

# **INTERNATIONAL OLYMPIC COMMITTEE MEDICAL COMMISSION**

## **Prohibited Classes of Substances and Prohibited Methods**

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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 prohibited methods

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

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

### **II. PROHIBITED 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

### **Article 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	caffeine *
cocaine	ephedrines
fencamfamine	mesocarb
pentylentetrazol	pipradol
salbutamol **	terbutaline **
salmeterol **	

... 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.

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.

### **B. Narcotics**

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

dextromoramide	dextropropoxyphene
diamorphine (heroin)	methadone
morphine	pentazocine
pethidine	

... and related substances

NOTE : CODEINE, DEXTROMETHORPHAN, DIHYDROCODEIN, DIPHENOXYLATE AND PHOLCODINE ARE PERMITTED.

### **C .Anabolic agents**

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

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

#### 1. Anabolic androgenic steroids

clostebol	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 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

clenbuterol  
salbutamol  
terbutaline  
salmeterol  
fenoterol  
... and related substances

## D. Diuretics

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

acetazolamide	bumetanide
chlorthalidone	ethacrynic acid
furosemide	hydrochlorothiazide
mannitol	mersalyl
spironolactone	triamterene
... and related substances	

## E. Peptide and glycoprotein hormones and analogues

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

1. Chorionic Gonadotrophin (HCG - human chorionic gonadotrophin)
2. Corticotrophin (ACTH)
3. Growth hormone (HGH, somatotrophin)  
.... and all the respective realeasing factors for such substances.
4. Erythropoietin (EPO)

## **Article II : PROHIBITED METHODS**

The following procedures are prohibited:

#### Blood doping

Blood doping 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.

#### Pharmaceutical, 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 epitosterone application.

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.

### **Article 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 cannaboids (Marijuana, Hashich ...). The results may lead to sanction.

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

Injectable local anaesthetics are permitted under the following conditions:

- a) that bupivacaine, lidocaine, mepivacaine, procaine, 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 (e.g. the details including diagnosis) dose and route of administration must be submitted prior to the competition or immediately, if administered during the competition, in writing to the relevant medical authority.

#### **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 injection.

The IOC Medical Commission has introduced mandatory reporting of athletes requiring corticosteroids by inhalation during competitions.

ANY TEAM DOCTOR WISHING TO ADMINISTER CORTICOSTEROIDS BY LOCAL OR INTRA-ARTICULAR INJECTION, OR BY INHALATION, TO A COMPETITOR MUST GIVE WRITTEN NOTIFICATION PRIOR TO THE COMPETITION TO THE RELEVANT MEDICAL AUTHORITY.

#### **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, tests 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, phenylpropaolamine 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 (class II b).

## EXPANDED LIST OF EXAMPLES

Caution : This is not an exhaustive list of prohibited substances. It is provided only to give the reader a more comprehensive list of banned substances. Many drugs that do not appear on this list are considered banned under the term "related substances"

### STIMULANTS

amineptine  
amfepramone  
amphetamine  
caffeine  
cathine  
cocaine  
cropropamide  
crotethamide  
ephedrine  
etamivan  
etilamphetamine  
etilefrine  
fencamfamine  
fenetylline  
fenfluramine  
heptaminol  
mdea  
mefenorex  
mephentermine  
mesocarb  
methamphetamine  
methoxyphenamine  
methylephedrine  
methylphenidate  
nikethamide  
norphenfluramine  
parahydroxyamphetamin  
pemoline  
phendimetrazine  
phentermine  
phenylephedrine  
phenylpropanolamine  
pholedrine  
prolintane  
propylhexedrine  
pseudoephedrine  
salbutamol  
strychnine

### NARCOTICS

dextropropoxyphene  
  
ethylmorphine  
hydrocodone  
morphine  
pentazocine  
pethidine  
propoxyphene

### 1) ANABOLIC AGENTS 2) BETA 2 AGONISTS

boldenone  
clenbuterol  
clostebol  
danazol  
dehydrochlormethyltest.  
dihydrotestosterone  
drostanolone  
fluoxymesterone  
formebolone  
mesterolone  
metadienone  
metenolone  
methandriol  
methyltestosterone  
nandrolone  
norethandrolone  
oxandrolone  
oxymesterone  
oxymetholone  
stanozolol  
testosterone  
trenbolone

### BETA - BLOKERS

acebutolol  
alprenolol  
atenolol  
betaxolol  
bisoprolol  
bunolol  
metoprolol  
oxprenobol  
propranolol  
sotalol

### DIURETICS

acetazolamide  
bendroflumethiazide  
bumetanide  
canrenone  
chlortalidone  
furosemide  
hydrochlorothiazide  
indapamide  
spironolactone  
triamterene

### MASKING AGENTS

epitestosterone  
probenecid

### PEPTID HORMONES

HCG  
hGH  
erythropoietin  
ACTH