



Independent Observers Report

2002

Olympic Games
Salt Lake City





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 **Preface**

The World Anti-Doping Agency (WADA) is composed of both Olympic Movement and Public Authority partners. Its main focus is to lead and coordinate doping-free sports activities in all their forms at international level.

One of WADA's major initiatives for pursuing this objective is the program of the Independent Observer (IO). This has developed into an important program, as it builds confidence both within sport and among the general public by ensuring a doping control process that is open and transparent.

In order to successfully carry out our mission, experts in all aspects of doping control were recruited to observe activities, from sample collection to laboratory analysis to the result management process.

As leader of the IO Team, it was a privilege to work with such a quality group of individuals. Their time, energy, enthusiasm and expertise were critical to the successful operations in Salt Lake City.

The Doping Control Program at the Games was, on the whole, well run and I would like to thank the International Olympic Committee and the Salt Lake City Organizing Committee for its support and cooperation.

I hope that our presence in Salt Lake City contributed to the success of the Games, and that the observations and recommendations contained in the enclosed report will contribute to the implementation of effective testing programs at future Olympics.

David Howman

Chairman of the Independent Observer Team for Salt Lake City Games - 2002





Introduction

“Apart from security threats that may arise during the Games, the greatest danger to sport is doping. Not only does doping attack ethics and fair play, it puts at risk the health of athletes who will do anything to get a competitive edge. It also threatens the credibility and future of sport in the eyes of parents and children who may look down on a win-at-all costs attitude.”

Jacques Rogge
President IOC

In order to fight this perceived danger, doping controls — consisting of random and targeted mandatory urine testing (both in and out of competition), blood testing for endurance athletes and pre-competition testing — were put in place for the 2002 Olympics at Salt Lake City by the International Olympic Committee (IOC) through its Medical Commission (IOCMC) and the Salt Lake Organising Committee (SLOC).



|| ||| | Background

The World Anti-Doping Agency (WADA), with the support of and at the invitation of the IOC, first created the Office of Independent Observer for the Olympic Games in Sydney, Australia in 2000.

The Independent Observers Report was published shortly after the Sydney Games, and the President of the IOC subsequently invited WADA to provide an Independent Observer Team for the first time for a Winter Olympic Games, at Salt Lake City in 2002.

The need for such an Independent Observation of the doping control processes was emphasized by the Report that was issued after the Sydney Games. The public and many competitors themselves still do not have complete confidence in the procedures and the follow-up to them (test results management). Rumours of outstanding doping issues at previous Olympics are still existent. Through independence, transparency and observation, the vulnerability to previous allegations of wrongdoing or cover-ups – and hence to a potential lack of confidence – can be removed. An open and transparent system helps rebuild confidence in one of the vital aspects of modern major sports events.

The creation of the Independent Observer was a crucial step in demonstrating doping control transparency and accountability at the Olympic Games. The Independent Observer essentially acts as the “eyes and ears” of the world as it observes and monitors all aspects of the doping control process, prior to, during and (where necessary) after the Games.

One fundamental objective of the Independent Observer is to ensure that the doping control process at the Games is both fair and seen to be fair, and that those responsible for conducting the testing program in Salt Lake City, namely the SLOC and IOC, followed their processes fully and properly. Achieving such an objective helps to strengthen athlete, sport and the public's confidence in the doping control process.

The role of the Independent Observer is therefore to review, observe and report on all aspects of the doping control operations in a neutral and unbiased manner. In order to provide effective observation and reporting, independent expertise from throughout the world was recruited to the IO Team for Salt Lake City, with sample collection, result management, medical, legal and analytical laboratory experience, as well as the involvement of a former Olympic athlete (see Appendix 1).

At the press conference at Salt Lake City on 3 February 2002, where the Independent Observer Team was introduced, **WADA Chairman Richard W. Pound QC**, stated:

The Independent Verification is designed to ensure the integrity of the entire process. The Independent Observer Team will monitor every stage of testing from athlete notification to the test itself, to the Lab, to Results Management. The IO Team will receive all results simultaneously with Olympic Officials.

The International Olympic Committee has been fully supportive of our Independent Observer Process. No one wants a return to the allegations of problems at prior Olympics. The IO involvement at all stages will help to assure athletes and the world that the process is fully honest and fair.

WADA successfully introduced the program during the 2000 Sydney Summer Olympic Games with strong support from athletes, sport and the general public.

The main role of the WADA Office of the Independent Observer in Salt Lake City is to observe and report on all aspects of the doping control operations, prior to and during the Event, in a neutral and unbiased manner. A report will be published following the Games.

Harri Syväsalmi, WADA's Director General, noted that *"the independent aspect of WADA's observation role is designed to both protect the integrity of athlete testing and to enhance athlete, sport and public confidence in the doping control operations by having a more open and transparent process"*.

David Howman, Chair of the Salt Lake City IO Team, stated that *"he was honoured to lead this important endeavour, as it is a valuable program that supports the good work of both the IOC and the Organizing Committee by instilling a strong sense of confidence in the doping control operations through WADA's independent, open and transparent presence in Salt Lake City"*.

More precisely, the Terms of Reference for the Office (Appendix 2) set out the following key responsibilities:

- 1 | With respect to overseeing the doping control process, the Independent Observer shall observe:
- a. procedures relating to the selection, notification and monitoring of a competitor for doping control;
 - b. procedures where a competitor uses a substance for therapeutic use, including beta-2 agonists;
 - c. sample collection procedures at the Doping Control Stations;
 - d. sample collection procedures where a competitor fails to comply or reports to the Doping Control Station later than required;
 - e. analysis of A samples (including blood and urine);
 - f. transportation and Chain of Custody; and
 - g. process and procedures at the Laboratory.
- 2 | With respect to the subsequent Test Result Management process, the Independent Observer shall:
- a. receive copies of all athlete doping control forms (including those of control samples);
 - b. receive notification of all laboratory test results;
 - c. receive notifications of all failures to comply;
 - d. receive notification of all new substances, unusual results and other irregularities;
 - e. attend the analysis of all B samples;
 - f. attend the deliberations of the responsible doping control review committee when it determines whether a potential doping offence has occurred, and provide relevant information upon request;
 - g. receive a copy of the notification given to competitors of all hearing(s);
 - h. attend all hearings and receive copies of all relevant documents, including recommendations and decisions of sanctions imposed; and
 - i. attend any dispute hearing before CAS or any other judicial body and be available to the parties in a dispute before a tribunal if required.

The WADA Board's Executive Committee appointed its Legal Committee Chairman Mr David Howman as Chair of the Office of the Independent Observer. The members of the Team were selected in such a way as to cover the various fields of work involved (such as laboratory, legal, operational) as well as the different interest groups (such as

athletes, National Olympic Committees, public authorities) (see Appendix 3). This process took place during June and July 2001. An initial meeting of the proposed IO Team members took place in Vierumaki, Finland on 11-15 December 2001 where, on the basis of the experiences at the Sydney Olympic Games and of the training seminar, an Operation Manual and ethical instruments governing the behaviour of the Office and its members were adopted and published.

The work of the Independent Observer was predicated on a number of basic principles:

- *Absolute confidentiality* with regard to all information gathered as a result of the work of the Team. Hence no comments on the information so gathered would be made to any person, including (and in particular) any media representative. (All visitors to the Office of the Independent Observer at Salt Lake were also requested to sign a Confidentiality agreement with regard to anything **that they might see or hear** in connection with its work).
- *Non-interference* with any stage or operation in the doping control processes. Those charged with the various doping control responsibilities would continue to be those in charge at the respective phases. The principle of the IO meant that s/he could not react or respond to questions or requests for help, however well intentioned such requests might be. Nevertheless, a form on which to record a competitor's possible comments was prepared so that feedback could be obtained without the IO having to intervene.
- *Total transparency*: WADA instructed the Office of the Independent Observer to prepare its own report (which would then be made public) by May 2002.
- *Total independence*, including financial, from any of the parties involved. This precluded members of the Office from being involved with any of the doping control processes at Salt Lake, either through membership of the IOC or the IOCMC or by being part of the SLOC or a citizen/resident of the host country.
- Assurance that any potential *conflict of interest* among the members of the Office was addressed through a pre-established procedure.
- The work of the Office and its members would be based on a *Code of Conduct*.
- This also meant that any other members of WADA (Board or staff) who were present at Salt Lake City were not part of the IO Team or privy to any of the information or material gathered by the Team.
- The relevant documents showing how these principles were put into effect are reproduced in **Appendices 4 and 5** of this report.

|| ||| | Establishment of Team and Task

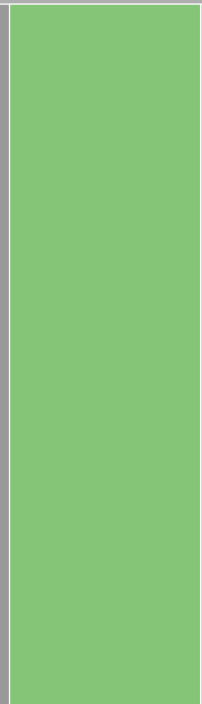
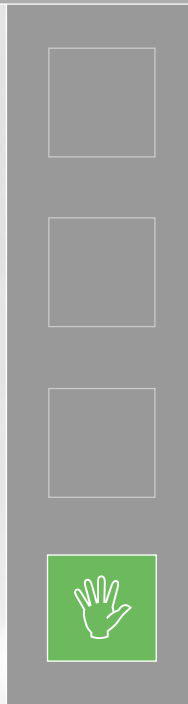
The negotiation and establishment of the necessary cooperation protocols with the IOCMC was substantially completed prior to the opening of the Olympic Village on 29 January 2002 when the IO Team commenced its task.

Several meetings were required to achieve the basic level of cooperation needed, and negotiations for improvements and additions, shown from experience to be necessary, continued until well after the Games had started. The complete list of processes and stages involved in IOCMC procedures was not fully divulged by the IOCMC; the IO Team had actively to search out the information required to enable it to accomplish its task. The initial protocols were therefore not always adequate and made the work of the Office more difficult. As will be seen later in this Report, some of these matters were caused by the changing circumstances and by varied or amended protocols rather than by a lack of co-operation.

The Office of the IO was given accreditation similar to that of the members of the IOCMC, in order to enable the Office to fulfil its mission in conditions similar to those charged with responsibility for the anti-doping process at Salt Lake.

The IO Team acknowledges with gratitude the unconditional support for the work of the Office of the Independent Observer provided throughout the Games by Dr Jacques Rogge, President of the International Olympic Committee, Professor Arne Ljungqvist, Acting Chairman of the IOCMC, and by Mr Richard W. Pound QC, Chair of the WADA Board. Their support and, on occasion, interventions made the Team's task easier. Several members of the IOC Secretariat and the IOCMC were also of considerable help to the Team. In addition, the co-operation from the SLOC, in particular from Dr Doug Rollins and the Doping Control Team, was at all times gratefully received. Finally, the Team is most obliged to Dr Howard Gray, volunteer driver of the IO Team designated car, whose cheerful chauffeuring and other assistance were of great benefit.

At the operational level, at the doping control stations, in the laboratory and at all stages of the IOCMC, the Team met with a warm welcome and constructive cooperation. Thanks are expressed to all those people for their assistance.



DOPING CONTROL PROCESS



DOPING CONTROL PROCESS

It will provide useful background to briefly describe the various stages of the doping control process at the Olympic Games.

The IOC, through its Medical Commission, is responsible for the doping control processes and policies at Olympic Games, with the involvement in each Olympic sport of the respective International Sports Federation. The staff required to implement the processes, especially the doping control officers, and the laboratory and its specialists are provided by the Organising Committee. For each event a number of competitors (in the case of a final, including all the medal winners in individual events) will be selected for testing during the competition or event. At the end of the event those competitors selected are notified of their selection and are required to report to the doping control station at the venue within an hour, during which time they will be escorted by an official (some extension may be granted to allow for ceremonies or press conferences). At the doping control station the competitor is required to provide a urine sample of 75 millilitres; the competitor transfers this to two bottles (the "B" bottle containing 2/3rds, the "A" containing the rest). The "A" sample is then analysed at an IOC-accredited laboratory for the presence of chemical compounds showing the use or ingestion of "prohibited substances or methods". If the analysis at the laboratory shows traces of any such compounds the sample is declared "positive" and the competitor involved is invited to a meeting of the IOCMC Inquiry Commission (comprising 3 members – selected by the Chair in each case) to discuss (in person, or through a representative) the facts of the case. Once the Inquiry Commission has determined the facts, it submits a written report to the IOC Disciplinary Commission (a sub-Commission of the IOC Executive Board), which hears the case. It determines whether or not a doping infraction has occurred and makes recommendations to the IOC Executive Board as to an appropriate sanction (which relates only to the competitor's involvement at the 2002 Winter Olympics: this includes disqualification, withdrawal of a medal and/or expulsion from the Village by removing the competitor's accreditation). The Bye-Laws for the result management process are reproduced in Appendix 6.

The competitor may ask for the bottle containing the "B" sample to be analysed. Should the result of the "B" sample not confirm the result of the "A" analysis then the case is considered negative, subject to any decisions made in the context of the competition, which may no longer be reversed. If the competitor is dissatisfied with the IOC Executive Board's decision, there is a right of appeal to the Court of Arbitration for Sport (CAS), whose findings are binding on both parties. This latter provision is accepted by all competitors as a condition for entry to the Games.

Blood testing was a further important part of the doping control process at Salt Lake City. Protocols were developed by the IOCMC in consultation with relevant individuals and bodies prior to the Games, and were finalised and published in November 2001.

Particular emphasis was placed on testing in endurance sports, skating, cross-country skiing and biathlon (the ISU, FIS and IBU – the relevant International Federations). All competitors in these sports were targeted for testing in the period immediately prior to the Games – “pre-competition” – and random selections were made prior to each event, which up to 20% of the competitors were tested. Because of its importance, a special section of this Report is devoted to blood testing.

Because the integrity of the process and the security of the samples are of prime importance for competitors’ confidence in the process – i.e. the knowledge that all competitors are treated equally, that nobody can tamper with the sample, that the sample is indeed that of the competitor, and that all positive results from the laboratory will be followed up in an impartial manner – the IO Team devoted particular attention to sample collection, pre-competition testing and blood testing collection, and to the test result management process.

The principles and operational methods for these different stages were laid out in:

- The *Olympic Movement Anti-Doping Code (Code)*
- The *SLOC Doping Control Guide for Salt Lake City 2002*

The latter is more detailed on some operational matters (but not in respect of blood sample collection and analysis, regarding which the Guide was inaccurate).

The two texts did contain some differences and, in a few instances, some contradictions. This led to a certain degree of confusion as to which text was valid, similar to the problem that occurred at Sydney in 2000.

|| ||| | Conflict between Code and Guide

There was again an issue in the Salt Lake Games relating to the legal and formal status of the Doping Control Guide.

Following the Sydney Olympic Games, the Independent Observer Team recommended:

“... that for future events the Doping Control Guide (or its equivalent) be adopted as the valid text for that event, on the understanding that while the Guide may contain more detailed procedures than those set out in the Olympic Movement Anti-Doping Code, it will not be in contradiction or conflict with the latter”

It appears that, if any consideration were given to this recommendation, it has not resulted in its acceptance. Indeed the Doping Control Guide reads on page 7:

“The Olympic Movement Anti-Doping Code which came into effect on 1st January 2000 and ... are the applicable rules for the Salt Lake City 2002 Olympic Winter Games”.

As a result of this “rule,” several questions arise as to the status of the Guide, particularly where its contents either conflict with or supplement the Code. For example:

1 | There is a reference to “pre-competition testing” (page 6, page 10 et seq), which is not defined or indeed referred to at all in the Code. What does this mean? This is a new term in anti-doping, one that may be unfamiliar to athletes. It could be inferred that it was “out of competition” but, if so, that fact should be clearly stated. In fact, on page 11 of the Guide there is confusion even under the heading “Pre-Competition” where it states: “... when the competitor is notified or contacted in person regarding the selection for out-of-competition testing”. Clarity for the athletes and for the laboratory as to the “menu” of substances to be analysed in respect of such tests is required.

2 | There is no reference in the Code to blood sample collection/analysis or to blood screening. Indeed, prior to the Games the IOC issued a specific ruling that the Code did not apply to blood collections – only to urine.

However there is detailed content in the Guide relating to blood collection and analysis. None of this was applicable for the Games, nor implemented. In its place, the IOC issued protocols for three sports – biathlon, skiing and skating (IBU, FIS and ISU) – as set out later in this Report.

3 | For in-competition testing, the Guide substantially mirrors the Code but:

- a. There are duties specifically assigned to the IOCMC representative in addition to those mentioned in the Code. For example: page 21, “The IOCMC representative will seal the security transport bag to be sent to the laboratory”.
- b. The Guide mentions the role to be played by the WADA IO representative in the collection process. Moreover, there is inconsistency throughout the Guide in the reference to WADA, including:
 - i. “A representative of WADA” at sample collection. (p15)
 - ii. “WADA Independent Observer Team representative” – at IOCMC hearings. (p25)
 - iii. “Independent international observers will be involved at all levels of the Doping Control process” – description of confidentiality and integrity. (p26)
 - iv. “...including WADA” – post-games report to be sent no later than one month following the completion of the Games (i.e. 25 March 2002). (p27)
 - v. “WADA observers” – at B analysis. (p28)
 - vi. “...the Independent Observer of WADA” – definition of Doping Control Notification. (p.29)
- c. The Code refers to the transport of specimens to the laboratory in “respective A and B transport containers”. In fact, there was only one transport container and the Guide refers to that single container. If the Code is to be adhered to strictly with regard to the chain of custody then every sample at the Salt Lake Games is potentially voided by breach because there are not two transport containers. The IO Team expresses no opinion as to whether such a failure would have a material effect on the chain of custody issue, but merely points out that a problem may be created as a result of this inconsistency and suggests that it be reviewed.

- d. There is no provision for cancellation of the "B" Sample analysis once requested by the athlete, and in Salt Lake the "B" sample analysis was requested but not analysed when the athlete was effectively exonerated (the Belarus skater case).
- e. The Code does not contain the new hearing procedure for positive cases – nor does the Guide (it was published separately and the extent of its circulation is not known).

RECOMMENDATION:

It is recommended (as it was in the Sydney Report) that for future events the Guide (or its equivalent) be adopted by the IOC and IOCMC as the valid text for that event, on the understanding that, while the Guide may contain more detailed procedures than those set out in the Code, it will not be in contradiction or conflict with the latter. Furthermore, the role and definition of the WADA Independent Observer Team should be more clearly set out in future Guides.

|| ||| Independent Observer Team

The Independent Observer Team was present at all stages of the doping control program during the Salt Lake Olympic Games.

The IO Team commenced its operations at Salt Lake City on 29 January and closed its operations on 24 February. Pre-competition testing of Olympic competitors was conducted by the SLOC from 29 January. Pre-competition blood testing in relation to the endurance sports was commenced by the SLOC on 6 February. The IO Team observed these operations on a random basis. There were some operational difficulties with the pre-competition testing program, chiefly due to the lack of information available to the SLOC as to the whereabouts of competitors. It was observed on several days that those who had been selected for pre-competition tests could not be located. For the blood sampling collection process, the doping control stations were too small and resulted in overcrowding, lack of privacy and lack of confidentiality. This issue persisted throughout the Games. As in Sydney the IO Team recommends that, before the Athens Olympics, more time be given to the planning and, particularly, the co-ordination of all doping control programs in order to ensure that the facilities necessary to carry them out are sufficient and appropriate, having particular regard to matters of privacy, confidentiality, independent management and the presence of extra people, including accompanying persons and observers.

With a Team numbering nine operational observers during the Games it was not possible, nor necessary, to observe every doping control. Nevertheless, all venues at Salt Lake City were visited on at least two separate occasions and all sports observed at least twice. See Appendices 7a) and 7b) for a summary of the IO Team Observations.

The numbers of observations were statistically more than sufficient for a full and proper representative sampling. In addition the courier system responsible for taking the samples from Doping Control Stations to the Laboratory was observed and the couriers followed, and the Laboratory was visited every day (sometimes more than once) and at various times. All IOCMC meetings were attended and observed, as were the Inquiry Commission hearings conducted in Salt Lake City and subsequently in Lausanne. The Disciplinary Commission, a sub-Committee of the IOC Executive Board, conducted hearings at Salt Lake City to which the IO Team was invited and which it subsequently attended. It also conducted hearings in Lausanne post-Games and the IO Team was also

present at these hearings. The IOC Executive Board meetings convened to determine doping cases were all attended. There was one matter to which the IO Team was not accorded the privilege of an invitation and that was the subsequent inquiry relating to the skater from Belarus, who tested positive for Nandrolone but whose test was deemed negative by the Disciplinary Commission because of a breach in the chain of custody. There was a subsequent inquiry established by the IOC and carried out without observation from the IO Team. One doping matter went to the CAS during the Salt Lake Olympics, and an invitation to attend was extended to the IO Team with the consent of all parties, including the Arbitration Panel. It is noted that there are still hearings to be conducted at the CAS, where as many as five separate matters are to be litigated, and the IO Team has been advised of such appeals with an invitation to seek the opportunity to attend.

Media

The IO Team, through the Chair, received a number of media inquiries regarding its task at Salt Lake City.

Appropriate answers were given in accordance with the confidentiality agreement. It is noted that WADA also had its Office at Salt Lake City and general questions relating to anti-doping issues were referred to that Office, which had no part to play within the IO Team (see Appendix 8).

Substances Subject to Prior Notification

Description

For the Games in Salt Lake City, only the use of β -2 agonists was subject to a protocol of prior notification. This provision was not required either for anaesthetics or for authorised corticoids, either in the form of local or intra-articular injections. The IOC had adopted the recommendation made in the Independent Observers Report from Sydney, and had put in place a new system to assess the therapeutic justification of authorised β -2 agonist prescriptions.

Thus athletes wishing to take, by inhalation, one of the four authorised medicines to treat asthma or effort-induced broncho-constriction (formoterol, salbutamol, salmeterol or terbutaline) had to submit a request to the IOCMC for prior authorisation. This request had to be submitted at least one week before the start of the competitions and had to include, *inter alia*, the results of clinical and paraclinical examinations, including respiratory function tests, justifying the need for such medical therapeutic use.

This application and medical file then had to be assessed by a panel of independent experts appointed by the IOCMC, which was empowered to withhold the authorisation of therapeutic use and, if necessary, to request further clinical examinations to be performed on the spot.

Panel of Independent Experts appointed by the IOCMC

| NAME | COUNTRY |
|---|-----------|
| Dr Sandra Anderson | Australia |
| Dr Bob Crapo | USA |
| Prof. Don McKenzie | Canada |
| Prof. Helgo Magnussen | Germany |
| Dr Malcom Sue | Norway |
| Prof. Ken Fitch (Serving as moderator) | Australia |

In order to grant authorisation, the experts were required to assess the relevance of the athlete's medical antecedents and the spirographic results in at least one of the following provocation tests:

- positive reaction to methacholine (PD20 at 1 mg/ml or less)
- positive response to a bronchodilator (increase by at least 12%)
- positive response to a voluntary hyperpnoea test (EVH): FEV1 reduced by at least 10%
- positive response to an exertion test: FEV1 reduced by at least 10% or more
- a positive histamine test (for Europe): PD20 at 1mg/ml or less

Observed Results

The panel received 163 requests, 4 of which were from athletes who did not qualify for the Games:

- 130 requests were accepted and the use authorised
- 29 requests were refused on first appraisal
- 8 requests which were initially refused were accepted after further investigation
- from our observations no a posteriori authorisation was granted
- additional examinations were performed on the spot in fewer than 5 cases (these examinations had to be paid for by the applicant).

Comments

The IO Team had several meetings with Prof. Ken Fitch, the expert panel's moderator. It also had access to all the relevant documentation.

It was observed that, in the initial notifications, the NOCs applied for the use of 2 medicines with short-term action or 2 medicines with long-term action. In these cases the athletes were asked to choose one drug only in each category. There was no intervention aimed at influencing this choice, which may explain why the IO Team observed the distribution of combinations exhibiting very little pharmacological justification.

The IOCMC introduced formoterol in the category of authorised β -2 agonists in September 2001, primarily, it appeared, to cut back the combined use of two drugs, in view of the fact that this drug (formoterol) acts immediately, but has a longer half-life than the others. This characteristic was not fully used and the intended effect was not achieved, since the combined use of two drugs increased from 12.5% of notifications in Sydney to nearly 31% in Salt Lake.

According to the published statistics the comparison with past Winter Games reveals the effectiveness of the system. The percentage of athletes who received authorisation for therapeutic use has fallen, whereas the number of requests had risen considerably. The filtering effect of the panel (29 refusals) thus played its part. The percentage of therapeutic justifications without the independent panel's intervention would have been even higher (more than 6%).

The distribution of the declared β -2 agonists was as follows:

| SINGLE USE | |
|--------------------------|----|
| Salbutamol | 75 |
| Formoterol | 8 |
| Terbutaline | 4 |
| Salmeterol | 3 |
| COMBINED USE | |
| salbutamol + salmeterol | 34 |
| salbutamol + formoterol | 4 |
| terbutaline + formoterol | 2 |

Athletes' authorised use of β -2 agonists:

| YEAR | # OF ATHLETES | AUTHORISED TO USE B-2 AGONISTS | % OF TOTAL ATHLETES | % NOCS REFUSED |
|------|---------------|--------------------------------|---------------------|----------------|
| 1998 | 2,296 | 128 | 5.6 | 18 |
| 2002 | 2,595 | 130 | 5.0 | 22 |

As in the past, athletes competing in endurance events made the largest number of requests. The reduction achieved was, however, observed in all the disciplines except for biathlon, ski-jumping and luge.

The very significant increase observed in the biathlon (from 3.9% to 8.3%) would have been even greater had the independent panel not refused 6 requests from that sport.

As far as the geographic origin of the requests is concerned, the most substantial decline occurred with respect to the countries that historically have submitted the largest number of requests at the Olympic Games (Netherlands, USA, Sweden, Norway and Canada). On the other hand, the countries with a small number of requests in the past showed a significant increase (Switzerland, France, Italy, Austria). On the whole this new system was in fact well received by the team doctors, and the opportunity for team doctors to discuss issues with the moderator was extremely useful. As a result, in most cases the panel's decisions were not contested, as the decisions were appropriately supported by medical arguments.

The sports results show that a large number of medals were won by athletes taking β -2 agonists (28 individual medals and 15 medals in team sports). It is interesting to note that out of the total number of rejected requests there were 2 athletes who won a medal in an individual sport and 6 in a team sport.

Out of the 130 approved notifications, the laboratory found 10 cases of elevated urine levels exceeding 100 ng/ml, following controls performed pursuant to ranking or based on random selection. None of the urine samples exceeded the maximum allowed level of 280 ng/ml.

Conclusions and Recommendations

In the light of the results obtained, the IO Team can conclude that the targets set were reached and recommends that this system be maintained for future Olympic Games.

In order to optimise the way this process works it might be useful to improve it by providing all doctors involved with detailed information in good time about the diagnostic test to be performed as well as about the specific properties of the available products.

International Federations may benefit by taking this process as a model for their major events. Further authorised therapeutic use might properly be recorded in the athlete's passport, thus eliminating the need for multiple examinations or procedures on the occasion of the events in which the athletes compete.

|| ||| | Doping Control Stations

Generally these stations were adequate; however the waiting areas were in some instances too small.

The blood stations were also too small. The privacy between the waiting, sample collection, and examination areas was inadequate, with some stations being all muddled up and with only temporary partitions, sometimes of the "hanging blanket" type.

Poor signage and marking made for difficult identification and navigation of the Doping Control Station from either the Drop-Off Station or Event Site. When asked, SLOC staff were often unsure or unclear of DCS locations. Clear markings and educated Host Staff would be very helpful in the future.

|| ||| | Doping Control Training

Considering the number of steps in the detailed process of sample collection and transport, the DCOs were generally quite well organised, knowledgeable, and efficient.

Typically, athletes were taken through the entire process without much error, time burden or inconvenience. There were, however, situations where DC Staff were unsure of proper procedure, which compromised the credibility and quality of the process. These situations included cross-referencing double samples and conducting partial samples. DCOs need to be educated on all procedures, both common and uncommon, to ensure that tests are conducted properly and fairly for athlete protection and to avoid unnecessary future confusion and potential examination. It is possible to implement a certification program where educational seminars are conducted and extensive practical training provided, to get the DCOs the information and training that the position demands.

|| ||| | Documentation

With a high number of handwritten steps in a manual process there is inevitably a risk of error.

While the documents are quite clear and straight forward, the number of documents, serial numbers, and signatures are unnecessary. Many of the errors that were observed including oversight of signatures, oversight of serial numbers, and documenting incorrect numbers, were obvious human errors.

If handwritten forms are to be used in the future, then it is recommended that the form for the laboratory be better prepared. It might more appropriately be the last page of the document covering only the area of information required by the laboratory. This could be

RECOMMENDATION:

It is recommended that, to simplify the cumbersome handwritten documentation work and procedures currently in force, a computerised doping notification and record process be introduced and that barcodes be used for identifying individual sample kits.

done by shortening the page for the laboratory and providing a perforation. (There were occasions at the laboratory when writing was made with such pressure on the writing instrument that the name of the athlete was visible on the laboratory form.)

With today's technology a more efficient and dependable solution must be explored. It is possible that an electronic system could be used with scan-codes identifying athlete, DCO, IOCMC and sample numbers. The forms could be completed via a laptop and then sent to the necessary organisations and confirmed electronically. Each athlete's profile could be pre-set, with only times, dates, medications and comments needing to be manually added. Signatures could be recorded using an electronic sensory pad. This process would make the system much more time-effective and, more importantly, less exposed to human error. Barcodes were used for blood samples but not for urine samples. Stick-on codes of this kind reduce the potential for error and time spent, producing a safer result.

Selection of Athletes for Testing

It was observed that there are differences in the procedures adopted by each sport at Salt Lake City.

The main areas of difference were:

- a. The numbers of competitors selected.
- b. The timing of the selection process.
- c. The selection method.
- d. The notification methods and deadlines for presentation.

It was also interesting to observe that, even within the same sport, there were different procedures. For example, the FIBT has differences between luge, skeleton and bobsleigh, the FIS has variations for alpine, cross-country and ski jump; and the ISU similarly for speed skating, short track speed skating and figure skating.

Further, it is observed that the Team sports and events are subject to significantly less testing than individual sports and events. Again, as in Sydney, it is recommended that this situation be examined and rectified, particularly for medallists.

Numbers of Athletes Selected for Testing

| | | |
|------|---|--|
| IBU | Top 4 + 1 random (+ 4 extra randoms in case a random finishes in the top 4) | |
| FIBT | Luge | Top 4 + 1 random (+ 4 extra randoms) |
| | Skeleton | Top 4 + 2 random (+ ditto) |
| | Bobsleigh | Top 4 + 2 random (+ ditto) |
| FIS | Top 4 + 2 random (+ 4 extra randoms) | |
| IIHF | 1 random from each team in preliminary matches, 2 randoms from each team in medal matches | |
| ISU | Speed & Short Track | Top 4 + 1 random (+ 3 extra randoms for Speed Skating) |
| | Figure | Top 4 + 2 random and in Pairs & Dance, random choice of male or female |
| ICF | Round robin matches: 1 player from male & 1 player from female matches each day; Semi-finals: 2 players from different teams; Medal matches: 1 player from each team. | |

Timing of Selection

| | | |
|------|---|--|
| IBU | Prior to start of competition | |
| FIBT | Luge | Prior to 2 nd run |
| | Skeleton | Prior to final competition |
| | Bobsleigh | During first run |
| FIS | X-Country, Nordic Combined | Just before start |
| | Alpine & Freestyle | Just before "final competition" or 2 nd run |
| | Jump | Before 2 nd jump |
| IIHF | "Prior to start" <i>After the first game in this was changed to the end of the second period.</i> | |
| ISU | Prior to start of competition | |
| ICF | Prior to competition | |

Methods of Selection

| | | |
|-------------|---|--|
| IBU | Bib numbers, drawn by lot Relays: 1 random per team, country name drawn by lot first, then number 1 – 4 drawn by lot | |
| FIBT | Luge | ditto |
| | Skeleton | Number drawn from 2 nd start list, drawn by lot |
| | Bobsleigh | ditto, and also random draw, by bob, of pilot or brakeman (2 man) or pilot or 2, 3, 4 crew man (4 man) |
| FIS | Bib number, drawn by lot | |
| IIHF | Official team rosters, verification by DCO of actual players (“dressed” or “suited”), their numbers into a hat, drawn by lot. Team doctor informed 5 minutes before end of the third period. | |
| ICF | Athletes’ names from start list are cut up and drawn by lot. In the IO Team’s experience, a different system was used: the number of the ice sheet was drawn by lot, then the red or yellow stone on that sheet drawn by lot, then the player’s number (1 – 4) from that colour drawn by lot. | |
| ISU | ISU has its own system, whereby no notifications can begin until the official results are communicated to the DCO by the ISU official. Hence, the importance of place numbers. This procedure inevitably caused a ten-minute delay after the end of competition. | |
| | Speed Skating | Names, drawn by lot |
| | Short Track Speed Skating | Place numbers (in relays, helmet cover numbers), drawn by lot |
| | Figure, Singles, Pairs & Dance | Place numbers, drawn by lot. Male and female cards, from which gender drawn by lot for first place, then alternating genders for each successive control, including randoms. The randoms are drawn by lot from place numbers: thus no need for extra random draws. |

Notification of Selection to Athletes

| | | |
|-------------|---|--|
| IBU | Escorts wait in Coaches’ Zone for verbal notification; written notification after the flower ceremony | |
| FIBT | Escorts wait in dock (luge, bob) or mixed zone (skeleton) for written notification | |
| FIS | X-Country, Nordic Combined | Escorts wait in coaches’ area |
| | Alpine | Escorts wait in coaches’ zone in mixed zone |
| | Freestyle | Escorts wait in “O Zone” |
| | Jump | Escorts wait in free zone at bottom of jump for verbal notifications. After the flower ceremony for written notification |
| IIHF | Escorts wait in field of play ice exit, written notification at the end of the mixed zone, or given in locker rooms | |
| ISU | For all three disciplines written notifications seemed to take place at the end of mixed zone. | |
| ICF | Escorts wait at exit from ice and written notifications take place before the mixed zone. | |

|| ||| | Chain of Custody

“The United States prides itself on its anti-doping stance, and SLOC believes it will contribute to the Salt Lake 2002 Winter Olympic Games by running a professionally conducted Doping Control Program that respects the rights of the competitors, while ensuring that the chain of custody of the specimen is maintained throughout the Doping Control process”.

p28, Doping Control Guide.

The Chain of Custody procedures for the transport of both blood and urine samples from the Doping Control Station to reception at the laboratory are set out in detail on pages 21 and 22 of the Guide. The laboratory also had its own internal chain of custody procedures and paperwork while each sample was being analysed there.

From the Team’s observations it was noted that there were imperfections in the system developed for the Salt Lake Games. These included:

- problems with completing the large amount of paperwork associated with the dispatch of a transport bag containing samples; space in the doping control stations was often insufficient to cope with the piles of forms and envelopes that had to be arranged, completed and sorted correctly. The IO Team gained the impression that little training had been given to doping control station supervisors on these aspects. In addition, procedures were revised on several occasions during the Games;
- long delays in getting a courier to the Doping Control station and in the courier finding the correct door at the laboratory to deliver the bags. Couriers often went to several stations before going to the laboratory. This meant that some samples were delivered to the laboratory more than twelve hours after collection, causing problems with regard to the integrity of the samples, in particular the blood samples. As the Games progressed, however, the courier system became much more efficient and speedier. However, the IO Team noticed that, even at the end of the Games, some Doping Control station supervisors preferred to take the samples to the laboratory themselves rather than wait for the courier (this was still the case as late as 23 February); and
- varying practical difficulties in filling all forms correctly and completely: while there was an IOCMC representative invariably present at the sampling stages, they were not always present at the time of the transport and courier phase; IF representatives were not always present even at the sampling stages.

The daily “Corrective Action Reports” from the laboratory provide a detailed résumé of problems encountered: incorrectly completed forms, forms arriving without corresponding samples, samples arriving without relevant forms, drivers lost, long delays. Not all these problems resulted in a break of the chain of custody, but some undoubtedly did, and these were not able to be corrected by the laboratory sample reception staff. As a consequence, a number of samples, as many as 11, received at the laboratory were not analysed because of inadequate or faulty chain of custody documentation.

RECOMMENDATION:

It is recommended that there be a review of the chain of custody requirements, distinguishing between the essential and the desirable in the light of new techniques.

The chain of custody has been, historically, a major component in the integrity of doping control processes and in the past there have been numerous cases of potential doping infractions lost because of difficulties in this area. The *Code* specifically exempts chain of custody questions whereby minor irregularities cannot be used to overturn a potential doping case.

“Minor irregularities, which cannot reasonably be considered to have affected the results of otherwise valid tests, shall have no effect on such results. Minor irregularities do not include the chain of custody of the sample, improper sealing of the container(s) in which the sample is stored, failure to request the signature of the athlete, or failure to provide the athlete with an opportunity to be present or be represented at the opening and analysis of the “B” sample, if analysis of the “B” sample is requested”.

The importance of this aspect is therefore apparent. Recent developments in doping control techniques have, in the opinion of the IO Team, led to an internationally acceptable view that too much importance is now attached to this question: in particular, the very widespread use of Berek kits, with their tamper-evident tops, and other in-built security devices, means that once the bottles are sealed by the athlete, and dispatched with the correctly completed and signed doping control record forms, the chain of custody procedures could be eased without harm to the integrity of the sample or the rights of the athlete. For example, the need to have a transport bag with its own seal is questionable.

Equipment

The design of the urine sample equipment was acceptable. No irregularities in design or function were observed. There were no samples that leaked and, upon inspection, athletes and attending officials seem satisfied with the sample kits.

RECOMMENDATION:

It is recommended that the design of the transport bag tabs be reviewed to ensure unnecessary complications are avoided. Further, the numbers might sensibly be printed on both sides of the tab.

The plastic tabs that were used to seal the transport bags led to some complications and malfunction. It seemed that when inserted with the serial numbers up/away from the bag they were more susceptible to breaking. If this seal was broken, the DCO had to fill out a new form with the new serial identification number on it. It was then realised that if the seal was inserted with the numbers facing in/towards the bag then the tab was less likely to break. This change in protocol was introduced but had the effect of concealing serial numbers. The DCOs were then instructed to manually inscribe the numbers on the side of the tab facing up. Writing on plastic with a pen proved to be difficult and produced unclear serial numbers.

|| ||| | Dilute Samples

While most of the samples provided met the required specific gravity and pH parameters, there were still many dilute and consequently double samples.

Since athletes were required to provide only two samples, there were occasions where both the samples collected were too dilute for analysis. This is a substantive and procedural issue that requires review, and it could be seen by athletes as a way of avoiding testing. As urine can be manipulated to alter the dilution of a sample, the review must ensure that athletes are required to provide a sample that meets the required specific gravity and pH methods. If a sample cannot be produced within the first two attempts, it is recommended that the athlete be asked to continue to provide samples until an acceptable one is obtained.

|| ||| | Forms

A complete review of the doping control forms revealed only a few comments made by athletes at the time of providing samples.

Examples included:

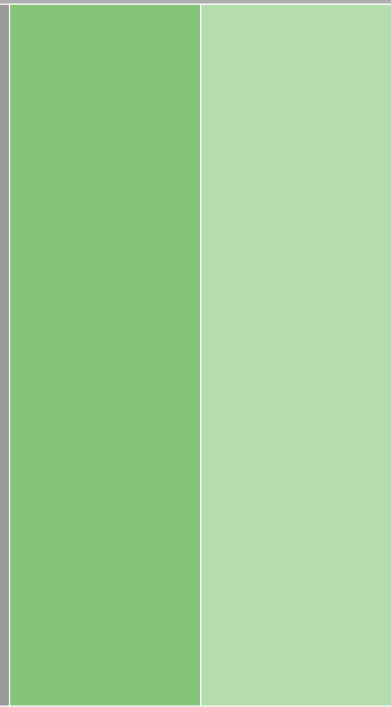
- Ran out of flutide and are now using a medicine with the same ingredients but can't remember the name.
- Notification of therapeutic use of prohibited substance for beta methasone and lidocaine hydrochloride form included was faxed to IOCMC on 11 February.
- "None" (this was recorded on many occasions).
- Well organized.
- Competitor had 2 beers in after-game celebration.
- The athlete consumed 5 beers in post-games celebration.
- First specimen of 2 due to dilute, no comment from athlete.
- Athlete concerned that had to wait in waiting room with specimen before processing with urine in his possession with lots of people present.
- Competitor refused language services and representative. Competitor also drank out of unsealed containers.
- Athlete received Novocain injection for broken ligaments of right ankle.
- Drank Power Aid – tasted strange, had "something" in it. Sent to Lab for examination as obtained from changing room supply.

RECOMMENDATION:

After Sydney the IOCMC adopted the IO Team recommendation to make an urgent study of supplements. The IO Team suggests that it can now be enhanced by the material provided at these Olympic Games.

- Had to wait after specimen provided. Too busy.
- “No comments” (also frequently used).

The lists of medications declared by athletes were often long and varied. Most medications and supplements declared included vitamins and other related substances. Many competitors also declared birth control pills. The IO Team observations in relation to substances connected to supplements and vitamins led it to conclude that, as in Sydney, there is widespread use of supplements and vitamins in sport.



BLOOD SAMPLE COLLECTION & ANALYSIS



BLOOD SAMPLE COLLECTION AND ANALYSIS

The importance of blood testing to detect the use of banned methods or banned substances has increased in recent years. As with blood drawing in general, several fundamental human rights are involved, which led the IO Team to put special emphasis on the observations of the blood collection before and during the Games.

|| ||| Historical overview

Blood sampling for medical, health and anti-doping purposes was introduced in 1989 by the International Ski Federation (FIS) to detect manipulations meant to increase red blood cells.

Endurance athletes were targeted, as increased haemoglobin and red cell counts can enhance endurance performance. Subsequently the International Biathlon Union (IBU) and the International Skating Union (ISU) also started blood testing for endurance athletes.

The Salt Lake City Games were the first Winter Games with a blood testing protocol for the three federations involved (although the FIS had conducted blood testing at Lillehammer in 1994).

|| ||| Categories of Blood Testing: Screening and Legal Detecting

The procedures in the FIS and IBU are quite similar. The ISU procedures, however, differ significantly from the FIS and IBU procedures.

Blood testing can be divided according to its purpose into two main categories:

- for detection and or proof of application of forbidden doping methods and/or substances; deviant findings usually are sanctioned according to the rules of the relevant sports organisations;
- as a pre-participation test, possibly (but not necessarily) related to doping use; anomalous findings in these tests are usually followed by advice or a warning but not by any measures other than a temporary ban on taking part in the competition in order to protect the health of the athlete.

To counteract such forbidden manipulations as the re-infusion of one's own previously drawn and stored blood (autologous transfusion) or transfusion of blood from other persons (homologous transfusion), blood sampling is necessary. The detection of foreign blood can be legally proven. For the detection of some other manipulation, blood testing is indispensable. To detect the use of EPO, blood sampling and analysis is regarded as an important screening step. For the detection of this performance-enhancing drug, however, confirmation by urine analysis is still required.

|| ||| | Test Conducted Before and During the Salt Lake City Games

Blood tests were conducted at three venues and in the Olympic village prior to and during the Salt Lake Games from 6 to 24 February 2002.

In total 1222 blood specimens were drawn and analysed. The SLOC laboratory received 72 combined blood and urine erythropoietin samples for EPO analysis erythropoietin. Blood samples were taken by authorised phlebotomists under the responsibility of SLOC.

At the biathlon and cross-country venue at Soldier Hollow, blood samples were screened with the use of two Sysmac machines for the counting of reticulocytes and a Sysmac machine and a Coulter machine for measuring the haemoglobin. The machines were operated by medical technicians under the responsibility of the FIS and IBU. The FIS subcontracted a commercial organisation to measure the blood samples on the spot. At the skating venues (Olympic Oval and the Salt Lake Ice Centre) the blood samples were analysed by Bayer machines, which combine the measurement of haemoglobin and the counting of relevant cells in the blood samples. These machines were operated by medical technicians of the manufacturer, but under the responsibility of the ISU.

|| ||| | Scope of IO Team and Specific Terms of Reference

The terms of reference were laid down in the Operation Manual for the IO Team, to which a checklist was added.

That checklist deals with the general supervision of the blood doping control station, the personnel, the available materials and forms and the start-up procedures. Further, it contains information about observation of the specific procedures for identification of the athlete, blood drawing, coding and sealing the samples in the phlebotomy part of the station. The analysis should be performed in a separate room. The Operations Manual also deals with observing the result management.

Observations

The IO Team was involved in observations of the several phases of blood testing.

Doping Control Stations for Blood Testing

The routings were properly signed. Generally the doping control stations, both for blood and urine, were well equipped. However, the space in the doping control stations at Soldier Hollow for biathlon and cross-country skiing was limited. There was no separate waiting-room in the blood control station. That station was too small to test the planned pre-competition numbers.

The sampling room and the laboratory room at the Olympic Oval were not always locked when not in use. The space for processing the paperwork at that station was limited.

There was not always a check-in registration at the blood control stations. In particular the registration of individuals accompanying the athletes was lacking, although these persons were usually recognisable.

The privacy of athletes was not respected in the blood drawing rooms and at the processing spot. When crowded, the chain of custody might have been compromised (although the IO Team did not observe any problems) because of the small space between the phlebotomy chairs. During the day-of-competition testing the capacity of the stations was sufficient and no crowding occurred.

The SLOC personnel were easily identifiable from recognisable clothing and accreditation, although the wordings of their functions differed from the SLOC protocols. The personnel present on behalf of the IFs were less easily identifiable, but were very willing to explain their tasks.

Selection & Notification Procedure

We were unable to observe any of the selection process for blood sampling. We were given information about this procedure by the representatives of the IBU and ISU. The IBU used a random number generator, which can be adjusted for the number of competitors. The input number is keyed to the starting list. The program requires repeated drawing. No automatic record files were kept to show the drawing history. According to the IBU rules, the drawing must be done by two officials. According to the rules of the ISU, the random selection procedure may be performed on the day before the competition.

The ISU used a procedure with a random number sheet. The same random number sheet was used throughout the Games, which does not accord with the proper use of this method.

The notification for the blood sampling was provided in writing in an envelope given to a team official.

Sampling Procedure

From the IO Team observations, the preparation for the blood drawing was appropriate. The duration of the application of the tourniquet differed. Usually the tourniquet was

not released before the end of the filling of the sampling tubes. The blood drawing was done properly most of the time, but some phlebotomists used a different style of venepuncture. The IO Team observed several instances of improper drawing technique or insufficient vacuum of the sampling tubes. It also observed poor mixing of the blood tubes immediately after drawing. On request, some athletes had a venepuncture with smaller-sized sampling material, a procedure that usually took longer.

Machines and Procedures for Blood Analysis at the Venues

On-site blood analyses were performed at Soldier Hollow by the IBU and FIS. In the Olympic Oval and the Salt Lake City Ice Centre blood analyses were done by the ISU.

Although installed in the same cabin, the IBU and FIS originally planned to use their own machines. The IBU and FIS use the same type of Sysmac analyser for counting reticulocytes (R-500). However, the IBU measures the haemoglobin with a Coulter and the FIS with a Sysmac KX-21.

The ISU had two Bayer Advia machines available, which can measure both haemoglobin and reticulocytes. A similar type was available at the SLOC laboratory.

All IFs use different control substances for calibration purposes (see table). The IBU runs one calibration at the beginning of each testing day and after approximately 30 blood samples. The FIS usually runs several calibrations a day. In the ISU procedure, some additional control samples are taken from the personnel to 'prime' the machine. These samples are present in the analysis room at the same time as the samples to be officially tested. The calibration runs observed were always in the required range for all machines (see Tables). The observed calibrations at the Salt Lake Ice Centre were also within the permitted range. The IO Team did not observe the calibrations of the Bayer Advia machine in the SLOC anti-doping laboratory nor any comparison measurement between machines.

Reticulocytes Table:

| | TEST SUBSTANCE | ALLOWED RANGE % (G/DL) | ACTUAL CONTROLS (G/DL) |
|------------------|-----------------|-------------------------------|------------------------|
| IBU | Sysmac 500 | Ret check II - 2.07 – 3.85 | |
| FIS | Sysmac 500 | Ret check II - 2.07 – 3.85 | 2.18 – 2.75 (n=10) |
| ISU (400 m Oval) | Bayer Advia 120 | 3 substances 2.5-5.5 (medium) | 3.7-4.5 (n=26) |

Haemoglobin Table:

| | MACHINE USED | TEST SUBSTANCE | ALLOWED RANGE (G/DL) | ACTUAL CONTROLS (G/DL) |
|------------------|-----------------|-------------------|----------------------|------------------------|
| IBU | Coulter | Coulter | Substance 7.4 – 9.2 | 8.2 – 8.4 (n=8) |
| FIS | Sysmac KX-21 | Eightcheck-3WP | 12.7 – 13.5 | 13.0-13.3 (n=14) |
| ISU (400 m Oval) | Bayer Advia 120 | 3Bayer substances | 16.3-17.7 (high) | 16.8-17.2 (n=25) |

Actual Blood Analysis at the Venues

As the IBU Sysmac could not be started up after arrival at Soldier Hollow, the counting of reticulocytes for both organisations was performed on the FIS machine until this machine stopped working after a week. While awaiting shipment of a new machine, blood samples were sent to the laboratory in Salt Lake City for screening.

The IBU performs one measurement of each sample for both haemoglobin and reticulocytes unless the findings are anomalous. Two extra measurements are then performed on the same sample and the average of the three measurements is the value used to make decisions.

The Sysmac machines were equipped with a barcode reader, which identifies the unique code of the sample. However, the reading occurred outside the machine and the code had to be written by hand on the output. The output of the Sysmac is in a receipt-type format, which is clipped onto other forms related to the sample.

The Bayer Advia was equipped with a barcode reader, which identified the sample in the machine when in automatic mode. The ISU performed two measurements of each sample. If these duplicates were found acceptable at the discretion of the operating technician then the lower measurement was used for final decisions. The acceptable difference between the duplicates is neither quantified nor documented.

The IO Team observed several occasions at the Olympic Oval where the doping control officer instead of the medical technician operated the blood analyser. It also observed that automatic mode was not always used. At all venues the separation of the drawing room from the analysing room was insufficient.

Decision-Making and Informing the Athlete

The results of the analyses were reported verbally to the athletes. There was no written document given to the athlete, even though one was completed and copies of it were given to the IO Team.

The IO Team observed one blood drawing and consequent analysis of elevated haemoglobin finding in speed skating. The athlete was known to have naturally elevated haemoglobin. Although the internal written procedure did not foresee such an occasion the athlete was allowed to start despite a value of over 18.1 g/dl. The decision-making of the ISU was based upon many parameters of the human blood system. Longitudinal data and information relating to the effects of change in altitude were taken into account. The ISU medical officers stated that in almost every case a distinction can be made between natural and suspect artificial findings.

The IO Team observed one haemoglobin finding in a male biathlete of 17.5 g/dl. It was decided by two IBU officials that no further measurements had to be done as the level did not exceed 17.5g/dl as provided in the rules of the International Biathlon Union (IBU).

The IO Team observed several cases of cross-country skiers with elevated haemoglobin. According to the FIS rule, an extra measurement must be performed within 5 minutes. The interpretation by the FIS official was to do a complete new phlebotomy, not simply a second measurement of the same sample. In one case the delay between the phlebotomies was about 20 minutes, during which period the haemoglobin decreased

to the allowed value. The IO Team observed the decision-making in two cases for two cross-country relay team members where the second measurements were also elevated. Neither athlete was allowed to start. Substitutes were not allowed, in accordance with FIS rules.

The IBU operating technician, a medical doctor, had the authority to inform the athlete about the results of the haemoglobin findings when not elevated. When elevated the medical officer of the IBU reviewed the case.

According to FIS procedures the SLOC medical doctor on site informs the athlete when the findings are normal. The head of the jury of the FIS (not a medical doctor) informed the athlete in deviant cases. The haemoglobin findings after measurements by the FIS and ISU were not reported to the athletes, but the IBU officials did communicate the findings to the athlete.

Procedure in Case of a High Reticulocytes Count

In case of elevated reticulocytes counts before the competition, additional analysis of the blood and serum was conducted at the laboratory using blood taken either before or immediately after the competition. A urine sample was also collected after the competition and forwarded with the blood to the laboratory. If the five blood-screening measurements resulted in an elevated "on model" score or indicated other possible abnormalities, the urine confirmation test for EPO was conducted.

Linking Blood & Urine Samples, Paperwork

Due to the experiences in the first week and the above mentioned technical problems at Soldier Hollow, SLOC Doping Control (with IOCMC permission) frequently amended the procedures throughout the process of blood testing: these changes related to timing, amount of blood, intermediate storage, sealing and transport. The linking of blood and urine samples proved to be complex. The IO Team observed several occasions of non-conformities in paperwork. In one case the athlete happened to take away all the original blood control forms.

Transport and Arrival to Laboratory

The laboratory issued several reports about improper paper work and/ or improper sealing of the transport bags. The combined time for storage at the venue and travel was in some cases considerably more than 4 hours.

IO Team Recommendations

- a. General improvement of the procedure for updating the rules and protocols as well as informing athletes and teams thereof in a timely manner.
- b. Improving the transparency of the rules and protocols on selection and/or random drawing, decision-making and informing of the athlete about the results of measurements.
- c. Recording and signing the results of the random drawing process, possibly by use of a random number generator that also records all drawings and the time of drawing.

- d. Improving the quality procedures for on-site blood analysis: written protocols and systematic reports/records of calibration available at all times.
- e. Automatic reading of sample Codes and automatic output of the results electronically.
- f. Harmonisation between the IFs with regard to rules & protocols, and standardisation of the calibration of the machines.
- g. Strengthening of the scientific basis for policy differences between the IBU and FIS on the one hand and the ISU on the other.
- h. More transparency about decisions on waivers or exemptions, e.g. by registration of these exemptions.
- i. Endorsement of a waiver or exemption protocol by independent experts, preferably on the basis of objective data.
- j. Blood analysis must be performed anonymously.
- k. With regard to the protocol, the reticulocyte percentage (expressed as Hb level) must be considered a necessary criterion for providing a urine sample.
- l. Any medical decisions to exempt or waive athletes should be tested, approved and published well before the Games.

In addition, observations of the pre-competition blood sample collection process and analysis and the in-competition random blood sampling collection and analysis led the IO Team to the following further opinions:

- i. The International Federation concerned carried out a result management process pre-event, in the sense that decisions were made by a representative of the International Federation as to whether or not athletes could "start" the event.
- ii. Variations occurred in this decision-making process from sport to sport. There were occasions, few in number, where the levels established by the blood collection protocols appeared to have been exceeded but the competitor was nevertheless permitted to start the event. There were two occasions in cross-country skiing where those levels were exceeded and the competitors (both Russian woman cross-country skiers in the relay event) were not permitted to start.
- iii. The IOCMC contends that the pre-event blood testing was of a health/medical nature. No member of the IOCMC signed the documents for this sample collection process nor for the subsequent analysis and decision-making process. However, the protocols in place were such that if certain levels were reached and a start still authorised then there were post-event doping controls. Therefore it can be argued that the blood collection process, at least with respect to EPO, is part of the doping control process and not merely a health/medical control.

In view of both the decision-making component and the doping control issue, it is recommended that these issues be examined carefully before the implementation or continuation of blood sampling protocols.

It is further recommended that, both at the blood sample collection stage and also at the blood sample analysis stage, there be independent personnel to check the scientific nature of the analysis and the state of the equipment and to take responsibility for the results, including the result management process and the advice to those responsible for this process.

Observations

At the time of the sample collection of blood for each of the endurance sports, it was observed:

- As far as the FIS was concerned, there was hardly any International Federation presence at the collection. The forms revealed only a presence if there was a high count noted by the sample collector.
- For the IBU the International Federation representative was present at almost all collections and signed the forms appropriately.
- As far as the ISU was concerned, the International Federation representative was very often present and signed the forms appropriately.

Equipment

On the whole, the sample collection equipment was satisfactory. Insofar as blood was concerned, there were many blood vials destroyed and the collection equipment was not adequate.

This requires review. This review should encompass vessels for collection, storage and analysis and the equipment required for analysis. One of the machines at the Soldier Hollow venue broke down during the Games and could not be replaced for several days. This meant that many blood samples were not completely analysed.

The IO Team was concerned to discover, when reviewing the Doping Control forms late in the Games, that the FIS had produced a list of athletes that indicated that high haemoglobin levels were medically acceptable for some athletes, the majority of whom were from one country (Switzerland). The IO Team was not aware of the creation of this list nor the background to its formation, and it may well be medically appropriate. However, it was not a matter discussed prior to the Games, nor does it appear to have been a list that was circulated to the Doping Control Officials.

The Blood Reports

The forms used were “Doping Control Blood Record” forms. From that printing and description it can be seen that there was a doping control factor regarded by the officials and that the blood sample collection was not simply health/medical.

RECOMMENDATION:

It is recommended that, as far as the blood collection protocols are concerned, there be consistency in protocols for attendance, having particular regard to the important requirement for decisions in respect of analyses.

RECOMMENDATION:

It is recommended that, should any medical approval or acceptance of high haemoglobin levels be given to any athlete, it be published prior to the Games; and further that any process should be medically acceptable and should be subsequently published and circulated to athletes and NOCs following proper medical analysis.

Utah Olympic Oval

From the analysis made of the figures presented in relation to blood collection, it is apparent that at the Utah Olympic Oval there were high numbers of competitors with high reticular counts. The percentage was much higher in this sport (skating) than the counts revealed by an analysis of samples taken at Soldier Hollow and Salt Lake Ice Centre.

Pre-Competition Testing

Following the pre-competition testing in relation to blood which commenced on February 6th, the following observations can be made:

- a. The protocols for blood testing for EPO were not established to the degree required to ensure that all athletes in the endurance sports were tested pre-Games. For example, an athlete residing outside of Salt Lake City could come to Salt Lake City after 6 – 7 February and not be included in the program. Therefore it would have been possible for an athlete to have arrived at the Games after 7 February, take EPO and compete 10 days later without having been tested.
- b. Pre-competition testing was also conducted by the SLOC, WADA and IOC outside of Salt Lake City until 8 February. The protocols meant that it was possible for athletes to have avoided pre-Games urine testing post-8 February.

Post-Event Testing

The sample collection process for athletes post-event was such that except in the case of endurance sports where blood counts had been irregular, athletes were not tested for EPO. The IO Team observed that therefore many medallists were not tested for EPO although there were systems in place for such analysis to take place.

Furthermore, following the change in blood sample collection protocols after 4 days of competition, blood samples were collected from those athletes who were in the second parameter level of the blood protocols. Other such samples could have been collected physically at the doping control stations.

Target Testing

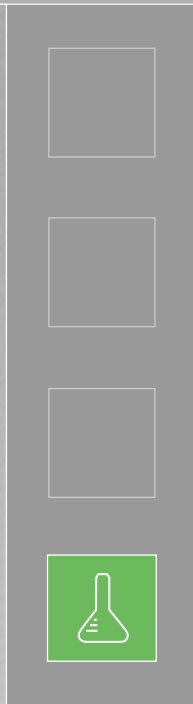
The IOCMC has the power under the Code to test any competitor at any time. The decisions taken by the IOCMC to target-test some athletes were communicated to the IO Team. The IOCMC is to be commended for targeting athletes who subsequently proved to be in breach of the Code. Furthermore, the laboratory is to be commended for detecting the drug Darbepoetin, commonly known as NESP, which was only commercially produced in October 2001.

Doping Control Procedures Post-Sample Collection

As can be seen from the contents of the corrective action reports prepared by the Director of the Laboratory, the processes were not always properly followed. In the case of at least 11 samples the Laboratory decided not to analyse samples because of serious breaches. The Laboratory Director reported these breaches to the IOCMC. There was no direction or request made of him to pursue such analysis in any of the cases he reported. Essentially this means the Laboratory Director is partaking in a form of result management function without proper detailed or independent review.

RECOMMENDATION:

It is recommended for the future that the contract entered into with the Laboratory provide for proper ways of dealing with such issues, to exclude the possibility of the Laboratory Director being involved in unilateral decision-making of a result management nature.



LABORATORY



LABORATORY

The Salt Lake City Organising Committee (SLOC) for the Olympic Winter Games of 2002 contracted the Regents of the University of California to provide the laboratory testing services for the 2002 Winter Olympic Games.

For the period prior to and during the Winter Olympics, the University's Los Angeles' (UCLA) Olympic Analytical Laboratory was required to set up a temporarily accredited laboratory in approximately 5000 square feet of new laboratory space in the Salt Lake City (SLC) ARUP Laboratory complex. The temporary laboratory achieved both ISO 17025 Certification and IOC Accreditation. The analyses for the Paralympics were conducted back at the Los Angeles laboratory.

|| ||| Staff

All scientific, technical, sample management and administrative staff had been trained in the UCLA laboratory and were transported to SLC as required prior to and during the Olympics. At least 40 and up to 60 staff were available to provide the comprehensive Laboratory Testing Services during the peak of activity from 5- 25 February 2002.

Laboratory Staff

| FUNCTION | NAME |
|-----------------------------------|--|
| Laboratory Director | Dr Don Catlin |
| Assistant Director | Dr Caroline Hatton |
| Visiting Laboratory Directors | Dr David Cowan (Drug Control Centre, Kings College, London) |
| | Dr Ray Kaslauskas (Australian Olympic Laboratory, AGAL, Sydney) |
| Director, Administration/Planning | Ryan Connolly |

|| ||| | Accommodation & Equipment

The laboratory accommodation was spacious and professionally designed to accommodate the specific requirements of an Olympic operation. Special consideration had been given to security, operational flow, equipment set-up, IT laboratory management systems and staffing needs to ensure that the entire process functioned efficiently and effectively.

The laboratory operated 24 hours per day, with the “peak” rostered period being evening-early morning to coincide with the times when the majority of the samples were delivered from the venues and required processing and screening. The majority of results were reported within 24 hours of sample receipt.

The instruments that had been purchased or leased were:

- Eight (8) Agilent 5973N MSD/DS Diffusion-Pump EI Bundle (GC-MS)
- Two (2) Agilent 1100 Automated Quaternary LC 3D Systems (HPLC)
- Two (2) Finnigan MAT 95 XL High Resolution Mass Spectrometers (HRMS)
- Two (2) Finnigan MAT Delta Plus Isotope Ratio Mass Spectrometers (IRMS)
- Two (2) Advia 120 Haematology Systems
- One (1) Transferrin Receptor Screen
- One (1) CCD Camera
- One (1) Immunolyte Random Access Chemiluminescent System
- Two (2) Electrophoresis Systems
- One (1) Abbott System

|| ||| | Sample Numbers

Approximately 700 “in-competition” urine tests for the standard drug menu were conducted throughout the Winter Olympic. These samples were collected using kits manufactured by Bereg.

From 6 February, approximately 1000 blood samples were collected for screening for possible EPO and Plasma expander abuse. The intention was that athletes competing in cross-country skiing, biathlon, Nordic combined, and long and short track speed skating

should have blood screens at least one day prior to first competition, using “on site” equipment at Soldier Hollow, the Utah Olympic Oval and Salt Lake Ice Centre. According to the protocols, some competitors were also required to have further blood screens on the day of competition prior to competing. If the haemoglobin and/or the percentage reticulocytes were at or above defined “gender specific” levels, the competitor was required to produce a urine sample for EPO testing (normally immediately post-competition). This urine split sample was twin-packaged with the blood and serum samples and forwarded to the Laboratory. The laboratory performed five parameter blood screening tests prior to deciding whether to proceed with the complex urine test for EPO based on isoelectric focusing. The urine EPO test was conducted on a number of the samples received prior to and during the Games. While the IO Team was not given information on the precise number, the estimate is between 50-100.

|| ||| | Scope of Services

The Laboratory conducted appropriate screenings and confirmations on the urine and blood samples for the presence of substances listed in the *Code* (and any updated amendments) for which an IOC procedure existed or a validated method had recently been developed.

The procedures were well documented in laboratory manuals and strictly adhered to. They employed the “State of the Art” instrumentation listed above to ensure maximum selectivity and sensitivity along with efficient and high-quality output of results. The scientific staff had the appropriate qualifications, training and skills to perform their tasks.

While the IO Team observed the validity of the standard EPO test, it is not able to comment on alterations that were made to this test which also allowed the detection of Darbepoetin. However, they were able to examine either the visualised gel or the printouts of the electropherograms from the three positive cases and to observe the distinct separation between the acidic isoforms of Darbepoetin (NESP) and the more basic normal EPO and recombinant EPO isoforms. The IO Team is unable to comment on whether or not this method for detecting Darbepoetin was providing quality results for the entire period of the Games.

|| ||| | WADA Independent Observers

The Laboratory Experts of the IO Team commenced their work on 3 February and continued until 26 February. The first (introductory) visit was intended to introduce the IO Team laboratory experts to the Laboratory Director and relevant staff, to explain the role of the observers visiting the laboratory and to discuss practical aspects of the co-operation.

It subsequently became apparent that the Laboratory Director either did not fully understand or did not fully accept the role of the IO Team Laboratory experts. From time to time throughout the Games there were strains on the professional relationships as well as difficulties in communication between the IO Team and the Laboratory Director and his staff.

The Laboratory was a separate unit within the ARUP laboratory complex and a strict security system was maintained 24 hours per day during the Olympic Games testing period. Only laboratory personnel had coded swipe cards for entry into the laboratory suite. Visitors were required to register at security and were then escorted by a staff member into the laboratory. Once in the laboratory, the IO Team was free to move around the various laboratory zones but was instructed not to communicate with any of the staff. Any queries, requests for information or discussions (all to enable the IO Team to fully observe and subsequently report) were to be channelled only to the Laboratory Director, who did not always approve those requests. For example, a specific request to have access to the blood measurements was refused.

The following main areas were focused on:

- Specimen receiving procedures (functional contact between Doping Control Stations and Laboratory)
- Laboratory work (processing of analyses)
- Laboratory data management and reporting (functional contact between Laboratory and IOC result management).

Special attention was paid by the IO Team to blood doping control (EPO and related substances), both measured in blood and urine.

The IO Team strategy was to schedule daily visits in a manner that allowed observation of the entire set of procedures during the 24-hour period of laboratory work. Confirmation procedures for “A” samples (if suspected positive) and for “B” samples received special observation.

Schedule of Laboratory Observations

| DATE | PURPOSE |
|------------------------|---|
| 03 Feb 1100 (2h 30min) | Introduction and laboratory inspection. |
| 07 Feb 1600 (2h) | Laboratory receipt process and chain of custody. |
| 09 Feb 1830 (1h 15min) | General observations. Discussion of WADA IO's role. |
| 10 Feb 1700 (1h) | Observation of receipt of urine samples followed from Snow Basin. |
| 10 Feb 2020 (2h 05min) | Evening shift observations. Blood screening methods. |
| 11 Feb 2108 (3h 50min) | Midnight shift observations. Blood screening & urine EPO. |
| 12 Feb 1315 (3h 30min) | Blood receipt & screening. Urine EPO. Clenbuterol positive control. |
| 12 Feb 2112 (2h) | Evening shift observations. HRMS analyses. |
| 13 Feb 1830 (1h 15min) | General observations. |
| 14 Feb 2120 (2h 55min) | Examination of Standard Operation Procedures (SOPs) & Quality Manuals. |
| 15 Feb 0930 (2h) | Observation of receipt & analyses of "Day of competition" blood samples from Soldier Hollow (SH) |
| 15 Feb 1630 (2h 50min) | Post race blood/urines from SH. Urine EPO analyses. IRMS analyses. |
| 16 Feb 0945 (1h 15min) | "Day of competition" blood samples from SH. |
| 18 Feb 0845 (1h 15min) | "B" sample confirmation (19-norandrosterone) which did not proceed. IO Team had not been notified of cancellation. |
| 18 Feb 1715 (1h) | Observation of receipt of blood & urine followed from SH. |
| 18 Feb 1855 (2h 20min) | Evening shift observations. |
| 19 Feb 1502 (1h 30min) | General observations. Courier delivery and lab receipt of EPO samples. |
| 19 Feb 1930 (1h 50min) | Blood and urine EPO analyses. B-blocker procedure. |
| 20 Feb 1300 (1h 30min) | Review of data documentation & checking of urine screening results. |
| 21 Feb 1134 (1h 10min) | Review of analytical screening data. |
| 21 Feb 1925 (1h 45min) | General observations. Blood/urine EPO. |
| 22 Feb 1110 (5h 15min) | Review of files and results relating to blood/urine EPO tests. Request for access to files relating to additional analyses on borderline "A" samples (eg confirmation/ quantitation). |
| 23 Feb 1105(1h 10min) | Review of two caffeine quantitation files. |
| 23 Feb 1940 (2h) | General observations. |
| 24 Feb 1130 (2h) | Missed witnessing start of "B" confirmation for darbepoetin since IO Team had not been forwarded an invitation. Review of documentation. |
| 26 Feb 0845 (3h) | "B" confirmations: two x darbepoetin (NESP) |

|| ||| | Specimen Receiving and Sample Preparation Procedures

Samples were received in a separated reception area which was restricted to sample receipt personnel, peer review staff and a limited number of senior managers. While the area was supposed to be locked when one of the relevant staff was not present there were occasions when the door was observed to be open when the room was empty.

The sample reception area contained the refrigerators for the storage of urine samples, controls, etc. While these refrigerators were in an obviously secure area and the contents were only handled by the restricted personnel, they were not individually locked.

The courier delivered the samples, via a security door, to a sliding window in the sample receipt area. The following processes were observed:

- Receipt of Transport Bags
- Checking and logging of Transport Bag Seal Number & Doping Control Laboratory Advice Form
- Registration/ logging of Samples
- Labelling & storage of "A" and "B" Urine Samples
- Processing of blood samples and blood/urine twin pack
- Batch preparation and aliquoting of samples
- Measurement of pH and specific gravity
- Chain of custody documentation
- Transfer of aliquots to assay chemist in the analytical laboratory

Particularly the following were observed:

- High skill level and discipline of staff
- Thorough peer checking, by specialist staff, of every step of the receipt/sample preparation procedures
- Timely and professional response to numerous irregularities (accompanying documentation, samples, transport, time delays, seals, etc.)
- Comprehensive corrective actions detailed and reported on a daily basis

Overall the sample reception responsibilities were managed in a very controlled and high- quality manner. The staff were all very experienced and able to cope professionally and in a timely manner with the irregularities as they arose. Senior staff involved in checking the processes were also involved in addressing and resolving irregularities that could be dealt with immediately and/or preparing daily "Corrective Action Reports."

Corrective Action Reports

In the case of any irregularities of specimen receipt, sealing, transport, sample documentation or related problems the Laboratory Director prepared a Corrective Action Report (CAR) and presented it to the Acting Chairman of the IOCMC, with a copy to the IO Team Chair. Between 10 and 23 of February, 11 CARs were presented for consideration.

The majority of the issues documented had also been observed on occasions by the IO Team either at the Doping Control Venues or in the laboratory reception area. The following main problems were reported from the laboratory:

- at the beginning of the Olympic Games, some drivers transporting the samples were unable to find the laboratory location, causing unnecessary delay in sample receipt and posing a potential threat to the biological integrity of some samples; the door or entrance for sample delivery at the laboratory was not clearly indicated, and until the drivers were familiar with the route and entrance such delays were almost inevitable, particularly when the samples arrived after midnight;

The IO Team observed two such incidents when drivers transporting samples had difficulty finding the entrance to the laboratory.

- the transport system (collection of samples from different sport venues) needed to be improved; the time between sample collection and the delivery to the laboratory was initially too long;

The IO Team was present in the laboratory on several occasions when the sample receipt process was frustrated by the considerable variations between expected and actual sample delivery times.

- some doping control forms associated with samples were either missing, incomplete or incorrect; samples arrived at the laboratory without forms, and forms without samples;

The IO Team observed these deficiencies on at least three occasions as well as the efforts the laboratory staff made to rectify the problems so that, wherever possible, the analytical process could proceed; the IO Team observed appropriate action being taken.

- bag seals were broken or not present on arrival at the laboratory;

The IO Team did not directly observe the receipt of any such bags but was advised of these occurrences.

- incorrect Doping Control documents (with athlete's details) accompanied samples, thus breaching confidentiality and rendering the samples unable to be analysed;

The IO Team was present when one such case involving blood and urine for EPO was received.

- the blood and urine samples for EPO analysis were not always properly packed together; the blood kits were not so easy to pack safely, one kit exploding when it was being prepared for analysis; some plasma/serums had insufficient sample to conduct the EPO screening; forms and samples did not always correspond; SLOC protocols changed during the Games, causing confusion for laboratory staff;

The IO Team was shown the blood sample which had exploded; it also observed at least three plasma/serums where there was insufficient sample for analysis and a number of incidents where the forms and samples did not correlate.

- communication problems meant that some deliveries arrived ahead of schedule and some without any notice;
- a number of athletes provided consecutive “pairs” of dilute urines and both samples were forwarded to the laboratory. While this procedure was consistent with the SLOC protocols for dealing with dilute samples, there still remains the issue of how to obtain urine of acceptable concentration (or pH if relevant) from an athlete who cannot produce such a sample immediately post-competition.

The IO Team observed the receipt of dilute pairs on several occasions, sometimes without clear documentation; appropriate decisions were made on the analytical protocols, such as whether to analyse one or both samples of the pair and which analytical procedures required larger sample aliquots.

A further issue in the first few days was that the SLOC had trained the Doping Control Officers to instruct the athlete to initially fill the “A” bottle to the mark and pour the remaining urine sample into the “B” bottle. This sequence required altering so that the “B” bottle was initially filled to the mark and the remaining urine was poured into the “A” bottle, thus ensuring that the laboratory had the maximum amount available.

From the IO Team observations it appears that the IOCMC and SLOC responded to CARs quickly and properly wherever possible, thus eliminating, at the laboratory, many of the above-mentioned doping control irregularities, which occurred particularly during the first days of the Olympic Games. In addition, laboratory staff were conscientious in ensuring that small irregularities were appropriately corrected, thus enabling analytical work to proceed according to the chain of custody requirements of the *Code*.

The IO Team was not present to observe all the urine and blood samples that were rejected for analysis by the Laboratory Director. Those that were rejected on the occasions that the IO Team was present appeared to have been rejected appropriately. It is noted, however, that there is no process for the review or endorsement of such decisions made by the Laboratory Director, and the IO Team recommends that this aspect be reviewed prior to the next Olympic Games.

Laboratory Work

The analytical laboratory was divided into the following specific functional areas:

- a. Chemistry zone, where the batches of urine samples and controls were subjected to extraction/derivatisation/workup according to the relevant procedures.
- b. Main instrumental zone, which accommodated the majority of the more "routine" analytical instruments.
- c. Special EPO zone, where the entire blood/urine sample preparation, blood instrumental screening and urine EPO confirmation procedures were conducted.
- d. Separate room accommodating the highly specialised instrumentation: HRMS and IRMS.

The IO Team laboratory experts focused on the following aspects:

- a. Organisation
- b. Accreditation
- c. Quality control systems
- d. Equipment and engineering
- e. Management
- f. Standard Operating Procedures (SOPs)
- g. Compliance with SOPs
- h. Staff qualifications & skills
- i. Chain of Custody
- j. Documentation

All the observed aspects of the laboratory chemistry and instrumental analytical work were conducted to very high standards that were dictated by documented Operational Procedures and were adhered to. The scientific staff displayed a high skill level and were experienced in the tasks they were required to perform. Equipment was well maintained and calibrated. Normal instrumental problems were dealt with and did not jeopardise the timeliness of the daily service delivery.

The IRMS was operating daily on samples which were specifically selected after the screening analyses.

In particular, the specialists involved in the blood and urine EPO screening and confirmation procedures were very active throughout the entire Games period and were still processing urine confirmation samples on 26 February. During the Games, the team perfected the ability to confirm Darbepoetin (NESP) in urine. As mentioned previously, the IO Team cannot comment on whether or not this modified method was fully functioning for the confirmation of Darbepoetin during the earlier period of the Games.

Up until February 21st, the IO Team had received copies of 52 EPO test reports where the urine test for exogenous erythropoietin had been conducted and the results were negative. In addition, three detailed reports confirmed the presence of Darbepoetin in the urine.

Since the IO Team had difficulty locating and accessing the results of the blood measurements according to the “on” model, (particularly for those cases that were under laboratory review), it was not possible to monitor all the decision-making criteria that determined whether or not urine analyses would be conducted. Hence, these observations were subject to limitations.

|| || | Laboratory Data Management and Reporting

Data Collection

The data were stored in a computer servicing a specific method or instrument and then networked to a central computer unit (server) for further analysis and evaluation. This function was performed by both senior laboratory staff and the visiting laboratory directors. The system allowed for efficient data management and reporting. During the time of observation only one short break in connection between one working computer and the server was noted. This did not appear to significantly influence the timeliness of the results or the quality of the output.

Data Analysis

Data relating to the sample were individually analysed at each step of the operating procedure. The initial suite of assays involved screening the “A” sample to determine if the sample might contain a drug, drug metabolite or some endogenous substance above its physiological level. The screening tests provided a qualitative indication of the possible presence of banned substances. For those few substances with threshold limits, approximate semi-quantitative determinations could be calculated.

When any suspected substance was detected, a new aliquot of the sample was re-analysed following the appropriate “A” confirmation procedure (*see exception below for salbutamol, salmeterol and terbutaline). This procedure was performed by a different analytical chemist to the one who performed the “A” screening. Each batch of samples included negative and positive quality control samples and the athlete’s sample in question. For the substances with threshold levels, quantitative analyses were included in the “A” confirmation procedure. Such samples were analysed in triplicate along with a minimum of three calibration control samples that had been appropriately selected to provide accurate and statistically significant final results.

Because of the permitted use, by inhaler, of the asthma medications salbutamol, salmeterol and terbutaline, these results were reported to the IOCMC (and to the IO Team chair) after screening, with the qualification that “This is not a positive case report.” The laboratory director requested that declaration forms be checked prior to him being advised on the need to perform an “A” confirmation.

NB: This protocol was one of the recommendations for change that the IO Team made in its Sydney 2000 Summer Olympic Games Report.

“B” Confirmation

The “B” confirmation procedure was essentially the same as the “A” confirmation, but was performed at the request of the suspect athlete or athlete’s representative under IOC authority. The athlete was invited to have a representative attend the analysis of the “B” sample. An IOCMC Medical Commissioner and an IO Team laboratory expert were also invited.

During the Winter Olympic Games there were only two occasions (24 and 26 February) when the observation of “B” confirmations took place. Unfortunately the IO Team had not been notified by the IOCMC of the Darbepoetin “B” confirmation on 24 February, so it was not present to observe the examination of the documentation filed by the athlete’s representatives and the inspection and opening of the “B” sample. When the IO Team arrived for a general laboratory visit, the athlete’s representatives were departing but the Laboratory Director and IOCMC Medical Commissioner did brief the IO Team on the proceedings and provided copies of the relevant documents and witness statements.

On 26 February two further Darbepoetin confirmations were conducted in the presence of the athletes’ Chef de Mission, a SLOC interpreter, an IOCMC and an IO Team representative. The process described in section 2.2 of the Appendix D of the Code, i.e. “Guidelines for the analysis of the B sample,” was strictly adhered to.

On one other occasion, the IO Team was notified by the IOCMC that a “B” confirmation for 19-norandrosterone was scheduled for 9am on 18 February and was invited to be present. This appointment was subsequently cancelled but, since the IO Team was not notified, the IO Team reported to the laboratory at the scheduled time.

Data Evaluation

The reading/interpreting/collating of results and auditing functions were performed by multiple layers of senior staff. Results from the suite of screening tests for each batch of samples were collated into one file and read or interpreted by at least two senior analysts. These were documented on worksheets and summarised on summary sheets. After an official request by the IO Team Chair for access to this data, the IO Team laboratory experts were able to check on the completeness of these batch screening files and the thoroughness of the evaluation.

For samples requiring additional analysis (e.g. “A” confirmation, quantitation, IRMS), additional working files were set up and stored in laboratory areas that were not readily accessible. For those cases where an “A” confirmation had resulted in the production of an “A-Sample Adverse Report,” both the IOCMC and the IO Team Chair simultaneously received the entire documentation package by confidential fax. Six “A-Sample Adverse Reports” relating to athlete samples were received in this manner and the documents examined were complete and of a very high calibre.

The substances reported were:

- 19-norandrosterone (two cases above the thresholds)
- methamphetamine
- Darbepoetin=NESP (three cases)

In addition, three IOCMC control samples were reported as well as a further IOCMC control that did not require confirmation because of incorrect Doping Control documentation. The IO Team Chair was faxed the documentation packages for these controls.

There was an issue, however, for the IO Team to gain access to the files where the additional workup had been carried out but where the results had not led to an "A-Sample Adverse Report". It required an official letter from the Chair of the IO Team to the Laboratory Director before some selected files were made available. Those files that were examined reiterated the very high standard of analyses, data evaluation, peer-checking throughout and final conclusions.

The quantitative results were statistically evaluated by linear spectrum cross-correlation analysis, estimation of linearity of calibration curve, analysis of variance (ANOVA) and two-sample variance t-test. For a case to be considered positive, there would have needed to be a statistically significant difference between the means and variances of the questioned and calibrated sample.

Reporting

After performing all the analytical procedures, a specialist panel in the laboratory again discussed all the possible aspects of the questioned samples. If there were no doubts regarding the laboratory procedures or the laboratory chain of custody then the Director of the Laboratory reported the results as an "A-Sample Adverse Report" to the IOCMC Medical Commissioner and the IO Team Chair.

The positive case report contained full documentation of internal laboratory procedures, chain of custody (both Doping Control Transport Form and laboratory chain of custody), laboratory analytical results and data evaluation. Short descriptions of the analytical methods applied were also included.

For negative urine EPO tests, the 52 reports that the IO Team saw contained blood screening values and a statement that the urine test showed no evidence of exogenous erythropoietin.

|| ||| | Co-operation with the IO Team

The co-operation between the Laboratory Director and the IO Team varied depending on the tasks and functions being performed. This attitude and behaviour could relate to the previous comment about the lack of clear understanding and documented agreement about the role and expectations of the IO Team laboratory experts.

As mentioned above, copies of laboratory reports and CARs were simultaneously sent by confidential fax to the IOCMC and to the IO Team Chair. This process made it possible to become acquainted with formal laboratory documents and to compare the content of the CARs with observations and reports prepared by the IO Team performing its variety of functions. This level of co-operation between the Director of the Laboratory and the IO Team Chair was correct and helpful.

Eventually, the IO team was given access to documents describing the organisation, accreditation and certification of the laboratory, standard operating procedures, batch reports and some other special analytical data. While all laboratory procedures and analytical processes were open for observation and were seemingly transparent, there were problems with the lack of ability to communicate with laboratory staff, who were instructed not to talk to the IO Team. There were also problems with tracing and obtaining additional work conducted on borderline quantitative screening results and other suspect laboratory positive screen results. Since detailed questions addressed to the laboratory staff and/or to the Laboratory Director were regarded as disturbing or interfering with the laboratory work, some information about current analytical results was not available at the time. This confusion of clear communication rules between senior laboratory staff and the IO Team created a tense atmosphere, making the fulfilment of the duties of the laboratory IO Team significantly more difficult. It resulted in a reduced ability to comprehensively observe all the laboratory operations going on at the time of the visits, and to obtain the detail required for fully adequate and balanced reporting.

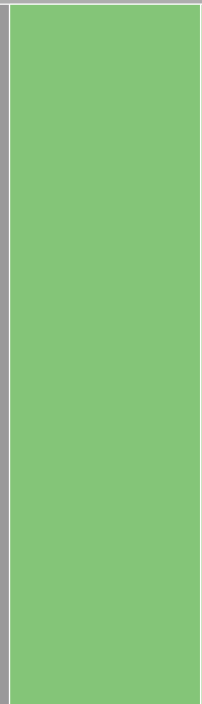
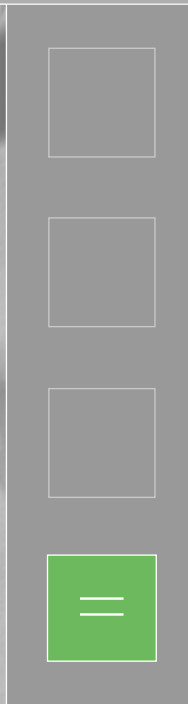
Summary of General Observations

- a. Despite the personal communication problems between the Laboratory Director and the IO Team, the latter were eventually able to fulfil their duties by being present at all stages of sample processing and analytical work, by gaining access to operational procedures, quality manuals and analytical data documentation compendiums and by gathering additional information, especially concerning some borderline doping cases.
- b. The overall performance of the laboratory was very professional. Staff at all levels were appropriately skilled, the equipment and laboratory set-up were "State of the Art" and the analytical procedures followed were of a very high standard and conducted with high quality precision. The entire operational set-up was more than adequately resourced. The IO Team has no reason to question any of the laboratory analytical results that it saw.
- c. The laboratory should be complimented on the practical implementation of the analytical procedures for the detection of EPO and Darbepoetin in urine.
- d. The specimen receipt team should be particularly singled out for their skills, organisational efforts, flexibility and initiatives taken to compensate for delays in time of sample receipt, resolve documentation problems and correct irregularities which might have had an impact on the laboratory work.
- e. The adoption of the Sydney Report recommendation relating to initially reporting "permitted asthma medications" after positive screens was effective in eliminating wasted analytical confirmation time. However there was an unresolved issue about whether the IOCMC Control Samples (introduced during Olympic Events) should be similarly treated. It is suggested that this issue would benefit from further consideration before the next Olympics Games and clear guidelines detailed.

- f. The mix and quality of the Control Samples should be reviewed before future Olympic Games. Not only were some of the Controls predictable (e.g. clenbuterol, 3'-OH-stanozolol) but also two of the controls had inadequacies (e.g. lack of metabolites in sample, documentation irregularities).
- g. Reception area security might have been compromised by the door not always being locked while the room was unattended and by the refrigerators not being individually locked.

|| ||| | Recommendations

- a. The role of IO Team Laboratory experts should be fully accepted by the Director of the Laboratory. The IO Team must be able to function professionally in their expected role, without of course interfering with the work of the laboratory. They should be provided with a comfortable environment where there is the appropriate level of interaction with senior laboratory staff and access to relevant data. An important part of the IO Team's role is to report on the laboratory as respecting IOC rules and the Code and also to comment on the transparency of the operation.
- b. In order for the IO Team laboratory experts to observe all possible doping cases, it would be clearer if the Chair of the IO Team were to receive a daily report from the Laboratory Director on all suspected samples detected during screening procedures which are subject to additional analytical investigation. Such information would allow the laboratory observers to follow, in a timely manner, all "A" confirmation procedures and final results evaluation performed by senior laboratory staff and thus create proper transparency in the process.
- c. A process should be established to review decisions made by the Laboratory Director regarding the rejection of samples for analysis. This process should allow for such decisions to be endorsed or otherwise by a "Non-Laboratory" official.
- d. The Control Sample process during the Olympic Games should be reviewed with respect to the mix of doping substances, the quality of the samples and documentation, and the analytical requirements.



RESULT MANAGEMENT



RESULT MANAGEMENT

There were two separate inquiries in addition to those conducted for positive laboratory results commenced by the IOC in respect of matters relating to doping.

The first was an inquiry conducted by the IOC subsequent to the laboratory analysis finding of Nandrolone in respect of a skater from Belarus. Following proper process in respect of the matter the IOCMC set up an Inquiry Commission, which conducted its inquiry pursuant to its rules and reported appropriately to the IOC Disciplinary Commission. That body conducted a hearing and subsequently recommended to the IOC Executive Board that the test be regarded as negative because “there was an irregularity with respect to the chain of custody of the sample, in particular:

There is a contradiction in the evidence of the Doping Control Officer who stated that he had resealed the bag in which the boxes containing the two (A and B) individual samples were transported; whereas the Laboratory receptionist stated that the bag was unsealed.

“The receptionist refused to sign the doping control transport form because his signature would have signified his explicit agreement that the ‘transport bag’ was delivered with an ‘intact seal’.

“Although it was not wrong for the Doping Control officer to break the seal, since he had forgotten to place the contents form inside, he did not reseal it properly, and moreover did not change the seal number of the transport form to correspond to the new seal”.

These irregularities should be considered in the light of chapter VI, article 5 of the Code, which reads as follows:

“Minor irregularities, which cannot reasonably be considered to have affected the results of otherwise valid tests, shall have no effect on such results. Minor irregularities do not include the chain of custody of the sample, improper sealing of the container(s) in which the sample is stored, failure to request the signature of the athlete, or failure to provide the athlete with an opportunity to be present or be represented at the opening and analysis of the “B” sample, if analysis of the “B” sample is requested”.

The Disciplinary Commission therefore proposed that the Executive Board take no action against the athlete because the chain of custody was defective and would, in the Disciplinary Commission’s view, not withstand a challenge. The Disciplinary Commission also recommended that the IOCMC be directed to take all steps necessary to ensure proper testing and a reliable chain of custody of samples. This decision was adopted by the IOC Executive Board on 17 February.

The IOC Executive Board subsequently directed that an inquiry be undertaken into the Belarus delegation's handling of matters, with particular regard to the sudden departure from the Olympic Village of the athlete concerned, who thereby avoided the subsequent out-of-competition testing that had been sought by the IOCMC. This inquiry was conducted in the absence of the IO Team on the grounds that it was not regarded by the IOC as a "doping issue". In the circumstances that was regrettable.

Following the conclusion of the Games, a further inquiry was directed by the IOC Executive Board into blood transfusion equipment found in the house that was occupied by members of the Austrian cross-country skiing team. The IO Team has been invited to the hearings conducted by this Inquiry Commission.

The result management process of those cases dealt with at Salt Lake City, namely the Belarus skater, the Spanish cross-country skier, and the two Russian cross-country skiers adhered to the rules and process.

A member of the IO Team was actually present during the sample collection process for each of the four athletes.

The Belarus Skater

It was observed during the sample collection process that when the samples collected were put into the transport bag for delivery to the laboratory the doping control officer had omitted to include the doping control forms within the transport bag. As a result the seal was broken, the forms inserted, and the seal replaced. The rules relating to the transport bag as set out in the Code state:

"The Doping Control Transport Form shall be completed and given together with the sealed transport containers to the Doping Control Courier, hereafter referred to as the Courier, who is in charge of transportation of samples collected at each venue to the Doping Control Laboratory. The records on this form shall include the signature and accreditation number of the Courier, the seal numbers of the transport containers, the venue from which the transport containers have come and the departure time of the Courier. The Doping Control Transport Form shall be signed by the IOC Medical Commission representative who is on duty and by the Doping Control Officer. The IOC Medical Commission representative shall be responsible for bringing the original of the Doping Control Transport Form to the Chairman of the IOC Medical Commission. The Courier shall take a copy of the Doping Control Transport Form to be counter-signed by the Head of Laboratory of staff member designated by him."

Appendix C clause 4.1

The IOCMC member was not present to sign the document to indicate the resealing of the bag. When the bag was subsequently transported to the laboratory the receptionist noted that it was not sealed and reported accordingly.

The Inquiry Commission conducted its inquiry properly and prepared its report. In line with the CAS decision notified just before the start of the Games on the American bobsledder Jovanovic (*“Once again, the Panel interprets the sentence ‘minor irregularities do not include the chain of custody ...’ in Article 5 to refer to the chain of custody as such, not the documentation thereof, so that minor irregularities on the documentation do not invalidate the test”*), the Inquiry Commission concluded there had not been a breach of the chain of custody. It was the Inquiry Commission’s finding of fact that a doping offence had occurred. As set out earlier in this report, the Disciplinary Commission did not accept that finding of fact and the IOC Executive Board decided that the test was negative.

It was observed that the athlete did not attend either the Inquiry Commission process or the Disciplinary Commission hearing. The athlete was represented by the Chef de Mission and the Medical Officer of the Belarus Team.

The Spanish Cross-Country Skier

Again the process was properly followed. This athlete did attend both the Inquiry Commission process and the Disciplinary Commission hearing. He was represented at the hearing by a Deputy Minister of the Spanish Government. The member of the IO Team present at the sample collection stage for this competitor observed:

- The competitor drank approximately two litres of water immediately after the event and before the sample taking.
- On two occasions he passed urine before reaching the Doping Control Station for the sample collection to occur. The IO Team is concerned to observe that this occurred, particularly when the pH level for the sample duly collected was 1.000 and a second sample collected was of a similar count.

Neither the Inquiry Commission nor the Disciplinary Commissioner exercised its discretionary power to suspend the athlete prior to his last competition the 50km cross-country, which event he subsequently won.

Russian Cross-country Skiers

Again the result management process was observed to be properly conducted and appropriately pursued. The athletes were not present. The athletes were represented by the Chef de Mission for the Russian team and the head of the Russian Anti-Doping Committee. It was observed that the hearings were completed the night before an event in which both athletes participated. Neither the Inquiry Commission nor the Disciplinary Commission exercised its powers to suspend the athletes prior to that competition. Subsequently one of the Russian athletes won the Gold Medal in the event. It was further observed that the Russian delegation advised both Commissions that the athletes had not been personally notified of the hearings because of the event in which they were competing the following day.

The IOC Executive Board when sanctioning the Spanish skier and the two Russian skiers determined to take only the Gold Medals won at the time of the sample analysis. The Olympic Charter provides in Rule 50:

“The IOC Executive Board may withdraw accreditation from any person who infringes the Olympic Charter. Furthermore, the competitor or team at fault shall be disqualified and lose the benefit of any ranking obtained; any medal won by him or it shall be withdrawn, as well as any Diploma which has been handed to him or it.”

Bye-law to Rule 70, article 2.9 reads: *“If an Olympic competitor is disqualified, his medal(s) and diploma(s) must be returned to the IOC.”*

The IOC Executive Board’s decision not to seek the return of other medals from these competitors is presently being challenged by the Norwegian and Canadian Olympic Committees in applications brought before the CAS.

Post-Salt Lake Hearings

The two cases which were completed post-Salt Lake City involved a Belarusian ice hockey player and a skier from Great Britain. The IO Team was invited to observe both result management processes, which were conducted in Lausanne. Both inquiry and hearing were conducted properly pursuant to the rules. Again the IO Team had been present at the sample collection stage for each of the two athletes. It was observed post-event the chaperon for the Belarusian hockey player had to accompany the athlete to the shower. As in Sydney this can be a potential difficulty and the IO Team again highlights the need for review of the protocols.

Latvian Bobsledder

It must be noted that the case involving the Latvian Bobsledder, Prusis, who was initially precluded from entering the Olympic Games by the IOC Executive Board but whose decision was overturned by the CAS, was not part of the IO Team observation as it was outside the terms of reference for the Olympic Games Doping Control Process.

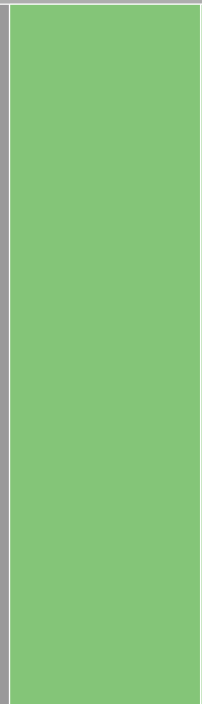
|| ||| | Post-Games Report

At the time of writing this report, the IO Team had not received a copy of the IOCMC report due one month after the completion of the Games, i.e. 25 March, which was to include a report from the Director of the Laboratory. Accordingly it is impossible to comment on the contents of that report and any of its recommendations or findings.

David Howman

Chair

Independent Observer Team, May 2002



RECOMMENDATIONS



RECOMMENDATIONS

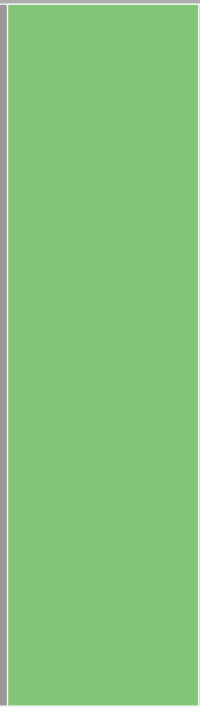
Recommendations

- | 1 | The doping control process involving blood sampling at competition sites prior to the event must involve persons to manage the analyses who are independent and have expertise. The result management of blood analysis is as important as that involving positive laboratory analysis. It should therefore be seen to be independent, expert and fair. Consideration might be given to a group of three persons being involved in such management.
- | 2 | Transparency and fairness of process is most important where a sanction can be imposed without a hearing, e.g. the “no start” decision made in the case of cross-country skiing (and the potential for similar decisions in other endurance sports).
- | 3 | The protocols for blood collection and analysis must be harmonised and scientifically secure. For example, at Salt Lake City competitors were still allowed to compete in skating events after a high blood count whereas, according to the protocols, similar counts would have rendered them ineligible to compete in skiing events.
- | 4 | Blood protocols must be put into place well in advance of the Games. Late changes to protocols, some indeed during the Games themselves, provide considerable communication issues for competitors, officials and doping control personnel.
- | 5 | At the blood sample collection stage and also at the blood sample analysis stage there are independent personnel to check the scientific nature of the analysis and the state of the equipment and to take responsibility for the results, including the result management process and the advice to those responsible for such a process.
- | 6 | Harmonisation should be explored to ensure similar analytical equipment is used for the analysis of blood samples at all events and not, as occurred at Salt Lake City, different equipment for different sports.
- | 7 | In determining the blood sampling protocols for the future there needs to be proper discussion and debate as to whether blood sampling prior to events is part of the doping control process or a health/medical check. Each requires a different decision, a different process and a different protocol, but there is an entwining which leads to an inextricable linkage.
- | 8 | Those responsible for preparing blood sampling protocols might appropriately give consideration to “comfortable” scientific certainty, including a consideration of building up athlete profiles in order to ensure consistent tracking of competitors’ personal blood counts.

- 9 | Consideration should be given to testing all medallists in endurance sports for EPO and their analogues and mimetics. This essentially means that urine samples taken from medallists must be sufficient to allow the laboratory analysis to include an analysis for EPO; if blood is required for such analysis then it should also be taken post-event if it has not been collected prior to the event.
- 10 | As far as team sports are concerned, it is recommended (as was the case in the IO Report from Sydney 2000) that there be an increase in the numbers tested in team sports, which at the Olympic Winter Games would include curling, ice hockey, bobsled and relay events in skiing and skating.
- 11 | The hearing process for positive cases was much more effective, thanks to the implementation of changes made since Sydney. Perhaps consideration might now be given to widening the powers and jurisdiction of the Disciplinary Commission to enable it to seek more evidence from the Inquiry Commission (including oral evidence from witnesses, should they be challenged).
- 12 | It is suggested that the quality of control samples injected into the doping control process by IOCMC to check on the quality of laboratory analysis should be more authentic (i.e. more difficult to analyse). The integration of such control samples within the process must be of the same standard as that of the athlete sample collection and must include the accompanying paperwork, which must be of high quality.
- 13 | Priority might beneficially be given to target testing at future Olympic Games. Such target testing, which proved important at Salt Lake City, may well be of greater benefit as systems develop and athlete profile information improves. To enable target testing to be effective, consideration must be given to the collection of all information from prior tests and the maintenance of a profile information centre.
- 14 | Pre-competition testing will be effective only if athletes can be found and tested. Consideration might be given to including an additional condition on the entry form to the effect that athletes must disclose to doping control officials their whereabouts in the period immediately preceding the Games (i.e. not less than six weeks beforehand), with proper sanctions, including withdrawal from the Games, should there be a failure to provide information and therefore a failure to be available for pre-competition testing.
- 15 | It is recommended that consideration be given to conducting pre-competition testing so that it involves IOCMC and International Federations in the same way as in-competition testing during the Olympic Games, in order to ensure consistency and harmony.

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- 16 | The present Code and some of its rules mandate the actual participation of members of IOCMC in the doping control process (e.g. signing of documentation, sealing transport bags), with failure leading to the risk of bad process, including the breach of the chain of custody. This mandatory active participation in a doping control process might usefully be reviewed again to ensure harmony and to make sure that expertise and educational opportunities are enhanced.
 - 17 | Consideration might usefully be given to electronic recording at the doping control stations to preclude forms that are too complex and complicated to prevent inadvertent administrative or clerical errors.
 - 18 | Doping Control stations ought to be adequate for the purpose of sample collection.
 - 19 | There should be a review of the protocol in respect of dilute samples to ensure athletes can not avoid testing either by manipulating urine or otherwise.
 - 20 | Consideration needs to be given to ensuring that future Games have full, proper and appropriate training for Doping Control Officers, including sufficient practical training.
 - 21 | The Olympic Movement Anti-Doping Code's rules pertaining to chain of custody should be reviewed to ensure that the major concern of the chain of custody, through proper and secure transport and other processes, is to ensure the integrity of the sample.
 - 22 | Accreditation for the IO Team must include the ability to attend any new venue, such as the Medals Plaza at Salt Lake City, to ensure that observation can be complete.
 - 23 | For future events the Guide (or its equivalent) should be adopted by the IOC and IOCMC as the valid text for that event, on the understanding that while the Guide may contain more detailed procedures than those set out in the Code it will not contradict or conflict with the latter. Furthermore, the role and definition of the WADA Independent Observer Team should be more clearly set out in future Guides.
 - 24 | The prior notification protocols for Beta 2 antagonists should be maintained, but all doctors involved should be given, in good time, detailed information about the diagnostic test to be performed as well as full details of the specific properties of the available products.

- | 25 | The design of the transport bag tabs should be reviewed to ensure that unnecessary complications are avoided. Furthermore, the numbers might sensibly be printed on both sides of the tab.
- | 26 | The contract entered into with the Laboratory should exclude the possibility of the Laboratory Director being involved in unilateral decision-making of a result management nature.
- | 27 | The role of the IO Team Laboratory experts should be fully accepted by the Director of the Doping Control Laboratory. The IO Team must be able to function professionally in their expected role without, of course, interfering with the work of the laboratory. They should be provided with a comfortable environment where there is an appropriate level of interaction with senior laboratory staff and access to relevant data. An important part of the IO Team's role is to report on the laboratory as respecting IOC rules and the Olympic Movement Anti-Doping Code and also to comment on the transparency of the operation.
- | 28 | In order for the IO Team laboratory experts to observe all possible doping cases it would be clearer if the Chair of the IO Team were to receive a daily report from the Laboratory Director on all suspect samples detected during screening procedures which are subject to additional analytical investigation. Such information would allow the laboratory observers to follow, in a timely manner, all the "A" confirmation procedures and final results evaluation performed by senior laboratory staff and thus create proper transparency in the process.
- | 29 | A process should be established for reviewing decisions made by the Laboratory Director regarding the rejection of samples for analysis. This procedure should allow such decisions to be endorsed or challenged by a "Non-Laboratory" official.



APPENDIX



APPENDIX 1

WADA INDEPENDENT OBSERVER TEAM

|| ||| | Chairman



Mr David Howman (NZL)

Legal Expert
Barrister
Chairman of the New Zealand Sports Drug Agency
President of New Zealand Tennis
WADA Board Member
Chairman of WADA's Legal Committee

|| ||| | Independent Observers



Mr Rune andersen (NOR)

Vice-Chairman, IO Team
Doping Control Expert
Director "Standards & Harmonization" at the World Anti-Doping Agency



Dr Alain Garnier (FRA)

Medical Expert
Medical Consultant at the World Anti-Doping Agency
Chair of Monitoring Group of the Anti-Doping Convention, Council of Europe
WADA Board Member



Mr Richard Gucza (POL)

Laboratory Expert
Director of the Institute of Sport, Poland
Member of the co-ordinating Group, Anti-Doping Monitoring Group, Council of Europe



Prof. Ichiro Kono (JPN)

Doping Control Expert
MD PhD, Division of Sports Medicine, Institute of Health and Sports Sciences Japan
Member of WADA's Standards & Harmonization Committee



Dr Marteen Koornneef (NED)

Medical Expert
Director of Doping Control, Netherlands (DoCoNed)



Mrs Sue Nolan (NZL)
Laboratory Expert
ESR-Institute of Environment Science & Research, New Zealand



Derrick Campbell (CAN)
Athlete Representative
3-time Olympian, Short Track Speedskating



Dr Christa Thiel (GER)
Legal Expert
Lawyer
President of the German Swimming Federation
Board Member of the German Sports Confederation
Member NOC of Germany
Member of WADA's Legal Committee



Mr Casey Wade (CAN)
Manager, IO Team
Doping Control Expert
Director at the World Anti-Doping Agency



Mr George Walker (GBR)
Vice-Chairman, IO Team
Doping Control Expert
Chief of the Sport's Division at the Council of Europe
WADA Board Member
Chairman of WADA Standards & Harmonization Committee

|| ||| | **Administration**



Ms Chloé Christopoulos (SUI)
WADA Administrative Assistant

APPENDIX 2

TERMS OF REFERENCE

|| ||| Purpose

The office of the Independent Observer (IO) is an aspect of doping control during Major Games/Sporting Events. Its primary function is to independently observe all or some aspects of the doping control operations prior to and during the assigned Games or Sporting Event to both protect the integrity of the doping control process and to enhance athlete, sport and public confidence in the doping control process.

Key functions of the Independent Observer will be to oversee the doping control process and to prepare an independent, public report on the doping control activities conducted prior to and during the Games.

Further details on IO responsibilities are contained in the roles and responsibilities section.

|| ||| Key Responsibilities

The Independent Observer will have the following responsibilities; *(It should be noted that all responsibilities may be carried out during Major Games, while selected responsibilities will be carried out for other Sporting Events.)*

- | 1 | With respect to overseeing the doping control process, the Independent Observer shall observe:
- a. procedures relating to the selection and notification and monitoring of a competitor for doping control;
 - b. procedures where a competitor uses a substance for therapeutic use, including beta 2 agonists;
 - c. sample collection procedures at the Doping Control Station;
 - d. sample collection procedures where a competitor fails to comply or reports to the Doping Control Station later than required;
 - e. analysis of "A" Samples (including blood and urine);
 - f. transportation and Chain of Custody; and
 - g. process and procedures at the Laboratory.

| 2 | With respect to the subsequent Test Result Management process, the Independent Observer shall:

- a. receive copies of all athlete doping control forms (including those of control samples);
- b. receive notification of all laboratory test results;
- c. receive notifications of all failures to comply;
- d. receive notifications of all new substances, unusual results and other irregularities;
- e. attend the analysis of all “B” samples;
- f. attend the deliberations of the responsible doping control review committee when determining whether a potential doping offence has occurred and to provide relevant information upon request;
- g. receive a copy of the notification given to the competitor of all hearing(s);
- h. attend all hearings and receive copies of relevant documents including recommendations and decisions of sanctions imposed; and
- i. attend any dispute hearing before CAS or any other judicial party and be available to parties in a dispute in a tribunal if required.

|| ||| Membership

The WADA or, if requested by WADA, the Chairperson of the Office of the Independent Observer may recruit, select and appoint members as deemed appropriate to fulfil the Independent Observer mandate, in accordance with WADA IO membership criteria.

All members will be volunteers. No member shall have been involved in any way in a doping offence. The Office of the Independent Observer will be comprised of individuals possessing competence and expertise in: doping control process in general, and/or specific areas such as sample collection; result management; medical; doping control; law; laboratory analysis; and Olympic and international sport. Former elite athletes may also be assigned to the team.

The size of the actual team will be determined by WADA in accordance with the size of the Event, what aspects will be observed, the duration of the assignment, and the extent to which partnership support funding is provided.

Chair

The Chair and Vice Chair of the Office of the Independent Observer shall be appointed by the WADA. The Chair shall not have a conflict of interest.

The Chair will have overall responsibility for the operations of the Office of the Independent Observer and will be its public spokesperson. The Chair may delegate Vice Chairs and others to carry out duties as necessary.

Reporting

The Office of the Independent Observer is responsible to the WADA Board through its Chair, and shall provide such information as requested, or as deems appropriate.

The WADA Foundation Board shall appoint a Board Member, or designate, to receive the reports on doping control activities. Unless otherwise appointed, the Board representative shall be the WADA Secretary General. The Chair will report any issue or matter to the appointed WADA representative on the day the issue or matter becomes known.

At the conclusion of the Games, the Independent Observer Chair shall produce an Independent Observers Final Report.

The Independent Observers Report will include the following information:

- 1 | Certification of compliance with procedures of the doping control regulations governing the respective Sporting Event;
- 2 | Non-conformities (if any) and steps taken to remedy non-conformities; and
- 3 | Other relevant matters.

The Independent Observers Report will be submitted to WADA no later than one month¹ after the completion of all doping control testing relating to the assigned Event.

The Independent Observers Final Report will be made public by WADA.

¹ This time limit may be extended when attending the Olympic and/or Paralympic Games to a maximum of two months.

|| ||| | Conflict of Interest

All members of the Office of the Independent Observer are subject to the Independent Observer Code of professional conduct, included in which shall be a Conflict of Interest Agreement.

Any member of the Office of the Independent Observer who has a conflict of interest in any function or matter being dealt with, or is perceived to have a conflict of interest in any manner, shall declare this conflict immediately to the Chair and shall not participate in any activity related to the matter in question.

|| ||| | Confidentiality

Also included as part of the Independent Observer Code of Ethics and Conduct, shall be a Declaration of Confidentiality, a copy of which all members are required to sign.

Except as provided in the Confidentiality Agreement, all information relating to the work of the Office of the Independent Observer shall remain strictly confidential.

Unless authorized by the Chair, no member of the Independent Observer Office shall speak publicly about the work and observations of the Office.

|| ||| | On-Site Operations

Please refer to the operation/protocol section of this manual which includes regular meeting schedules, methods of assignment, on-site office capacity (transportation, secure fax/email, computer capacity, mobile phones, office set-up, etc.), full venue accreditation access and official clothing.

|| ||| | Funding

WADA shall be responsible for funding the office of the Independent Observer member's transportation, accommodation and meal expenses (when on duty).

A daily allowance will be provided to each member according to WADA policy. Where appropriate, WADA will enter into joint funding agreements with relevant Major Games Organizations, International Federations, or other responsible organizations.

APPENDIX 3

SELECTION CRITERIA: IO OBSERVERS

Introduction

The World Anti-Doping Agency (WADA) introduced independent observers at the 2000 Summer Olympic Games in Sydney, Australia. The primary benefit of the IO Program is to independently observe and report on all aspects of the doping control process prior to, during and following a Games or event, in order to ensure an open and transparent process to strengthen athlete, sport and public confidence in athlete testing.

General

In order to ensure professional and competent operations during an event, a variety of experts are required with experience and expertise in sample collection, legal matters, medical, laboratory and overall doping control expertise. Adequate office management and administrative support is also essential. Athlete representation is also a requirement, particularly for Major Games/Events. A Chair and, in some cases, a Vice-Chair shall be appointed. The number of persons and experts assigned to a particular sporting event depends on the size of the event, (the number of sports, events and competitions, the duration of the event and the actual doping control operations being observed.)

WADA will establish a panel of independent observers with suitable expertise from which WADA can select and assemble IO Teams as necessary. WADA will make efforts to ensure regional and gender balance. All persons selected to the WADA IO Panel must provide letters of endorsement from their respective International Federations, national anti-doping (or similar) authority. WADA shall select and appoint all IO participants.

Sample Collection Experts

Sample collection experts selected as a WADA IO shall have a minimum of five (5) years practical experience, will be in good standing with the national anti-doping agency he/she is accredited by, and will have received and satisfied training programs that are consistent with the International Standards for Doping Control. The collection officer must come from an agency or organisation that has been certified or that works in accordance with the International Standard for Doping Control (ISDC). WADA will select up to 20 sample collection experts.

Legal Expertise

WADA will select legal experts for the WADA IO Panel. Selected persons must be a lawyer in good standing, have a minimum of 5 years experience in the anti-doping field, including extensive experience in athlete/sport member appeals and/or arbitrations, and have knowledge and general experience in athlete test result management.

Medical Expertise

WADA will select medical doctors in good standing for the IO Panel. Doctors shall have a minimum of 5 years practical experience in sport medicine, a minimum of 5 years experience in drug-free sport, have extensive knowledge of and experience in result management and have acknowledged and experience in sample collection.

All doctors chosen shall have an in-depth knowledge of the current list of banned substances and methods.

Laboratory Expertise

WADA will select up to six (6) laboratory experts. Laboratory experts shall have an advanced degree in a physical or biological science, at least 8 years experience in clinical or forensic laboratory science, have knowledge of the contemporary standards of analytical forensic toxicology (including chain of custody), have knowledge of drug metabolism (preferably steroid metabolism) and endocrinology, and experience in expert forensic laboratory testimony and required laboratory documentation.

Athlete Representation

Athletes will be selected for the WADA IO Panel. Athletes shall be retired athletes, will have competed in Olympic or World Championship competitions, will have been selected for doping control during their competitive years, and will not have had a doping infraction during their career. However, WADA shall reserve the right to review exceptional or unique circumstances related to an infraction. An active interest in and support for doping-free sport is also essential.

Chair / Vice-Chair

IO Team Chairs and Vice-Chairs shall be selected by WADA from the IO Panel.

APPENDIX 4 CONFIDENTIALITY AGREEMENT

|| ||| | Declaration of Confidentiality

Event Name and Location: _____

As a member of the WADA Office of the Independent Observer, I _____, declare that, by executing this Declaration, I hereby agree to abide by the Office of the Independent Observer's commitment to Confidentiality and am bound by the terms of this Declaration.

It is understood that the nature of my involvement as an Independent Observer is such that I will have knowledge of or become aware of sensitive and confidential information from time to time, specifically, but not limited to the following:

- Selection of athletes for unannounced doping control.
- Problematic and/or positive test results information on an athlete or group of athletes.
- Follow up testing.
- Investigation activities.
- Appeals or arbitrations related to doping infractions.

I do swear or solemnly affirm that as a representative of the Office of the Independent Observer, I will observe and comply with all the requirements of the Office of the Independent Observer pertaining to the confidentiality of doping control information during and after the term of my involvement.

Except as required by law or as authorised in the course of my duties, I will not disclose or give to any person whatsoever any confidential information or document that comes to my knowledge or possession either directly or indirectly through my involvement as an Independent Observer.

Furthermore, I understand that breach of my obligation of confidentiality may result in possible legal action against me and in immediate termination of my involvement with the Office of the Independent Observer.

Dated this _____ day of _____ year _____

Sworn or affirmed by _____
(signature)

Witness _____
(signature)

APPENDIX 5

CODE OF PROFESSIONAL CONDUCT

A code of professional conduct is more than simply a set of behaviours for people within the Office of the Independent Observer: it reflects the ideals and values of the organization, as well as its commitment to uphold those values as part of what makes the organization what it is.

The work of the Office of the Independent Observer is first and foremost in the best interests of athletes and the public at large. As a promoter of sport values and ethics, the Office of the Independent Observer should lead by example as an organization committed to the highest order of professionalism and public scrutiny. We should therefore conduct ourselves with integrity, be fair and honest in our dealings with others, and treat others with respect and dignity. The following is our code of professional conduct:

- Independent Observers are responsible for their actions and accountable for the consequences of their actions or inactions. Independent Observers serve the Office of the Independent Observers at the discretion of the Chairperson.
- At all times, Independent Observers will act in a manner that encourages and maintains confidence in the integrity of the Office of the Independent Observer and its people among athletes, sport officials, sport organizations and the public at large.
- The role of the Independent Observer is to observe and report observations and findings to the proper authority. The Independent Observer is not in a decision-making role.
- The Office of the Independent Observer will conduct its relations with, and discharge its duties to, other organizations, clients, the public and media ethically, fairly and professionally both within the spirit and the letter of agreements, policies and legal requirements. All persons should be treated with respect, tact and courtesy in all dealings with the Office of the Independent Observer.
- All communications with individuals or business entities, whether oral or written, must be conducted in a professional manner, and should be delivered in a timely, accurate and clear manner.

- Independent Observers must not be in a conflict of interest or permit any influence that could conflict with the best interest of the mandate and obligations of the Office of the Independent Observer. Each Independent Observer must execute a Conflict of Interest Agreement.
- Confidentiality of all information, whether written or verbal must be respected. Each Independent Observer must sign a Declaration of Confidentiality.

The Office of the Independent Observer must use its resources (including human and material resources, funds, equipment and information) responsibly and in the best interests of athletes, the sports community and the public at large.

This Code applies to all Independent Observers and to the Office of the Independent Observer. The reputation and integrity of the Office of the Independent Observer is maintained when every one of us acts, and is seen to act, in a way which is exemplary of the highest standard of professional ethics.

The Office of the Independent Observer wishes to maintain a strong reputation for its integrity, and thereby be valued as an independent and ethical monitoring agency. Ultimately, this is reflected in the pride we have in what we do, in the successful achievement of our mandate and the willingness of others to work with us in that regard. Our reputation as an ethical organisation is an essential part of what will make us successful.

APPENDIX 6

BYE-LAWS FOR THE RESULT MANAGEMENT PROCESS

Procedure to Be Followed When an A Sample is Declared Positive at the Olympic Games

Chapter 1: Inquiry Phase

- 1 | The head of a laboratory which identifies a positive result shall immediately inform the Chairman of the IOC Medical Commission and provide him, in a confidential letter, with a detailed report containing the results and the documentation relating to the analyses performed.
- 2 | The Chairman of the IOC Medical Commission shall immediately set up an Inquiry Commission responsible for investigating the case. This Commission, chaired by a jurist chosen from among the members of the IOC Juridical Commission, shall be composed additionally of two members of the IOC Medical Commission.
- 3 | The Chairman of the Inquiry Commission shall, in confidence, inform the athlete of the result of the A sample analysis through the intermediary of his chef de mission or his representative. He shall also forward to him a copy of the detailed laboratory report with the results and the documentation relating to the analyses performed, together with a document briefly describing the procedure that will be followed and reminding the athlete of his rights. He shall also inform the President of the International Federation concerned or his representative in a confidential letter.
- 4 | The Chairman of the Inquiry Commission shall convene an investigation hearing of the athlete concerned and his chef de mission, who may delegate another person to represent him. Both may be accompanied and represented at the hearing by persons of their choice (lawyer, doctor, etc.) (a maximum of three for both).

If the athlete concerned and/or his delegation have already left the Olympic host city, the Chairman of the Inquiry Commission shall take all measures reasonably possible in the circumstances to ensure that the rights of the athlete are respected, while the procedure normally follows its course so that a decision can be made as quickly as possible.

- 5 | If the circumstances justify it, the Chairman of the Inquiry Commission may, provisionally and temporarily, suspend the athlete concerned until the case is forwarded to the IOC Executive Board Disciplinary Commission (cf. art. 13 below). This suspension shall remain in force for as long as it has not been revoked by the Chairman of the Executive Board Disciplinary Commission.

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- | 6 | The Inquiry Commission shall determine the nature and circumstances of any breach of the Olympic Movement Anti-Doping Code which may have been committed. It shall allow the athlete an opportunity to give an explanation concerning the circumstances and the facts in relation to the result of the test, either orally, before the Commission, or in writing, as the athlete so wishes.
 - | 7 | The Inquiry Commission may seek the opinion of experts.
 - | 8 | The athlete may adduce any evidence he deems helpful to the defence of his case in connection with the breach of which he is accused and which does not require the use of disproportionate means. The Inquiry Commission shall make a decision in this regard.
 - | 9 | The Inquiry Commission shall establish a report recording all the relevant elements of the case. Such report shall indicate, in particular:
 - a. whether this is in fact a positive A sample and which provisions of the Olympic Movement Anti-Doping Code have apparently been violated,
 - b. all the elements (in particular those put forward by the athlete) which enable the case to be assessed.
 - | 10 | The Inquiry Commission shall immediately forward this report, with the case file, to the Chairman of the Medical Commission.
 - | 11 | The Chairman of the Medical Commission shall immediately inform the IOC President and forward the entire file to him. The report shall also be forwarded to the athlete concerned and to his NOC.
 - | 12 | The entire inquiry procedure shall not exceed 24 hours.

Chapter II: Judgment Phase

- | 13 | As soon as the case is referred to him by the Chairman of the Medical Commission, the IOC President shall designate five members of the IOC Executive Board, including one as chairman, to create an Executive Board Disciplinary Commission.

The task of this Commission is to establish a proposal for a decision by the IOC Executive Board.

- | 14 | The Chairman of the Disciplinary Commission shall, as soon as possible, convene a hearing of the athlete concerned and his chef de mission, who may delegate another person to represent him. Both may be accompanied and represented by persons of their choice (lawyer, doctor, etc.) (a maximum of three for both). The Commission shall also invite the IF of the athlete concerned to appoint a representative. The presence of such representative is not, however, a condition for the procedure to be valid.

15 | As soon as the file is referred to the Disciplinary Commission, its Chairman alone is competent to decide on any provisional and temporary suspension of the athlete concerned.

16 | The Disciplinary Commission shall hear the athlete and the other persons present whom it wishes to hear. It shall, in particular, allow the athlete the opportunity to give his views on the report established by the Inquiry Commission.

No more evidence may be brought at this stage, unless there are exceptional circumstances which justify this.

17 | The Chairman of the Disciplinary Commission shall invite the representative of the IF to speak, and then give the athlete or his representative the opportunity to present his case, either orally or by submitting a written statement of case.

18 | The Disciplinary Commission shall retire in order to deliberate.

It shall then communicate its conclusions to the IOC Executive Board through the intermediary of its Chairman.

19 | The IOC Executive Board shall take its decision and make this public as soon as it has been notified to the athlete, his NOC and his IF, irrespective of any appeal to the GAS.

The decision shall list the judicial remedies provided for under Chapter III of the Olympic Movement Anti-Doping Code.

20 | The entire disciplinary procedure shall not exceed 12 hours.

Chapter III: General Provisions

21 | Any person who has access to the file or who takes part in any stage of the procedure is bound by the duty of third party confidentiality, on pain of sanctions or even legal proceedings.

22 | No person of the same nationality as the athlete concerned, or having any declared or apparent conflict of interests with such athlete, his NOC, his sport or any person whatsoever involved in the case, or who, in whatever way, does not feel himself to be free and independent may be a member of the Inquiry Commission or the Disciplinary Commission.

23 | No person may be a member of the Inquiry Commission and the Disciplinary Commission in the same case.

APPENDIX 7-A

Pre-Game Observation Summary

| | DATES | | | | | | | | | | TOTAL |
|--------------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|-------|
| | 31/1 | 1/2 | 2/2 | 3/2 | 4/2 | 5/2 | 6/2 | 7/2 | 8/2 | | |
| PRE-GAMES TESTING | | | 1 | | | 1 | 3 | 3 | 2 | 10 | |
| MEETINGS | | | | | | | | | | | |
| IOC Meetings | 1 | | | | | | | | 1 | 2 | |
| IOCMC Meetings | | | | | | | | | 1 | 1 | |
| Laboratory Meeting | | | 1 | | | | | | | 1 | |
| SLOC Meeting | 1 | | | | | | | | | 1 | |
| CAS Meeting | | | | | | 1 | | | | 1 | |
| CAS Hearing | | | | | | | | 1 | | 1 | |
| MEDIA CONFERENCE | | | | | | | | 1 | | 1 | |

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APPENDIX 7-B

Observation Summary

| SPORTS & SITES | DATES | | | | | | | | | | | | | | | TOTAL | |
|-----------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | 9/2 | 10/2 | 11/2 | 12/2 | 13/2 | 14/2 | 15/2 | 16/2 | 17/2 | 18/2 | 19/2 | 20/2 | 21/2 | 22/2 | 23/2 | | 24/2 |
| Cross Country Men | 1 | | | 1 | | 1 | | | 1 | | 1 | | | | 1 | | 6 |
| Cross Country Women | 1 | | | 1 | | | | | | | 1 | | 1 | | | 1 | 5 |
| Moguls Men | | | | 1 | | | | | | | | | | | | | 1 |
| Moguls Women | 1 | | | | | | | | | | | | | | | | 1 |
| Speed Skating Men | 1 | | 1 | 1 | | | 1 | 1 | | 1 | 1 | | | 1 | | | 8 |
| Speed Skating Women | | 1 | | | 1 | 1 | | | 1 | | | 1 | | | 1 | | 6 |
| Hockey Men | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 13 |
| Hockey Women | | | 1 | 1 | | 1 | 1 | 1 | | | 1 | | 1 | | | | 7 |
| Nordic Combined Men | | 1 | | | | | 1 | | | | | | | | 1 | | 3 |
| Nordic Combined Women | | | | | | | 1 | | | | | | | | | | 1 |
| Snowboard Men | | | 1 | | | | 1 | | | | | | | | | | 2 |
| Snowboard Women | | 1 | | | | | 1 | | | | | | | | | | 2 |
| Downhill Men | | 1 | | | | | | | | | | | | | | | 1 |
| Downhill Women | | | 1 | | | | | | | | | | | | | | 1 |
| Ski Jump | | 1 | | | 1 | | | | | 1 | | | | | | | 3 |
| Biathlon Men | | | | | 1 | | | 1 | | | | 1 | | | | | 3 |
| Biathlon Women | | | 1 | | 1 | | | 1 | | 1 | | | | | | | 4 |
| Curling Men | | | | 1 | | | | | 1 | | | 1 | | 1 | | | 4 |

Observation Summary (continued)

| SPORTS & SITES | DATES | | | | | | | | | | | | | | | TOTAL | |
|---------------------------------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|------------|
| | 9/2 | 10/2 | 11/2 | 12/2 | 13/2 | 14/2 | 15/2 | 16/2 | 17/2 | 18/2 | 19/2 | 20/2 | 21/2 | 22/2 | 23/2 | | 24/2 |
| Curling Women | | | | | | | 1 | | 1 | | | 1 | 1 | | | | 4 |
| Luge Men | | | 1 | | | | | | | | | | | | | | 1 |
| Luge Doubles | | | | | | | 1 | | | | | | | | | | 1 |
| Luge Women | | | | | 1 | | | | | | | | | | | | 1 |
| Figure Skating | | | 1 | | | 1 | | | | 1 | | | 1 | | | | 4 |
| Combined Downhill/Slalom Men | | | | | 1 | | | | | | | | | | | | 1 |
| Combined Downhill/Slalom Women | | | | | | 1 | | | | | | | | | | | 1 |
| Short Track Speed Skating Men | | 1 | 1 | | | 1 | 1 | 1 | | | 1 | 1 | | | 1 | | 8 |
| Short Track Speed Skating Women | | 1 | | | 1 | | | 1 | | | | 1 | | | 1 | | 5 |
| Super G Men | | | | | | | | 1 | | | | | | | | | 1 |
| Super G Women | | | | | | | | | 1 | | | | | | | | 1 |
| Bobsleigh Men | | | | | | | | | 1 | | | | | | 1 | | 2 |
| Bobsleigh Women | | | | | | | | | | | 1 | | | | | | 1 |
| Aerials Men | | | | | | | | | | | 1 | | | | | | 1 |
| Aerials Women | | | | | | | | | | 1 | | | | | | | 1 |
| Slalom Men | | | | | | | | | | | | | | | 1 | | 1 |
| Slalom Women | | | | | | | | | | | | 1 | | | | | 1 |
| Giant Slalom Men | | | | | | | | | | | | | 1 | | | | 1 |
| Giant Slalom Women | | | | | | | | | | | | | | 1 | | | 1 |
| Skeleton Men | | | | | | | | | | | | 1 | | | | | 1 |
| Skeleton Women | | | | | | | | | | | | 1 | | | | | 1 |
| TOTAL | 5 | 8 | 8 | 7 | 8 | 7 | 10 | 8 | 7 | 6 | 7 | 10 | 5 | 5 | 7 | 2 | 110 |
| MEETINGS | | | | | | | | | | | | | | | | | |
| IOC Medical Commission Meeting | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 15 |
| IOC Disciplinary Committee | | | | | | | | | 1 | | | | | 1 | 1 | | 3 |
| IOC Executive Board Meeting | | | | | 1 | | | | 1 | 1 | | | | | | 1 | 4 |
| SLOC Meeting | | | | 1 | | | | 1 | | | | | | | | | 2 |
| MEDIA CONFERENCE | | | | | 1 | | | | | | | | | | | | 1 |

APPENDIX 8

Memorandum for WADA Independent Observer Team

The WADA Independent Observer Team is invited by the IOC to act as observers to the doping controls in place for the Winter Olympic Games. As such the Team has access to all material and information relating to doping controls, tests, analyses and result management.

Each member of the team is required to complete a declaration of confidentiality in respect of that material, and these undertakings, when complete, are advised to the IOC because it is a condition of their invitation to observe.

At Salt Lake City, it has become apparent that confidentiality has been breached at IOC level. The IOC President at last evening's special Executive Board meeting was extremely angry that there had been breaches of confidentiality in respect of information given in previous EB meetings. He warned all present – interpreters, guests (which of course includes WADA IOs), IOC employees, and IOC members, that there would be harsh sanctions imposed on those who are found to be in breach.

The IO Team has not broken these rules at Salt Lake City. Indeed as far as the only doping case is concerned, briefing of the team was undertaken only on general terms – without athlete specifics / nor country. The Team abides by confidentiality very properly and is to be commended.

As a general protocol this must continue and despite curiosity or inquiries, information obtained under confidence must not be shared with others, not even with WADA staff not in the IO Team.

Yesterday I met Richard W. Pound and briefed him (and Harri by telephone) as to the general issues of the case. Dick and Harri have told me that the WADA response to any press inquiry is to say (generally):

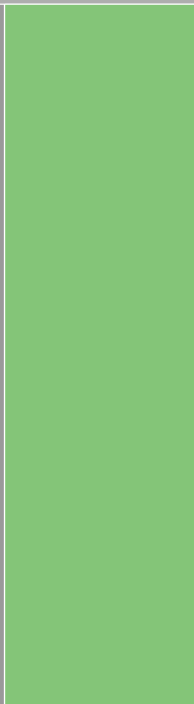
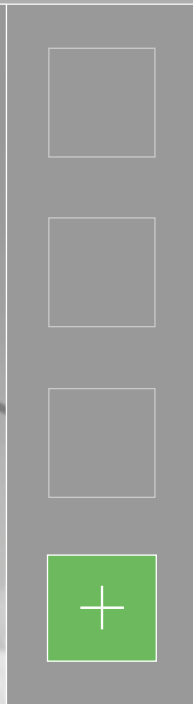
"Doping control at Olympic Games is the responsibility of the IOC and the Organizing Committee. WADA is not involved in this work at Salt Lake City, but has an Independent Observer Team which is observing the processes. That team will complete its observations and provide a report, which will be made public in its entirety, following the Games".

If anyone in the IO Team has a request from anyone outside the Team for information obtained under our confidential contract please refer to me for response. I shall report appropriately to the WADA Chair and Director General within this protocol.

David Howman
Chairman

WADA Independent Observer Team

cc: Richard W. Pound, Q.C., WADA Chairman
Harri Syväsalmi, WADA Director General



ANNEX



EXECUTIVE SUMMARY

Introduction

The World-Anti-Doping Agency (WADA), with the support of and at the invitation of the International Olympic Committee (IOC), created for the first time, the office of Independent Observer (IO) for the Olympic Games in Sydney, Australia in 2000.

This initiative and the subsequent public report were received favourably by the sporting community and by the public at large, thanks to the open and transparent process.

WADA was therefore pleased to be invited by the IOC to provide an Independent Observer Team for the first time for a Winter Olympic Games, in Salt Lake City.

The fundamental objective of the Independent Observer during the Games was to ensure that the doping control process was fair and seen to be fair, and that those responsible for conducting the program followed their procedures fully and properly.

The role of the Independent Observer operation was therefore to be the “eyes and ears” of the world by reviewing, observing and reporting on all aspects of the doping control operations in a neutral and unbiased manner. In order to fulfil this role, independent expertise throughout the world was recruited to the IO Team for the Games, including sample collection, result management, medical, legal and laboratory expertise, as well as the involvement of a former Olympic athlete.

The IO Team acknowledges with gratitude the strong support given by Dr. Jacques Rogge, President of the IOC, Professor Arne Ljungqvist, Acting Chairman of the IOC Medical Commission (IOMC), and Mr. Richard Pound QC, Chairman of the WADA Foundation Board. Several members of the IOC Secretariat and the IOMC were also of considerable help, together with Dr. Doug Rollins and the Salt Lake Organizing Committee (SLOC) Doping Control Team.

General Comments

The full report of the Independent Observer mission in Salt Lake City provides extensive detail on the background, role and observations of the IO Team at these Games.

In general, the IO Team's observations concluded that the doping control process for the most part, was carried out in a manner that protected the overall integrity of the testing process and, therefore, athletes' rights.

However, the implementation of the blood testing during the Games illustrates an urgent need:

- 1 | to improve blood sample collection;
- 2 | to develop harmonized and transparent international protocols; and
- 3 | to develop coordinated result management protocols between the International Federations (IFs) that use blood testing.

This Executive Summary provides an overview of the key observations at the Games and provides recommendations for further improvement.

Key Observations

- 1 | These were the first Winter Olympic Games with an Independent Observer Team present. As in Sydney, the IO office enhanced the transparency and processes of the doping control operations.
- 2 | Athlete, sport and public confidence in the doping control process is undoubtedly essential for the well-being of sport. The Independent Observer operation is an important factor in building up this confidence, and the mission in Salt Lake City contributed to this objective.
- 3 | The IO Team was able to attend doping control at all sports, at least twice per sport.
- 4 | In establishing the IO Team and related tasks, cooperation with the International Olympic Committee Medical Commission (IOCMC) was adequate; however, several meetings were necessary to achieve the basic level of cooperation needed, and negotiations for necessary improvements and additions were required during the first stages of the Games. The IO Team also had to actively search out the information required to accomplish its task. Some of these matters were due to changing circumstances rather than lack of cooperation.
- 5 | Inconsistencies by IOCMC members in fulfilling their responsibilities were sometimes observed.

- 6 | With respect to doping control conducted for urine collection:
- a) The sample collection operation was for the most part performed very well.
 - b) The doping control stations were often inadequate for their purpose (due to a lack of privacy), but this did not compromise the integrity of the sample collection process.
 - c) The Doping Control Officers were, in the main, professional and well prepared, but inadequacies were noted in some areas where greater training and experience would have been helpful.
- 7 | With respect to documentation for the Games:
- a) The IO Team Chair was properly provided on a daily basis with doping control records and forms. This enabled the IO Team to cross-reference laboratory reports on a regular basis.
 - b) However, too many forms were used at the doping control station and this led to occasional human errors.
- 8 | With respect to blood testing:
- a) Stations were not well suited for collecting samples.
 - b) The on-site analysis of blood and subsequent decision-making by sport officials needs to be reviewed.
 - c) There were inconsistencies in the application of rules for blood collection among International Federations.
- 9 | There was a conflict between the Olympic Movement Anti-Doping Code and Salt Lake City Doping Control Guide. This resulted in confusion over terminology for pre-competition and out-of-competition testing, a lack of reference to blood testing in the Code, and a lack of clarity within both documents as to the role of the WADA Independent Observer Team.
- 10 | The Pre-competition testing program carried out by the IOC and SLOC could have been an effective deterrent. However, it was observed that testing in Salt Lake City leading up to the Games was problematic due to inadequate information on athletes' whereabouts. During the Games, some targeted testing was successfully introduced.
- 11 | With respect to the laboratory analysis, the laboratory standards and analytical procedures were well done. However, there were problems experienced by the IO Team in obtaining information on a timely basis.
- 12 | The Result Management process was greatly improved during these Games, with the introduction of a small Inquiry Commission and Hearing process. This served to greatly improve confidentiality, efficiency and expertise among individuals managing positive findings or other reportable doping offences.
- 13 | The new protocols for the review of both asthmatic and therapeutic medications were observed to be well constructed. Additional lead-time for countries to comply with these protocols will further improve the system.

Recommendations

- 1 | The doping control process involving blood sampling at competition sites prior to the event must involve persons to manage the analyses who are independent and have expertise. The result management of blood analysis is as important as that involving positive laboratory analysis. It should therefore be seen to be independent, expert and fair. Consideration might be given to a group of three persons being involved in such management.
- 2 | Transparency and fairness of process is most important where a sanction can be imposed without a hearing, e.g. the “no start” decision made in the case of cross-country skiing (and the potential for similar decisions in other endurance sports).
- 3 | The protocols for blood collection and analysis must be harmonised and scientifically secure. For example, at Salt Lake City competitors were still allowed to compete in skating events after a high blood count whereas, according to the protocols, similar counts would have rendered them ineligible to compete in skiing events.
- 4 | Blood protocols must be put into place well in advance of the Games. Late changes to protocols, some indeed during the Games themselves, provide considerable communication issues for competitors, officials and doping control personnel.
- 5 | At the blood sample collection stage and also at the blood sample analysis stage there are independent personnel to check the scientific nature of the analysis and the state of the equipment and to take responsibility for the results, including the result management process and the advice to those responsible for such a process.
- 6 | Harmonisation should be explored to ensure similar analytical equipment is used for the analysis of blood samples at all events and not, as occurred at Salt Lake City, different equipment for different sports.
- 7 | In determining the blood sampling protocols for the future there needs to be proper discussion and debate as to whether blood sampling prior to events is part of the doping control process or a health/medical check. Each requires a different decision, a different process and a different protocol but there is an entwining which leads to an inextricable linkage.
- 8 | Those responsible for preparing blood sampling protocols might appropriately give consideration to “comfortable” scientific certainty, including a consideration of building up athlete profiles in order to ensure consistent tracking of competitors’ personal blood counts.

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- | 9 | Consideration should be given to testing all medallists in endurance sports for EPO and their analogues and mimetics. This essentially means that urine samples taken from medallists must be sufficient to allow the laboratory analysis to include an analysis for EPO; if blood is required for such analysis then it should also be taken post-event if it has not been collected prior to the event.
 - | 10 | As far as team sports are concerned, it is recommended (as was the case in the IO Report from Sydney 2000) that there be an increase in the numbers tested in team sports, which at the Olympic Winter Games would include curling, ice hockey, bobsled and relay events in skiing and skating.
 - | 11 | The hearing process for positive cases was much more effective, thanks to the implementation of changes made since Sydney. Perhaps consideration might now be given to widening the powers and jurisdiction of the Disciplinary Commission to enable it to seek more evidence from the Inquiry Commission (including oral evidence from witnesses, should they be challenged).
 - | 12 | It is suggested that the quality of control samples injected into the doping control process by IOCMC to check on the quality of laboratory analysis should be more authentic (i.e. more difficult to analyse). The integration of such control samples within the process must be of the same standard as that of the athlete sample collection and must include the accompanying paperwork, which must be of high quality.
 - | 13 | Priority might beneficially be given to target testing at future Olympic Games. Such target testing, which proved important at Salt Lake City, may well be of greater benefit as systems develop and athlete profile information improves. To enable target testing to be effective, consideration must be given to the collection of all information from prior tests and the maintenance of a profile information centre.
 - | 14 | Pre-competition testing will be effective only if athletes can be found and tested. Consideration might be given to including an additional condition on the entry form to the effect that athletes must disclose to doping control officials their whereabouts in the period immediately preceding the Games (i.e. not less than six weeks beforehand), with proper sanctions, including withdrawal from the Games, should there be a failure to provide information and therefore a failure to be available for pre-competition testing.
 - | 15 | It is recommended that consideration be given to conducting pre-competition testing so that it involves IOCMC and International Federations in the same way as in-competition testing during the Olympic Games, in order to ensure consistency and harmony.

- 16 | The present Code and some of its rules mandate the actual participation of members of IOCMC in the doping control process (e.g. signing of documentation, sealing transport bags), with failure leading to the risk of bad process, including the breach of the chain of custody. This mandatory active participation in a doping control process might usefully be reviewed again to ensure harmony and to make sure that expertise and educational opportunities are enhanced.
- 17 | Consideration might usefully be given to electronic recording at the doping control stations to preclude forms that are too complex and complicated and to prevent inadvertent administrative or clerical errors.
- 18 | Doping Control stations ought to be adequate for the purpose of sample collection.
- 19 | There should be a review of the protocol in respect of dilute samples to ensure athletes can not avoid testing either by manipulating urine or otherwise.
- 20 | Consideration needs to be given to ensuring that future Games have full, proper and appropriate training for Doping Control Officers, including sufficient practical training.
- 21 | The Olympic Movement Anti-Doping Code's rules pertaining to chain of custody should be reviewed to ensure that the major concern of the chain of custody, through proper and secure transport and other processes, is to ensure the integrity of the sample.
- 22 | Accreditation for the IO Team must include the ability to attend any new venue, such as the Medals Plaza at Salt Lake City, to ensure that observation can be complete.
- 23 | For future events the Guide (or its equivalent) should be adopted by the IOC and IOCMC as the valid text for that event, on the understanding that while the Guide may contain more detailed procedures than those set out in the Code it will not contradict or conflict with the latter. Furthermore, the role and definition of the WADA Independent Observer Team should be more clearly set out in future Guides.
- 24 | The prior notification protocols for Beta 2 antagonists should be maintained, but all doctors involved should be given, in good time, detailed information about the diagnostic test to be performed as well as full details of the specific properties of the available products.
- 25 | The design of the transport bag tabs should be reviewed to ensure that unnecessary complications are avoided. Furthermore, the numbers might sensibly be printed on both sides of the tab.

- 26 | The contract entered into with the Laboratory provide for proper ways of dealing with such issues, to exclude the possibility of the Laboratory Director being involved in unilateral decision-making of a result management nature.
- 27 | The role of the IO Team Laboratory experts should be fully accepted by the Director of the Doping Control Laboratory. The IO Team must be able to function professionally in their expected role without, of course, interfering with the work of the laboratory. They should be provided with a comfortable environment where there is an appropriate level of interaction with senior laboratory staff and access to relevant data. An important part of the IO Team's role is to report on the laboratory as respecting IOC rules and the Olympic Movement Anti-Doping Code and also to comment on the transparency of the operation.
- 28 | In order for the IO Team laboratory experts to observe all possible doping cases it would be clearer if the Chair of the IO Team were to receive a daily report from the Laboratory Director on all suspect samples detected during screening procedures which are subject to additional analytical investigation. Such information would allow the laboratory observers to follow, in a timely manner, all the "A" confirmation procedures and final results evaluation performed by senior laboratory staff and thus create proper transparency in the process.
- 29 | A process should be established for reviewing decisions made by the Laboratory Director regarding the rejection of samples for analysis. This procedure should allow such decisions to be endorsed or challenged by a "Non-Laboratory" official.

IOC MEDICAL COMMISSION

POST GAMES REPORT

|| ||| | **Salt Lake City**
8 February - 24 February 2002

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In accordance with the Salt Lake 2002 Doping Control Guide, the IOC Medical Commission, in cooperation with SLOC Medical Services and the UCLA Olympic Analytical Laboratory is presenting this summary report based on the information provided by both Dr Douglas Rollins and Prof. Don Catlin.

During the Games, the doping control programme, headed by Douglas Rollins, M.D., Ph.D., managed the operations from SLOC headquarters. SLOC Chief Medical Officer, Charles Rich, M.D. was the formal liaison to the IOC MC.

During the Games, the anti-doping programme was supported by the following staff:

- Seven paid staff
- 390 volunteers composed of several positions with the following job descriptions
 - 50 Doping Control Officers: the person who processes the urine/blood specimens and completes the necessary paperwork (15 from USADA and 35 locally-trained);
 - 30 Site Supervisors: the person in charge of the management of the doping control station, including staffing, assignment of radios/telephones, organization of the station, and checking in athletes;
 - 25 Phlebotomists: the person in charge of the vein puncture for blood collection; and
 - 195 persons for the following positions:
 - a. Escort Supervisor: the person responsible for assigning escorts to specific athletes and for assisting in the location of these athletes following the event;
 - b. Escort: the person who notifies and escorts the athlete following the event;
 - c. Technical Officer: the person who witnesses the passing of the urine specimen into the collection vessel; and
 - d. Couriers: persons who assisted the contract courier service to pick up specimens at each venue.

The Programme was divided into four phases:

- 1 | **A 100% Initiative:** Working with WADA, NOCs, IF and the national anti-doping agencies to ensure that all athletes were tested prior to attending the Olympic Winter Games of 2002 (OWG 02).

The purpose of this programme was to work with outside agencies to determine if all athletes coming to Salt Lake Games were tested for drug use prior to arriving in Salt Lake in February 2002. Working with WADA, NOCs, IF, and governmental anti-doping agencies, SLOC Doping Control began an effort to monitor athletes coming to Salt Lake. We requested testing information from WADA and NOCs about athletes that had been tested. It was difficult to monitor all athletes. NOCs provided information to SLOC doping control via a survey conducted in December 2001. Many NOCs tested all of their athletes before coming to Salt Lake. Some of this was done through WADA and some by governmental anti-doping agencies. In addition, WADA conducted approximately 1,200 tests during December 2001 and January 2002, prior to the Games. Overall, it was determined that approximately 95% of athletes underwent doping control before coming to Salt Lake City.

From the opening of the village until the first competition, the IOC Medical Commission was involved in this programme to prevent duplication between this programme and the IOC programmes.

- 2 | **Pre-Competition Testing Programme:** Testing randomly selected athletes prior to the beginning of their competition.

The Pre-Competition testing programme was modelled on the Out-of-Competition Programme used in Sydney. The name was changed from out-of-competition testing to pre-competition testing at the suggestion of WADA Secretary General. The purpose of the change was to avoid confusion between IOC testing with testing being conducted by WADA and other government anti-doping agencies.

The Pre-Competition programme was developed in three phases.

Phase I took place on October 29, 2001. At that time each National Olympic Committee (NOC) had submitted the estimated size of its respective teams. We planned to test approximately 4% of all athletes coming to the Salt Lake Games. In Phase I, we selected numbers corresponding to 4% of each NOC. For example, if an NOC had 100 athletes, four numbers (eg 7, 19, 38 and 90) were selected at random. NOCs that had less than 13 athletes were pooled together and 4% of the pooled number were selected. The selection for Phase I was completed in the presence of representatives of the IOC Medical Commission, SLOC, the IOC Athletes' Commission and the NOCs. These numbers were kept by SLOC and the IOC in sealed envelopes.

Phase II took place on 28 and 29 January, 2002. This was the deadline for the NOCs to submit their final list of athlete names. A computerized list of athletes from each NOC was randomized and the randomized names were matched to the numbers drawn in Phase I.

Phase III took place after 29 January 2002 when the Olympic Village opened. During this Phase, athletes were located, notified of testing by representatives of SLOC doping control and a urine specimen was collected. The urine specimens were sent to the laboratory for analysis of anabolic steroids and masking agents.

Ninety Six athletes were tested in this programme. A complete list of athletes, sports, and NOCs for the Pre-Competition Programme is shown.

- 3 | Blood Testing Programme:** Testing for the use of erythropoietin (EPO) in all athletes participating in the endurance sports of cross country skiing, biathlon, Nordic combined, long track speed skating and short track speed skating.

All endurance athletes were screened by a blood test for elevated hemoglobin or reticulocytes. Those that were suspected of EPO use were required to return for a repeat screen on the day of their next competition. In addition, a maximum of 20% of the field of athletes were to be screened on the day of each competition. Athletes with a suspicious blood screen were required to provide a urine specimen. The blood and urine were sent to the IOC laboratory for a more detailed blood screen (the same model as used in Sydney), and, if there was further suspicion, an analysis of the urine for EPO or related substances. The decision for a possible "no start" was to be made by each Federation and was out of the hands of the IOC or SLOC.

Initial blood screening occurred at Soldier Hollow (SHP), The Utah Olympic Oval (UOV) and the Salt Lake Ice Center (SLI). The equipment for analysis was chosen by the Federations. Skiing (FIS) and biathlon (IBU) chose equipment provided by the Sysmex company (a haemoglobin analyser and an instrument to determine the percent reticulocytes). Skating (ISU) chose the Advia instrument provided by the Bayer company. The ISU refused to pay for the use of the Advia instruments at UOV and SLI because they were not in agreement with the protocol and felt that the IOC/SLOC should pay. FIS paid for the relocation of its instrument. FIS and IBU paid for the persons to operate their instruments. The cost of transporting the IBU instrument from Europe to Salt Lake was paid by SLOC. Despite efforts to get IBU and FIS to share an instrument each brought their own and separate persons to operate them. This created a severe space problem as we had space for only one instrument at SHP. We managed to create two spaces, but working conditions were not ideal.

The Sysmex instrument sent to SHP from Austria by the IBU was damaged in shipment and could not be used. Thus, IBU and FIS had to share one instrument (despite not wanting to previously). About halfway through the Games the Sysmex instrument at SHP began malfunctioning and for several days, until a replacement arrived, there was no blood analyser at SHP to perform blood screening. On these

days, blood samples were sent to the IOC laboratory in Salt Lake City where haemoglobin and percentage of reticulocytes were measured by an Advia instrument. The results were immediately sent back to SHP by FAX in time to collect a urine if necessary after the race.

Procedures were changed by the Federations and the IOC Medical Commission after the Games had started. The following changes were made to the blood testing protocol after the start of the Games:

- FIS and IBU changed the protocol so that only one whole blood tube was collected prior to an event. Haemoglobin and % reticulocytes were measured on that sample. If suspicious, the athlete was required to return to have more blood drawn after the race and to provide a urine specimen. The blood and urine specimens were sent to the IOC lab. NOTE: The laboratory insisted on 3 ml of whole blood and 10 ml of clotted blood for serum to perform the necessary analyses. This made it necessary to draw 16 ml of blood from those athletes who were to have blood and urine sent to the laboratory (3 mL for on-site measurement and 13 ml to send to the laboratory).
- FIS required that an additional blood specimen be drawn for a "no start" decision. The average values of the two specimens were used to determine a "no start".
- The ISU did not want to draw blood from athletes on the day of a race. Consequently, 20% of the field of athletes who raced on a given day had their blood drawn the day before. This worked reasonably well in that speed skating and short track speed skating athletes did not compete the day prior to their race.
- The ISU decision for a no start was based on its experience with the "SAFE" paradigm. It made no decisions in favour of a no-start during the Games.

The Blood Doping Control Stations at SHP, UOV, and SLI were separate from the Urine Doping Control Stations and they had separate staff. At the blood stations there was a Doping Control Officer, a Site Supervisor, and five to seven phlebotomists. Blood was tested for haemoglobin and % reticulocytes at each venue. Blood tubes (two 3 ml lavender top tubes for whole blood and one 10 ml multi-coloured top or red top tube) were purchased from Berlinger in the form of Mini-Bereg Kits. In some cases the lavender top tube was drawn before the race and the remainder of the blood drawn after the race if necessary. When it was required to send a blood and urine specimen to the IOC laboratory for EPO analysis it was sent in a Bereg Twin Kit. The blood tubes were placed into the blood portion of the Bereg Twin Kit and the urine was placed into the urine portion. Both blood and urine tubes had the same unique kit number.

The use of the Bereg Twin Kits and Mini-Kits for blood collection should be reviewed carefully. The kits holding the blood tubes were not very flexible and if a blood tube was used the entire kit had to be discarded. Berlinger recommends that the blood tubes be placed in the top of the Bereg Twin Kit bottles. This resulted in the breakage of one blood tube and loss of the specimen.

There were 1,222 blood specimens drawn and analysed at these three sites. Of these specimens 133 (10.6%) had elevated reticulocytes and 8 (0.7) had elevated haemoglobin. The IOC laboratory received 77 combined blood and urine specimens for EPO analysis. The majority of blood specimens were drawn on 6, 7, 8, 9, and 10 February when all endurance athletes were initially tested.

- 4 | **In-Competition Testing Programme:** Urine testing of the top four athletes (or a random selection from the respective team) in each medal event, plus one or two random athletes in those events. In the team event of ice hockey a random athlete was selected from each team for each preliminary game. In curling, one random athlete was selected from each preliminary round. Each IF signed a test protocol agreement that clearly outlined the doping control for each event

The samples were analysed at the UCLA Olympic Analytical Laboratory, temporarily located in Salt Lake City. This laboratory has IOC and ISO/IEC 17025-1999 accreditation, and is directed by Dr Don Catlin. More than 40 people worked at the laboratory which was operational 24 hours a day. A member of the IOC "Doping and Biochemistry" sub-commission and a WADA Independent Observer were at the laboratory at various times. In addition, blood specimens were also drawn and analysed at several venues under the direction of the IFs.

The summary of the all the tests done by the laboratory is listed in Table 1.

1 | **TESTS PERFORMED IN-COMPETITION (TABLES 2A – 2B)**

A total of 598 tests were performed during the period from 9 to 24 February. This number of tests was determined by the IOC and SLOC, taking into account the laboratory handling capacity and the wishes of the IFs. However, 623 samples were collected. The discrepancy comes from the partial samples which were counted as one sampling.

The method for selecting the athletes to be tested was agreed on with each IF and led to the preparation of a protocol by SLOC which was signed by all the parties. This selection method was based on the methods used by each IF while respecting the IOC's principle of testing all medallists. In the majority of cases, the medallists, the fourth place finisher, and athletes selected at random were tested.

The turn-around-time, which is the number of hours elapsed between receipt of the samples in the laboratory and faxing the report to the Chairman of the IOCMC and to the WADA Independent Observer, averaged 25.9 hours exclusive of the positive cases.

2 | OUT-OF-COMPETITION TESTS (TABLE 3)

Out-of-competition testing was conducted by various agencies including the IOC. The laboratory is not aware of the administrative details on these samples. In all, 102 urine tests were carried out. This testing began when the Olympic Village opened on 29 January 2002, and continued until 20 February 2002. The average turn-around-time for these samples was 23.8 hours. Ninety-six athletes were selected for this programme. The total of 102 reflects some partial samples due to problems with Ph or SG.

3 | EPO TESTS: URINE PLUS BLOOD (TABLES 4A – 4B)

It was agreed by the IOC, SLOC and the IFs that these tests would be focused more particularly on endurance sports. Table 4 summarises these tests. Seventy-seven couples blood/urine were analysed by the laboratory.

4 | RETICULOCYTE TESTING FOR THE INTERNATIONAL FEDERATIONS (TABLE 5)

One of the Federations experienced difficulty with on-site blood testing and asked for the assistance of the UCLA laboratory. This testing is summarised in table 5.

5 | POSITIVE ANALYTICAL RESULTS (TABLES 6A – 6B)

The Salt Lake laboratory Director communicated 22 positive results to the acting Chairman of the Medical Commission and to the Office of the Independent Observer. These results were:

- Six positive results leading to a hearing and a report to the IOC Executive Board
- Four positive results corresponding to blind tests
- Twelve positive screen results for salbutamol, the use of which was indicated in a declaration beforehand

It was decided not to follow up 17 results which the laboratory communicated to the Chairman of the Medical Commission and the Office of the Independent Observer for the reasons given in table 6b.

6 | BLIND URINE TESTS (TABLE 7)

This technique consists of preparing "positive" samples in advance, which are then included with the normal samples sent to the laboratory to be analysed. This technique is used to allow the IOC to state that the laboratory was performing the analyses properly. Four such samples were submitted to the laboratory and all were detected and reported. The A confirmation was not performed on one of the samples because the form received from SLOC indicated that the sample was an IOC blind sample.

(1) Comments

(6.1) By the laboratory

- (a) To summarize the testing methods and procedures worked very well. All the equipment performed satisfactorily. The method for detecting EPO and darbepoetin in urine performed flawlessly. The cooperation of the IOC was outstanding and most appreciated. The turn-around time for the negative samples was just under 24 hours, which to our knowledge has never been achieved before.
- (b) It was clear from the opening day that the sample-collection teams at the sites did not have sufficient training. This resulted in the necessity for the laboratory to spend hours trying to find and correct all the errors in the paper work. In the future, the IOC would be better served if the entire sequence of paper work were revised.
- (c) There were too many IOC blind samples. There is no real point in adding these samples in the modern world of doping control wherein all the procedures are highly controlled and the process is open to continual inspection and verification. In addition it was very easy for the laboratory to recognise the IOC samples, thus the point of the exercise was moot.

(6.2) By SLOC

- (a) Laboratory. Identify a laboratory as early as possible. Acquire space and commitment from the laboratory director. Work with a laboratory director who will be a part of the doping control team and meet with them regularly. Consult with the laboratory director about urine and blood collection supplies and chain-of-custody forms.
- (b) Volunteers. Identify and train volunteers as early as possible. Use experienced Doping Control Officers (even if they must be paid). Do not train local people as DCOs in two or three years and expect them to be competent. Develop a sense that all of the volunteers are part of a large team; provide them with as many perks and benefits as possible. Do not count on the Organising Committee to take care of your volunteers. Doping Control volunteers must be specifically trained at least one year in advance and should work at their specific job assignment during the test events. The Doping Control Team should be venue-specific. This particularly refers to the Doping Control Officers, Site Supervisor, and Escort Supervisor. It is important for them to be knowledgeable about the Sport and Venue.
- (c) International Federations. During the test events work with the IFs. Know the key persons involved and develop strong relationships with them. Develop testing protocols with each Federation as early as possible. These protocols will be used to develop your in-competition test plan. Communicate frequently with key persons in each Federation.

- (d) IOC/WADA. Work closely with both of these organisations. Meet with them regularly to stay abreast of changes and to remain knowledgeable about potential changes in doping control protocols and procedures. This is particularly important with regard to blood testing. Wherever possible, obtain of procedures in writing.

(6.3) By the IOC

The doping control programme in Salt Lake City went well in general. However, some points, not directly linked with the Salt Lake City programme, but which had consequences on this programme, should be revised in the future.

- (a) All the Doping Control Officers, responsible for a doping control station should be professional.
- (b) Procedures should be defined at least six months before the opening of the Village.

TABLE 1

| SALT LAKE CITY 2002 OLYMPIC GAMES TEST SUMMARY | |
|---|--------------|
| Samples in competition Refer to tables 2a - 2b for test distribution | 598 |
| Samples out of competition Refer to table 3 for test distribution | 102 |
| EPO tests (urine and blood) Refer tables 4a - 4b for test distribution | 77 |
| EPO tests (reticulocyte count for IF) Refer table 5 for test distribution | 35 |
| Duplicate samples - not tested (SG or pH issue) | 9 |
| IOC Blind samples Refer table 7 for distribution | 4 |
| TOTAL | = 825 |

TABLE 2A

In-Competition Urine Collected

| VENUE | SPORT | NUMBER OF TESTS |
|-------------------|--------------------------------|-----------------|
| Snowbasin | Downhill men | 6 |
| | Combined downhill/Slalom Men | 6 |
| | Super G Men | 6 |
| | Downhill/Slalom Women | 6 |
| | Combined downhill/Slalom Women | 6 |
| | Super G Women | 6 |
| TOTAL | | 36 |
| Deer Valley | Moguls Men | 7 |
| | Aerials Men | 7 |
| | Slalom Men | 6 |
| | Moguls Women | 6 |
| | Aerials Women | 6 |
| | Slalom Women | 6 |
| TOTAL | | 38 |
| Park City | Halfpipe Men | 9 |
| | Snowboard parallel Men | 6 |
| | Super giant slalom Men | 7 |
| | Halfpipe Women | 6 |
| | Snowboard parallel Women | 6 |
| | Super giant slalom Women | 6 |
| TOTAL | | 40 |
| Soldier Hollow | Cross country Men | 36 |
| | Biathlon Men | 23 |
| | Nordic combined Men | 15 |
| | Cross country Women | 49 |
| | Biathlon Women | 26 |
| TOTAL | | 149 |
| Utah Olympic Park | Bobsleigh Men | 13 |
| | Luge Men | 5 |
| | Luge double | 5 |
| | Skeleton Men | 7 |
| | Bobsleigh Women | 7 |
| | Luge Women | 5 |
| | Skeleton Women | 9 |
| | Ski jumping | 18 |
| TOTAL | | 69 |

TABLE 2A**In-Competition Urine Collected (continued)**

| VENUE | SPORT | NUMBER OF TESTS |
|----------------------|----------------------------------|-----------------|
| E Center | Ice hockey Men | 51 |
| | Ice hockey Women | 19 |
| TOTAL | | 70 |
| Peaks Ice Arena | Ice hockey Men | 26 |
| | Ice hockey Women | 31 |
| TOTAL | | 57 |
| Salt Lake Ice Center | Figure skating | 26 |
| | Speed skating /short track Men | 23 |
| | Speed skating /short track Women | 15 |
| TOTAL | | 64 |
| Peaks Ice Arena | Speed skating Men | 35 |
| | Speed skating Women | 34 |
| TOTAL | | 69 |
| Peaks Ice Arena | Curling Men | 18 |
| | Curling Women | 13 |
| TOTAL | | 31 |
| TOTAL | | 623 |

TABLE 2B

UCLA report on testing in Salt Lake City

In competition testing number of samples processed by day during games

| DATE | 9/2 | 10/2 | 11/2 | 12/2 | 13/2 | 14/2 | 15/2 | 16/2 | 17/2 | 18/2 | 19/2 | 20/2 | 21/2 | 22/2 | 23/2 | 24/2 | TOTAL |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| DAY | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
| Alpine Skiing | | 6 | | 6 | 6 | 6 | | 6 | 6 | | | 6 | 7 | 6 | 6 | | 61 |
| Biathlon | | | 11 | | 10 | | | 10 | | 5 | | 5 | | | | | 41 |
| Bobsled | | | | | | | | | 6 | | 7 | | | | 6 | | 19 |
| Cross-Country Skiing | 13 | | | 13 | | 6 | 6 | | 6 | | 12 | | 5 | | 4 | 6 | 71 |
| Curling | | | 3 | 1 | 2 | 2 | 2 | 4 | 3 | 2 | | 4 | 3 | 3 | | | 29 |
| Figure Skating | | | 6 | | | 5 | | | | 6 | | | 7 | | | | 24 |
| Freestyle Skiing | 6 | | | 7 | | | | | | 6 | 7 | | | | | | 26 |
| Ice Hockey | 7 | 6 | 9 | 8 | 11 | 14 | 10 | 9 | 11 | 9 | 10 | 9 | 8 | 4 | 4 | 4 | 133 |
| Luge | | | 5 | | 5 | | 5 | | | | | | | | | | 15 |
| Nordic Combined | | 6 | | | | | | | 6 | | | | | 6 | | | 18 |
| Short Track | | | | | 4 | 1 | | 9 | | | | 10 | | | 15 | | 39 |
| Skeleton | | | | | | | | | | | | 13 | | | | | 13 |
| Ski Jumping | | 9 | | | 7 | | | | | 6 | | | | | | | 22 |
| Snowboarding | | 6 | 7 | | | | 12 | | | | | | | | | | 25 |
| Speed Skating | 6 | 5 | 5 | 6 | 5 | 5 | | 5 | 5 | | 5 | 5 | | 5 | 5 | | 62 |
| TOTAL | 32 | 38 | 46 | 41 | 50 | 39 | 35 | 43 | 43 | 34 | 41 | 52 | 30 | 24 | 40 | 10 | 598 |

TABLE 3

UCLA report on testing in Salt Lake City

Out of competition testing: Number of samples processed by day of Games

| DATE | 30/1 | 31/1 | 1/2 | 2/2 | 3/2 | 4/2 | 5/2 | 6/2 | 7/2 | 8/2 | 9/2 | 10/2 | 11/2 | 12/2 | 13/2 | 14/2 | 19/2 | 20/2 | TOTAL |
|----------------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|
| DAY | -9 | -8 | -7 | -6 | -5 | -4 | -3 | -2 | -1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 12 | 13 | |
| Alpine Skiing | | | 1 | | | | 2 | 1 | 3 | 1 | 1 | | | 3 | | | 1 | | 13 |
| Biathlon | | | | | | | | | | | | | | | | | | | 0 |
| Bobsled | | | 3 | 1 | | | | 2 | 3 | | | | | 1 | | | | | 10 |
| Cross-Country Skiing | | | | | | | | | | | | | | | | | | | 0 |
| Curling | | | | | | | | 2 | 2 | | | | | | | | | | 4 |
| Figure Skating | | | | | | 1 | 1 | 1 | | 1 | 2 | | | | | 1 | | | 7 |
| Freestyle Skiing | | | | | | 1 | 1 | | 1 | 2 | | 2 | | | | | | | 7 |
| Ice Hockey | 2 | 4 | 3 | 1 | 1 | 7 | 1 | 2 | 2 | | | | | | | 3 | | | 26 |
| Luge | | | | | | 1 | 2 | 1 | | 2 | | 2 | | 2 | | | | | 10 |
| Nordic Combined | | | | | | | | | | | | | | | | | | | 0 |
| Short Track | | | | | | | | | | | | | | | | | | | 0 |
| Skeleton | | | 1 | | | | | | | 1 | | | | | | | | | 2 |
| Ski Jumping | | | | | | | 2 | 4 | 2 | | | | | | | | | | 8 |
| Snowboarding | | | | | | | 3 | 2 | | 2 | | | | | | | | | 7 |
| Speed Skating | | | | | | | | | | | | | | | | | | | 0 |
| Unknown | | | | | | | | 1 | | | 2 | | 1 | | 2 | | 1 | 1 | 8 |
| TOTAL | 2 | 4 | 8 | 2 | 1 | 10 | 12 | 16 | 13 | 9 | 5 | 4 | 1 | 6 | 2 | 4 | 2 | 1 | 102 |

TABLE 4A

Blood Testing

| VENUE | | DATES | | | | | | | | | | | | | | | | | | | | TOTAL | % |
|--|--------------------------|-------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------|-------------|-------------|---|
| | | 6/2 | 7/2 | 8/2 | 9/2 | 10/2 | 11/2 | 12/2 | 13/2 | 14/2 | 15/2 | 16/2 | 17/2 | 18/2 | 19/2 | 20/2 | 21/2 | 22/2 | 23/2 | 24/2 | | | |
| SOLDIER HOLLOW | BLOOD COLLECTIONS | 80 | 201 | 143 | 104 | 14 | 21 | 26 | 20 | 16 | 14 | 25 | 27 | 14 | 18 | 10 | 23 | 8 | 17 | 12 | 793 | | |
| Cross Country, Biathlon, Nordic Combined | RETICULOCYTES ≥ 2.0% | 4 | 9 | 2 | 8 | 1 | 2 | 3 | 0 | 0 | 2 | 5 | 3 | 1 | 0 | 0 | 3 | 0 | 2 | 1 | 46 | 5.8 | |
| | ELEVATED HEMOGLOBIN | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 0.5 | |
| | URINE/BLOOD TO LAB | 1 | 0 | 0 | 6 | 1 | 2 | 3 | 0 | 0 | 2 | 5 | 3 | 1 | 0 | 0 | 6 | 0 | 2 | 1 | 33 | 4.16 | |
| UTAH OLYMPIC OVAL | BLOOD COLLECTIONS | 88 | 70 | 4 | 9 | 7 | 7 | 1 | 3 | 1 | 10 | 9 | 0 | 10 | 8 | 0 | 4 | 4 | 0 | 0 | 235 | | |
| Speed Skating | RETICULOCYTES ≥ 2.0% | 13 | 6 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 31 | 13.2 | |
| | ELEVATED HEMOGLOBIN | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 1.7 | |
| | URINE/BLOOD TO LAB | 0 | 1 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 13 | 5.53 | |
| SALT LAKE ICE CENTER | BLOOD COLLECTIONS | | | | | 104 | 25 | 0 | 14 | 0 | 16 | 0 | 0 | 0 | 19 | 0 | 0 | 16 | 0 | 0 | 194 | | |
| Short Track Speed, Skating | RETICULOCYTES ≥ 2.0% | | | | | 25 | 5 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 9 | 0 | 0 | 1 | 0 | 0 | 56 | 28.9 | |
| | ELEVATED HEMOGLOBIN | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | URINE/BLOOD TO LAB | | | | | 0 | 0 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 9 | 0 | 0 | 1 | 0 | 0 | 26 | 13.4 | |
| TOTAL | BLOOD COLLECTIONS | | | | | | | | | | | | | | | | | | | 1222 | | | |
| | RETICULOCYTES ≥ 2.0% | | | | | | | | | | | | | | | | | | | 133 | 10.9 | | |
| | ELEVATED HEMOGLOBIN | | | | | | | | | | | | | | | | | | | 8 | 0.65 | | |
| | URINE/BLOOD TO LAB | | | | | | | | | | | | | | | | | | | 72 | 5.89 | | |

TABLE 4B**UCLA Report on testing in Salt Lake City**

EPO Doping Control out of Competition: Number of blood samples received

| DATE | 6/2 | 7/2 | 8/2 | 9/2 | 10/2 | 11/2 | 12/2 | 13/2 | 14/2 | 15/2 | 16/2 | 17/2 | 18/2 | 19/2 | 20/2 | 21/2 | 22/2 | 23/2 | 24/2 | TOTAL | |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|-----------|----------|-----------|----------|----------|----------|-------|-----------|
| DAY | -2 | -1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | | |
| Biathlon | | | | | | 3 | | | | | 5 | | 1 | | | | | | | | 9 |
| Cross-Country Skiing | 1 | | | 6 | | | 3 | | | 2 | | 2 | | | | 7 | | 4 | 1 | | 26 |
| Nordic Combined | | | | | 1 | | | | | | | 1 | | | | | | | | | 2 |
| Short Track | | | | | | | | 8 | | 8 | | | | 9 | | | | | | | 25 |
| Speed Skating | | 1 | | 2 | 2 | | | 1 | | 1 | | | 3 | 1 | | 3 | 1 | | | | 15 |
| TOTAL | 1 | 1 | 0 | 8 | 3 | 3 | 3 | 9 | 0 | 11 | 5 | 3 | 4 | 10 | 0 | 10 | 1 | 4 | 1 | | 77 |

TABLE 5**UCLA Report on testing in Salt Lake City**

EPO Doping Control out of Competition: Number of blood samples received from the Skiing and Biathlon Federations for the analysis of reticulocytes.

| DATE | 15/2 | 16/2 | TOTAL |
|----------------------|-----------|-----------|-----------|
| DAY | 8 | 9 | |
| Biathlon | | 20 | 20 |
| Cross-Country Skiing | 15 | 7 | 15 |
| Nordic Combined | | | 0 |
| Short Track | | | 0 |
| Speed Skating | | | 0 |
| TOTAL | 15 | 20 | 35 |

TABLE 6A

UCLA Report on testing in Salt Lake City

Number of positive analytical results reported to the acting Chairman of the IOC Medical Commission and Mr Howman (WADA)

| DRUG REPORTED | B SAMPLE REQUIRED | ALPINE SKIING | CROSS-COUNTRY | CURLING | ICE HOCKEY | SPEED SKATING | SHORT TRACK | SYNOPSIS |
|-----------------------------|-------------------|---------------|---------------|---------|------------|---------------|-------------|--------------|
| Clenbuterol | no | | | | | | | 1 IOC sample |
| Stanozolol | no | | | | | | | 1 IOC sample |
| Methenolone | no | | | | | | | 1 IOC sample |
| Triamterene + Epitrenbolone | no | | | | | | | 1 IOC sample |
| Nandrolone | yes | | | | 1 | | 1 | 2 |
| Methamphetamine | yes | 1 | | | | | | 1 |
| Darbepoetin | yes | | 3 | | | | | 3 |
| Salbutamol | | | 8 | 2 | | 2 | | 12 declared |
| TOTAL | | | | | | | | 22 |

107

TABLE 6B

UCLA Report on testing in Salt Lake City

Analytical positive cases that did not lead to sanctions

| SUBSTANCE | NUMBER | REASON |
|-----------------------------|-----------|--|
| Nandrolone | 1 | Breach of the chain of custody |
| Methenolone | 1 | IOC Control Sample |
| Clenbuterol | 1 | IOC Control Sample |
| Triamterene + Epitrenbolone | 1 | IOC Control Sample |
| Stanozolol | 1 | IOC Control Sample |
| Salbutamol | 12 | Prior notification approved by the independent panel |
| TOTAL | 17 | |

TABLE 7

UCLA Report on testing in Salt Lake City

Positive samples planted by the IOC to test the laboratory

| SUBSTANCE | NUMBER | STATUS |
|-----------------------------|--------|-----------------------------|
| Clenbuterol | 1 | Confirmed and Reported |
| Stanozolol | 1 | Confirmed and Reported |
| Methenolone | 1 | Confirmed and Reported |
| Triamterene + Epitrenbolone | 1 | Reported, but not confirmed |

INDEPENDENT OBSERVERS

OBSERVATION OF THE IOCMC REPORT

The Doping Control Guide (“the Guide”) produced by SLOC for the Olympics states (p 27):

|| ||| | Post-Games Report

“ At the conclusion of the Salt Lake 2002 Olympic Winter Games, the IOCMC will produce, in consultation with SLOC, a post-Games report on the doping control process of the Games.

The IOCMC may also consult with the head of the laboratory and others involved in the Games to obtain information required to produce the report.

The post-Games Report will state:

- The number of in and out-of-competition tests conducted in each sport
- The results of all tests conducted
- The number of A and B samples reported as positive to the chairman of the IOCMC
- The number of voided specimens and the reason for voiding a specimen
- The number of results of blind control specimens identified
- The number of doping offences arising from the positive test results and the reason for any decision that a reported positive test did not constitute a doping offence
- The status of any rest results that are still under investigation

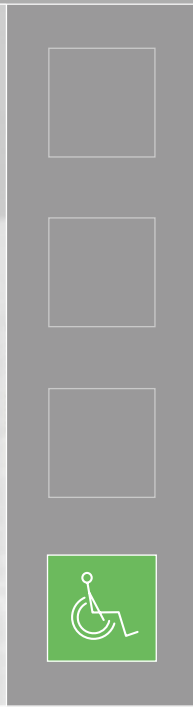
The post-Games report shall be issued publicly no later than one month after the completion of the Salt Lake 2002 Olympic Winter Games. The post-Games report will also be issued to the IOC Executive Board, the head of laboratory and the SLOC doping control medical director. The IOC Executive Board will provide the report to other parties, including WADA. ”

| 1 | The Independent Observers Report was completed and published in May 2002, and tabled at the WADA Board meeting held June 3, 2002. The post-Games Report was not published at that time so the IO Report contained a qualification that it was not complete until and unless it included an observation of the Report. The IOCMC Report was subsequently published by the IOCMC and received by WADA in early June, 2002.

| 2 | The IO Team has now studied the Report and has observed the following:

- (i) The IOCMC, in presenting this report, explicitly accepts the authority of the Guide. The Report states that it is presented “*in accordance with the Salt Lake 2002 Doping Control Guide ...*”. The Report then addresses the points as set out in the guide as matters to be included.
- (ii) The Report was issued approximately 3 months after the completion of the Games. There is no explanation for the delay. As at the Sydney Olympic Games, this Report was not published until after the Independent Observers Report and the tardiness, without a proper accompanying explanation, is of some concern.
- (iii) The Report confirms that for the Games, doping control was considered part of the overall medical program for SLOC. The Sydney Games IO Report recommended a separation of the two tasks. That recommendation is repeated here. Doping control should be a separate program.
- (iv) The Report includes information relating to pre-Games testing. The IO Team did not observe pre-Games testing and cannot comment on the content of the Report in this respect.
- (v) The confusion that arises with the use of a new term “pre-competition testing” is of concern and could be confusing to athletes. The term is not used in the Olympic Movement Anti-Doping Code, which refers only to “in-competition” and “out-of-competition” testing. Analysis of samples collected under this program must be conducted under either of the heads “in-competition” or “out-of-competition”. It is not clear from the Report which was used.
- (vi) The Report confirms the difficulties observed by the IO Team in relation to the blood testing program. In effect, the recommendations made by the IO Team are validated and corroborated by the contents of the IOCMC Report.
- (vii) It is noted that the contract with the laboratory needs to be clear and unequivocal so far as the blood collection process is concerned. This will mean the amount of blood collected conforms with the laboratory’s contracted requirements for analysis.
- (viii) Once again confirming an IO Team recommendation, the Report strongly criticises the blind control samples used during the games: “*In addition it was very easy for the Laboratory to recognise the IOC sample, thus the point of the exercise was mute.*”

- (ix) It is observed that the Report contains positive recommendations which need full consideration before the doping control protocols are finalised for the Olympic Games in Athens. In particular the Doping Control Guide needs to be published well in advance of the Games (at least six months prior to the Opening Ceremony), thus avoiding many potential difficulties, conflicts and protocol problems.
- (x) The Report contains most of the information required of it. However, there is no detailed reason or explanation of the case where the chain of custody was broken.
- (xi) The table containing the numbers of test results for irregular blood test results shows 77 samples required further analysis. There is no statement as to the analyses of these irregular blood samples so it must be presumed that none of the follow-up analyses resulted in a positive test. The IO Team would like to ensure that if there were irregular results from the analyses communicated to the International Federations or indeed to any other person, then those results should be published. The Report does not indicate whether this was done.



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The International Paralympic Committee is the supreme authority of the Paralympic Movement and, in particular, the Paralympic Games.

The IPC, in association with the International Federations and National Paralympic Committees, has established the IPC Medical and Anti-Doping Code with the expectation that, in the spirit of Fair Play, it will lead the fight against doping in sport for athletes with disabilities.

The IPC Medical and Anti-Doping Code is intended to safeguard the health of athletes and to ensure respect for the ethical concepts implicit in Fair Play, the Paralympic Spirit and medical practice.

International Paralympic Committee Medical and Anti-Doping Code

January 2002

Preamble



|| ||| | Introduction

This is the report of the World Anti-Doping Agency (WADA) Independent Observer Team (IO Team) that attended the 2002 Paralympic Winter Games in Salt Lake City, Utah, in the United States of America.

The IO Team observed the International Paralympic Committee (IPC) anti-doping program at the Games. It witnessed many aspects of application of the IPC Medical and Anti-Doping Code. The WADA IO Team is pleased to submit this report of its observations.

WADA has a mandate to promote ethical, doping-free sport worldwide to protect athletes' fundamental rights to compete in sport free from banned drugs and other doping practices. WADA consists of sport, athlete and government partners who are united in their commitment to this objective. One of the Agency's priorities is the Independent Observer program for Major Games and World Championships.

The main role of WADA IO Teams is to observe and report on all aspects of the doping control operations, prior to and during the Games/Championships, in a neutral and unbiased manner. The independent aspect of the WADA role is designed to both protect the integrity of athlete testing and to enhance athlete, sport and public confidence in the doping control process. The independent aspect of WADA's observation role is designed to both protect the integrity of athlete testing and to enhance athlete, sport and public confidence in the doping control operations by having a more open a transparent process.

Key functions of a WADA IO Team are to observe the doping control process and to prepare an independent, public report on the doping control activities conducted prior to and during the Games. In order to provide effective observation and reporting, IO Teams include a variety of independent expertise, covering sample collection, result management, legal, analytical and medical expertise as well as experience in the design and implementation of anti-doping programs. A list of the 2002 Paralympic Winter Games IO Team is attached as Appendix 1.

These Games were the first time that WADA had observed the anti-doping program of the IPC. As WADA stated in its press release of March 12 2002 announcing this IO Team, implementing the independent observer program for the IPC is only the first part of an overall plan that will benefit both organizations. WADA has begun to develop its expertise beyond Olympic sports, and the IPC has gained a partner in its efforts to strengthen its anti-doping program. Cooperation between the two organisations for this IO Mission has opened up the possibility of future collaboration in testing and education. The future WADA-IPC anti-doping partnership will include several other initiatives in addition to testing and education, and independent observation. Eventually WADA will help the IPC develop international anti-doping educational programs for athletes, coaches, and sports administrators within Paralympic sports. Both entities will urge National Anti-Doping Agencies to include Paralympic sports within their testing and educational programs, and the IPC will be fully involved in WADA's development of the World Anti-Doping Program, including the World Anti-Doping Code.

|| ||| | Scope of Observation

The WADA IO team observed these elements of the IPC anti-doping program:

- Doping Control Rules
- Doping Control Facilities
- Doping Control Equipment
- Doping Control Personnel
- Selection Process
- Notification Process
- Sample Collection and Documentation
- Chain of Custody
- Laboratory Analysis
- Results Management

|| ||| | Summary

The IO Team is pleased to report that the IPC anti-doping program functioned well at the Games.

Doping control was conducted professionally, often enthusiastically. The IPC had the benefit of an excellent working relationship with the Salt Lake Organising Committee (SLOC), and utilised SLOC doping control stations and doping control officers and escorts who had conducted doping control during the 2002 Olympic Winter Games the month before. Indeed, as in the past, it was gracious of the International Olympic Committee to provide a prior event for preparing Paralympic doping control.

Athletes, coaches, doctors and officials seemed well pleased with the organisation and conduct of doping control. About the only complaint the IO Team heard from them was that not enough testing was being done. A similar concern was expressed about the lack of blood sampling for doping control (the result of a deliberate decision of the IPC Medical Commission to inaugurate blood sampling only when an international consensus on the appropriate protocol has been achieved). While there were some irregularities or anomalies in the conduct of doping control (which are described below), the overall effort was highly successful. Interestingly, not one athlete or athlete's representative complained about any aspect of doping control on their doping control forms or in the presence of members of the IO Team.

The IPC Medical and Anti-Doping Code seemed generally appropriate to the task, although the IO Team felt there are some matters for adjustment or development. These are also discussed below.

Sample analysis was conducted at the accredited laboratory at the University of California at Los Angeles of which Dr. Don Catlin is the Director. The IO Team was able to visit the lab and observe some aspects of its work. Dr. Catlin was most helpful on that occasion and later during the Medical Commission hearing into the one positive test that occurred at the Games.

The IPC, and in particular its Medical Commission, went to considerable efforts to welcome the IO Team. So did the leadership of the SLOC anti-doping team. Access to their work was open. The doping control officers and escorts staffing the doping control stations were friendly yet thoroughly professional in their dealings with the IO Team.

Any caveats of the IO Team in this regard are quite minor. They probably reflect the fact that the Medical Commission and its staff were a very small group covering a large geographical area providing a complex service to an eager clientele through very busy personnel. The IPC and its Medical Commission successfully met these challenges with great dedication and good humour.

|| ||| | Paralympic Sport

Paralympic sport involves highly-skilled, elite athletes. They compete with a wide range of functional abilities.

Athletes can have visual or locomotor impairment. The organisation of Paralympic sport around that range of functional abilities has a direct bearing on the IPC's anti-doping program. This report cannot be understood without some introduction to these aspects of Paralympic sport

Paralympic athletes in a particular sport compete in classes. Classification provides a systematic method for grouping athletes in a sport according to their functional abilities into classes. Different classification systems are used for each sport. The 2002 Paralympic Winter Games saw competition in three sports: Nordic skiing (cross-country and biathlon); alpine skiing; and ice sledge hockey. In the skiing disciplines, there were

three groups of classes: locomotor classes for athletes who compete standing; locomotor classes for athletes who compete on sit-skis; and visual impairment classes. Within each group, there could be as many as nine classes to group together athletes with similar functional abilities. For skiers, there are different locomotor classes depending on whether competitors have disabilities in one or more upper limbs, or lower limbs, or both, and depending on the equipment they used to compete. There were three classes of competitors with visual impairments depending on the degree of functional ability. All ice sledge hockey players must have a permanent impairment in the lower part of the body of such a degree that it is obvious and easily recognisable and makes ordinary skating impossible.

For doping control, the classification systems bear particularly on the design and location of the doping control stations, on athlete selection, on athlete notification and on sample collection. Some classes had few competitors. In such cases, the IPC tends to merge similar classes, and uses sophisticated time-handicapping to ensure that multi-class events are fair to all competitors. Some decisions to merge classes can only be made on the day of the competition, once final entry lists have been received from participating teams. In turn, this impacts on the number of medals to be awarded and on the distribution of tests among classes and among finishers.

The IPC Medical Commission displayed considerable nimbleness in making the system work, and ensuring that doping control officers had adequate instructions for athlete selection.

|| ||| | The IPC Doping Control Program

The IPC Medical Commission

The IO team found it interesting that the IPC Medical Commission takes an active role in supervising the doping control stations. At least one member of the Medical Commission was in attendance whenever a sample was taken. The Doping Control Official Record form provides for the signature of an IPC Medical Commission member or representative. The IO Team observed Medical Commission members stepping in as doping control documentation was completed to ensure that the athlete (and representative) was content with the process and to remind them of the opportunity to make comments or complaints.

The IO team felt that the purpose of the signature of the member or representative of the Medical Commission was not clear. One individual cannot directly and completely supervise every step of doping control if more than one athlete is undergoing it at the same time. The doping control official record form does not purport to have the member or representative sign as an indication that he or she has supervised each and every step of doping control. Supervision by one person must of necessity be somewhat less direct.

A potential difficulty with this supervisory role arises if there is a positive test result. It may be that an athlete with a problematic laboratory result challenges the conduct of doping control. Chapter IX of the *IPC Medical and Anti-Doping Code* provides that the Medical Commission shall conduct the hearing of that challenge. (There is a subsequent right to pursue the matter before the Court of Arbitration for Sport.) This raises the possibility that a member of the Medical Commission effectively sits in judgement on the

doping control that he or she was participating in as signing representative. In such a case, the IO Team believes the member should not participate in the hearing as part of the decision-making process on the challenge.

During the Medical Commission hearing of the one positive test that occurred at the Games this was not an issue as the athlete did not challenge the conduct of the sample collection.

The IPC does not have unlimited financial resources for doping control. It was able to afford approximately 100 tests for these Games (for about 450 athletes). Approximately 40% of its tests were conducted pre-Games. The rest were conducted during the competition, generally on gold medalists. As mentioned, the IPC faced considerable calls for greater numbers of tests to be conducted both in and out of competition. A robust anti-doping program, including the greatest number of tests possible, is desired by Paralympians as a sign of their parity with their Olympic counterparts and to deal with those few Paralympic athletes who have been or are tempted to cheat. The WADA IO Team was welcomed enthusiastically for similar reasons.

The IO team recommends that the IP Medical and Anti-Doping Code make clear the objective of Medical Commission supervision of the doping control stations and the purpose of the Medical Commission signature on the doping control official record forms.

The IO Team recommends that the IPC Medical and Anti-Doping Code be amended to require a member of the Medical Commission who has supervised a particular doping control from participating as part of the decision-making process of any Medical Commission hearing of a challenge involving the collection of the relevant sample. However, it may be appropriate for the member to act as a witness to the conduct of the doping control.

The IPC Medical and Anti-Doping Code

The *IPC Medical and Anti-Doping Code* was revised as of the beginning of 2002. It is a workable document that served the IPC well at the Games. However, in the view of the IO Team, a few of its provisions require further consideration. This is particularly so in view of the International Standard for Doping Control, which is likely to become a mandatory international standard when the World Anti-Doping Code is completed and comes into force for sport organisations in 2003-2004. The IO Team observes:

- The procedures for the selection and notification of athletes do not seem to be spelled out in the body of the Code or in the detailed procedures in Appendix A. They ought to be, as they were in the *Paralympic Doping Control Guide* published for the Salt Lake City Winter Games. Procedures for formal re-notification of athletes as part of the partial sample procedure would also be better practice.
- Chapters I, Article II – V, Chapter III, Article III and Chapter X: as discussed at the final Medical Commission meeting of the Games, the rules on refusal to be tested (or failure to report for testing on time) are not clear and ought to be spelled out.
- Chapter X (Appeals), Article III: the B sample opening is described “as part of the appeal” but there seems to be no other connected appellate procedure. The B sample opening would usually take place after the hearing of the Medical Commission and decisions of the IPC Management Committee, but before the right of appeal to the

Court of Arbitration for Sport. More thought ought to be given to how the B sample opening fits into the system and by what procedure a B sample result would be part of or constitute an appeal.

- Appendix A, Article IV: it is not clear why athletes with cerebral palsy should not have a choice of collection vessels (even if of a larger size). Similarly, athletes requiring a sterile catheter ought to have the right to choose one.
- Appendix A, Article VII: probably needs to be rewritten to accommodate the possible use of a variety of collection kits (like Article V), and not just Berlinger equipment.
- Appendix A, Out-of-Competition, Article I: says that only 60ml urine is required with 2/3 in the A sample and 1/3 in the B sample. Yet, many IOC accredited laboratories require at least 25ml in each sample for a valid analysis. It is probably better to require the same 75ml as in-competition.
- Appendix: Blood Sample Collection Procedure: as discussed at the final Medical Commission meeting at the Games, the IPC may wish to wait for a determination by WADA on the exact blood testing protocol that should be universally adopted before implementing its own procedures. This applies to the possibility of instituting medical controls using blood as well.

The IO Team did not observe the Medications Advisory Panel (MAP) described in Chapter VII of the *IPC Medical and Anti-Doping Code*. However, it did observe one team doctor who forgot to bring a letter of exemption granted by the MAP to an ice sledge hockey player selected for doping control. The doping control officer noted that the doctor said that there was such a letter and confirmation was sent to the Medical Commission after the fact.

The IO Team recommends that the IPC Medical and Anti-Doping Code be reviewed in order to consider the above observations, and in particular so that it conforms to the International Standard for Doping Control.

Doping Control Stations

The IPC used the doping control stations provided by the SLOC for the Olympic Winter Games. The doping control stations at the Athletes' Village Polyclinic and at the skiing venues were large mobile trailers. Each had two bathrooms, two processing areas (without doors, thus interfering with privacy), and a waiting-room. The latter was never large. Although well-appointed (with chairs, television and ample beverages), they tended to be crowded if more than two or three athletes (with coaches or doctors or another representative) were involved in the various stages of doping control at the same time. The processing rooms were not entirely private as they lacked full-height partitions and doors (and were usually separated from the corridors of the doping control station only by curtained openings, if at all).

These doping control stations were not necessarily situated with the particular needs of athletes with disabilities in mind. The stations at the skiing venues were up-hill from the finish and cool-down areas. This could be awkward for sit-skiers who required their wheelchairs or crutches or prostheses (not always immediately available) to get to the

stations. In the case of the Nordic venues, there was some distance between the cool-down area and the doping control station. Some athletes required a shuttle bus to travel between the two and often had to wait for the shuttle. Both of these are uncomfortable tasks in wet gear post-competition.

The doping control station at the ice sledge hockey venue, the East Centre, was located at ice level and not far from the team dressing-rooms. It had only one washroom for passing samples. At times this created a bottleneck when more than one athlete arrived for doping control at about the same time.

The IO Team appreciates that the IPC Medical Commission inherits its doping control stations from the International Olympic Committee and has only limited authority (and funds) to make changes of the sort the IO Team suggests.

Access to the doping control stations was not controlled from the outside. On occasion, coaches or officials with queries about doping control would seek information while athletes were in the station under doping control. While invariably these individuals were dealt with appropriately and politely inside the door of the station and asked to leave, it would have been better to have had some person controlling access on the outside. One IO Team member observed a coach who seemed to be visiting the doping control station prior to the start of an event in order to find out who would be tested after the event.

Use of doping control station passes was inconsistent, at least as far as the IO Team members were concerned. At some stations we were requested to wear them and were logged in and out (but only on first arrival and final departure). At others we were not requested to wear them and did not seem to be logged in or out.

The IO Team recommends that in future the processing areas of the doping control stations be more private.

The IO Team recommends that more consideration be given to the needs of Paralympic athletes when locating doping control stations for the use of both Olympic and Paralympic Games.

The IO Team recommends that every doping control station have at least two toilet areas for passing samples, as well as a distinct physical separation of the processing areas.

The IO Team recommends that access to doping control stations be controlled from the outside while any athlete is inside for doping control.

|| ||| | Pre-Games Testing

The IO team was able to observe one pre-games test, although not the selection process. The test was conducted at short notice at the doping control station at the Athletes' Village Polyclinic. The athlete arrived in a wheelchair, and wheelchair access was appropriate. The IO Team was advised that the Medical Commission selected athletes for pre-games testing by a combination of weighting countries with less robust anti-doping programs more heavily but then making a random drawn among all athletes. The result was that 41 pre-games tests were conducted on athletes from 17 countries.

An interesting feature of the one observed pre-games test was the manner in which translation was provided. A translator was not immediately available. However, arrangements had been made for telephonic translation. A speakerphone was used and the doping control officer carefully took the athlete – and the translator – through the procedure. The result was satisfactory to the athlete, despite the added time. It was fortunate that only the one athlete was in the doping control station at the time, as use of a speakerphone is not private in such a facility without enclosed rooms.

Testing During the Games

Athlete Selection

The IPC Medical Commission generally set the selection criteria at its meetings the day before each event. In most cases, gold medallists were selected. Care was taken to ensure that all classes in men's and women's events were tested at least once. Where it became clear that the same athlete might well win more than one event for which they were eligible to compete, the Medical Commission determined that the silver medallist would be tested. This was to reduce the chance of one athlete being tested repeatedly to the exclusion of all others in the same class or merged classes. For ice sledge hockey, the Medical Commission drew places based on team lists at random (or had doping control officers on sight make the draw) to determine who would be tested.

This was consistent with the Paralympic Doping Control Guide, which provided that, generally, gold medallists or athletes drawn at random would be selected.

Athlete Notification

For the most part, in the skiing competitions gold medallists were selected for doping control. Escorts received their documents, supplies of beverages and radios prior to the start of each event. They would station themselves in the finish area to follow the competition and to identify the winners, as that became clear. Athletes with a chance of medalling invariably stayed in the finish area until the event was completed. Once the last competitor had finished and the official results were posted, escorts would notify the selected athlete in writing at the earliest possible opportunity (allowing for celebrations, media interviews, etc.). For the most part, escorts were careful to follow the competition and to keep track of the leaders even prior to the official results.

However, IO Team members witnessed several occasions where escorts did not follow the competition carefully enough and were not sure of the winner's identity when the official results were posted. As a result, the wrong athlete was initially notified several times. In one case, the escort had to question finish-area officials as to which competitor had won and, having misunderstood the reply, notified the wrong athlete (and only orally). Due to language barriers and because the escort only presented the written notification to the athlete some time later, the mistake was not discovered until approximately 30 minutes after completion of the event. By the time the winning athlete was notified, he had been unobserved by the escort for at least 45 minutes. In another case, the escort only found the athlete (away from the finish area) after questioning members of the media.

For ice sledge hockey, escorts generally waited in the locker room connecting to the team benches to notify the athlete(s) at the end of the match. There were no observed irregularities.

With respect to athletes with visual impairments, several IO Team members observed escorts giving athletes sealed containers but not in the presence of the athlete's guide or representative. It would be better if the guide or representative witnessed this.

The IO Team also noted that most doping control stations seemed to have many more escorts than were needed for the number of athletes to be tested that day. This embarrassment of riches stemmed in large part from the enthusiasm of the escorts and their desire to be involved in the Games even if not really needed. At times this made for overcrowding in and around the competition finish area or the doping control station. It also added to the supervisory burden of the senior doping control officer at each station. Moreover, some escorts did not have sufficient knowledge of overall doping control procedures and were unable to answer athletes' questions.

The IO Team recommends that fewer escorts be assigned to each doping control station for greater consistency and ease of supervision.

The IO Team recommends that escorts be better trained on all aspects of doping control procedures, particularly on the importance of confirming the identity of the selected athlete by race number, team uniform and other means, and ensuring that written selection be made as early as possible.

Sample Collection and Documentation

Berlinger sample collection bottles and containers were used. The IPC had notification, partial sample, official record and transportation forms modelled on those of the International Olympic Committee forms.

Because of a requirement of the International Olympic Committee, all SLOC doping control officers were medical doctors. They were a competent and sophisticated group, generally quite methodical and deliberate in reviewing the steps of selection of specimen kits, division of the sample into the A and B bottles, sealing the bottles, and completion of the paperwork. They did well with athletes for whom understanding English was difficult or impossible (and therefore requiring translation). In a few cases at venues, translation would have been helpful but were not immediately available.

The IO Team observed some inconsistencies in the approaches of doping control officers to preparing the doping control documentation. As a group, doctors are notorious for poor handwriting and this was a problem from time to time. The matter of inconsistent approaches to declarations of medications and supplements has been noted. The IO team also noted inconsistencies in the cleaning of refractometers after measurement of the specific gravity of the sample. Some doping control officers merely wiped the refractometer lens clean on the disposal tablecloth. Others were very conscientious in cleaning the lens with distilled water.

In one case, a momentary lapse led the doping control officer to direct the athlete to seal a partial sample in an A sample bottle (instead of using a partial sample kit with removable partial sample lid). Because the doping control officer had no experience of opening the lid of the Berlinger system bottles (and lacked the necessary equipment to do so), it was impossible to complete the usual partial sample procedure. The athlete was asked and agreed to redo the entire sample collection procedure from scratch. He did so without complaint, an illustration of the way athletes embraced doping control at these Games.

It may be that minor inconsistencies such as those discussed above are the result of using doping control officers who had sufficient break from the Olympic Games' testing the month before. Perhaps some form of a refresher course prior to the Paralympics would be advisable.

Other matters are worth noting. Doping control officers were provided with an adequate supply of sealed catheters and were well instructed in ensuring that athlete's catheters or leg bags were drained and samples taken only from fresh urine. This is an example of the unique features of doping control for athletes with disabilities.

It was only once Doping Control Official Record forms had begun to be used that a printing error in them was noticed. This was the doping control form used to record the athlete's identity sample kit number, sample volume, pH and SG, medications, etc. The yellow carbon copy (for the laboratory) had the box for the specimen kit code number out of alignment with the white, pink and blue carbon copies. Doping control officers were instructed to use the "comments" box to repeat the specimen kit code number for complete certainty. The UCLA lab was notified of this anomaly. The IO Team observed the problem and the solution being explained to all athletes whose sample collection we witnessed. There were no complaints.

The Doping Control Official Record has a large area to record "medication taken during the past three days." The IO Team observed that, in most cases, doping control officers only asked athletes to declare "medications." However, some asked athletes to declare supplements, vitamins and other preparations, as well as medications. There ought to be a consistent practice.

The discussion of "medications" is the area of doping control that most requires adequate communication between the athlete and the doping control officer. Sometimes communication was difficult, if only because technical language and brand names vary from language to language and country to country. The IO Team observed an excellent practice by one ice sledge hockey team: all of its players had a list of current medications, vitamin and other supplements attached to their credentials (prepared by and under the supervision of team doctors). This made the transmission of this information simple during the doping control session. More importantly, it had the advantage of encouraging (if not ensuring) team medical supervision of athlete medication, vitamin and other supplement intake. This ought to be a universal practice.

Finally, the IO Team observed that, on the last days of competition, some doping control station supplies (such as pipettes for measurement of the specific gravity, and paper to cover the tables) ran out.

The IO Team recommends that all doping control officers, regardless of whether they were active in the immediate preceding Olympic Games, receive common training prior to the Paralympic Games to refresh their knowledge of best practices.

The IO Team recommends that doping control officers be directed to request athletes to declare all medications, supplements, vitamins, herbal preparations and other substances (aside from food and normal beverages) on the doping control official record.

The IO team recommends that the IPC Medical and Anti-Doping Code require athletes to have with them during a Paralympic competition a written list of all medications, vitamins and other supplements being used, such a list having been prepared under the supervision of team medical staff.

The IO Team recommends that the IPC Medical Commission ensure that the Games organising committee providing the doping control facilities have adequate supplies to last through to the end of the Paralympic Games.

Transportation

Samples were collected on a daily basis from the doping control stations by UPS couriers for overnight shipment to the accredited laboratory at UCLA. Samples collected after the daily pick-up were delivered to the UPS facility in Salt Lake City by one of the doping control officers. There were no issues with respect to transportation, although at least one member of the IO Team felt that there was an excess of paperwork and that this could be simplified.

Lab Analysis

The analytical services provided by the accredited laboratory at UCLA seemed to the IO Team to be first-rate.

Results Management

The IPC Medical Commission met daily or every other day. The Chair of the IO Team attended every meeting. At these meetings, Medical Commission staff delivered to the Chair the WADA copies of all doping control documentation, as well as the laboratory analytical reports and other requested information. Assignments for next day's supervision of doping control stations were made. Athlete selection decisions were made. Issues from that day's sample collection were discussed.

Appeals

As mentioned, there was one positive test (for methenolone). The Medical Commission acted on the A positive laboratory result as provided for in Chapter IX, Articles I and II of the *IPC Medical and Anti-Doping Code* and determined to hold a hearing with the athlete present. The Medical Commission conducted the hearing as required by Chapter IX, Articles II - V. Its recommendation – that a doping infraction be declared – was reported to the IPC Management Committee as required by Chapter IX, Article VI. The Management Committee accepted the recommendation of the Medical Commission and

levied a disqualification from the Games (and loss of the gold medal) as well as a 2-year suspension from competition. These were in accordance with Chapter X of the *IPC Medical and Anti-Doping Code*. A press conference was held within a few hours of the determination. The IO team observed each step.

The Medical Commission's hearing was conducted with sympathy yet due deliberation. The athlete, coach and team doctor were present. A translator was present. The director of the laboratory was connected by speakerphone and explained the laboratory analysis carefully, answering all the questions. The athlete and team doctor were entirely at liberty to make submissions. No issue was raised about the sample collection.

After the athlete had completed all his submissions, the Medical Commission deliberated in private and determined to recommend that a doping infraction be declared. That afternoon, the IPC Management Committee heard the recommendation, and a report on the hearing and the arguments advanced during it from a member of the Medical Commission. After deliberation, the IPC Management Committee agreed to adopt the Medical Commission recommendation.

A press conference early that evening included a public announcement of the positive test and sanctions.

The B sample opening did not occur until after the Games had ended and was not observed by the IO Team.

|| ||| Final Comments

This report would not be complete without a salute to the spirit with which the IPC and its Medical Commission and staff, as well as the SLOC, welcomed the WADA IO Team to the Games. The IO Team was greeted with enthusiasm. It was shown every imaginable courtesy and co-operation. It was offered complete access to all aspects of the anti-doping program of the Games. The IPC, its Medical Commission and staff and the SLOC showed commitment to the same vision for doping-free sport as WADA. The value of WADA independent observation was recognised as terribly important in achieving that vision. The IO Team cannot overstate how warmly it was welcomed at the Games and how eagerly the IPC, its Medical Commission and staff and the SLOC facilitated the IO Team's activities. At the 2002 Paralympic Winter Games the IPC set a high standard for the future co-operation between WADA and the IPC that is sure to come about.

APPENDIX 1

Members of the IO Team Salt Lake City 7 to 16 March 2002

- **Mr. Joseph de Pencier (CAN)**
Chair of the Independent Observers
Director Sport Services/General Counsel, Canadian Centre for Ethics in Sport (CCES)
- **Ms. Lindbjørg Stølan (NOR)**
Independent Observer
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- **Dr. Jacques Huguet (FR)**
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