

## DEVELOPMENTS IN ANTI-DOPING IN ELITE SPORT

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### Introduction

Doping in sport continues to impact on athletes, results and support for sport throughout the world.

How many times do you pick up a newspaper or watch a television announcement about a wonderful athletic performance and a couple of weeks later feel let down when you hear that the athlete has tested positive for using a banned substance?

How many times does this athlete who has been caught, cry — “I didn’t do it” — which often then leads to expensive legal cases impacting on the sports organizations trying to deal with this issue.

How many times does an athlete stand on the medal dais and you start to wonder whether they are clean or not?

Sadly, all these situations start to impact on our joy of hearing of great athletic performances and make you feel that the cheats are really taking over the heart and soul of sport.

Fortunately, the cheats do not have it all their own way and the significant amount of work being done around the world in dealing with this major issue for sport means that while it is difficult to foresee a time when we will be completely free of doping, our strategies are having an impact and it is important that we continue to work towards this goal.

### Anti-doping Strategies

Strategies to address the doping issue started in the 1960s with the IOC Medical Commission creating

anti-doping rules and testing for banned stimulants. Testing for steroids started in 1974 and classes of substances have progressively been added to the banned list throughout this time. In the early 1980s, the IOC commenced recognizing specialized laboratories that were set up to find doping substances in athletes’ urine samples.

However, the culture of a number of sports was one of doping and some of the administrators were not really that serious about dealing with the issue. For many other sports being run by small administrations, it was really difficult for them to understand what they were dealing with and put the necessary resources and programs in place to deal effectively with the problem.

During the late 1980s, a number of countries — particularly the Scandinavian countries — decided that they needed to address the issue, and this saw the development of a number of national anti-doping organizations now known as NADOs. Finally, we had organizations actually focused on the issue and this enabled more effective strategies to be put in place. However, there were still only a very small number of countries involved.

At times, it took a small crisis for countries to really get serious about the issue: such as Ben Johnson testing positive in Seoul in 1988 for Canada to put significant resources into developing its anti-doping program; and Australia with a lower profile athlete but nevertheless a positive test in Seoul added to growing concern of doping within its National Institute of Sport to create its NADO in the early 1990s.

There have been many different forums created over the years, some involving sports organizations, and some involving governments and their respective NADOs. However, initially, too much energy was lost with the national and international organizations arguing about jurisdiction rather than working together to address what was a growing problem in sport.

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It has really been the recent creation of the World Anti-Doping Agency (WADA), an independent international body financed jointly by the governments and the sports movement as equal partners, that has finally seen sport and governments come together to address the issue of doping and start to use the range of strategies that both types of groups bring to the issue.

In the last 7 years, a more coordinated international approach to planning and implementing anti-doping strategies led by WADA means that the cheats do not have it all their own way.

WADA developed a *World Anti-Doping Code* endorsed by most countries and sporting organizations in 2003. Sports are expected to comply with the Code under threat of removal from the Olympic Games; governments that are normally not able to sign a private treaty have created an intergovernmental tool — the UNESCO International Convention Against Doping in Sport — which governments are expected to sign, again under threat of non-participation in the Olympics or other sporting events.

Reflecting the importance of staying current, a Code revision process has just been completed and the revised Code was approved at the recent World Anti-Doping Conference in Madrid. The various signatories of the Code or UNESCO Convention will be expected to implement the new Code by the start of 2009.

There are eight anti-doping rule violations that are regarded as *doping*, and the revised Code better addresses a number of these. In addition to rules dealing with athletes who test positive to using a banned substance, these extended rule violations are designed to give anti-doping authorities further powers to prosecute athletes who have possession of banned substances (some of which are currently undetectable); who do not cooperate with presenting for testing or are trafficking banned substances. Athlete support personnel can also violate these rules by possessing banned substances or assisting athletes to dope. There is an increased emphasis on anti-doping authorities working with governmental organizations such as customs authorities to address the supply of banned substances into the sporting environment. Athletes who have successfully avoided testing in the past will find this much harder to do with the enhanced *Athlete Whereabouts* requirements and *Missed Tests* rules — both strategies

to ensure that athletes can essentially be tested at any time and any place.

In general athletes fall into five groupings:

1. Athletes who never contemplate doping;
2. Athletes who think about it but are deterred by the anti-doping strategies put in place by sport and/or governments;
3. Athletes who take banned substances without being aware that the substances are banned — generally known as inadvertent doping;
4. Athletes who decide to take the risk and use detectable banned substances, sometimes using manipulation techniques to try and avoid being caught; and
5. Athletes who are really pushing the boundaries and use new undetectable substances or methods.

Our strategies must be different for each athlete grouping. We must always support, recognize and encourage athletes who do not dope. It is sometimes a risk that an athlete may try and build a “clean” profile while secretly cheating; however, it is vitally important that athletes are involved in strategies to help keep their sport clean, including reinforcing anti-doping messages amongst their peers.

Many of the strategies that anti-doping organizations put in place, such as testing at any time and any place — known as *Out-of-Competition Testing* — deter athletes who are contemplating doping. Supported by good information about the rules and processes, and educated that, ethically, doping is wrong, the majority of athletes fall into the first two categories.

The key strategy to reduce inadvertent doping is providing good information to ensure that athletes know what is banned and what is not, and to provide resources for the athletes and their support personnel to know where to find this information when it is required. There is increased emphasis in the revised Code for anti-doping organizations to implement education and information strategies.

Over the years, the timing of testing and the actual sample collection procedures have gradually been adapted to deal with athletes who, knowing that they are using a banned substance, try to manipulate the process by the provision of someone else’s clean urine or try to dilute their own urine until it is more or less water. This is why “no notice” testing was introduced, where athletes are given no warning, and therefore no

opportunity, to substitute a sample or to avoid reporting for testing. Procedures are now in place where athletes are required to wash their hands to avoid running their sample over any chemical that may alter the urine sample; and for quite some time, athletes have been required to enable the Doping Control Officer full view of the urine coming directly from their body to detect any athlete attempting to use artificial devices such as a false penis or a sample and tubing taped to their body.

There is an increased concentration on the use of “intelligence” testing, where instead of randomly testing athletes, anti-doping organizations will use their resources more effectively by focusing and even targeting the tests on athletes who are either in higher risk sports and/or by their own behavior or biological profile trigger some element of suspicion.

Athletes have already been prosecuted for not providing accurate information about where they will be training and living to enable the testing authorities to find them when selected for a test, and emphasis on this strategy will increase during 2008.

This group of athletes also benefit from emphasis on the ethics of sports participation and developing the attitude that it is unacceptable to “cheat”. A number of athletes who have committed anti-doping rule violations have had such a negative experience when they get caught that they then spend time assisting anti-doping organizations to educate their colleagues against doping.

One of the major challenges to sport is the last group of athletes who are pushing the boundaries of taking substances that are not detectable. Some of these substances are known as “designer” drugs where a molecule may be changed from a detectable drug that essentially still gives the athlete the doping assistance without the risk of detection. Fortunately for the clean athletes, it is often just a matter of time before the testing authorities do discover the new substance and develop a test. Samples will now be able to be tested retrospectively and even though it is still a tragedy that the clean athletes have missed the glory of winning, at least the risk of getting caught is now higher for the cheat.

A new strategy to deal with these athletes involves the longitudinal tracking of athlete biological parameters. This biological tracing should enable a method of

detecting doping through indirect signs, which is generally a new approach and one that will no doubt be tested in the courts. Some sports are starting to take DNA samples from their athletes to assist in this profiling.

A new challenge will be the area of gene doping. WADA is already addressing this area of potential future doping by devoting part of their research budget to detection strategies.

A sport which has been impacted significantly by doping for many decades is cycling. Changing the culture of a sport is vital when doping has been entrenched. There are now signs that the international world of cycling, the International Federation (the UCI) and the key professional tours, including the Tour de France, are seriously addressing the issue of doping in their sport.

It has been interesting to see in recent times that some sponsors of the professional cycling teams are now withdrawing their sponsorship due to the negative publicity of having their brand connected to doping. This can only help change the negative culture by publicly acknowledging that doping is not acceptable.

There has been important involvement of government authorities such as police and customs to deal with the trafficking and use of banned substances. Examples of major cases are: the Festina case in France which involved the discovery of banned substances in the car of a cycling trainer, leading to his arrest and the arrest of a number of cyclists who then admitted to the use of erythropoietin (EPO); and the BALCO (Bay Area Laboratory Co-operative) investigation in the US leading to the jailing of the owner Victor Conte and coach Greg Anderson and the naming of a number of athletes who had been supplied with banned substances. The BALCO case is continuing with athletes such as Marion Jones recently acknowledging her drug use and Barry Bonds, the Major League Baseball player accused of doping — both face charges of perjury which will possibly lead to jail time.

These cases demonstrate that doping often occurs on a broad scale and involves the participation of well-financed and well-organized members of the athlete entourage — those who profit from the athlete’s success, derived from doping, while risking very little themselves.

It has been very important for the success of anti-doping that since 1999, the US government has become

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engaged in the issue reflected by the establishment of their NADO and their authorities involved in investigations such as BALCO.

A recent international undercover operation run by the US Drug Enforcement Administration (called Operation Raw Deal) involved 10 countries and resulted in 124 arrests and the seizure of 242 kg of steroids and 1.4 million units of steroid dosage from 56 laboratories across the US. China was one of the countries involved and the investigation targeted 35 Chinese companies that were shipping raw materials needed to make steroids and human growth hormone to manufacturers and labs in the US and nine other countries.

WADA and Interpol are soon expected to sign a memorandum of understanding to work closely together

in dealing with trafficking banned substances, which reflects the importance of this issue.

So, while it is important to acknowledge that the battle against doping has not yet been won, and this scourge of sport will require the ongoing efforts of all parties to succeed, we are certainly implementing a much wider menu of anti-doping strategies. Governments and the sporting community are working together far more effectively and our energies are being better directed in working towards a clean sporting world.

Let us hope for the young sporting stars of the future as well as the many thousands of people throughout the world who enjoy participating in and watching sport that we are successful.