

International Olympic Committee  
Medical Code

# **PROHIBITED CLASSES OF SUBSTANCES AND PROHIBITED METHODS**

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*Antagen av RF:s Dopingkommission med giltighet fr.o.m. 97-05-01*

Doping contravenes the ethics of both sport and medical science.

Doping consists of:

1. The administration of substances belonging to prohibited classes of pharmacological agents and/or
2. The use of various doping methods.

## **I. PROHIBITED CLASSES OF SUBSTANCES**

- A. Stimulants
- B. Narcotics
- C. Anabolic Agents
- D. Diuretics
- E. Peptide and glycoprotein hormones and analogues

## **II. DOPING METHODS**

- A. Blood doping
- B. Pharmacological, chemical and physical manipulation

## **III. CLASSES OF DRUGS SUBJECT TO CERTAIN RESTRICTIONS**

- A. Alcohol
- B. Marijuana
- C. Local anaesthetics
- D. Corticosteroids
- E. Beta-blockers

# **I. PROHIBITED CLASSES OF SUBSTANCES**

Prohibited substances fall into the following classes of substances:

- A. Stimulants
- B. Narcotics
- C. Anabolic Agents
- D. Diuretics
- E. Peptide and glycoprotein hormones and analogues

## **A. Stimulants**

Prohibited substances in class (a) include the following examples:

*amiphenazole*  
*amphetamines*  
*amineptine*  
*bromantan*  
*caffeine \**  
*cocaine*  
*ephedrine*  
*fencamfamin*  
*mesocarbo*  
*pentylentetrazol*  
*pirradol*  
*salbutamol \*\**  
*salmeterol \*\**  
*terbutaline \*\**

*... and related substances*

\* For caffeine the definition of a positive depends on the concentration of caffeine in the urine. The concentration in urine may not exceed 12 micrograms per milliliter.

\*\* Permitted by inhaler only and must be declared in writing, prior to the competition to the relevant medical authority. <sup>1)</sup>

**NOTE:** All imidazole preparations are acceptable for topical use, e.g. oxymetazoline. Vasoconstrictors (e.g. adrenaline) may be administered with local anaesthetic agents. Topical preparations (e.g. nasal, ophthalmological) of phenylephrine are permitted.

### **<sup>1)</sup> Inom svensk idrott tillämpas anmälningsplikten enligt följande:**

Inhalation av salbutamol, salmeterol och/eller terbutalin skall för att vara tillåtet vid anmodan kunna styrkas med giltigt recept eller läkarintyg ej äldre än tre år.

## **B.     Narcotic analgesics**

Prohibited substances in class (b) include the following examples:

*dextromoramide*  
*diamorphine (heroin)*  
*methadone*  
*morphine*  
*pentazocine*  
*pethidine*  
  
*... and related substances*

NOTE: Codein, dextromethorphan, dextropropoxyphen, dihydrocodein, diphenoxylate, etylmorphine, pholcodine and propoxyphene are permitted.

## **C.     Anabolic agents**

The Anabolic class includes 1) anabolic androgenic steroids (AAS) and 2) Beta-2 agonists.

Prohibited substances in class (c) include the following examples:

### **1.     Anabolic androgenic steroids (AAS)**

*clostebol*  
*dehydroepiandrosteron (DHEA)*  
*fluoxymesterone*  
*metandienone*  
*metenolone*  
*nandrolone*  
*oxandrolone*  
*stanozolol*  
*testosterone \**  
  
*... and related substances*

- \* The presence of a testosterone (T) to epitestosterone (E) ratio greater than six (6) to one (1) in the urine of a competitor constitutes an offence unless there is evidence that this ratio is due to a physiological or pathological condition, e.g. low epitestosterone excretion, androgene production of tumor, enzyme deficiencies.

In the case of T/E higher than 6, it is mandatory that the responsible authority conduct an investigation before the sample is declared positive. A full report will be written and will include a review of previous, subsequent tests and any results of endocrine investigations. In the event that previous tests are not available, the athlete should be tested unannounced at least once per month for three months. The results of these investigations should be included in the report. Failure to cooperate in the investigations will result in declaring the sample positive.

## **2. Beta-2 agonists**

When administered systemically, beta-2 agonists may have powerful anabolic effects.

*clenbuterol*  
*fenoterol*  
*salbutamol*  
*salmeterol*  
*terbutaline*  
  
*... and related substances*

## **D. Diuretics**

Prohibited substances in class (d) include the following examples:

*acetazolamide*  
*bumentanide*  
*chlortalidone*  
*ethacrynic acid*  
*furosemide*  
*hydrochlorothiazide*  
*mannitol\**  
*mersalyl*  
*spironolactone*  
*triamterene*  
  
*... and related substances*

\* Prohibited by intravenous injection.

### ***E. Peptide and glycoprotein hormones and analogues***

Prohibited substances in class (e) include the following examples:

1. *Chorionic Gonatrophin (HCG -human chorionic gonadotrophin)*
2. *Corticotrophin (ACTH)*
3. *Growth hormone (HGH, somatotrophin)*

*All the respective releasing factors for the above-mentioned substances.*

4. *Erythropoietin (EPO)*

## ***II. PROHIBITED METHODS***

The following procedures are prohibited:

### ***Blood doping***

Blood transfusion is the administration of blood, red blood cells and related blood products to an athlete. This procedure may be preceded by withdrawal of blood from the athlete who continues to train in this blood depleted state.

### ***Pharmacological, chemical and physical manipulation***

Pharmacological, chemical and physical manipulation is the use of substances and of methods which alter, attempt to alter or may reasonably be expected to alter the integrity and validity of urine samples used in doping controls, including, without limitation, catheterisation, urine substitution and/or tampering, inhibition of renal excretion such as by probenecid and related compounds and alterations of testosterone and epitestosterone measurements such as epitestosterone application or bromantan administration.

The success or failure of the use of a prohibited substance or method is not material. It is sufficient that the said substance or procedure was used or attempted for the infraction to be considered as consummated.

### **III. CLASSES OF DRUGS SUBJECT TO CERTAIN RESTRICTIONS**

#### **A. Alcohol**

In agreement with the International Sports Federations and the responsible authorities, tests may be conducted for ethanol. The results may lead to sanctions.

#### **B Marijuana**

In agreement with the International Sports Federations and the responsible authorities, tests may be conducted for cannabinoids (Marijuana, Hashish ...). The results may lead to sanction.

#### **C. Local anaesthetics**

Injectable local anaesthetics are permitted under the following conditions:

- a. that bupivacaine, lidocaine, mepivacaine, procain, etc. are used but not cocaine. Vasoconstrictor agents (e.g. adrenaline) may be used in conjunction with local anaesthetics.
- b. only local or intra-articular injections may be administered;
- c. only when medically justified. The details including diagnosis, dose and route of administration must be submitted prior to the competition or, if administered during the competition, immediately after injection, in writing to the relevant medical authority). <sup>2)</sup>

#### **<sup>2)</sup> Inom svensk idrott tillämpas denna anmälningsplikt enligt följande:**

Bruk av lokalbedövningsmedel enligt ovan skall för att vara tillåtet vid anmodan kunna styrkas med läkarintyg.

#### **D. Corticosteroids**

The use of corticosteroids is banned except:

- a) for topical use (aural, dermatological and ophthalmological) but not rectal;
- b) by inhalation;
- c) by intra-articular or local injections.

The IOC Medical Commission has introduced mandatory reporting of athletes requiring corticosteroids by inhalation during competition. Any team doctor wishing to administer corticosteroids by local or intra-articular injection, or by inhalation, to a competitor must give written notification to the relevant medical authority.<sup>3)</sup>

**3) Inom svensk idrott tillämpas denna anmälningsplikt enligt följande:**

Bruk av kortikosteroider - i form av lokal eller intraartikulär injektion, eller för inhalation eller sprayningar i näsan - skall för att vara tillåtet vid anmodan kunna styrkas med giltigt recept eller läkarintyg ej äldre än tre år.

**E. Beta-blockers e.g.**

Some examples of beta-blockers are:

*acebutolol*  
*alprenolol*  
*atenolol*  
*labetalol*  
*metoprolol*  
*nadolol*  
*oxprenolol*  
*propranolol*  
*sotalol*

*... and related substances*

In agreement with the rules of the International Sports Federations, test will be conducted in some sports, at the discretion of the responsible authorities.

## ***Article IV***

Except as specifically otherwise provided in the IOC Medical Code, the detected presence of any amount of substances in classes (a), (b), (c) (d) and (e) in respect of a test conducted in connection with a competition shall constitute a definitive case of doping. The quantity of the substance detected is not material to a definitive case of doping.

## ***Article V***

The detected presence of ephedrine, pseudoephedrine, phenylpropanolamine and cathine in respect of a test conducted in connection with a competition shall constitute a prima facie case of doping. The person affected shall have the opportunity to rebut the presumption of doping by providing evidence that the substance was present under circumstances which, on a balance of probabilities, including the quantity of substance detected, would support a conclusion that doping was neither intended, nor the result of gross negligence, willful negligence nor imprudence. In all cases, the onus of rebutting the presumption of doping, when the substance has been detected, shall rest with the person affected.

## ***Article VI***

Out-of-competition testing is directed solely at prohibited substances in classes (c),(d) and (e). The only Positive results for purposes of out-of-competition testing and the application of the IOC Medical Code will be in respect of such classes of prohibited substances and pharmacological, chemical and physical manipulation (classe II b ).



## List of examples of prohibited substances

CAUTION: This is not an exhaustive list of banned substances. Many substances that do not appear on this list are prohibited under the term "and related substances".

### Stimulants

amfepramone  
amineptine  
amiphenazole  
amphetamine  
bromantan  
caffeine  
cathine  
cocaine  
cropropamide  
crothetamide  
ephedrine  
etamivan  
etilamphetamine  
etilefrine  
fencamfamin  
fenetylline  
fenfluramine  
heptaminol  
mefenorex  
mephentermine  
mesocarbe  
methamphetamine  
methoxyphenamine  
methylenedioxyamphetamine  
methylephedrine  
methylphenidate  
nikethamide  
norphenfluramine  
parahydroxyamphetamine  
pemoline  
pentylentetrazol  
phendimetrazine  
phentermine  
phenylpropanolamine  
pholedrine  
pipradol  
prolintane  
propylhexedrine  
pseudoephedrine  
salbutamol  
salmeterol

strychnine

terbutaline

### Narcotics

dextromoramide  
diamorphine (heroin)  
hydrocodone  
methadone  
morphine  
pentazocine  
pethidine

### Anabolic agents

boldenone  
clenbuterol  
clostebol  
danazol  
dehydrochlormethyltest.  
dehydroepiandrosterone  
(DHEA)  
testosterone  
drostanolone  
fluoxymesterone  
formebolone  
mesterolone  
metandienone  
metenolone  
methandriol  
methyltestosterone  
mibolerone  
nandrolone  
norethandrolone  
oxandrolone  
oxymesterone  
oxymetholone  
salbutamol  
salmetrol  
stanozolol  
terbutaline  
testosterone  
trenbolone

### Diuretics

acetazolamide  
bendroflumethiazide  
bumentanide  
canrenone  
chlortalidone  
ethacrynic acid  
furosemide  
hydrochlorothiazide  
indapamide  
mersalyl  
spironolactone  
triamterene

### Masking agents

bromantan  
epitestosterone  
probenecid

### Peptide Hormones

ACTH  
erythropoietin (EPO)  
hCG  
hGH

### Beta blockers

acebutolol  
alprenolol  
atenolol  
betaxolol  
bisoprolol  
bunolol  
labetalol  
metoprolol  
nadolol  
oxprenolol  
propranolol  
sotalol