



REGISTRO PROFESIONAL  
DE TENIS

# Drugs and Ethics in Sport

# Ethics

- “ the practice of making principled choices between right and wrong”
- “explicitly reflecting on moral beliefs and practices”

# Principles for an Ethical Framework

- Respect
- Basic justice and fairness
- Refusing to take unfair advantage
- Willing compliance with laws and rules
- Freedom to enjoy and flourish
- Harm prevention
- Impartiality and objectivity
- Trustworthiness and honesty
- Transparency
- Avoiding potential or apparent conflict of interest
- Due diligence
- Duty of care

# Questions to Consider

- At what point does science and technology surpass the athlete's "natural" or own performance?
- How much of the performance belongs to the athlete versus the scientist working in the laboratory?
- Should we be advocating and supporting the use of practices that might be detrimental and dangerous to the health and well-being of athletes using them?
- How much of a "level playing field" exists if unequal access to ergogenic practices exists?

# Why do Athletes take Drugs?

There are a number of general factors that may contribute to an athlete misusing drugs:

- The drug itself
- The athlete
- The athlete's environment

- Dissatisfaction with performance and progress
- Psychological dependency
- Self-pressure and doubt, lack of confidence, stress, anxiety or depression
- Relaxation/socialisation
- Lack of knowledge about side effects
- Values (using is not a problem)
- Wanting to keep up with other athletes using drugs
- Believing they can get away with it
- Being easily influenced by peers
- A “win-at-all-costs” mentality
- Personal pride and the need to retain a “hero” status

# Ethical Dilemmas in Sport

In recent times ethical issues have confronted sport regarding various ergogenic (performance enhancing) practices:

- Intravenous drips
- Use of pain-killing injections
- Vitamin-supplement injections
- Performance-enhancing drugs and methods
- Genetic therapy and manipulation

# WADA Prohibited Substances List

- The prohibited substances list is a list of all drugs, supplements and other substances and methods which are banned from use in sports. WADA (World Anti-Doping Agency) is responsible for maintaining and updating this list. Note the list below may not be up to date!
- Some substances are banned only during competition, while others depend on the method of administration (for example inhalation versus tablet or injection form).
- The list of prohibited substances is updated annually to keep up with advances in science and technology, with a new list being issued on the 1st of January. A substance is added to the list if it meets two of the three criteria listed below:
  - The potential for enhanced performance
  - The potential for being detrimental to health
  - Violation of the spirit of sport



- In some cases an athlete may have a pre-existing medical condition which requires them to take medication which is listed. In this case the athlete can apply to their International Federation for a Therapeutic Use Exemption which must be verified by their physician. In order to be accepted the following must be true:
  - The athlete would suffer significant health problems if they do not take the medication
  - There is no suitable alternative which is not listed
  - There are no considerable performance enhancing benefits

# What Substances Make up the Prohibited List?

- Currently the prohibited list contains 5 classes of substances and 3 methods of doping which are banned at all times and a further 4 substances banned during competition.
- Substances Banned at All Times:
- Anabolic Steroids including THG
- Hormones including:
  - Erythropoietin (EPO)
  - Human Growth Hormone (hGH)
  - Insulin-like Growth Factor (IGF-1)
  - Human Chorionic Gonadotrophin (HCG)
  - Adrenocorticotrophic Hormone (ACTH)
- Beta-2-Agonists
- Hormone Antagonists and Modulators
- Diuretics

## Methods Banned at All Times:

- **Enhancement of Oxygen transfer** including:
  - **Blood Doping**
  - **Artificial Oxygen Carriers**
- **Chemical and Physical Manipulation** including tampering with samples and intravenous infusion
  - **Gene Doping**

## Substances Banned in Competition:

- **Stimulants** including:
  - **Amphetamines**
  - **Ephedra**
  - **Cocaine**
  - **Caffeine** (currently permitted)
- **Narcotics**
- **Cannabinoids**
- **Glucocorticosteroids**

# Drugs Testing

Drug testing has become an increasingly large part of both professional and amateur sports. An athlete can be called for drug testing at any time, in or out of competition.

During competition, some sports only carry out drug testing on the winning team or top three competitors. Others will test by random selection from all competitors.

# Urine Testing

- When called for a drugs test the athlete is entitled to have a representative (such as their coach or team doctor) present to verify that the testing occurred in accordance to guidelines. A sample is provided (in view of an official of the same gender) and split into two bottles and sealed by the athlete. A code number will be attached to the bottle and recorded on the relevant paperwork to ensure the correct result is given to the athlete whilst retaining their anonymity.

- Following the sampling procedure the athlete must complete a medical declaration which states all medicines, drugs and substances taken over the last week. It is important that the athlete records everything, from over-the-counter medicines, to supplements and prescribed drugs. If any of these substances are on the prohibited list the athlete must hold a Therapeutic Use Exemption (TUE). The competitor, representative and official all check the form before the official and athlete sign it and both parties are given a copy.

- The samples are then sent to a registered laboratory (if there is not one on site) where sample A is tested using gas chromatography (which uses separation techniques to divide the contents of the sample) and mass spectrometry (which provides the exact molecular specification of the compounds). If a positive result is found with sample A, the athlete is notified before sample B is also tested. The athlete or their representative is entitled to be present at the unsealing and testing of the second sample. If this too is positive, the relevant sporting organisations are notified whose responsibility it is to decide what penalties or bans are to be imposed.

# Blood Testing

- Blood testing is used in the detection of drugs such as EPO and artificial oxygen carriers by testing the haematocrit or blood count. Over time a "blood profile" of an athlete can be built up to help determine average readings for each individual. This can help with blood doping tests in the future. The same anonymity and representative procedures apply as for urine sampling.
- Again the athlete is asked to select and check the testing and collection equipment before a phlebotomist (an individual trained to draw blood) collects two samples of blood directly into bottles A and B. The bottles stay in the possession of the athlete (who is always accompanied by an official) until they are sealed in the sample collection kit. Samples are sent to a lab for testing. The same procedure applies as in urine testing, where if the A sample is positive, the B sample is then tested. Another positive result means the appropriate governing bodies are notified