

## **Anti-Doping Awareness in Sports**

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**Lecture -2**

**Indian Scenario in Doping**

Good morning, friends, and welcome to the NPTEL anti-doping program. In today's lecture, we'll be looking into the Indian scenario in doping. I'm Professor Dobson Dominic, and I'll be the lecturer for you. In this session, we'll be looking into an introduction to doping in India. We will be looking into several regulatory bodies, especially the international regulatory body, the National Anti-Doping Agency. We will look into how testing and sample analysis are done. We will look into ADVs, or anti-doping violations, and the punishments for it, especially sanctions.

We will look into major doping cases in India. We will see what are the national challenges which we are facing in India. And we will conclude with possible solutions for the doping scenario in India. India has the world's highest percentage of doping offenders in the latest WADA report, which is a staggering statistic.

Interestingly, last year in September 2023, a viral video of a steeple chaser crossing the finish line but kept on running at an athletics meet in Delhi became viral. The reason was he was being chased by the NADA, National Anti-Doping Agency, officials to get his urine sample. Why do the Indian athletes dope? Mainly due to lack of awareness, pressure to perform by coaches, trainers, and peers. And poor regulations are the main reason for India's position in the World Anti-Doping Agency report. Let's look into NADA, the National Anti-Doping Agency.

NADA was established by the Government of India in 2004. The main mission was to implement anti-doping measures, conduct doping tests, and to promote awareness about doping among athletes. NADA was responsible for coordinating and implementing the national anti-doping program in line with the World Anti-Doping Code. The legal framework in India: India's anti-doping rules are framed according to the World Anti-Doping Agency's code and implemented under NADA's guidelines. These rules ensure a fair conduct of sports by establishing uniform anti-doping regulation.

NADA enjoys an operational independence, and they work independent of any interference from the government or sports authorities to ensure there are unbiased decisions. Statute and Regulations: The key legal acts, including national NADA's anti-doping rules, were first introduced in 2009, revised in 2014, and again updated in 2021. If you look into the responsibility of athletes, the national-level athletes are subjected to NADA's rules, including a requirement for testing, whereabouts reporting, and TUE, or therapeutic use exemption. So, if any of you athletes are of national level, then at any point of time NADA can test you. So ensuring compliance with anti-doping regulations is very important, including provision of accurate whereabouts information.

So this is very important. So any national-level athlete should be able to provide where they are staying, where they are traveling, to NADA if questioned. Participation in education programs conducted by NADA also is very important for national-level athletes for them to be educated and not fall victim to any doping practices. So this testing authority of NADA is pretty comprehensive. NADA holds authority to test any athlete at any time, both during and outside competitions.

Out-of-competition testing is crucial to detect substances that clear the system quickly but enhance training performance. NADA follows international standards of testing and sample collection to ensure consistency and fairness in the testing process.

Now coming to performance-enhancing drugs' result management process. So how does this testing process happen? During the initial review, after testing an athlete's samples, A and B samples are analyzed under WADA-accredited laboratories. If any of the performance-enhancing drugs are found either in blood or urine, then NADA initiates a results management process.

First, it notifies the athlete of the adverse finding, and the athlete is given an opportunity to request a B sample analysis. During testing, there are two samples taken from the athlete, A sample and B sample. During the initial testing, only the A sample is tested, and if any adverse finding is found, then the athlete can request to test again the B sample. In certain circumstances, athletes are provisionally suspended pending the complete analysis — that is, the B sample's results — and they are provisionally suspended till a full hearing. NADA gives the athletes a fair appeal and hearing so that the athletes are treated fairly.

What is the role of government and institutions in our country? The Indian sports federations and associations must ensure that all athletes and personnel under their jurisdiction must comply with NADA's anti-doping rules. The laws and policies to curb doping have to be framed comprehensively. Government schemes for awareness and testing have to be educated and sensitized to the athletes and the support staff, especially the coaches and the trainers. Very important is the role of IOA, or Indian Olympic

Association, and the sports federations to sensitize athletes and also the support staff, especially the coaches and trainers, to the curbs and different testing rules.

Now looking into NADA's anti-doping measures. The primary objective of NADA is to educate athletes, coaches, and support staff on the dangers of doping and the responsibilities under anti-doping rules.

NADA conducts workshops, seminars, and training sessions across the country, and athletes and the support staff are encouraged to attend that. There is a comprehensive overview of testing technologies, whether it is a urine test or a blood test or for the athlete biological passports, ensuring forensic doping standards are maintained. NADA also conducts random testing for athletes. They also need to enhance the testing infrastructure.

And NADA's cooperation with the World Anti-Doping Agency, WADA, is very critical for ensuring proper anti-doping methods are followed. Coming to the major doping cases or scandals in India. The most important scandals are in the 2010 Commonwealth Games. Several Indian women athletes tested positive for PEDs, or performance-enhancing drugs, especially Indian weightlifters and wrestlers. The most important athlete who was caught in a scandal was Narsingh Yadav, who, in 2012, was a famous Indian wrestler. He tested positive for the anabolic steroid methandienone, commonly known as Dianabol or D-Bol.

He was suspended and banned, and later his ban was overhauled and overturned by NADA, saying that there were some major doping cases in India. 2010 Commonwealth Games: several Indian women athletes tested positive for performance-enhancing drugs, especially weightlifters and wrestlers. The most famous athlete to have been caught doping in the scandal was Narsingh Yadav, who was a famous Indian wrestler who tested positive for methandienone, which is an anabolic steroid commonly known as D-Bol or Dianabol. In 2019, there was a scandal among boxing athletes when several Indian boxers faced suspension after testing positive for banned substances. The most common sporting events which are suffered from doping are wrestling, weightlifting, and track and field.

Trends in anti-doping violations: If we look into the statistics, India has consistently ranked among the top three countries for doping violations since 2018. Young and emerging athletes are particularly vulnerable, especially in sports like weightlifting, athletics, and bodybuilding, and they show a higher rate of doping violations compared to other sports. The most common doping substances found in Indian athletes include anabolic steroids, stimulants, and diuretics, which are commonly taken for masking other drugs.

Now looking into the testing data, sample collection, and analysis. NADA conducts thousands of tests annually across all sports. In 2021 alone, approximately 3,500 samples

were collected for testing, with a focus on both in-competition and out-of-competition testing. All samples were sent to WADA-accredited laboratories, ensuring the highest standard in testing procedures.

Each sample is tested for various categories of prohibited substances depending upon the athlete's sport and competition.

The accredited laboratory and the sample analysis: All samples which are collected by NADA are analyzed at WADA-accredited laboratories only. These labs follow strict international standards for testing and handling of samples. The primary laboratory for Indian athletes' sample testing is the National Dope Testing Laboratory (NDTL) located in New Delhi.

Independent Observer Program: So this program is run by the World Anti-Doping Agency and ensures that anti-doping testing at major national and international events is conducted fairly and transparently. NADA invites the World Anti-Doping Agency to send independent observers to major national events like the National Games, Indian Premier League, all to monitor doping control procedures. The role of the independent observer is to audit the sample collection, analysis, and result management process so as to ensure compliance with WADA standards. They also provide recommendations to improve testing practices in India.

Role of WADA in India: The World Anti-Doping Agency (WADA) plays a significant role in monitoring and guiding anti-doping efforts in our country, India. WADA provides NADA with access to the Anti-Doping Administration and Management System (ADAMS) for managing doping data. NADA also operates under WADA's guidance, ensuring that the anti-doping practices in India are in line with the global standards. WADA provides training and technical assistance to NADA. WADA regularly audits Indian laboratories and testing facilities to ensure they meet international standards for accuracy and fairness.

Coming to the challenges and solutions for anti-doping in India: The main challenge is the lack of resources. NADA's testing infrastructure needs to be significantly enhanced, and more investment is required to match international standards. We need to be aware about the gaps. Many athletes, especially at the grassroots level, remain unaware about the anti-doping rules and dangers of performance-enhancing drugs.

Technological advancements: NADA needs to invest in new testing technology, including improving the biological passports and DNA sequencing methods. So the different solutions we can find are to enhance and increase grassroots education of the athletes and the support staff and to enhance more transparency in sports management and to bring about policy reforms to prevent doping.

So to conclude, India's anti-doping efforts have come a very long way with NADA playing a crucial role in implementing and enforcing the anti-doping rules. The need for collective action by athletes, institutions, and the government is very important. Despite significant progress, there remain challenges, including enhancing the education of athletes, improving the testing infrastructure, and addressing the rising menace of newer doping methods and substances. These are the references for today's lecture. Thank you. Jai Hind.