Identifies the substances and methods prohibited in sports

The substances and methods on the List are classified by different categories.

Updated on annual basis

Year-long process; includes consultation with stakeholders
Prohibited List

Categories of substances in the 2018 Prohibited List

Substances prohibited at all times
S0. Non-approved substances-
S1. Anabolic androgenic steroids (AAS, exogenous, endogenous, other)
S2. Peptide hormones, growth factors, related substances and mimetics
S3. Beta-2 agonists
S4. Hormone and metabolic modulators
S5. Diuretics and masking agents

Substances prohibited in-competition only:
S6. Stimulants- *psychoactive drugs*
S7. Narcotics- *psychoactive drugs*
S8. Cannabinoids - *psychoactive drugs*
S9. Glucocorticoids

Substances prohibited in particular sports
P1. Beta-blockers

Methods (prohibited at all times)
M1. Manipulation of blood and blood components
M2. Chemical and Physical Manipulation
M3. Gene Doping

Concept of open list of examples :"*substances with similar chemical structure or similar biological effects*"
Psychoactive drugs in Prohibited List  2018

S6-Stimulants: all stimulants (direct and indirect sympathomimetics) are prohibited

➢ medicines (e.g. modafinil, pseudoephedrine)
➢ medicines & « recreational » use (e.g. amphetamine)
➢ designer drugs (e.g. mephedrone, MDMA)
➢ natural product (e.g. cathinone)
➢ discontinued and re-appeared in supplements under different name (methylhexanamine)

Hallucinogens not prohibited

OPEN, NON-EXHAUSTIVE LIST
S8: Cannabinoids:

- Natural cannabinoids, e.g. cannabis, hashish and marijuana,
- Synthetic cannabinoids e.g. Δ9-tetrahydrocannabinol (THC) and other cannabimimetics.

- Except cannabidiol

Several WADA-sponsored grants to determine metabolism and detection .......

.........but new compounds appear.....

OPEN, NON-EXHAUSTIVE LIST
S7. NARCOTICS

The following narcotics are prohibited:

- Buprenorphine;
- dextromoramide;
- diamorphine (heroin);
- fentanyl and its derivatives;
- hydromorphone;
- methadone;
- morphine;
- nicomorphine;
- oxycodone;
- oxymorphone;
- pentazocine;
- pethidine.

CLOSED LIST, except for fentanyl derivatives
▪ CHALLENGES
Detection of NPS during doping control

Challenges-

1. Anti-doping detection based on:
   - Chromatography/MS
     ✓ Need structure & Mass spectrum

2. Mostly urinary samples
   - Metabolism unknown

3. Biologic effect/potency unknown
Detection/identification of NPS for doping control

Different Scenarios

1. Anti-doping lab detects new substance during screening & identifies it; communicates to WADA.

2. Intelligence-based approach
   a) Through AD labs/NADOs
   b) Through WADA & collaborators
Detection of NPS during doping control

Different Scenarios

1. Intelligence-based approach
   a) Through AD labs/NADOs:
      i. working with Customs, analysis seized material
      ii. information received by WADA from NADOs, sports Federations, whistleblowers
Detection of NPS during doping control

Different Scenarios

1. Intelligence-based approach
   a) Through WADA & collaborators
      i. Purchase of prohibited substances & analysis
      ii. Partner with law-enforcement agencies
      iii. Collaboration with governmental/NGO/academia linked to drug abuse and control
      iv. Collaboration with pharmaceutical industry
Intelligence-based approach: Purchase of prohibited substances & analyze

➢ Search drugs in internet, field information, etc

➢ Buy

➢ Analyse product to e.g.:
  ✓ test if existing detection methods adequate
  ✓ detect contaminants
  ✓ identify chemical structure
  ✓ develop and validate detection method
  ✓ study metabolism (in vitro)

➢ Inform authorities of clandestine labs/stores
Intelligence-based approach:
Purchase of prohibited substances & analyze
Intelligence-based approach: Collaboration with law-enforcement agencies

❖ 2,4 Dinitrophenol

- 1st ALERT JANUARY 2015 WADA
  Australian Sports Drugs Testing Laboratory

- 2nd ALERT APRIL 2015 FRANCE
  OCLAESP

- 3rd ALERT APRIL 2015 UK
  Open-Sources
Intelligence-based approach: Collaboration with law-enforcement agencies

- 2,4 Dinitrophenol
- INTERPOL Orange Notice
  Issued 21/04/2015
Nearly 300 Underground Laboratories identified

20 Participating countries

Dozen of websites regularly monitored

More than 2 millions of seized products listed in 2016

Nearly 300

PROJECT ENERGIA

World Anti-Doping Agency
Intelligence-based approach: Collaboration with governmental/NGO/academia

Information exchange

- UNODC
- EMCDDA
- University of Hertfordshire
- New ........
Intelligence-based approach: Collaborations with Pharmaceuticals

- Collaborative agreements with pharmas
  - Information on doping potential of new drugs in clinical development.
  - ADME/detection methods
  - Reference Materials (Parent compound, metabolites)
Thank you for your attention!