The World Anti-Doping Code

THE 2006 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 2006.
THE 2006 PROHIBITED LIST
WORLD ANTI-DOPING CODE
Valid 1 January 2006

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 (5α-androst-1-ene-3β,17β-diol); 1-androstendione (5α-androst-1-ene-3,17-dione); bolandiol (19-norandrostenediol); bolasterone; boldenone; boldione (androst-1,4-diene-3,17-dione); calusterone; clostebol; danazol (17α-ethynyl-17β-hydroxyandrost-4-eno[2,3-d]isoxazole); dehydrochlormethyltestosterone (17α-methyl-5α-androst-2-en-17β-ol); desoxymethyltestosterone (17α-methyl-5α-androst-2-en-17β-ol); drostanolone; ethylestrenol (19-nor-17α-pregn-4-en-17-ol); fluoxymesterone; formebolone; furazabol (17β-hydroxy-17α-methyl-5α-androstano[2,3-c]-furan); gestrinone; 4-hydroxytestosterone (4,17β-dihydroxyandrost-4-en-3-one); mestanolone; mesterolone; metenolone; methandienone (17β-hydroxy-17α-methylandrosta-1,4-dien-3-one); methandriol; methasterone (2α, 17α-dimethyl-5α-androstane-3-one-17β-ol); methylidenolone (17β-hydroxy-17α-methyllestra-4,9-dien-3-one); methyl-1-testosterone (17β-hydroxy-17α-methyl-5α-androst-1-en-3-one); methylnortestosterone (17β-hydroxy-17α-methylene-4-en-3-one); methyltrienolone (17β-hydroxy-17α-methylene-4,9,11-trien-3-one); methyltestosterone; mibolerone; nandrolone; 19-norandrostenedione (estr-4-ene-3,17-dione); norboleton; norclostebol; norethandroline; oxabolone; oxandrolone; oxymesterone; oxymetholone; prostanozol ([3,2-c]pyrazole-5α-etoallocholane-17β-tetrahydropyranol); quinbolone; stanozolol; stenbolone; 1-testosterone (17β-hydroxy-5α-
androst-1-en-3-one); tetrahydrogestrinone (18α-homo-pregna-4,9,11,17β-tetrahydrogestrinone-3-one); trenbolone and other substances with a similar chemical structure or similar biological effect(s).

β. Endogenous** AAS:

androstenediol (androst-5-ene-3β,17β-diol); androstenedione (androst-4-ene-3β,17β-dione); dihydrotestosterone (17β-hydroxy-5α-androstan-3-one); prasterone (dehydroepiandrosterone, DHEA); testosterone and the following metabolites and isomers:

5α-androstane-3α,17α-diol; 5α-androstane-3β,17α-diol; 5α-androstan-3β,17β-diol; androst-4-ene-3α,17α-diol; androst-4-ene-3β,17α-diol; androst-5-ene-3α,17α-diol; androst-5-ene-3β,17α-diol; androst-5-ene-3β,17β-diol; androst-5-ene-3β,17β-diol; 4-androstenediol (androst-4-ene-3β,17β-diol); 5-androstenedione (androst-5-ene-3β,17β-diol); epi-dihydrotestosterone; 3α-hydroxy-5α-androstan-17-one; 3β-hydroxy-5α-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 serious indications, such as a comparison to 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, the relevant Anti-Doping Organization shall test the Athlete with no advance notice at least three times within a three-month period. If the longitudinal profile of the Athlete that is subject to 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 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). When an additional reliable analytical method (e.g. IRMS) has not been applied, a minimum of three no advance notice tests in a period of three months shall be conducted by the relevant Anti-Doping Organization. If the longitudinal profile of the Athlete who is subject to 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.

**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, aminogluthethimide, 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 include but are not limited to:

Diuretics*, epitestosterone, probenecid, alpha-reductase inhibitors (e.g. finasteride, dutasteride), plasma expanders (e.g. albumin, dextran, hydroxyethyl starch).

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:

a. Blood doping, including the use of autologous, homologous or heterologous blood or red blood cell products of any origin.

b. 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**

a. 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.

b. Intravenous infusions are prohibited, except as a legitimate acute 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.
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**

The following stimulants are prohibited, including both their optical (D- and L-) isomers where relevant:

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

* 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.
**** The following substances included in the 2006 Monitoring Program (bupropion, caffeine, phenylephrine, phenylpropanolamine, pipradol, pseudoephedrine, synephrine) are not considered as Prohibited Substances.
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.

Except as indicated below, other routes of administration require an abbreviated Therapeutic Use Exemption.

Topical preparations when used for dermatological, aural/otic, nasal, buccal cavity and ophthalmologic 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 for each Federation is reported in parenthesis.

- Aeronautic (FAI) (0.20 g/L)
- Archery (FITA, IPC) (0.10 g/L)
- Automobile (FIA) (0.10 g/L)
- Billiards (WCBS) (0.20 g/L)
- Boules (CMSB, IPC bowls) (0.10 g/L)
- Karate (WKF) (0.10 g/L)
- Modern Pentathlon (UIPM) (0.10 g/L) for disciplines involving shooting
- 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)
- Archery (FITA, IPC) (also prohibited out-of-competition)
- Automobile (FIA)
- Billiards (WCBS)
- Bobsleigh (FIBT)
- Boules (CMSB, IPC bowls)
- Bridge (FMB)
- Chess (FIDE)
- Curling (WCF)
- Gymnastics (FIG)
- Motorcycling (FIM)
- Modern Pentathlon (UIPM) for disciplines involving shooting
- Nine-pin bowling (FIQ)
- Sailing (ISAF) for match race helms only
- Shooting (ISSF, IPC) (also prohibited out-of-competition)
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air
- Wrestling (FILA)

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”* are listed below:

- All inhaled Beta-2 Agonists, except clenbuterol;
- Probenecid;
- Cathine, cropropamide, crotetamide, ephedrine, etamivan, famprofazone, heptaminol, isometheptene, levemethamfetamine, meclofenoxate, p-methy lamphetamine, methylephedrine, nikethamide, norfenefrine, octopamine, ortetamine, oxilofrine, phenpromethamine, propylhexedrine, selegiline, sibutramine;
- 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…”