



## Sports Doping: A Short Note and Overview

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### Introduction

The use of controlled substances in professional sports is referred to as "doping." Another name for medications used by athletes to enhance their athletic performance is performance enhancing drugs (PEDs).

### What's the big deal with doping?

First and foremost, safety! The fact that all of these drugs may have negative and long-lasting side effects is the most important reason why doping is such a big deal: Irregular heartbeat, high blood pressure, heart attack, and sudden death are all symptoms of cardiovascular disease. Insomnia, anxiety, depression, suicidal behaviour, suicide, headache, addiction with withdrawal, psychosis, tremor, dizziness, and stroke are all symptoms of the central nervous system. Nasal bleeds, sinusitis of the respiratory system Infertility, gynecomastia (enlarged breasts), reduced testicular size, low sex drive, acromegaly (coarse bones in the face, hands, and feet), and cancer are all hormonal issues.

The second problem is something of a moral conundrum. These prohibited substances are used to achieve an unfair advantage, which devalues the spirit of competition greatly.

The aim of an anti-doping programme, according to the World Anti-Doping Agency (WADA), is to "protect athletes' fundamental right to participate in doping-free sport and thus promote fitness, justice, and equality for athletes worldwide."

### What substances are banned from use?

Owing to their performance-enhancing properties, some substances are prohibited both in and out of competition, while others are prohibited only during competition. Another explanation for a drug's prohibition is the ability to conceal the existence of another banned substance during research.

Each company has its own list of substances that are prohibited. The following groups of drugs are generally prohibited:

Stimulants, anabolic steroids, peptide hormones (such as human growth hormone [hGH]), alcohol, and beta blockers (for archery and rifle shooting only), diuretics, beta-2 agonists, anti-estrogens, blood doping, and gene alteration are all prohibited substances.

Anti-doping services provide a means for athletes who use a banned substance for valid medical purposes to seek a medicinal use of exemption (TUE), allowing them to use the drug. A physician must fill out a TUE form stating that the athlete requires the medication to treat their medical condition and that an alternative non-banned drug is unavailable or inadequately treats their condition. A medical committee reviews the TUE and either approves or disapproves the athlete's offer to take the medication.

It is worth noting that certain OTC drugs and supplements are either prohibited or contain prohibited additives or pollutants. The National Collegiate Athletic Association (NCAA), for example, prohibits excessive caffeine consumption, which is characterized as a caffeine level in the urine exceeding 15 µg/mL. While the NCAA allows pseudoephedrine (Sudafed), WADA has banned it if the urine

concentration is greater than 150 mcg/ml. There are several other common drugs that may be approved by one party but prohibited by another. In any event, the athlete can consult with the supervising medical staff to decide which medications are safe and allowable.

### Who decides if there has been a doping violation?

As previously mentioned, the organizations that track for doping violations differ depending on the sport. WADA is the world's biggest anti-doping body. WADA has created a global anti-doping policy that extends to all sports that have signed a commitment to follow the WADA Code.

The WADA Code details their "anti-doping policies, laws, and regulations for sport associations and public authorities around the world," according to the organization. The International Olympic and Paralympic Committees, all Olympic Sport International Federations, and National Olympic and Paralympic Committees are among the 660 sports organizations that have signed the WADA Code.

Global anti-doping bodies, such as the United States Anti-Doping Agency, are in charge of putting WADA rules into practice (USADA).

Athletes who compete in sports that have signed the WADA code are subject to random monitoring both before and after competition. Depending on the substances being examined, testing can be done on urine and/or blood samples.

The frequency and form of testing varies by sport, depending on a number of factors such as the sport's history of doping, the sport's type (e.g., agility, strength/power), the substances used, and the season's duration.

Penalties for doping violations differ significantly depending on the sport. A single violation of the WADA Code can result in a two-year suspension from sports competition, while a second violation can result in a lifetime suspension. A first offence anti-doping violation in the NFL carries a four-game suspension, a five-game suspension in the NBA, and a 20-game suspension in the NHL.

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