World Anti-Doping Agency

Independent Observer Report
Pan American Games
Guadalajara, Mexico
October 14-30, 2011
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Acknowledgements

The XVI Pan American Games held in Guadalajara, Mexico, 14-29 October 2011 included a doping control program that was the largest in the history of the Games. A large number of urine samples were collected from the more than 6,000 athletes participating in the Games and blood samples were collected for the first time at the Pan American Games. For many of the athletes, this was their first experience with doping control, especially with blood sample collection, and we commend the Pan American Sports Organization (PASO) for conducting their doping control program with the professionalism and effectiveness demonstrated throughout the Games.

In order to fulfill its mandate, the Independent Observer (IO) Team relied on the support and assistance of many people during the Games. First and foremost, we would like to thank the Pan American Sports Organization (PASO) for their invitation to attend this event and to the Chair of the PASO Medical Commission (MC), Prof. Eduardo De Rose, for the support showed to the role of the IO Team.

We would also like to thank the individual members of the PASO MC for their cooperation and open mindedness. The interaction between the PASO MC and the IO Team was fruitful and appreciated. We would also like to thank the Doping Control Services of Pan American Games for their hard work during the Games, even taking in consideration the problems that occurred at the beginning of the anti-doping program due to the lack of experience of some personnel. Most challenges seemed to be related to the Local Organizing Committee, but the PASO MC took the right measures to solve the more critical issues. The doping control staff that we met at every level was committed to doping free sport and the message of fair play.

Finally, we wish to acknowledge the athletes who participated cleanly in the XVI Pan American Games. The way the athletes participated in WADA’s Outreach Program during the Games represented the best example of their involvement to achieve the goal – Play True. We encourage these athletes to continue to demand that their anti-doping organizations (International Federations and National Anti-Doping Organizations) support doping free sport without conflicts of interest.

The Independent Observer Team
XVI Pan American Games
Guadalajara, Mexico
October 2011
PASO/WADA Agreement and Compliance

An Agreement was signed between the World Anti-Doping Agency (WADA) and PASO to permit an IO Team to observe all aspects of the doping control program for the XVI Pan American Games. The terms of the Agreement were met with full cooperation from PASO, who ensured that the IO Team had full access to any and all resources to fulfill its mission, even taking into consideration some logistical problems that occurred in the first week of the IO Team activities.

The PASO anti-doping rules were covered through Section XII of their Statutes and the accompanying Doping Control Manual, which was deemed “an essential component and compliment to the PASO Statutes and the Regulations of the Pan American Games”. These Rules were accepted, for the purposes of this mission and Report, as meeting the obligations of PASO to adopt and implement rules in line with the World Anti-Doping Code.

The Mission

Objective

The aim of the WADA IO/Audit program is to complement effective doping control programs during Major Games or sporting events. The observation/audit shall provide a system of evaluation to assess whether or not procedures conform to the existing documented standards and rules and to provide on-site advice, guidance or assistance as may be needed. If non-conformities are identified, the need for corrective action can be suggested and improvements can be made in a timely manner.

The IO Team

The WADA IO Team for the XVI Pan American Games consisted of:

- Luis Horta – President, Anti-Doping Authority of Portugal, (Portugal) – Chair
- Anne Cappelen – Director, Systems and Results Management, Anti-Doping Norway (Norway)
- David Julien - Manager, Program Development, WADA Staff (Canada)

Methodology

The terms of the Agreement between WADA and PASO established the base guidelines for the role of the IO Team at the XVI Pan American Games. The PASO MC provided for complete access to the IO Team throughout the Games, thus ensuring a collaborative approach to guarantee the most effective doping control program.

The IO Team attempted to observe all aspects of the doping control program at the Games, including:

- In- and out-of-competition testing;
- Athlete selection process;
- Athlete notification and chaperoning;
- Urine and blood sample collection procedures;
• Chain of custody procedures;
• Delivery of samples to the laboratory;
• Laboratory activities;
• All doping control documentation;
• Therapeutic Use Exemption Committee meetings;
• Use of ADAMS during the Games;
• Results management process; and
• Possible hearings conducted during the period of the mission.

The IO Team attended all PASO MC meetings. At these meetings the IO Chair was able to listen to MC Members discuss what they observed in the field and any other anti-doping issues that arose. In addition, the IO Chair presented a verbal report on the key issues that the IO Team observed the previous day. Daily written reports were provided to the Chair of the PASO MC. These reports included the information that the IO Chair verbally reported to the MC, in addition to other issues that the IO Team felt was important to report.

It is worth mentioning that in one of their very first meetings, the PASO MC analyzed the recommendations from the Rio 2007 Pan American Games IO Report in order to focus on the issues that were pointed out to correct them. The IO Team believes that this approach is very important and that other Major Games Organizers should consider doing the same.

In most occasions the PASO MC agreed with the Team’s observations and corrected the issues. However, the Team reported one recurring issue to the PASO MC several times and no formal corrective action was reported or appeared to be taken. With no formal corrective action taken during the Games, the Team can only include in the report what was observed.

At the venues, the IO Team would only intervene or provide immediate feedback to the doping control staff if, in the view of the IO Team Member, there was the potential to affect the validity or integrity of the sample or otherwise negatively impact the anti-doping program. This occurred on a couple of occasions and was reported immediately to the Chair of the PASO MC or to the PASO MC the following day.

**Observations**

**Doping Control**

**Training and Education of Doping Control Personnel**

Doping Control Officers (DCO) from different South American countries were recruited for the purpose of ensuring that doping control was carried out as per the International Standard for Testing. The competence and experience of the DCOs varied, with the majority showing excellent performance and good planning skills prior to and during the doping control procedures. Some DCOs had less experience, which was evident from their performance. The international DCO pool was composed of DCOs from Brazil (10-12), Colombia (1), Uruguay (1) and Venezuela (1). Having excluded native English speakers in the recruitment of DCOs was problematic given the large delegation of athletes using English as their mother tongue – especially those taking medals at the Games. Even if the majority of DCOs was speaking English as a second language, a widespread continental selection could have been more beneficial. The IO Team is aware
that there are experienced English speaking DCOs, not only from Canada and the US, but also from the Caribbean RADO, that could have been considered for the international pool of DCOs, which would have given a better linguistic balance and a good opportunity to use the very experienced DCOs from CCES or USADA, both relating to carrying out the doping control but also for educating the Mexican DCOs.

Several Mexican DCOs were assigned to assist the international DCOs. These DCOs did not receive any pre-Games supervision or evaluation. At the beginning of the Games a large portion of the doping controls were performed by the international DCOs with the Mexican DCOs observing. Then, the MCDOs started conducting sample collection under the supervision of the international DCOs. The IO Team feels that this was a good strategy in order to increase their experience and to leave a legacy in Mexico in terms of trained and experienced doping control personnel. Half way into the Games, most of the less suitable Mexican DCOs were left to carry out other tasks and leaving the more capable MCDOs to continue to perform sample collection with full autonomy.

The IO Team was present for the two training sessions that were organized by the PASO MC to retrain all DCOs to ensure that they were familiar with the procedures described in the Doping Control Manual, doping control equipment and documentation for the Games. It was very positive to have PASO MC Members present at these sessions to share their experience with the DCOs.

The first session was performed two days before the opening ceremonies. As some DCOs and Mexican DCOs hadn't attended the first session, a second session was organized one day after the opening ceremonies. The first session was mainly theoretical, with no practical training or demonstration of equipment. Forms to be used during the sample collection session were explained during this education session.

A larger number of DCOs attended the second session (10 international and 15 Mexican). The training was also delivered in a professional manner. Having DCOs perform some of the tasks, using the sample collection equipment used during the Games, under the supervision of two members of the PASO MC, increased the effectiveness of the training. This training session was a good opportunity to share information between the more and less experienced DCOs and to clarify all the remaining doubts about the doping control procedures during the Games. The IO Team used the opportunity to give a brief presentation about the manipulation of urine samples with proteases to defeat the EPO detection method and the preventive actions that must be implemented during the doping control procedures in order to prevent that manipulation.

Chaperones did not receive any training prior to the beginning of the Games, only receiving a briefing at the venues just before the beginning of the start of the doping control session. In addition, at some venues the volunteers recruited as chaperones changed from one day to the next, what did not contribute to capitalize on their experience from one day to the other.

**Doping Control Manual**

The Doping Control Manual is always an important document to guide doping control personnel, athletes and athlete support personnel through the doping control procedures and to inform all concerned about their rights and responsibilities related to doping control.
The Doping Control Manual for the XVI Pan American Games was a well organized document based on similar documents used in previous editions of the Games. This said, it seemed that the doping control personnel were not well informed about the contents, relying on their own experience as well as that of others instead of consulting the Manual. The IO Team was concerned with some gaps and discrepancies in the Doping Control Manual, which could lead to misunderstandings:

- The blood sample collection procedures were not described and considering that these Games represented the first in the history of the Pan American Games where blood samples were collected and that the majority of the athletes were not familiar with the procedures, it would have been most useful to have a detailed section dedicated to blood sample collection procedures in the Manual and a leaflet to inform the athletes about the procedures;
- The preventive measures put in place to prevent the use of proteases to manipulate urine samples collected for EPO detection were not described, namely the need for athletes to wash their hands before the collection of the urine sample;
- The responsibility of the athlete to provide information about any prescription/non-prescription medications or supplements that he or she has taken recently and the right to note comments and concerns regarding the conduct of the doping control session on the Doping Control Form were not described;
- The manual does not include any information regarding conformity with the Article 5.4.1 g) of the International Standard for Testing (IST) – “That should the Athlete choose to consume food or fluids prior to providing a Sample, he/she does so at his/her own risk, and should in any event avoid excessive rehydration, having in mind the requirement to produce a Sample with a Suitable Specific Gravity for Analysis.”
- The Article 12.3 of the Doping Control Manual described the procedure to use when urine samples did not meet the requirement for suitable specific gravity for analysis, in compliance with the IST, that the DCO should continue to collect additional Samples until the requirement for suitable specific gravity for analysis is met (1.005 or higher), or until the DCO determines that there are exceptional circumstances which mean that for logistical reasons it is impossible to continue with the Sample Collection Session. Such exceptional circumstances shall be documented accordingly by the DCO. Meanwhile, the Article 12.6 of the same Doping Control Manual defined that only one more sample must be collected if the first one did not met the requirement and if the laboratory inform that none of the two samples eventually met the requirement and that fact is not due to natural causes the athlete must be submitted to another doping control as soon as possible. There is a clear contradiction between Articles 12.3 and 12.6.

With reference to this last discrepancy, the PASO MC said that they informed the DCOs that only one more sample must be collected, to avoid long delays in the doping control procedures, and the MC must be informed of such situations in order to plan the collection of another sample from the athlete as soon as possible. The PASO MC cannot create a rule to replace a requirement of IST that where only exceptional circumstances are acceptable for not following the requirement. This means that for logistical reasons it is impossible to continue with the Sample Collection Session, decided case by case by the DCO. The IO Team saw an unusual number of very dilute samples (1.000 or 1.001) collected during in competition tests where a second doping control was not intended in the next day.
Out-of-Competition Testing

In addition to the in-competition testing program, the PASO MC also conducted out-of-competition testing (OOCT) throughout the Games. Athletes were randomly selected and the testing took place at the Pan American Village (Village). In general, the OOCT program went well. The key observations were:

- The PASO MC tried to use the Anti-Doping Administration and Management System (ADAMS) to conduct athlete selection for the OOCT Program. While this was an effective way of conducting the selection, it was dependent on the Team Lists being entered into ADAMS which was impossible to fulfill due to the lack of accuracy of the information provided to the Local Organizing Committee (LOC) and problems related to the availability of ADAMS in the beginning of the Games. The PASO MC decided to establish a back-up plan with the creation of an Excel spreadsheet where all the athletes were included in order to perform a random selection for OOCT.

- The IO Team was pleased with the randomized process that was used for the selection of athletes for OOCT two days before the beginning of the Games. The approach of selecting one athlete per country for smaller delegations and 5% for delegations with more than 50 athletes was appropriate. The Team Lists delay resulted in difficulties in the normal start of the OOCT Program and also in the lack of fulfillment of the total of OOCT that were planned by PASO MC for the Games. Nevertheless the IO Team would like to congratulate the PASO MC for taking into consideration similar problems faced in Rio 2007, making improvements in Guadalajara 2011.

- The total number of OOCTs was lower than initially planned - not only urine sample collection but also blood and urine for EPO detection. This situation was related mainly with difficulties in getting the list of participants and their location from the LOC, but also with the lack of cooperation of some delegations and difficulties in the coordination of the doping control personnel during the first days of OOCT at the Village. No OOCT was performed on athletes that didn’t stay in the Village during the Games.

The IO Team noted that in the first two days of OOCT a total of 8 doping controls were conducted cyclists (road race) - 4 requiring EPO analysis and 4 not requiring EPO. The IO Team requested to know what selection criteria was used for such a decision, but never received an explanation from the PASO MC.

The ability to ensure that unannounced, no advance notice testing occurred at the Village was at times difficult, as was the case in the previous edition of the Games. The doping control personnel were not always permitted to enter the athlete residence and knock on the specific athlete’s door. Therefore, they had to talk to the National Olympic Committee (NOC) staff to determine which athletes were present. In these cases, the athletes were often not present and therefore the tests may have turned into an advance notice test.

One particular incident happened with the Brazilian Chef de Mission when the DCO requested the list with the room assignments in order to test a Brazilian athlete. The Chef de Mission denied the request due to privacy protection issues. This was unacceptable given that he was challenging the authority to formalize such a request and the right of anti-doping authorities to request such information. The IO Team Member present at the notification intervened to protect the integrity of the DCO and reinsured the Chef de Mission that the DCO was following the instructions received from the PASO MC. A tense verbal altercation occurred between people present and the IO
Team requested that the PASO MC Chair intervene to resolve the issue. A meeting with all parties was planned to sort out this situation but never occurred. After this incident at least two others occurred with the same delegation, always refusing to provide the list with the room assignments and therefore not receiving the room number to find a particular athlete for testing.

The IO Team noticed some occurrences during the OOCT performed in the Village in the first days that affected the quality of the OOCT Program:

- Strategy of using only one DCO with all chaperones notifying athletes one by one, instead of splitting the DCOs available in the Village and pairing them with chaperones in order to reach a larger number of athletes in a shorter period of time;
- The attempt to notify the athletes began late (10am-11am) decreasing the chances of actually locating the athletes in their rooms;
- When walking around the Village, the DCOs and Chaperones were wearing the red doping control vest and accreditations providing an opportunity for athletes and/or delegations to leave their building and escape from a possible test, instead of only wear it at the moment of notification to avoid being identified as doping control personnel;
- There was confusion related to the amount of information the DCOs were able to provide to the delegation and/or Chef de Mission, namely whether or not to reveal the name of the sport of the selected athlete.

Appropriate measures were taken by PASO MC to correct these issues after being informed by the IO Team.

Apart from the problems related to the notification of the athlete, the collection of urine and/or blood observed by the IO Team in the doping control station at the Policlinic in the Village were performed in a highly professional way.

While in theory it seems easier to perform OOCT on athletes that are staying at a Village of a Major International Event than those that are living and training at their usual home address or training venues, DCOs trying to notify athletes in a Games Village face a lot of difficulties. These include:

- The LOC didn’t provide accurate information about the date of arrival and departure for specific athletes. Sometimes they provide the date of arrival and departure for the delegation, but we did not know if a given athlete would arrive with the first group of members of that delegation or at a later stage. The same applies with the date of departure;
- The LOC provided, when available, the building where the delegations were staying but without the room assignments. On several occasions the DCO arrived at the building and members of the delegation refused to give the room list without the DCO giving the name of the athlete or athletes to be tested, which interfered with the no advanced notice requirement;
- The athlete is member of a delegation that is staying in the Village but competing in a sport that is far away from the Village and decided to stay in an hotel nearby the competition venue; and
- The athlete is staying in the Village but leaves very early to train at the venue where the event is to take place or outside the Village and are not in the building when the DCO tries to notify him/her.
The IO Team noticed that these issues occurred during the Pan American Games in Rio 2007 and recurs at most Major International Events (e.g. Olympic and Paralympics Games, Commonwealth Games, Mediterranean Games, etc.) and for this reason thinks that a solution should be found in order to solve this problem, so that other organizations of Major International Events can be encouraged to follow the same strategy. For example, ADAMS has been introduced at the Pan American Games and should have been used by the participants as per the International Standard for Testing (IST).

**Preparation for Sample Collection Process**

At these events it is essential to have one experienced DCO carrying out all planning and preparation, including planning for the most suitable time of notification, assisting during notification, setting up the doping control station, maintaining contact with the technical delegate on site and other ongoing issues. Such person was not assigned, leaving all these tasks to the DCO, who also had to deal with inexperienced chaperones and partly experienced or inexperienced Mexican DCOs.

**Doping Control Stations**

Each venue was equipped with an identified doping control station during competition. At larger venues, such as swimming or athletics, these were permanent doping control stations, with a waiting area, processing room and adjacent toilet facilities for each procedure room.

The doping control stations at several venues were temporary facilities. A more professional layout for this size of competition was expected. Several of these doping control stations lacked facilities that would fully secure the athlete’s privacy, such as:

1. Lack of closed waiting area;
2. No guard at the door restricting entrance;
3. No record of people entering and/or leaving the station;
4. Lack of toilet facilities at one site;
5. Lack of privacy at the processing table;
6. An office at one site was used as both a waiting area and processing room.

Ad-hoc solutions that to a large extent solved some of the main issues were initiated, such as:

1. The toilet at the back of the technical delegate/organizers bus was used for doping control purposes;
2. Two tables were hung from the roof dividing two processing tables;
3. A portable office from the technical delegate/organizers at site was voluntarily lent to the DCO/PASO MC personnel for blood sample processing room.

**Doping Control Equipment**

Certified and adequate kits were used as doping control equipment for both blood and urine sample collection.

In one case the number on the stickers containing a sample code did not match with the number on the bottles only by a little difference in the last number of the code. The
PASO MC decided to request that the LOC find the other kit containing the same code as the sticker and to send a letter to the company that created the kits to inform them about this serious non-conformity.

The LOC preferred to use digital refractometers to measure the specific gravity (SG) of urine samples. The IO Team noticed some problems with the measurement of SG related to refractometers lacking power, which resulted in DCO accepting samples with SG out of range.

**Doping Control Documentation**

The documentation used at the Pan American Games was prepared specifically for the Games. Nevertheless the IO Team was concerned with the following aspects:

- Doping Control Form (DCF) contained all of the necessary information, but only had space for one blood sample code, which required the DCOs to complete two DCFS when 2 codes were needed (for example one code for hGH and another code for the Athlete Biological Passport). This was time consuming and prolonged a procedure that, even in normal situations, was already very long;
- Supplementary Report Forms had three sheets with one wrongly dedicated to the IPC and did not include sequence number.
- Supplementary Report forms were also used for medication declarations, with a copy only needed for the laboratory, however all copies had the name of the athlete and his/her signature, which created problems with the confidentiality of the samples. The IO Team intervened during the first DCO training session to point out this problem. The PASO MC instructed all DCOs to cut off the lower part of the form, which contained the athlete’s name and/or signature, of copy sent to the laboratory and to put the urine sample code on the form in order to match the Supplementary Report Form with the DCF;
- The Athlete Notification Form still included a box for “Report no later than”, which should not have been included since the 60 minute rule to report to the doping control station has not applied since 2009. The IO Team observed some confusion on the part of the athletes related to this and recommended that the box on all DCFS be crossed out prior to the notification. This recommendation was put into place at all venues; and
- The lack of a standardized DCO reporting for each session was a concern to the IO Team. The DCOs were instructed to write a report when something extraordinary occurred. During the Games, the IO Team witnessed a few issues that the Team felt warranted a DCO report, however, the Team is not aware of any DCO Report Forms being completed throughout the Games.

**Athletes Selection**

The athlete selection for the in-competition testing (ICT) program generally followed the International Federation (IF) guidelines or requests. It did concern the IO Team that in some venues there was no coordination between the doping control personnel and IF representatives which created problems (e.g. a swimmer was notified for doping control after a first event because the chaperone was not aware that he/she would compete later in another event and the chaperone could not prevent the athlete from urinating between the two events). In order to avoid these situations, the IO Team recommended a systematic coordination with the IF technical commissioner to plan the notification and testing procedures. The IO Team observed that some doping control station managers
and/or lead DCOs and/or PASO MC representatives doing it but it was not done at all venues.

Some IF delegates requested that the athletes who were tested on one day not be selected for testing on the following day. This request was made, despite the fact that the athletes were often competing in finals, resulting in a situation where even if an athlete finished first in the event, they would not be selected for testing, which the IO Team considered inappropriate and unacceptable. Nevertheless, systematically testing gold/silver/bronze medal winners in a sport, for example like swimming, where events took place on consecutive days and which were dominated by the same group of nations, leads to several samples being collected from the same athletes and/or countries. While the IO Team understood the need to test gold and/or silver medalists, the third test could perhaps be distributed randomly in order to extend the pool of countries and athletes that were selected for doping control. This could also serve as a preventive factor for nations who think they can escape doping control at Pan American Games because they do not take the podium but still perform well at a national or regional level. The IO Team proposed that some athletes be randomly selected for doping control between the finalists that did not go to the podium. The PASO MC followed this recommendation, at least for swimming.

The day following this proposal, the representative of the IF and lead DCO, before the beginning of the swimming events on that day, decided to test in each final Gold, Silver and a randomly selected swimmer from the other finalists. After the intervention of the Chair of the PASO MC, it was then decided not to test the Gold medalist in one event because that athlete was apparently tested in different occasions. The IO Team reviewed the DCFs and concluded that the athlete was previously tested only once during the Games. The following day, the IO Team informed the PASO MC about the concern. The IO Team also informed the PASO MC that during the first four days of swimming competition eight athletes were tested more than once (one athlete four times, one athlete three times and six athletes twice). The names of these athletes were sent to the Chair of the PASO MC as requested.

The IO Team reviewed the DCFs from the beginning of the testing in Guadalajara 2011 Pan American until October 20 and noticed that a total of fourteen athletes provided two dilute samples. Only five of those fourteen athletes provided an additional test the following day, which was not in conformity with the provision described in the Anti-Doping Manual. The IO Team recommended that an additional test be performed in all these cases.

**Notification**

The chaperones were assigned from the corps of volunteers and/or medical staff shortly prior to the start of competition. It was not verified whether the chaperones were related to competitors or support personnel. The chaperones, with no previous experience or knowledge of sport peculiarities were all assigned to carry out notification, chaperoning and witnessing the passing of the urine sample. The chaperone training consisted of less than 30 minutes of instructions relating to all of the above. During all the observed doping controls the IO Team noted a very limited number of adequate notifications. In order to ensure that the correct athlete was in fact made aware of the doping control, a person from PASO or a DCO had to escort the chaperone to the athlete. Some chaperones did not notify the athletes in accordance with the requirements – generally only saying “doping control”. Some of them were not completing the Athlete Notification
Form before entering the doping control station. The IO Team never overheard the athletes’ rights and responsibilities explained adequately to the athletes during notification. It seemed that the chaperones were not aware of the athletes’ rights and responsibilities and did not appear able to handle unexpected situations (such as if the athlete wanting to take a shower).

Fortunately, the athletes and their support personnel were adequately familiar with the doping control process and aware of the procedures, ensuring that both the athlete and their support personnel would accompany the chaperones and arrive in due time to the doping control station.

An athlete having to attend a press conference, a medal ceremony or receive medical attention does not require them to report immediately to the doping control station, however, the athlete still has to sign the Athlete Notification Form when notified. This practice was not observed at all times. The athlete should immediately receive a copy of the Athlete Notification Form. The IO Team noted that in some situations the Form was only given at the very end of the doping control process.

**Urine Sample Collection Procedure**

The number of ICTs collected was mostly in-line with the Testing Distribution Plan (TDP). This said, in swimming eight EPO tests were planned but only two were performed, due to a lack of coordination between the PASO MC representative and the lead DCO.

The IO Team is satisfied with what we have seen and the most of the international DCOs were working in a very professional fashion, and the Mexican DCOs showed improvement as the Games were progressing. The urine sample collection during the Games was generally done in accordance with the PASO Rules and Doping Control Manual as well as the International Standard for Testing. However, a few key issues that were observed:

- Two DCOs did not appear to be fully following the testing procedures. This was raised with the PASO MC, resulting in one of the two DCOs being removed; The IO Team observed a number of mistakes in the completion of the Doping Control Forms by the DCOs, although most were minor. In few cases the mistakes could have been relevant during the Results Management process should an Adverse Analytical Finding (AAF) been reported; and
- In some the box on the DCF indicating consent to have the sample used for research was not filled. On most DCFs the box for “blood transfusions in the last six months” was unnecessarily completed, given that it should only be filled in case of blood collection.

**Blood Sample Collection Procedure**

It was the first time that blood samples were collected in the history of the Pan American Games, following the recommendation of the IO Team in Rio 2007.

Blood samples were collected mainly for hGH detection and for the Athlete Biological Passport (ABP). The IO Team congratulates the PASO MC for the decision of having contacted UCI and IAAF in order to get a list of priority athletes to be tested for the ABP, using the experience of these IFs for their own anti-doping programs.
The PASO MC decided to centralize most of the blood sample collection in the Policlinic in order to have the ideal facilities to perform the procedures. Given that it would have been very difficult to have these conditions at the majority of the doping control stations, this was a wise decision. In a few cases the blood collection procedures were performed in other venues. The blood doping control station at the Policlinic was perfect. Nevertheless in a few cases the blood collection procedures were also performed in other venues, which created some particular challenges that were addressed appropriately.

Dr. Orlando Reyes, member of the PASO MC, was the person responsible for the supervision of blood collection. At the beginning of the Games, a training session was organized in order to train DCOs and blood collection officers (BCOs) on the blood doping procedures and to familiarize them with the documentation and equipment. The BCOs were local nurses or phlebotomists and the DCOs were a mix of international and Mexican DCOs, which was a positive legacy of the Guadalajara Pan American Games.

The DCOs carried out all procedures related to the doping control, with the exception of the actual blood collection, which was performed by the BCOs. The DCOs were also assisting during the blood collection ensuring that proper equipment was selected and used. At the beginning of each blood sample collection the DCO explained the procedure extensively to the athlete, outlining what was crucial, taking into consideration that in the majority of the cases it was the athlete’s first experience with blood sampling. Although some delegations complained about the delays or other requirements due to such procedure, the IO Team was satisfied with what was put in place, not only in terms of facilities and equipment but also in terms of personnel, and the professionalism of the person responsible for the blood program.

The IO Team noticed the absence of data loggers, mandatory in the transportation of blood samples, and agreed to the provisional suspension of the blood sample collection at the beginning of the Games, as decided by PASO MC, until appropriate measures were guaranteed (delays and, conditions of transportation). During one of the observations the IO Team gave some instruction on how to optimize the transport of the samples to the laboratory, in full compliance with 2ºC to 12ºC requirements.

The IO Team would like to congratulate Dr. Orlando Reyes and his team for the work done in such a short period of time in order to perform blood testing in full compliance with the WADA Blood Sample Collection Guidelines.

Security/Post-Test Administration

The IO Team did not have any major concerns with regards to this area, taking in consideration that the samples were stored in a manner that protects their integrity, identity and security prior to the transport, and the documentation for each sample was completed and securely handled.

Transport and Receipt of Samples

The IO Team observed that although the Pan American Games Doping Control Services provided security bags for the transportation of samples to the laboratory, on several occasions the security seals provided with the bags were not used, which could have threatened the security of the samples during transport. Although this is not a requirement in the IST, such an approach could lead to better practice.
The IO Team observed the transfer of the samples from the DCO responsible for each sample collection session at each venue to the DCO in charge of handling all samples collected to the location where the samples were stored, while waiting the final transportation by plane to the laboratory in Mexico City. No major concerns were observed with the exception of the one mentioned above and related to the unsealed transportation bags. The solution of using a DCO’s hotel room to store the samples was not ideal but measures taken to guarantee security were satisfactory. To improve security, the IO Team proposed that a lock should be added to the fridge and to always have a DCO present in the room to assure the full security of the samples and to prevent no one being available to receive samples being delivered to the room.

Some transport challenges had occurred in the beginning of the Games, namely security guards requiring that the security bags were opened at the airport to check the contents and the air transportation company preventing the transportation of blood samples, which resulted in the PASO MC to suspend blood collections during two days. After some initiatives taken by the Doping Control Services of Pan American Games the IO Team was informed that the blood samples were transported to the laboratory and all problems concerned with transportation were resolved.

The laboratory personnel confirmed that the samples were delivered and signed off on receipt of the samples, closing the chain of custody.

**Therapeutic Use Exemptions**

A Therapeutic Use Exemption Committee (TUEC) was established to review all TUE applications received during the Pan American Games. This Committee was made up of three medical doctors: Dr. Adrian Lorde, member of the PASO MC, a Brazilian doctor and a Mexican Doctor, all having expertise in sports medicine.

Although the Anti-Doping Manual stated that all TUE applications were to be requested through ADAMS, the IO Team was not aware of any TUEs submitted through ADAMS. The IO Team believes that ADAMS could be a very useful tool for the Pan American Games Organizing Committee in the management of TUEs. However, at the Pan American Games there appeared to be a lack of a detailed plan to facilitate this, even taking into consideration the initiatives taken by PASO MC in RIO 2007 to provide NOC Team Physicians with ADAMS training prior to the Games. More incentive or education may need to be given to the NOC Team Physicians to ensure they attend the training sessions and agree to use the ADAMS system for TUE applications. The IO Team was shocked with the number of requests that were rejected due to the fact that the applications were not complete or were not needed because the substance was not prohibited in the Prohibited List or the request was related to the use of glucocorticosteroids by non systemic way of administration.

The IO Team was present at one formal meeting of the TUEC and concluded that all the decisions made by the Committee were in compliance with the International Standard for TUEs and the PASO Rules and the personnel involved showed great professionalism.

The IO Team would like to congratulate the TUEC for the response time for TUE requests, which represents an improvement compared with Rio 2007.

The IO Team noticed that there was no TUE mailbox in the Policlinic for the reception of TUE applications at the beginning of the Games. After two days a paper box was put in place, which did not provide any security or protect the confidentiality of the applications. After insistence of the IO Team and PASO MC a real mailbox that could be...
locked was in place in order to preserve the confidentiality of the information related with the TUE procedure.

**Laboratory Sample Analysis**

All analyses were performed at the Anti-Doping Laboratory of Mexico in Mexico City, which served as a satellite laboratory of Barcelona’s WADA accredited laboratory during the Games. Given that the Anti-Doping Laboratory of Mexico had not yet been accredited by WADA, the only solution was to use the provision of the International Standard for Laboratories to work under the supervision of the ISO certification and WADA accreditation of the Accredited Anti-Doping Laboratory of Barcelona as a satellite laboratory. The IO Team did not visit the Anti-Doping Laboratory of Mexico but taking into consideration the information that was available, it seemed that the laboratory was well equipped and had adequate facilities to analyze the large number of urine and blood samples collected during the Games. Direction of the satellite laboratory was assumed by Prof. Jordi Segura and the scientific, analytic and quality management was assumed by two other members of the same laboratory, namely Dr. José António Pascual and Dr. Rosa Ventura. Many experts from the Anti-Doping Laboratory of Barcelona were also present to assist with the sample analysis.

All analytical reports were inputted and received through ADAMS, with the exception of the reports issued at the beginning of the Games. This was a very efficient way to record results and, although some minor problems were observed, the IO Team recognized the benefit to the laboratories and the Major Games Organizers in using ADAMS.

The IO Team supported the decision of the PASO MC to request the analysis of the sample related with a non-conformity reported by the Anti-Doping Laboratory of Mexico, where a different “turbidity” between the A and B sample coming from the same athlete was found.

**Results Management**

The PASO MC outlined in its Rules how the Results Management Process would be conducted. In addition, the PASO MC invited Mr. Richard Young, a lawyer with several years experience in anti-doping, to advice on all potential cases.

During the presence of the IO Team at the Games, no Results Management Hearings were scheduled. In the last days of the mission the IO Team was informed about three Adverse Analytical Findings (AAFs) for 16a-hydrodyprednisolone (metabolite of budesonide). The PASO MC informed the IO Team that they would contact relevant delegations to understand if the results could be related to the use of any medication containing budesonide. Additional AAFs have been reported by the laboratory and the IO Team attempted to continue to monitor the process in place for these hearings without success.

After leaving the Games, the IO Team continued to monitor the reporting of AAFs through ADAMS and observed a lack of follow-up in the results management process. For example, without knowing if athletes were appropriately notified or not, some AAFs on the A sample were not followed-up by an immediate notification to the athlete or request to open the B sample. At least two IFs contacted WADA with a request for information about their athletes that had an AAF on A samples. For instance, the little
information on these cases was obtained by reading in the media where the IO Team noticed that athletes had lost medals. After requests to the PASO MC Chair by email on pending cases, the IO Team finally received partial information on 9 December 2011 on how these cases have been solved and addressed its concerns on a few cases.

**Other Issues**

**ADAMS**

The PASO MC used ADAMS to manage all anti-doping operations at these Games. Pre-Games online training was provided by WADA to the PASO MC staff in charge of ADAMS.

While the use of ADAMS was a very positive step for PASO, some challenges were observed regarding the respect of WADA’s requested deadlines to provide the list of 6,000 athletes that needed to be entered into ADAMS prior to the Games. The Pan American Games Rules allow delegations to register their athletes up to 2 days prior to the beginning of the Games while a minimum of a full week of work is necessary to enter such a large number of athletes into ADAMS. Some efforts were done with temporary lists but a lot of names and duplication errors were present and made it impossible to start the OOCT Program before the beginning of the Games using the information in ADAMS and created additional challenges during the first couple of days of competition. This situation was at the same moment that ADAMS itself was facing problems that required keeping the system offline for several days. To cope with this problem, the IO Team recognized the efforts made by PASO MC in using an effective alternate method for the randomized athlete selection in order to start the OOCT before the opening of the Games, as mentioned before.

Throughout the Games, all DCFs and TUEs were entered daily into ADAMS by the PASO MC or the TUEC. This allowed for an up-to-date record of all doping controls conducted during the Games. The IO Team was able to monitor the doping control activities of the Games and found this approach very helpful. While there were some errors with data entry, the overall advantage of using ADAMS for record management during a Major Games was clearly evident. Following the RIO 2007 recommendation to accelerate the insertion of DCFs and TUEs into the system, positive changes and quicker turnarounds were also observed.

**Conflict of Interest**

Throughout the development of the Games, the IO Team observed various situations where possible conflicts of interest were present between different actors involved in the doping control processes.

The IO Team’s position is that a conflict of interest occurs when some circumstances, behaviors or facts call into question the person’s independence or impartiality in the eyes of other countries or the public to complete the task they are mandated for or the person is in a situation where there are at least two conflicting interests. The person involved does not have to be placed in a situation where there is an actual conflict, for a conflict to be present. In the exercise of his or her functions, every person should be free of undue influence or other factors which may give rise to a conflict between his or her own interest or the interest of any other person and that of WADA.
More precisely, the Annex H of the International Standard for Testing states that:

**H.4.2** The ADO shall ensure that Sample Collection Personnel that have an interest in the outcome of the collection or testing of a Sample from any Athlete who might provide a Sample at a session are not appointed to that Sample Collection Session. Sample Collection Personnel are deemed to have an interest in the collection of a Sample if they are:

a) Involved in the planning of the sport for which Testing is being conducted; or

b) Related to, or involved in the personal affairs of, any Athlete who might provide a Sample at that session.

One of these situations arose when a DCO was assigned to a sample collection session for a sport that she was currently employed at a national federation. The IO Team also observed a high level of familiarity in the doping control station between Doping control personnel and athlete/delegation being tested that could easily lead to confusion and concerns for a participant or observer from other countries. When the IO Team shared this observation with the PASO MC, our view of a possible conflict of interest was not shared and the initial reaction was to keep that DCO in its current position because the MC considered that given the fact that the DCO was familiar with the sport and thus was able to plan the doping control and related procedures in the best manner. After insisting that the IO Team was uncomfortable with such a decision, the DCO was kept in place but asked not to test athletes from the same country for one day and was then entirely removed from that particular sport. However the following day, that same DCO was back at this particular venue and performing doping control duties. Only after this situation occurred was the DCO permanently assigned to a different venue.

It is also important to mention that members of the PASO MC should be very careful when dealing with their duty not to interfere directly in functions or roles that involve athletes and/or officials from their own country. At different times, a PASO MC representative involved in particular situations was interfering with the processes put in place by other individuals (lead DCO, coping Control station manager, TUEC, country’s delegation, etc.). Although the IO Team understood that there are situations that require intervention involving a MC member from the same country, it is crucial for anti-doping personnel to be aware that their involvement, in the perception of other delegations, WADA or the public could have a negative impact on the quality of their program.

**Confidentiality**

Due to the logistical challenges as well as the language and translation issues, different local people had to be present at the daily PASO MC meetings to assist the members. The IO Team shared its concerns that delicate and confidential topics related to anti-doping were discussed and thus becoming available to local staff and volunteers. The PASO MC responded that although some organizations are more systematic in preventing such issues, they have been working in an environment based on trust for several years and therefore did not feel more actions were needed to address this matter.

**Educational Material**

The IO Team attended the Team Physicians Meeting on the eve of the Opening Ceremonies. The meeting, lead by the PASO MC Chair, was done in a very professional manner and appropriate information and education material was distributed to the team physicians and proper instructions were provided regarding the doping control processes during the Games.
There appeared to be a lack of anti-doping education material available to the athletes or teams, both prior to the Games and at the doping control stations. If Games specific material was not available, the PASO MC may have considered using WADA’s existing materials such as DVDs, brochures, athlete guides and posters. This could have been a great opportunity to promote the drug free sport message.

**Contaminated of Meat with Clenbuterol**

Before arriving at the Pan American Games, the IO Team was given evidence from scientific papers, reports from the European Commission and a WADA statement demonstrating that Mexico had difficulties in the regulation and control of the nutritional industry to prevent the contamination of some nutritional products (e.g. meat) with Clenbuterol and other drugs.

The PASO MC informed the IO Team at the first meeting that local health authorities took very strict measures to prevent contamination. The meat used in the Village restaurant came from animals that were raised in a protected and secure environment and were controlled by local veterinary authorities. The athletes were advised not to eat outside of the Village, using a similar strategy used by Chinese authorities in Shanghai during the FINA World Championships. WADA met with the Mexican authorities before the Games in order to assure that the right measures would be put into place to prevent problems.

**Recommendations**

1. All doping control stations with all the necessary equipment should be planned and organized in due time for each and every event, ensuring that all stations are fully operational prior to the Opening Ceremonies. One person should be assigned to each doping control station, ensuring access is controlled and registered, and also ensuring that the station and equipment is available when required.

2. While testing in-competition, wearing clothing that identifies doping control personnel, in addition to the accreditation cards, is important not only for ease of access to all sites at all times, but also to provide doping control personnel with some “automatic” authority, ensuring that the personnel are able to carry out their tasks and duties in a professional manner.

3. Ensuring that chaperones are qualified should also be planned prior to the competition, although not as comprehensive as for the doping control officers. A selection and education program for chaperones should be addressed and include:

   i. Planning adequate number of chaperones for each venue;
   
   ii. Selection process of chaperones ensuring that they are of adult age, possess the skills necessary to carry out notification, chaperoning and ability to observe an athlete providing a urine sample. They must also not be closely related to the relevant sports and/or families they are chaperoning;
   
   iii. Education and practical training program relating to the sport for which chaperones are assigned, focusing on that particular notification during in-competition of that sport, in addition to chaperoning and observation at the toilet facilities. Their education should also include examples of what
to do if possible rule violations occur, and suitable reactions of the chaperones; and

iv. More time dedicated to in preparation of chaperones prior to the first doping control session and provide chaperones with a written document outlining the athletes’ rights and responsibilities and instructing the chaperones to read this to the athlete upon notification.

4. DCO training sessions should be planned prior to the competition. A training program for doping control personnel process should be addressed and include:

   i. Planning adequate number of doping control personnel;
   
   ii. Selection process of doping control personnel ensuring that they are of adult age, possess the skills of a doping control officer and that they are suitable and not closely related to the relevant sports and/or families. This may include some initial education or test to ensure adequate skills;
   
   iii. Education program identifying all aspects of the doping controls in and out of competition focusing on in competition testing;
   
   iv. Practical training program identifying all aspects of the doping controls in and out of competition focusing mainly on in competition testing;
   
   v. Specific education and training program for lead DCOs at the venues, ensuring proper knowledge of preparation, including contact with the technical delegate, planning time of notification and also all other aspects of the sample collection process; and
   
   vi. In order to facilitate a better presentation of some specific procedures (for example partial sample), use the equipment (collection vessels, doping control kits, etc) during DCO training.

5. The Doping Control Manual must describe, in a clear way, the procedure for urine samples that do not meet the requirement for Suitable Specific Gravity for Analysis as outlined in Annex G of the IST and the provision also described in the same Standard to avoid excessive rehydration in order to prevent the oldest strategy to manipulate urine samples – over hydration. The Manual must contain a detailed section dedicated to the blood collection procedure.

6. The PASO MC should Review all forms related to the doping control procedures and to create a DCO report form, which was recommended in the IO Team report from the Rio 2007 Games.

7. Explore the possibility of modifying the PASO Games Rules in order to move-up the deadline for submission of final list of athletes (based on the IOC Rules) to facilitate the insertion of the athlete data into ADAMS and the planning of OOCT.

8. Creation of new provision in the PASO Anti-Doping Rules in order to have effective whereabouts information during the Pan American Games where the athletes and delegations must provide their location during the Games, using ADAMS or another electronic platform located on the Organizing Committee’s Web site. All athletes participating in the Pan American Games must be entered into the system one week before the beginning of the Games, including their arrival and departure dates and the place where they will stay (Village, hotel, etc.). Immediately after their arrival they must also indicate the location and number of their rooms and a 60 minutes timeslot for each day that they will be at the Games.
9. Start the OOCT as early as possible at the Village (the IST allows to start at 6:00am) to avoid tests not being conducted and conducted with no advanced notice. The OOCT Program should also be extended to athletes staying outside the Village during the Games.

10. Better and earlier coordination between the IF Technical Commissioner and DC station manager to prevent challenges with the availability of the athletes for ICT (e.g. availability for medal ceremony, competing in two events in the same day).

11. For ICT, randomly select some athletes for doping control among the finalists who are not medalists, creating a dissuasive effect for athletes/nations who think they can escape doping at Pan American Games because they do/will not medal.

12. A better coordination between the PASO MC and the lead DCOs at the venues in order to fulfill the Test Distribution Plan and prevent situations where the planned tests for EPO detection are not performed;

13. More information must be sent to the delegations during the preparation of the Pan American Games to inform and educate medical personnel and athletes about the TUE procedures to avoid having applications rejected because they are not needed and to reinforce that the applications must be sent thorough ADAMS.

14. The PASO MC should include an anti-doping education campaign for future Games. This would include the distribution of education information to the teams and athletes prior to the start of the Games; and also the provision of information at the Athlete Village and in the doping control stations, with special attention for the blood collection procedures.

15. A better results management should be ensured for cases happening close to the end of the Games and a process should be in place for such processes following the departure of PASO MC from the Games.

16. All members of PASO MC and all personnel involved in doping control at the Pan American Games should sign a conflict of interest declaration as a preventive action in order to optimize the assigning of doping control personnel to the different tasks. At any time, where facts or circumstances arise which create or could create such conflict or the appearance of a conflict in the eyes of WADA stakeholders or the public, the situation shall be disclosed to the PASO MC in order that appropriate preventive measures may be taken.

17. All members of the PASO MC and staff/volunteers supporting them should sign a formal declaration of confidentiality.