medically justified indications

## SUBSTANCES AND METHODS PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)

### PROHIBITED SUBSTANCES

#### S1. ANABOLIC AGENTS

Anabolic agents are prohibited.

##### 1. Anabolic Androgenic Steroids (AAS)

a. Exogenous\* AAS, including:

**1-androstendiol** (5 $\alpha$ -androst-1-ene-3 $\beta$ ,17 $\beta$ -diol ); **1-androstendione** (5 $\alpha$ -androst-1-ene-3,17-dione); **bolandioli** (19-norandrostenediol); **bolasterone**; **boldenone**; **boldione** (androsta-1,4-diene-3,17-dione); **calusterone**; **clostebol**; **danazol** (17 $\alpha$ -ethynyl-17 $\beta$ -hydroxyandrost-4-eno[2,3-d]isoxazole); **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-nor-17 $\alpha$ -pregn-4-en-17-ol); **fluoxymesterone**; **formebolone**; **furazabol** (17 $\beta$ -hydroxy-17 $\alpha$ -methyl-5 $\alpha$ -androsta[2,3-c]-furazan); **gestrinone**; **4-hydroxytestosterone** (4,17 $\beta$ -dihydroxyandrost-4-en-3-one); **mestanolone**; **mesterolone**; **metenolone**; **methandienone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylandrosta-1,4-dien-3-one); **methandriol**; **methasterone** (2 $\alpha$ , 17 $\alpha$ -dimethyl-5 $\alpha$ -androstane-3-one-17 $\beta$ -ol); **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); **methyltrienolone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylestra-4,9,11-trien-3-one); **methyltestosterone**; **mibolone**; **nandrolone**; **19-norandrostenedione** (estr-4-ene-3,17-dione); **norboletone**; **norclostebol**; **norethandrolone**; **oxabolone**; **oxandrolone**; **oxymesterone**; **oxymetholone**; **prostanazol** ([3,2-c]pyrazole-5 $\alpha$ -etioallocholane-17 $\beta$ -tetrahydropyranol); **quinbolone**; **stanozolol**; **stenbolone**; **1-testosterone** (17 $\beta$ -hydroxy-5 $\alpha$ -androst-1-en-3-

one); **tetrahydrogestrinone** (18a-homo-pregna-4,9,11-trien-17 $\beta$ -ol-3-one); **trenbolone** and other substances with a similar chemical structure or similar biological effect(s).

b. Endogenous\*\* AAS:

**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); **testosterone** and the following metabolites and isomers:

**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; 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; 4-androstenediol (androst-4-ene-3 $\beta$ ,17 $\beta$ -diol); 5-androstenedione (androst-5-ene-3,17-dione); epi-dihydrotestosterone; 3 $\alpha$ -hydroxy-5 $\alpha$ -androstan-17-one; 3 $\beta$ -hydroxy-5 $\alpha$ -androstan-17-one; 19-norandrosterone; 19-noretiocholanolone.**

Where an anabolic androgenic steroid is capable of being produced endogenously, a *Sample* will be deemed to contain such *Prohibited Substance* where the concentration of such *Prohibited Substance* or its metabolites or markers and/or any other relevant ratio(s) in the *Athlete's Sample* so deviates from the range of values normally found in humans that it is unlikely to be consistent with normal endogenous production. A *Sample* shall not be deemed to contain a *Prohibited Substance* in any such case where an *Athlete* proves that the concentration of the *Prohibited Substance* or its metabolites or markers and/or the relevant ratio(s) in the *Athlete's Sample* is attributable to a physiological or pathological condition.

In all cases, and at any concentration, the *Athlete's* sample will be deemed to contain a *Prohibited Substance* and the laboratory will report an *Adverse Analytical Finding* if, based on any reliable analytical method (e.g. IRMS), the laboratory can show that the *Prohibited Substance* is of exogenous origin. In such case, no further investigation is necessary.

If a value in the range of levels normally found in humans is reported and the reliable analytical method (e.g. IRMS) has not determined the exogenous origin of the substance, but if there are indications, such as a comparison to endogenous reference steroid profiles, of a possible *Use of a Prohibited Substance*, further investigation shall be conducted by the relevant *Anti-Doping Organization* by reviewing the results of any previous test(s) or by conducting subsequent test(s), in order to determine whether the result is due to a physiological or pathological condition, or has occurred as a consequence of the exogenous origin of a *Prohibited Substance*.

When a laboratory has reported a T/E ratio greater than four (4) to one (1) and any reliable analytical method (e.g. IRMS) applied has not determined the exogenous origin of the substance, further investigation may be conducted by a review of previous tests or by conducting subsequent test(s), in order to determine whether the result is due to a physiological or pathological condition, or has occurred as a consequence of the exogenous origin of a *Prohibited Substance*. If a laboratory reports, using an additional reliable analytical method (e.g. IRMS), that the *Prohibited Substance* is of exogenous origin, no further investigation is necessary and the *Sample* will be deemed to contain such *Prohibited Substance*. When an additional reliable analytical method (e.g. IRMS) has not been applied and a minimum of three previous test results are not available, a longitudinal profile of the *Athlete* shall be established by performing a minimum of three no advance notice tests in a period of three months by the relevant *Anti-Doping Organization*. If the longitudinal profile of the *Athlete* established by the subsequent tests is not physiologically normal, the result shall be reported as an *Adverse Analytical Finding*.

In extremely rare individual cases, boldenone of endogenous origin can be consistently found at very low nanograms per milliliter (ng/mL) levels in urine. When such a very low concentration of boldenone is reported by a laboratory and the application of any reliable analytical method (e.g. IRMS) has not determined the exogenous origin of the substance, further investigation may be conducted by subsequent tests. When an additional reliable analytical method (e.g. IRMS) has not been applied, a longitudinal profile of the athlete shall be established by performing a minimum of three no advance notice tests in a period of three months by the relevant *Anti-Doping Organization*. If the longitudinal profile of the *Athlete* established by the subsequent tests is not physiologically normal, the result shall be reported as an *Adverse Analytical Finding*.

For 19-norandrosterone, an *Adverse Analytical Finding* reported by a laboratory is considered to be scientific and valid proof of exogenous origin of the *Prohibited Substance*. In such case, no further investigation is necessary.

Should an *Athlete* fail to cooperate in the investigations, the *Athlete's Sample* shall be deemed to contain a *Prohibited Substance*.

## **2. Other Anabolic Agents, including but not limited to:**

**Clenbuterol, tibolone, zeranol, zilpaterol.**

*For purposes of this section:*

\* *"exogenous" refers to a substance which is not ordinarily capable of being produced by the body naturally.*

\*\* *"endogenous" refers to a substance which is capable of being produced by the body naturally.*

## **S2. HORMONES AND RELATED SUBSTANCES**

The following substances, including other substances with a similar chemical structure or similar biological effect(s), and their releasing factors, are prohibited:

- 1. Erythropoietin (EPO);**
- 2. Growth Hormone (hGH), Insulin-like Growth Factors (e.g. IGF-1), Mechano Growth Factors (MGFs);**
- 3. Gonadotrophins (LH, hCG), prohibited in males only;**
- 4. Insulin;**
- 5. Corticotrophins.**

Unless the *Athlete* can demonstrate that the concentration was due to a physiological or pathological condition, a *Sample* will be deemed to contain a *Prohibited Substance* (as listed above) where the concentration of the *Prohibited Substance* or its metabolites and/or relevant ratios or markers in the *Athlete's Sample* so exceeds the range of values normally found in humans that it is unlikely to be consistent with normal endogenous production.

If a laboratory reports, using a reliable analytical method, that the *Prohibited Substance* is of exogenous origin, the *Sample* will be deemed to contain a *Prohibited Substance* and shall be reported as an *Adverse Analytical Finding*.

The presence of other substances with a similar chemical structure or similar biological effect(s), diagnostic marker(s) or releasing factors of a hormone listed above or of any other finding which indicate(s) that the substance detected is of exogenous origin, will be deemed to reflect the use of a *Prohibited Substance* and shall be reported as an *Adverse Analytical Finding*.

## **S3. BETA-2 AGONISTS**

All beta-2 agonists including their D- and L-isomers are prohibited.

As an exception, formoterol, salbutamol, salmeterol and terbutaline when administered by inhalation, require an abbreviated Therapeutic Use Exemption.

Despite the granting of any form of Therapeutic Use Exemption, a concentration of salbutamol (free plus glucuronide) greater than 1000 ng/mL will be considered an *Adverse Analytical Finding* unless the *Athlete* proves that the abnormal result was the consequence of the therapeutic use of inhaled salbutamol.

#### **S4. AGENTS WITH ANTI-ESTROGENIC ACTIVITY**

The following classes of anti-estrogenic substances are prohibited:

1. **Aromatase inhibitors including, but not limited to, anastrozole, letrozole, aminoglutethimide, exemestane, formestane, 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.**

#### **S5. DIURETICS AND OTHER MASKING AGENTS**

Masking agents are prohibited. They include:

**Diuretics\***, **epitestosterone**, **probenecid**, **alpha-reductase inhibitors** (e.g. **finasteride**, **dutasteride**), **plasma expanders** (e.g. **albumin**, **dextran**, **hydroxyethyl starch**) and other substances with similar biological effect(s).

Diuretics include:

**acetazolamide**, **amiloride**, **bumetanide**, **canrenone**, **chlorthalidone**, **etacrynic acid**, **furosemide**, **indapamide**, **metolazone**, **spironolactone**, **thiazides** (e.g. **bendroflumethiazide**, **chlorothiazide**, **hydrochlorothiazide**), **triamterene**, and other substances with a similar chemical structure or similar biological effect(s) (except for drosperinone, which is not prohibited).

\* A Therapeutic Use Exemption is not valid if an *Athlete's* urine contains a diuretic in association with threshold or sub-threshold levels of a *Prohibited Substance(s)*.

# PROHIBITED METHODS

## **M1. ENHANCEMENT OF OXYGEN TRANSFER**

The following are prohibited:

1. Blood doping, including the use of autologous, homologous or heterologous blood or red blood cell products of any origin.
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, microencapsulated haemoglobin products).

## **M2. CHEMICAL AND PHYSICAL MANIPULATION**

1. *Tampering*, or attempting to tamper, in order to alter the integrity and validity of *Samples* collected during *Doping Controls* is prohibited. These include but are not limited to catheterisation, urine substitution and/or alteration.
2. Intravenous infusions are prohibited, except as a legitimate medical treatment.

## **M3. GENE DOPING**

The non-therapeutic use of cells, genes, genetic elements, or of the modulation of gene expression, having the capacity to enhance athletic performance, is prohibited.



# SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

**In addition to the categories S1 to S5 and M1 to M3 defined above,  
the following categories are prohibited in competition:**

## PROHIBITED SUBSTANCES

### **S6. STIMULANTS**

All stimulants (including both their (D- & L-) optical isomers where relevant) are prohibited, except imidazole derivatives for topical use and those stimulants included in the 2007 Monitoring Program\*.

Stimulants include:

**Adrafinil, adrenaline\*\* , amfepramone, amiphenazole, amphetamine, amphetaminil, benzphetamine, benzylpiperazine, bromantan, cathine\*\*\* , clobenzorex, cocaine, cropropamide, crotetamide, cyclazodone, dimethylamphetamine, ephedrine\*\*\*\* , etamivan, etilamphetamine, etilefrine, famprofazone, fenbutrazate, fencamfamin, fencamine, fenetylline, fenfluramine, fenproporex, furfenorex, heptaminol, isometheptene, levmethamfetamine, meclofenoxate, mefenorex, mephentermine, mesocarb, methamphetamine (D-), methylenedioxyamphetamine, methylenedioxymethamphetamine, p-methylamphetamine, methylephedrine\*\*\*\* , methylphenidate, modafinil, nikethamide, norfenefrine, norfenfluramine, octopamine, ortetamine, oxilofrine, parahydroxyamphetamine, pemoline, pentetrazol, phendimetrazine, phenmetrazine, phenpromethamine, phentermine, 4-phenylpiracetam (carphedon), prolintane, propylhexedrine, selegiline, sibutramine, strychnine, tuaminoheptane** and other substances with a similar chemical structure or similar biological effect(s).

\* The following substances included in the 2007 Monitoring Program (bupropion, caffeine, phenylephrine, phenylpropanolamine, pipradol, pseudoephedrine, synephrine) are not considered as *Prohibited Substances*.

\*\* Adrenaline associated with local anaesthetic agents or by local administration (e.g. nasal, ophthalmologic) is not prohibited.

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

\*\*\*\* Each of **ephedrine** and **methylephedrine** is prohibited when its concentration in urine is greater than 10 micrograms per milliliter.

A stimulant not expressly mentioned as an example under this section should be considered as a Specified Substance only if the *Athlete* can establish that the substance is particularly susceptible to unintentional anti-doping rule violations because of its general availability in medicinal products or is less likely to be successfully abused as a doping agent.

## **S7. NARCOTICS**

The following narcotics are prohibited:

**buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, pethidine.**

## **S8. CANNABINOIDS**

Cannabinoids (e.g. hashish, marijuana) are prohibited.

## **S9. GLUCOCORTICOSTEROIDS**

All glucocorticosteroids are prohibited when administered orally, rectally, intravenously or intramuscularly. Their use requires a Therapeutic Use Exemption approval.

Other routes of administration (intraarticular /periarticular/ peritendinous/ epidural/ intradermal injections and inhalation) require an Abbreviated Therapeutic Use Exemption except as noted below.

Topical preparations when used for dermatological (including iontophoresis/phonophoresis), auricular, nasal, ophthalmic, buccal, gingival and perianal disorders are not prohibited and do not require any form of Therapeutic Use Exemption.

# 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 (haematological values) for each Federation is reported in parenthesis.

- |                            |            |                                    |            |
|----------------------------|------------|------------------------------------|------------|
| • Aeronautic (FAI)         | (0.20 g/L) | • Karate (WKF)                     | (0.10 g/L) |
| • Archery (FITA, IPC)      | (0.10 g/L) | • Modern Pentathlon (UIPM)         | (0.10 g/L) |
| • Automobile (FIA)         | (0.10 g/L) | for disciplines involving shooting |            |
| • Boules (CMSB, IPC bowls) | (0.10 g/L) | • Motorcycling (FIM)               | (0.10 g/L) |
|                            |            | • Powerboating (UIM)               | (0.30 g/L) |

## P2. BETA-BLOCKERS

Unless otherwise specified, beta-blockers are prohibited *in-competition* only, in the following sports.

- |  |   |
|--|---|
| • Aeronautic (FAI)   | • Modern Pentathlon (UIPM) for disciplines involving shooting   |
| • Archery (FITA, IPC) (also prohibited <i>out-of-competition</i> ) | • Nine-pin bowling (FIQ)  |
| • Automobile (FIA)   | • Sailing (ISAF) for match race helms only  |
| • Billiards (WCBS)   | • Shooting (ISSF, IPC) (also prohibited <i>out-of-competition</i> )                                   |
| • Bobsleigh (FIBT)   | • Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air |
| • Boules (CMSB, IPC bowls)   | • Wrestling (FILA)  |
| • Bridge (FMB)   |   |
| • Curling (WCF)  |   |
| • Gymnastics (FIG)   |   |
| • Motorcycling (FIM)   |   |

Beta-blockers include, but are not limited to, the following:

**acebutolol, alprenolol, atenolol, betaxolol, bisoprolol, bunolol, carteolol, carvedilol, celiprolol, esmolol, labetalol, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, propranolol, sotalol, timolol.**

## SPECIFIED SUBSTANCES\*

"Specified Substances"\* are listed below:

- All inhaled Beta-2 Agonists, except salbutamol (free plus glucuronide) greater than 1000 ng/mL and clenbuterol;
- Probenecid;
- Cathine, cropropamide, crotetamide, ephedrine, etamivan, famprofazone, heptaminol, isometheptene, levmethamphetamine, meclofenoxate, p-methylamphetamine, methylephedrine, nikethamide, norfenefrine, octopamine, ortetamine, oxilofrine, phenpromethamine, propylhexedrine, selegiline, sibutramine, tuaminoheptane, and any other stimulant not expressly listed under section S6 for which the Athlete establishes that it fulfills the conditions described in section S6;
- Cannabinoids;
- All Glucocorticosteroids;
- Alcohol;
- All Beta Blockers.

\* *"The Prohibited List may identify specified substances which are particularly susceptible to unintentional anti-doping rule violations because of their general availability in medicinal products or which are less likely to be successfully abused as doping agents."* A doping violation involving such substances may result in a reduced sanction provided that the *"...Athlete can establish that the Use of such a specified substance was not intended to enhance sport performance..."*