

## Drugs in Sport Update (Vol 2, Issue 3)

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## International Olympic Committee to address doping

<p><i>Standardised anti-doping practice: ASDA's stringent sample collection procedure</i></p>	<p>National anti-doping agencies and governments are firming up their positions on doping for the World Conference on Doping in Sport planned for February 2-4, 1999.</p> <p>After an incident packed year, most notably the Tour de France, the International Olympic Committee (IOC) has vowed to change its approach to doping in sport.</p>
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National agencies, such as the Australian Sports Drug Agency, handle the drug testing duties for their particular country but there are less than a dozen reputable agencies world wide. Quick mathematics show that most countries do not effectively test their athletes out-of-competition when most doping occurs.

While ten of the thirty-four Olympic Federations conduct some out-of-competition testing, only two – FINA and the IAAF – conduct adequate programs.

The IOC has signalled its intention to take initiatives in four major areas:

- creation of an independent, worldwide, out-of-competition testing program that focuses on no-notice testing of elite athletes;
- creation of an international anti-doping agency to deliver testing, education and information services;
- creation of an anti-doping research fund to improve the anti-doping movement's ability to detect banned substances and develop effective strategies to deter athletes from using drugs to enhance performance; and
- develop an effective anti-doping policy framework that standardises anti-doping policy and practice across the Olympic family.

Any sport wishing to lobby the IOC can make representations through their international sports federation.

## ASDA conducts record number of tests in 1997-98

	<p>ASDA conducted a record 4,313 drug tests in 1997-98. 'The agency is gearing up for the Sydney 2000 Olympics by conducting more tests than ever before,' ASDA's Chief Executive Natalie Howson said.</p> <p>The record figure of 4,313 drug tests is a 23 per cent increase on 1996-97 numbers of 3,499.</p>
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ASDA will conduct more government-funded tests in 1998-99.

Out-of-competition tests will increase to 70 per cent of government-funded tests compared with 63.5 per cent in 1997-98. The total number of tests for 1998-99 is expected to exceed the 1997-98 record.

International testing will increase more than 40 per cent for Australian athletes training and competing overseas and international athletes training and competing in Australia. 'We are focusing on out-of-competition testing planned around major events in Australia and overseas and tested many Australian athletes prior to their participation in the Commonwealth Games,' Ms Howson said.

Forty-two entries were made to the Register of Notifiable Events for the year ending 30 June 1998 and 12 entries to the Register of International Incidents.

*Entries made to the Register of Notifiable Events for the year ending 30 June 1998 are included on page 4.*

## Avoiding positives for elite athletes with asthma

	<p>Salbutamol, terbutaline and salmeterol are contained in common asthma medications such as Ventolin, Bricanyl and Serevent inhalers. They are also included in the IOC list of prohibited substances as banned androgenic and anabolic agents if the athlete using them has not provided prior notification of use to a relevant authority (usually the sport's medical committee).</p>
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While most sports have adopted the International Olympic Committee (IOC) list, including its requirements for certified use of asthma medications, some athletes still face the daunting prospect of returning a positive result because their sports have not put in place a system for athletes with asthma conditions to get prior approval for use of these substances.

Any sport adopting the IOC list of banned substances needs an appropriate system for recognising approval of asthma medications for therapeutic use. Their sports administrators should also ensure athletes are aware of the system and follow the required procedures.

ASDA has worked with national sporting organisations to assist them to meet the IOC requirement that the use of salbutamol, terbutaline and salmeterol is only permitted in inhaler form and when previously certified in writing by a respiratory or team physician to the relevant authority (usually the national sporting organisation's medical committee).

In general sporting organisations have two options. They can adopt the IOC list as published or they can amend the list to reflect specific issues within their sport.

The first option requires clear, workable doping rules that are consistent with the IOC Medical Code. An appropriate system for recognising approval of asthma medications for legitimate therapeutic use should require athletes to provide prior notice of use to the sporting organisation in advance of competition, and for the sport to pass this information onto ASDA regularly. Failure to establish a comprehensive system will result in an athlete returning a positive test for the presence of salbutamol, terbutaline or salmeterol. Positive drug tests that result from the lack of an appropriate approval and administrative system are unnecessary and distressing for the athlete and the sporting organisation.

If the sporting organisation opts for the second option, they should keep in mind the need to be consistent with the requirements of their international sports federation's doping policy. Inconsistent policies can cause considerable confusion for all concerned.

*For more information, sports administrators should contact their ASDA Sports Service Officer, phone (02) 6206 0200. Athletes should contact their national sporting organisation.*

## Substance Updates

### Detection breakthrough Human growth hormone (hGH)

Development of a test for detection of synthetic human growth hormone is on track for Sydney 2000 Olympics according to Australian scientist, Jennifer Wallace.

‘Any athlete competing in 2000 would be foolish to have their performance reliant on the use of human growth hormone,’ Ms Wallace said.

Ms Wallace, based in Brisbane, is a member of the GH 2000 Project which is working on an analytical technique to detect an athlete’s use of banned human growth hormone. GH2000 is a US\$3 million research project supported by the International Olympic Committee and the European Union.

In her presentation to the Australian Sports Medicine Conference recently, Ms Wallace also highlighted the side effects of non-medical use of human growth hormone including acromegaly, diabetes, hypertension, soft tissue swelling and cardiac arrest.

The project is on schedule and the team’s finding is likely to be presented to the IOC Conference on Anti-Doping in Lausanne next year.

### Colostrum

Colostrum is the thin, yellow, milky fluid secreted by the mammary gland a few days before or after child birth. In the human form, it contains up to 20 per cent protein, predominantly immunoglobulins, representing the antibodies present in maternal blood. It contains more minerals and less fat and carbohydrate than normal milk. Colostrum is produced naturally and is not pharmaceutically manufactured.

Colostrum used as a nutritional supplement is derived from cows’ milk. It contains predominantly casein and whey protein. The whey protein includes immunoglobulins IgG, IgA and IgM, growth factors (IGF-1), lactoferrin, lysozyme, lactoperoxidase, serum albumin, alpha-lactalbumin and beta-lactoglobulin (Northfield Laboratories analysis of intact Colostrum Powder). IGF-1 also occurs in normal milk and other dairy products and eggs.

Professor Peter Sonksen, who is studying human growth hormone on behalf of the International Olympic Committee, has indicated that IGF-1 is broken down and inactivated when ingested orally. There is, therefore, no mechanism by which ingested IGF-1 could act on the body as a growth factor. This is consistent with the findings of Buckley et al that plasma IGF-1 concentrations did not differ between groups during their study, *Effect of an oral bovine colostrum supplement on running performance*.

### Status in sport

The IOC does not consider colostrum to be a prohibited substance.

## Reference

Buckley, J., Abbott, M., Martin, S., Brinkworth, G., Whyte, P. (1998). *Effect of a bovine colostrum supplement (intact) on running performance. Australian Conference of Science and Medicine in Sport Abstracts, 1998.*

## HMB (Beta-hydroxy beta-methylbutyrate)

HMB is a metabolite of the amino acid leucine. A small body of research proposes that HMB supplementation may reduce muscle protein breakdown and damage that may result from intense training. However, these claims are yet to be refuted or supported by well controlled scientific studies.

Although HMB is currently not prohibited by the IOC its status is under review. Until the status of HMB is confirmed by the IOC, ASDA cannot affirm its use as a permitted drug.

HMB is not an approved medication for marketing in Australia under the *Therapeutic Goods Act 1989*. The Therapeutic Goods Administration evaluates products such as HMB for safety, quality and to ensure the product's efficacy for its proposed use. With few exceptions, therapeutic products must be labelled in accordance with the prescribed labelling standard and be approved before marketing in Australia. HMB is not included in any product registered on the Australian Register of Therapeutic Goods.

Exceptions for use are only made in special circumstances and applications must meet stringent requirements outlined under the Therapeutic Goods Act.

In addition, HMB (an anabolic substance) is prohibited under the Customs (Prohibited Imports) Regulations.

### Status in sport

Under review.



## Entries on the Register of Notifiable Events for 1997-98

Sport	Sanction	Date of Entry	Type of Test	Date of Test	Category	Class	Substance
Australian football	16 match suspension	21/8/97	OOC	11/6/97	Prohibited substance	Anabolic agent	Boldenone
Australian football	Warning	22/8/97	Event	27/6/97	Prohibited substance	Stimulant	Methoxyphenamine

Baseball	3 month suspension	22/4/98	Event	15/2/98	Prohibited substance	Stimulant	Pseudoephedrine and Ephedrine
Bobsleigh	No breach of AOC anti-doping policy	24/10/97	OOO	21/9/97	Prohibited substance	Anabolic agent	Stanozolol
Bobsleigh	2 year suspension	24/10/97	OOO	21/9/97	Prohibited substance	Anabolic agent	Stanozolol
Bobsleigh	2 year suspension	21/11/97	OOO	16/10/97	Prohibited substance	Anabolic agent	Methandienone
Cycling	To be advised	2/6/98	Event	26/4/98	Prohibited substance	Stimulant	Amphetamine
Cycling	To be advised	3/6/98	Event	26/4/98	Prohibited substance	Stimulant	Pseudoephedrine
Ice hockey	To be advised	17/4/98	OOO	24/3/98	Failure to comply	N/A	N/A
Karate	Reprimand	1/10/97	Event	16/8/97	Prohibited substance	Stimulant	Pseudoephedrine
Motorcycling	To be advised	4/5/98	Event	13/3/98	Restricted substance	Cannabinoids	Cannabis
Motorcycling	To be advised	4/5/98	Event	13/3/98	Restricted substance	Cannabinoids	Cannabis
Motorcycling	To be advised	4/5/98	Event	13/3/98	Restricted substance	Cannabinoids	Cannabis
Motorcycling	To be advised	4/5/98	Event	13/3/98	Restricted substance	Cannabinoids	Cannabis
Powerlifting	3 year suspension	18/8/97	OOO	8/6/97	Prohibited substance	Anabolic agent	Methandienone
Powerlifting ##	3 year suspension	1/10/97	Event	27/7/97	Prohibited substance	Anabolic agent	Stanozolol
Rowing	Exonerated by CAS	14/1/98	OOO	2/12/97	Prohibited method	Manipulation	Probenecid
Rugby league ##	Warning	16/7/97	Event	10/5/97	Prohibited method	Manipulation	Probenecid
Rugby league ##	Warning	17/7/97	Event	25/5/97	Prohibited substance	Stimulant	Pseudoephedrine
Rugby league ##	Warning	17/7/97	Event	1/6/97	Prohibited substance	Stimulant	Pseudoephedrine
Rugby league ##	6 match suspension	17/7/97	Event	1/6/97	Restricted substance	Cannabinoids	Cannabis
Rugby league	Warning	14/8/97	Event	20/7/97	Prohibited substance	Stimulant	Pseudoephedrine

Rugby league	2 match suspension	1/9/97	Event	20/7/97	Prohibited substance	Stimulant	Pseudoephedrine
Rugby league	5 match suspension	1/9/97	Event	20/7/97	Restricted substance	Cannabinoids	Cannabis
Rugby league	5 match suspension	1/9/97	Event	20/7/97	Restricted substance	Cannabinoids	Cannabis
Rugby league	5 match suspension	1/10/97	Event	15/8/97	Restricted substance	Cannabinoids	Cannabis
Rugby league	Reprimand	24/10/97	Event	12/9/97	Prohibited substance	Stimulant	Pseudoephedrine
Rugby league	22 match suspension	28/10/97	OOC	11/4/97	Prohibited substance	Anabolic agent	Testosterone
Rugby league	Warning	1/12/97	Event	17/10/97	Prohibited substance	Stimulant	Pseudoephedrine
Rugby league	22 match suspension	22/5/98	Event	10/4/98	Prohibited substance	Anabolic agent	Testosterone
Rugby league	22 match suspension	2/6/98	OOC	23/4/98	Prohibited substance	Anabolic agent	Stanozolol
Rugby league	**	26/6/98	Event	22/5/98	Prohibited substance	Anabolic agent	Stanozolol
Rugby league	**	26/6/98	Event	24/5/98	Prohibited substance	Anabolic agent	Stanozolol
Soccer	Reprimand	13/5/98	Event	27/3/98	Prohibited substance	Stimulant	Pseudoephedrine
Soccer	2 year suspension	14/5/98	Event	30/3/98	Prohibited substance	Stimulant	Amphetamine
Swimming	\$2,000 fine (ASI) 3 mth susp (AOC)	13/3/98	OOC	17/2/98	Prohibited method	Manipulation	Probenecid
Volleyball	Reprimand & counselling	18/11/97	Event	11/10/97	Prohibited substance	Stimulant	Pseudoephedrine
Water skiing	No sanction (AWSA policy to be advised)	4/5/98	Event	15/3/98	Restricted substance	Cannabinoids	Cannabis
Weightlifting ##	Life ban -2nd offence	5/8/97	OOC	24/5/97	Prohibited substance	Anabolic agent	Stanozolol
Weightlifting	2 year suspension	1/10/97	OOC	18/6/97	Prohibited substance	Anabolic agent	Testosterone
Weightlifting	2 year suspension	24/10/97	Event	13/9/97	Prohibited substance	Anabolic agent	Stanozolol
Weightlifting ##	To be advised	17/7/97	Event	7/6/97	Prohibited substance	Stimulant	Prolintane

*\*\* Entries belong to the same individual who received a total suspension of 22 matches for the two results.*

*## To facilitate its reporting processes ASDA has altered the point at which it reports entries onto the Register of Notifiable Events from that of test date to that of date of entry which has resulted in a small number of entries included in this financial year's that were also reported in last year's annual report.*

## **Sports Administrators**

### **A risk management approach to drugs in sport**

Rising insurance premiums and increasing litigation mean that sporting organisations need a considered approach to risk management. Smart managers appreciate the importance of being prepared and ensuring procedures are in place to deal with events before they get out of hand.

Risk management is about thinking ahead, identifying potential issues and putting in place measures to counter or deal with matters as or before they arise. While it may seem like a lot of work in an already busy schedule, it will save time and money in the long run.

The drugs in sport issue is extremely complex and litigious. It is an issue that sends the media into a frenzy. Infractions, inadvertent or otherwise, can be blown out of proportion. A little thought beforehand can avert such scrutiny and ensure your organisation comes out with an enhanced, or preserved, reputation.

#### **Risk identification**

Developing a checklist of responsibilities and processes can assist in identifying risks. The following examples outline the questions you might ask in developing your checklist.

#### **Policy development**

A sport's doping policy needs to:

- be clear;
- be legally enforceable;
- protect the athlete's rights; appropriately address drug use in sport. If a sport wishes to provide for therapeutic use, its doping policy should provide for an appropriate prior approval procedure. Any such procedure will need to be consistent with the requirements of the sport's International Federation's policy; and
- comply with requirements of relevant bodies (eg sport's international federation, Australian Olympic Committee, Australian Sports Commission).

Therefore it is advisable to seek legal advice when drafting and implementing doping policies.

#### **Questions to ask**

- Does the doping policy meet above criteria?
- How will athletes be informed of requirement relating to drugs such as asthma medications?

#### **Education**

Sporting organisations have a duty of care to inform and educate athletes, coaches and support staff about their doping policy and drugs in sport issues. Failure to comply with this duty may result in the athlete suing the sport.

### Questions to ask

- Who has been exposed to education strategies? How often?
- What was the content and who delivered it? National sporting organisations down to club administrators and coaches should keep these records. Specific information for groups of athletes may also be needed.
- Do new members of the national squad understand the variations in the International Sporting Federation's policy or international testing procedures?

### Sanction hearings

Sporting organisations are responsible for management of positive test results from notification through to hearing outcomes. This process requires careful consideration to ensure natural justice for the athlete in question.

### Questions to ask

- Who is designated to deal with a positive test result?
- Is there an agreed procedure dictating who is informed and what should be done with the information?
- How is the hearing panel convened and what are their obligations?
- How will media inquiries be handled? Will there be one or more spokespersons?
- What support is provided to the athlete?

### Responsibilities of sporting organisations

The *National Drugs in Sport Framework*<sup>1</sup> provides a checklist of responsibilities for sporting organisations. These responsibilities (listed below) can form the basis of a checklist to assist in minimising potential risks. Each point will give rise to a range of processes that will determine the sporting organisations success or failure in its responsibility. Attention to detail will reduce the risk of litigation or unfavourable outcomes for each process.

### Policy

- Developing, in conjunction with State sporting organisations, a comprehensive drugs in sport policy consistent with international sporting federation's policy and conditions of funding from the Australian Sports Commission.
- Contribute to the development of international doping policy.

### Education

- Disseminating information to athletes.
- Making national sporting organisation policy available to athletes, coaches and State sporting organisations
- Drugs in sport education programs.

- Promoting the ethics of drug free sport with sponsors.

### Testing administration

- Providing athlete information to ASDA for out-of-competition database.
- Providing information to ASDA on international, national and major State events.
- Providing testing facilities at events.
- Contracting ASDA to conduct testing as required.

### Sanctions/hearings

- Determine hearing processes in consultation with key stakeholders.
- Conduct hearings.
- Determine and apply sanctions where appropriate.
- Notify all parties of outcome of hearing (eg State affiliates, relevant State and Territory governments plus agencies providing assistance to the sport/athlete, AOC, ASC, ASDA etc).

**For assistance in managing drugs in sport issues, contact ASDA on 02 6206 0200.**

<sup>1</sup> *Copies of the National Drugs in Sport Framework (NDISF) are available from the NDISF Secretariat, Dave Woods on (02) 9454 0203.*

## Building confidence with quality

	<p>The Australian Sports Drug Agency’s quality approach ensures the confidence of athletes and sporting organisations in its robust anti-doping program.</p> <p>The Australian Quality Awards Foundation has recognised ASDA’s progress towards world best practice with a Quality Award in 1998.</p> <p>Sporting organisations around the world can add value to their anti-doping program using ASDA’s individually tailored solutions for policy development, drug testing and education services.</p>
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The involvement of sports organisations in the design of quality drug testing and education services is integral to ASDA’s success.

For more information contact: Australian Sports Drug Agency, PO Box 345, Curtin ACT 2605.

Phone: (02) 6206 0200

Fax: (02) 6206 0201.

## ASDA: leading the way in anti-doping

### Out-of-competition testing: anywhere, anytime

ASDA conducts out-of-competition testing anywhere at anytime. This testing can take place after a training session, on the weekend, in a sport's off season or when athletes are overseas.

ASDA will increase no-notice testing in a large number of sports to further deter athletes from using banned substances. If you are notified for a test, ensure that the person notifying you provides ID and necessary documentation from ASDA.



### Coaches

#### Covering yourself in the drugs minefield

##### Duty Of Care

Recent inadvertent doping cases highlight the serious consequences of inadvertent doping for athlete and coach alike. Coaches are now acutely aware of the position of trust that they hold. To meet this duty of care, they need to provide a minimum standard of care to their athletes.

##### When is care required?

Doping rules become significant to coaches and their athletes as they progress towards national level. Parents and sports administrators expect coaches to monitor the drug education requirements of the developing athlete and ensure their exposure to drugs in sport information PRIOR to being subject to drug testing.

##### What care is required?

Institute and Academy sports administrators are setting minimum standards for athletes in their programs. Examples include:

- annual exposure to a formal presentation on drugs in sport issues including testing procedures, inadvertent doping, rights and responsibilities, banned substances and methods, sanctions, ASDA resources, policy issues;
- six monthly declaration of supplement use;
- a medications diary; and
- distribution of ASDA resources including *Drugs in Sport Handbook* and Wallet Card

##### Covering Yourself

Coaches are encouraged to keep records of the drugs in sport information they (or outside providers) impart to their athletes. This can be a simple administrative task of planning and recording the strategies that meet "minimum standards" and having athletes sign an attendance form or submit a declaration.

On an individual basis, it may prove prudent to note conversations with athletes that relate to drugs in sport.

The last thing a coach needs is a tribunal suggesting that they have either been negligent or the source of misinformation.

ASDA can provide Drugs in Sport Guidelines to assist coaches in developing appropriate strategies and have a range of resources to offer including overhead masters, and suggested activities from the Coach Education Manual and the Drug Testing Video.

*For more information, coaches should contact their sport's ASDA Sports Service Officer, phone (02) 6206 0200.*