

Report of the

INDEPENDENT OBSERVERS

XI World Games
Birmingham 2022



Table of contents

1.0	Acknowledgements	4
2.0	Acronyms and Abbreviations	5
3.0	Executive Summary	6
3.1	Overview and Operating Environment	6
3.2	Pre-Games Initiatives with WADA and WADA IO Team	6
3.3	COVID-19 Counter Measures	7
3.4	Athlete Education	7
3.5	Sample Collection Personnel, Procedures, and Technology	7
3.6	Results Management	8
3.7	Conclusion	8
4.0	WADA Independent Observer Team	8
5.0	Pre-Games Initiatives with WADA and WADA IO Team	9
6.0	Athlete Anti-Doping Education	9
7.0	Test Distribution Plan	10
7.1	Risk Assessment and TDP Planning	10
7.2	Out-of-Competition Testing	11
7.3	In-Competition Testing	12
7.4	TDSSA Compliance	12
8.0	Long-term Storage of Samples	12
9.0	Whereabouts Collection / Use of ADAMS	13
10.0	Intelligence	14
10.1	Pre-Games Intelligence Related Activities	14
10.2	During the Games	14
11.0	Therapeutic Use Exemptions	14
12.0	Compass Paperless Software	15
13.0	Sample Collection Personnel and Training	15
14.0	Notification Process	16
14.1	Sport Specific Protocols	16
14.2	Notifying and Chaperoning Selected Athletes	16
15.0	Sample Collection Process	17
15.1	Doping Control Stations	17

15.2	Sample Collection Session	18
15.3	Storage of Samples	18
16.0	Sample Transport and Receipt of Samples by the Laboratory	19
17.0	Results Management	19
18.0	Summary of IO Recommendations	20
19.0	Sample Collection Report – Sample Analysis	22
19.1	General	22
19.2	Sample Analysis	22

1.0 Acknowledgements

For the World Anti-Doping Agency (WADA) Independent Observer (IO) Team to attend The World Games 2022 in Birmingham, Alabama, we are incredibly grateful for the support and collaboration of several partner and stakeholder groups. In particular, the IO Team wishes to acknowledge the International World Games Association (IWGA) Anti-Doping Commission, International Testing Agency (ITA) staff, United States Anti-Doping Agency (USADA) office staff and Sample Collection Personnel (SCP) present in Birmingham, and all the volunteers provided through the Birmingham Organizing Committee (BOC) who contributed their time and commitment to hosting the Games. The support of all these individuals contributed to a highly successful IO mission at The World Games 2022 for which the IO Team is very grateful.

2.0 Acronyms and Abbreviations

Full Name	Acronym/Abbreviation
Adverse Analytical Finding	AAF
Anti-Doping Administration and Management System	ADAMS
Anti-Doping Organization	ADO
Anti-Doping Rule Violation	ADRV
Athlete Biological Passport	ABP
Athlete Passport Management Unit	APMU
Athlete Support Personnel	ASP
Blood Collection Officer	BCO
Blood Passport	BP
Birmingham Organizing Committee	BOC
Birmingham Southern College	BSC
Code Compliance Questionnaire	CCQ
Doping Control Chaperone	Chaperone
Doping Control Form	DCF
Doping Control Officer	DCO
Doping Control Station	DCS
In-Competition	IC
Independent Observer	IO
Intelligence and Investigations	I&I
International Doping Control Officer	IDCO
International Federation	IF
International Standard for Testing and Investigations	ISTI
International Standard for TUEs	ISTUE
International Testing Agency	ITA
International Testing Agency Secure Platform	ADCOM
International World Games Association	IWGA
Local Organizing Committee	LOC
Long Term Storage and Further Analysis	LTSFA
Minimum Level of Analysis	MLA
National Anti-Doping Organization	NADO
Out-of-Competition	OOC
Registered Testing Pool	RTP
Results Management	RM
Regional Anti-Doping Organization	RADO
Sample Collection Personnel	SCP
Technical Document for Sport Specific Analysis	TDSSA
Test Distribution Plan	TDP
Therapeutic Use Exemption	TUE
Therapeutic Use Exemption Committee	TUEC
University of Alabama-Birmingham	UAB
United States Anti-Doping Agency	USADA
WADA Independent Observer Team	IO Team
World Anti-Doping Agency	WADA
World Anti-Doping Code	Code

3.0 Executive Summary

The Birmingham 2022 World Games represented a continued commitment to sport and international competition through the on-going COVID-19 pandemic. Despite the continued effects of the COVID-19 pandemic which were felt throughout all aspects of the Games, the plans put in place to deliver the Games were executed providing a safe and secure environment for all participants involved.

3.1 Overview and Operating Environment

The Birmingham 2022 World Games occurred between July 7 - 17, 2022. A total of 34 sports with 58 sport disciplines were represented in Birmingham. Throughout the Games period approximately 3,450 athletes from 99 different countries were present to compete. In total 34 International Federations (IFs) were present at the Games.

The IWGA is the governing body for The World Games and as a signatory to the World Anti-Doping Code (Code), adopted the Anti-Doping Rules that were in force during the Games period. While the IWGA was responsible for all the elements of the anti-doping program at The World Games 2022, the ITA was contracted to deliver most elements associated with the anti-doping program. In fact, the IWGA tasked the ITA with all elements applicable under the Code, except for Therapeutic Use Exemptions (TUEs) and any hearing process(es), for which they maintained responsibility.

As part of their planning and execution of the anti-doping program, the ITA contracted the United States Anti-Doping Agency (USADA) to be responsible for all sample collection services, including ensuring the secure chain of custody to the WADA accredited laboratory in Salt Lake City. Additionally, USADA also provided support to the ITA education booth located in the University of Alabama-Birmingham (UAB) Athlete Village.

The TDP called for 273 urine samples and 15 blood samples to be collected in-competition (IC) and an additional 57 urine samples and 39 blood samples to be collected out-of-competition (OOC). Throughout the Games period, minor tweaks were made to the TDP based on input provided from the IO Team and IWGA.

The WADA accredited laboratory in Salt Lake City, Utah, was responsible for analyzing all urine and blood samples that were collected throughout the course of the Games.

3.2 Pre-Games Initiatives with WADA and WADA IO Team

In advance of the Games, the ITA was responsible for developing the risk assessment and TDP on behalf of the IWGA. The ITA additionally completed the WADA Code Compliance Questionnaire (CCQ) on behalf of the IWGA in advance of the Games with all corrective actions resolved prior to the start of the Games period.

The ITA also organized a preliminary video conference meeting with members of the IWGA and WADA IO Team in advance of the Games to provide an overview of all planned doping control activities. Additionally, the ITA established a secure ShareFile system to provide the IO Team with access to all relevant planning documents in advance of the Games and also created accounts for each IO Team member in their International Testing Agency Secure Platform (ADCOM) platform allowing for a secure communication system as opposed to using email. During the Games period the focus of the IO Team included the review and/or observations of the following areas:

- Test Distribution Plan (TDP) implementation
- IC and OOC doping control sessions
- Doping control documentation
- Chain of custody of samples and shipment to laboratory
- Education initiatives
- TUEs

3.3 COVID-19 Counter Measures

To best protect the health and safety of both athletes and SCP, COVID-19 counter measures were planned out in advance of the Games. All USADA DCOs that attended The World Games 2022 were fully vaccinated against COVID-19. In addition, during doping control interactions with athletes, USADA Doping Control Officers (DCOs) were instructed to wear a mask and face shield. As part of USADA's ongoing commitment to ensuring the health and safety of athletes and SCP, all DCOs were subject to weekly COVID-19 testing.

The BOC established isolation facilities during the Games period for Games personnel who tested positive for COVID-19. The isolation facilities included dedicated meal delivery to ensure individuals who tested positive could properly isolate while being supported. The BOC established a COVID-19 testing site to conduct symptomatic testing (no asymptomatic testing was provided).

3.4 Athlete Education

There was no mandatory education requirement for athletes or other persons to complete as a prerequisite to participate at The World Games 2022. Instead, education initiatives were promoted through the IWGA website in advance of the Games to provide athletes with the requisite anti-doping information under the "Athletes and Clean Sport" tab.

Throughout the Games period, an interactive ITA branded education booth was present within the UAB Athlete Village (within the accreditation center), offering the opportunity to interact with athletes as soon as they arrived in Birmingham. Additionally, at Games time, ITA branded anti-doping educational items were available in the Doping Control Stations (DCS) for athletes and Athlete Support Personnel (ASP).

3.5 Sample Collection Personnel, Procedures, and Technology

Prior to any sample being collected, each USADA DCO participating at the Games had successfully completed the ITA's International Doping Control Officer (IDCO) certification program. This included training on the ITA's paperless system 'Compass' which was used for the first time in a Major Games setting. Compass proved to be a highly effective system in ensuring that all doping control related information was accurately captured during each sample collection session. The USADA DCOs did a very commendable job in processing all athletes that were observed, especially with the added challenges of a limited number of SCP, weather and schedule changes resulting in delays to competitions, and unreliable rooming information as it pertained to the OOC testing plans.

The IO Team also notes that due to the limited number of DCSs throughout the Games venues this created a challenging issue in having to arrange transport for the athletes, their representative and SCP back to either of the Athlete Villages for sample collection to be conducted. The IO Team tabulated 19 different sports that did not have a DCS at the competition venue. Ideally there should be a DCS located

at each venue, to minimize any situation where an athlete may need to be transported in order to complete the doping control session.

Additionally, there were regular occasions when Doping Control Chaperones (Chaperones) that were supplied by the Organizing Committee did not show up for their shift due to attrition, competition scheduling changes, and incidents of COVID-19 illness. This absenteeism created an additional issue for USADA DCOs who had limited SCP onsite to work with and needed to adjust staffing plans on a daily basis.

Chaperones received training on-site at the venue just prior to their first shift. Given the importance of the role of the chaperone, providing training at an earlier stage, whether virtual or other, would assist in developing buy-in to the anti-doping program, as well as providing additional training in advance of the Games.

3.6 Results Management

No RM processes were observed during the Games period as no Adverse Analytical Findings (AAFs) were reported during that time. The IO Team was informed that should any AAFs be reported following the Games, those would first be handled by the ITA, on behalf of IWGA, with regards to the consequences applicable as per the IWGA ADRV and then referred to the respective IF for further consequences. The adjudication of ADRVs was the responsibility of the IWGA Anti-Doping Hearing Panel.

Following the completion of sample analysis by the Salt Lake City laboratory for all urine and blood samples that were collected during the Games period, a total of 3 AAFs were reported, including one AAF for a substance classified as an S1.1 Anabolic Androgenic Steroids (AAS), and two AAFs involving substances pertaining to S5. Diuretics and Masking Agents as defined on the 2022 Prohibited List. The IO Team is not involved in the observation of the RM process connected to these reported AAFs; the monitoring of the results management process and any consequences related to an ADRV will be conducted by WADA's Legal Department as part of its compliance monitoring responsibilities.

3.7 Conclusion

The IO Team is very appreciative of the openness and willingness of the various stakeholders involved with The World Games 2022 anti-doping program to respond to all inquiries. This IO report provides several recommendations for future editions of The World Games, but overall, the IO Team was impressed with the quality of the anti-doping program. In particular, the IO Team wishes to congratulate the ITA and USADA SCP for their ability to adapt in the face of several different Games time challenges whilst ensuring that athlete rights were protected through the doping control program that was implemented at The World Games 2022 in Birmingham.

4.0 WADA Independent Observer Team

The IO Team was composed of the following members:

- **Manuel Villalobos** (Panama) Executive Director, Pan-American Regional Anti-Doping Organization (RADO), Panama.
- **Natalie Grenier** (Canada), Manager, Testing, WADA (Vice Chair/Manager); and
- **Matthew Koop** (Canada), Manager, Intelligence and Results, Canadian Centre for Ethics in Sport (Chair).

5.0 Pre-Games Initiatives with WADA and WADA IO Team

In advance of The World Games 2022, the IWGA contracted the ITA and delegated responsibility of the anti-doping program to the ITA except for TUEs and any hearing process(es). Subsequently, the ITA subcontracted USADA to be responsible for sample collection and sample transport to the WADA accredited laboratory located in Salt Lake City.

In the lead up to the Games, the ITA completed the WADA CCQ where both the risk assessment and TDP were approved. While the risk assessment and draft TDP were approved by WADA approximately 7-months in advance of the Games, the IO Team was recruited approximately 2-months prior to the Games and announced approximately one month prior to the Games. On the eve of the Games, both the IO Team and IWGA provided minor subjective suggestions to the ITA with respect to the TDP primarily around increasing the number of tests for sports deemed to be of higher risk. While the ITA was able to accommodate minor TDP recommendation changes, these amendments were not necessarily easy to implement as the ITA had finalized many of its plans and operational requirements. However, the ITA was able to accommodate these minor TDP change suggestions within its overall plans. While the IO Team understand that the TDP was approved and difficult to accommodate further adjustments due to staffing, transport, and other operational requirements, it is recommended that for future editions of the Games, additional flexibility be built into the anti-doping program to accommodate TDP recommendations.

Following the appointment of the IO Team, the ITA organized a preliminary call with the IO Team and IWGA to present all the plans associated with the anti-doping program that had been put in place for Games time. The discussion included what would take place upon the arrival of all participants in Birmingham, including daily meetings, site visits, and other logistical planning.

Additionally, the ITA set up the IO Team with access to their ADCOM platform through which secure messaging and all planning related documentation was accessible. The IO Team found ADCOM to be particularly useful in having a central point of access to secure files that detailed the plans for all aspects of the anti-doping program. If any additional information was requested by the IO Team, a prompt response was provided by the designated ITA team member.

6.0 Athlete Anti-Doping Education

Prior to the Games, the IWGA updated their website to include information on anti-doping for The World Games 2022. This included posting the approved anti-doping rules that would be in force at the time of the Games. Additional anti-doping information on the IWGA website was also available, such as information on athlete rights and responsibilities, testing procedures, TUEs, medication and supplement risks, and how to report instances of doping. The ITA website linked to external information produced by other organizations such as the Global Drug Reference (Global DRO) website, and additional testing resources that had been developed by the ITA. The educational resources found on the IWGA website that were developed for the Games were deemed to be beneficial by the IO Team for athletes and members of their entourage/support teams. The centralization of all related anti-doping information on the IWGA website pertaining to the Games further contributed to an important step to ensuring that all information could be easily accessed given that there was no requirement in advance of the Games that athletes complete any sort of mandatory education program.

Given the limited anti-doping experience of many of the athletes and ASP participating at The World Games 2022, it was evident that not all participants had a strong command of their anti-doping related responsibilities. It is the view of the IO Team, that for future editions of the Games, a great opportunity

exists for the IWGA to create a mandatory education program that all athletes, coaches, and support personnel would have to complete as a condition of participation at the Games.

At Games time the ITA provided an anti-doping education booth located within the Athletes Village at UAB. The education booth was staffed by the ITA and USADA education team as a joint partnership. The education booth provided various anti-doping resources in multiple languages for athletes and on the occasions observed by the IO Team, appeared to have particularly good interactions with athletes. The IO Team noted that the anti-doping booth had Berlinger kits on display at the outset. The IO Team requested that these be swapped out for Innovero kits which were being used to collect urine and blood samples during the Games. This request was immediately accommodated by the ITA.

Education team members from USADA were also on hand to assist athletes in researching medications purchased in the United States to determine whether they contained any prohibited ingredients. In one instance the IO Team observed the education team working with an athlete and identified a prohibited ingredient in a medication that an athlete requested assistance with prior to commencing its use. Had the athlete commenced use of the medication it may have resulted in an AAF if they were tested. Anecdotally, it was noted by the education team that they were having up to 100 interactions per day with athletes while the education booth was in operation.

At the beginning of the Games, it was noted by the IO Team that there was a lack of visible anti-doping education materials present at the DCSs. This was brought forward within the daily IWGA/ITA meetings and corrected moving forward. Additionally, at each processing table within the DCSs, small stickers with a scannable QR code linking to educational materials was available for athletes to take.

Recommendation IWGA #1:

For future editions of The World Games, the IWGA should consider including a mandatory education component within their anti-doping rules as a prerequisite to participate for athletes, coaches, and support personnel.

7.0 Test Distribution Plan

7.1 Risk Assessment and TDP Planning

The risk assessment developed by the ITA for the Games evaluated all sport disciplines that were present at the Games and classified them as either high (11 sport disciplines), medium (over 24 sport disciplines) or low risk (over 11 sport disciplines). The ITA risk assessment methodology involved a three phased process:

1. Physiological assessment to define number of tests and specific analysis for each discipline.
2. Country risk assessment for each sport discipline including review of Anti-Doping Rule Violation (ADRV)/test completed per country and the corruption perceptions index (CPI) for each country.
3. Assessing high risk athletes for targeted testing during the Games based on sport performance/test history/additional information.

In addition to the steps taken in the risk assessment, it should be noted that the ITA was able to build in additional information based on the anti-doping program management work that they already conduct on behalf of various IFs participating at the Games. The ITA estimated that they were responsible for administering approximately 70% of the anti-doping programs for IFs present at the Games. It is the view

of the IO Team that this additional sport specific anti-doping knowledge provided an overall enhancement to the development of the risk assessment and overall TDP.

The TDP developed for the Games, included a total of 330 tests. Following the completion of the risk assessment, the ITA allocated 273 tests to IC and 57 tests to OOC. The ITA directed IC testing based primarily on sport performance. The ITA assigned OOC tests based on its country risk assessment of high-risk sport disciplines in order to best target athletes. The ITA also planned to inform its OOC testing plans through any intelligence that was received.

7.2 Out-of-Competition Testing

The OOC testing portion of the TDP was limited in both overall percentage of urine tests and to sports tested. Of the 330 total urine tests that were planned 57 were allocated for OOC testing which represented approximately 17% of all urine collections. All of the 57 OOC tests planned were completed.

At the outset of the Games, both the IO Team and IWGA Anti-Doping Commission suggested minor changes to the TDP to increase the overall percentage of OOC tests. In doing so, it was felt by the IO Team that this strategy would contribute to the overall deterrent effect of the anti-doping program. Additionally, the IWGA proposed minor changes to the TDP that were based on their view of sport risk. Following the suggestions provided by the IO Team and IWGA, the ITA made slight adjustments. We encourage the IWGA and ITA (if applicable) to consider those suggestions for future editions of the Games.

The IWGA collected Blood Passport (BP) samples from 17 athletes during the Games period. The majority of athletes selected for BP testing participated in aerobic and muscular endurance sports however most of these athletes did not have existing hematological profiles. For first time athletes that had a BP sample collected, the ITA indicated that it would be up to the respective International Federation (IF) to evaluate and determine whether BP samples should be collected in the future on these athletes. Where possible, the ITA coordinated BP sample collection based on its knowledge of the existing anti-doping programs it manages on behalf of IFs.

The IO Team had several opportunities to observe OOC testing during the Games. It was noted that there were several challenges with the quality of whereabouts information and the accuracy of rooming lists for athletes that were selected for OOC testing. This resulted in some delays and challenges to locate athletes during the time periods that had been planned for. From what the IO Team observed, OOC testing only occurred in the Athlete Villages. A solution to increase the effectiveness of the OOC testing portion of the anti-doping program could have been to plan for testing during training sessions at the venues.

Recommendation IWGA #2:

For future editions of The World Games, the IO Team suggests that the IWGA expands OOC testing attempts on athletes to include training facilities and scheduled practice times at future World Games.

Recommendation IWGA #3:

For future editions of The World Games an increase to the percentage of OOC tests should be considered to contribute to the enhanced unpredictability of the overall TDP. At The World Games 2022, OOC testing represented a total of 22% of all samples collected.

7.3 In-Competition Testing

The IC portion of the TDP was based upon the ITAs' performance driven approach. The TDP that was presented to the IO Team at the outset of the Games called for a total of 273 urine tests, representing approximately 82% of all urine testing planned for the Games.

While the TDP allocated testing to individual performances and results, the ITA did confirm in meetings with the IO Team that there was flexibility to adjust the testing plan based on any relevant information that may be received to make a different selection for testing. The IO Team appreciates the limitations of the IC testing plan with the limited number of tests that were allocated for the Games.

For testing the gold medal winners in team sports the IO Team observed various methods for selecting athletes for testing. While DCOs were provided with some flexibility to determine how selections within a team would take place, as the Games went on, a more targeted approach was implemented.

Recommendation IWGA #4:

In future editions of The World Games, it is recommended to increase the total number of IC tests by, for example, testing multiple medal winners from a competition based on an evaluated risk assessment by sport.

7.4 TDSSA Compliance

As per the TDP, the IWGA has fully complied with the requirements of the Technical Document for Sport Specific Analysis (TDSSA). All analysis results have been reported in Anti-Doping Administration and Management System (ADAMS) for all 401 samples collected by the IWGA. The review of the TDSSA Minimum Level of Analysis (MLAs) has shown that the requirements for MLAs are met for all the sports / sport disciplines, demonstrating full compliance.

8.0 Long-term Storage of Samples

Included as part of its contracted services to the IWGA, the ITA was tasked with developing a Long-Term Storage and Further Analysis (LTSFA) policy for The World Games 2022 within the budget allocated by IWGA for LTSFA. As part of the LTSFA policy, ITA identified a comprehensive list of criteria to be used in determining whether a sample should be selected for long term storage. In addition to the criteria identified by the ITA, consultation would also occur with other stakeholders such as WADA, National Anti-Doping Organizations (NADO)/RADOs, and IFs to determine whether a sample should be included in the LTSFA policy.

To determine the parameters for inclusion in the IC and OOC LTSFA for The World Games 2022, three different pillars were identified to assist in identifying samples for long term storage:

1. IFs long-term storage – IWGA will transfer custodianship to any IF whose sport was on the sport programme for The World Games 2022. The costs associated with long term storage would be the responsibility of the IF.
2. IWGA's storage – where the need may arise, up to fifteen samples may be stored under its own authority. Should long term storage of samples be warranted, the selection will be made by the ITA based on the criteria that has been put in place.
3. Intelligence/ Athlete Biological Passport (ABP)-driven storage – as outlined by the ITA, the quota of fifteen samples will be used in priority to store any samples based on reliable intelligence or laboratory recommendations, such as without limitation whistleblowing information, laboratory or Athlete Passport Management Unit (APMU) recommendations, information from other Anti-Doping Organizations (ADOs) and/or WADA.

Following the completion of The World Games 2022, the IWGA Anti-Doping Commission indicated that a review would be conducted to select up to 15 samples for long term storage using the criteria defined in the LTSFA policy. The identification of 15 samples for long term storage represents approximately 4% of all samples collected during the Games period (from July 7 – 17, 2022). The ITA and the IWGA should be commended for developing a well thought out and articulated LTSFA policy for The World Games 2022, based on a rationale set of risk criteria and processes for identifying the appropriate samples for long term storage. The IO Team does note that only 4% of samples will be flagged for long term storage. While this represents a good starting point for a long-term storage strategy, an increase in the overall percentage of samples identified for long term storage will contribute to an enhancement of the overall anti-doping program at future editions of The World Games.

Recommendation IWGA #5:

For future editions of The World Games, it is recommended that IWGA consider the LTSFA policy that has been developed by the ITA to determine whether the current allocated 4% of samples identified for long term storage is appropriate or whether it should be increased and whether specific criteria should be identified to ensure that samples from high-risk athletes or high sports or samples from all gold medalists (as was done for these Games) are kept.

9.0 Whereabouts Collection / Use of ADAMS

Given the composition of the athlete pool and sports participating at The World Games 2022, the ITA had to rely on whereabouts information for athletes that were included in Registered Testing Pools (RTPs) that was already being collected by either an IF or NADO. As the ITA was responsible for administering the anti-doping programs of approximately 70% of the IFs participating at The World Games 2022, they were able to leverage this knowledge, to coordinate OOC testing on athletes that were included as part of the OOC TDP where possible.

In addition to whereabouts information that was already being submitted in ADAMS, the ITA had access to rooming lists for the UAB and Birmingham Southern College (BSC) Athlete Villages that was provided by the Local Organizing Committee (LOC). While this information was provided in advance by the LOC, it is noted that the information was often not updated, creating challenges in locating athletes that had been selected for OOC testing.

To become more effective in locating athletes for OOC testing, the ITA adjusted its strategy to look for athletes in other locations than their accommodations, such as the Athlete Cafeteria resulting in more successful testing attempts.

No whereabouts failures were recorded during the Games period for athletes that were part of an RTP.

The IO Team was provided with access in ADAMS to view all Doping Control Forms (DCFs) and results as they were entered in ADAMS. The ITA had a system in place to enter DCFs into ADAMS during the Games period. The IO Team's access to Lab Results in ADAMS during the Games period was not possible as the analysis of samples did not have a quick turnaround time requested on them, meaning that the lab analysis on all samples would not be completed until the Games were over.

10.0 Intelligence

As part of the agreement between IWGA and ITA, Intelligence and Investigations (I&I) included access to the ITA whistleblowing platform (REVEAL) and the preliminary assessment of the information received via REVEAL. Through its REVEAL Platform, the ITA can receive information pertaining to potential ADRVs in a confidential manner and then verify and assess its validity.

10.1 Pre-Games Intelligence Related Activities

In advance of the Games, the IWGA included a page on its website promoting the ITA REVEAL platform. While REVEAL was promoted in advance of the Games, no tips were received that pertained to athletes or other persons who participated at the Games.

10.2 During the Games

Due to the limited size of the anti-doping program at The World Games 2022, the ITA did not have an on-site I&I presence during the Games period. Instead, the ITA I&I unit was available to provide any support in a remote capacity. Throughout the Games period, no tips were received by the ITA I&I unit.

It is noted that no education had been provided or policies or procedures developed with the LOC functional areas such as competition venues, Athletes Villages cleaning and waste or in advance of the Games should any doping related paraphernalia such as used syringes or blood bags be discovered at official The World Games 2022 Venues.

Recommendation IWGA #6:

For future editions of the World Games, it is recommended that the IWGA work with the LOC to provide training and education on how to identify and safely secure potential doping paraphernalia.

11.0 Therapeutic Use Exemptions

The IO Team had the opportunity to meet with the IWGA Therapeutic Use Exemption Committee (TUEC) during the Games. The composition of specialties within the IWGA TUEC included, but was not limited to, orthopedic trauma, family medicine, sports medicine, and emergency medicine.

As outlined on the IWGA website, athletes requiring a TUE were to submit their application to the IWGA 30 days prior to the commencement of the Games (by June 5, 2022). The IWGA TUEC reported that no TUE applications were received prior to the commencement of the Games period.

At the time of meeting with the IWGA TUEC on July 14, 2022, a total of four TUE applications had been received during the Games period (from July 5, 2022, onward). Of the four TUE applications that were received, three were not processed as they involved substances that are not prohibited in sport. The

fourth TUE application that was received was reviewed by the IWGA TUEC and approved in accordance with the International Standard for TUEs (ISTUE).

The IWGA TUEC confirmed that all TUEs that had been previously approved by other ADOs would be automatically recognized by the IWGA.

As anti-doping test results had not been reported in ADAMS at the end of the Games, the TUEC confirmed that their composition would remain and should an athlete apply for a retroactive TUE resulting from an AAF, there would be an ability to review TUE applications.

Recommendation IWGA #7:

As many of the sports participating at the IWGA are not regularly tested by their NADO, the IFs are encouraged to make efforts to remind National Federations to educate their athletes as it relates to their TUE requirements for participating at the Games.

12.0 Compass Paperless Software

For the first time at a Major Games, the ITA introduced its paperless doping control platform, Compass. The platform which is tablet based was intended to process all athletes during sample collection, both IC and OOC. The IO Team was able to observe Compass being used in a variety of scenarios, and overall was very impressed with how efficient the system was.

All USADA DCOs received training on the platform prior to the Games, and it was evident that the training that ITA had developed was effective in that no errors that would have compromised the integrity of a sample collection session were observed by the IO Team.

Compass provided a secure platform to complete the doping control process with athletes in multiple languages and provided them secure encrypted access to their DCF in the choice of language available (English being default).

A paper form was used to first notify the athlete, and then all the information from the notification form was transferred and entered on the tablet creating a single electronic record of the doping control session.

For all sample analysis requests, an automated laboratory advice form was generated by Compass. The file was sent by Compass to the lab with the requested analysis information to ensure the correct analysis request was conducted on each sample.

13.0 Sample Collection Personnel and Training

The planning of SCP for The World Games 2022 included the provision of 10 DCOs and 2 Chaperones from USADA (one of the DCOs was also a Blood Collection Officer (BCO)). Additionally, the BOC was responsible to provide between 10 – 15 Chaperones for the Games. Prior to the commencement of the Games all DCOs completed the ITA's IDCO training program and were certified to collect urine and blood samples accordingly. Additionally, the USADA DCOs were provided with training on the ITA's Compass paperless doping control platform in advance of being activated in the field.

The BOC Chaperones were trained by USADA DCOs at the commencement of their first shift on venue. Often, the Chaperone training was provided just prior to the commencement of anti-doping testing which

made for very tight timelines in order for the Chaperones to become familiar with their roles. The DCOs often needed to provide some oversight during athlete notifications to ensure a smooth process.

One of the biggest challenges noted by the IO Team when observing doping control at the venues, was the attrition of Chaperones, who did not report for their assigned shifts. This often meant that the DCO would have to notify and chaperone multiple athletes if the number of planned tests were greater than the amount of SCP at the venue. However, the IO Team wishes to congratulate the adaptability and effort put forward by the USADA DCOs to ensure that all athlete notifications were always properly conducted and that the athletes were continuously chaperoned, from the sample collection sessions that the IO Team observed.

Recommendation IWGA #8:

At future editions of The World Games, an additional buffer of DCOs and Chaperones should be planned for that exceeds the number of tests being planned to account for any attrition that may occur. Additionally, Chaperones should be trained prior to the commencement of the Games through virtual learning or other methods, to build up their buy-in and commitment to volunteering with the anti-doping program as well as ensure sound knowledge of their roles and responsibilities well ahead of the Games. If possible, Chaperones should also be provided with opportunities to participate in sample collection sessions prior to their participation at a major event.

14.0 Notification Process

14.1 Sport Specific Protocols

Given the unique composition of the sports represented at The World Games 2022, many of the DCOs had not previously conducted testing missions in sports that they were assigned to during the Games. As such, there were some instances where the athlete/team finishing placements were not easily determined due to scoring, timing, or other factors. This resulted in the DCOs relying on venue Sport Managers to assist in explaining the nuances of the sport in question.

There were no sport specific protocols developed in advance of the Games to assist in explaining to DCOs the most effective way to track the results within a competition and the most appropriate timing and location to conduct athlete notification. In some instances, it was noted by the IO Team that the locations for athlete notification were not private. Having a sport specific notification protocol in place would also ensure a more efficient process to notify athletes in sports that had lots of movement post competition, especially combat sports where athletes would leave the ring, go backstage to cool down, receive medical attention, fulfill media requirements, and then participate in medal ceremonies.

Recommendation IWGA #9:

For future editions of The World Games the IWGA should prepare sport specific protocols with the respective IFs in advance of the event to assist in the training of anti-doping personnel understand the sport and the most effective way to conduct athlete notifications.

14.2 Notifying and Chaperoning Selected Athletes

Given there were no pre-established post competition procedures in place for these Games, this resulted in athletes not being guided through the post event sequence as they may otherwise have been at for example an Olympic Games. The free-flowing movement of athletes post competition at times posed a

challenge to SCP in order to notify athletes for doping control in a confidential manner, and then also chaperone them as they progressed through finishing their post competition commitments.

The IO Team counted 19 sports did not have a DCS at the competition venue. As such, transport was required to bring the athletes and their representatives (as applicable) from the competition venue back to either of the Athlete Village DCSs, which meant that the DCOs and Chaperones had to be very well coordinated and adaptable to changes as they came up (for example: athlete medical attention, changes in competition schedules, weather delays, translation needs, media and medal ceremony commitments). The IO Team wishes to commend all USADA SCP in their adaptability to adjust their processes as needed to ensure the integrity of the notification process and continuous chaperoning of athletes.

15.0 Sample Collection Process

15.1 Doping Control Stations

At The World Games 2022, there were two main Athlete Villages at UAB and BSC. A permanent DCS was established at each Athlete Village to support the OOC testing program and in addition to act as a location where athletes would be transferred to following being notified for doping control at pre-determined competition venues. Due to many competition venues not having their own DCS on venue, athletes and their representative (where applicable) had to be driven to either UAB or BSC following being notified for doping control.

In addition to the UAB and BSC DCSs, three additional satellite DCSs were planned for venues that, in general, represented more than a 30-minute drive from either Athlete Village. These venues included Oak Mountain (Canoe Marathon, Waterski & Wakeboard), Crossplex (Roller – Inline Hockey, Underwater Finswimming, Lifesaving, Wheelchair Rugby, Roller – Artistic, and Hoover (Women’s Softball). While the spaces that were allocated at each venue were adequate for doping control to occur and ensure privacy, the following observations were noted by the IO Team as being a challenge prior to being rectified by the SCP on-site:

1. UAB DCS was initially missing some privacy elements (uncovered windows) and processing areas. Once the issue was raised, the SCP team immediately was able to produce workable solutions in order to ensure athlete privacy.
2. The DCSs at BSC and Crossplex were moved on several occasions due to other operational needs on-site or an apparent lack of size in comparison to the number of tests that had been planned. Additionally, there was little to no signage present to locate each DCS adding to the challenge of locating the DCS by athletes and their entourage, sport officials, and the IO Team.
3. The SCP team were not provided with keys to lock any of the DCSs. This meant that after each day of testing, a representative from the venue would need to be found to lock the DCS. Alternatively, all sample collection equipment would be removed from the venue by the SCP team on a daily basis if it could not be securely stored. This resulted in additional work for the SCP team following the completion of daily doping control operations.

The check-in and check-out process of each DCS was generally managed well by each SCP team. Due to the limited number of DCOs and Chaperones at each venue, the check in/out duties were shared by whoever was available at the time. The IO Team did not observe any instances where athletes were unchaperoned while in the DCS. The USADA DCOs should be commended for their flexibility in being able to switch between roles while ensuring that the doping control process was not compromised.

At the beginning of the Games, it was noted by the IO Team that there was not much in the way of anti-doping educational material present in each DCS. As many of the athletes competing at the Games had not been tested in the past, it was suggested that some additional anti-doping information be included at the DCS. Following this suggestion, additional anti-doping information was secured from the ITA education booth and brought to the DCS for athlete's use.

Recommendation IWGA #10:

A suitable DCS at each competition venue should be planned for in advance of the Games so that athletes are only transported as a last resort.

15.2 Sample Collection Session

For the most part, sample collection sessions observed by the IO Team were carried out in a manner consistent with the International Standard for Testing and Investigations (ISTI). Given the lack of anti-doping experience with many of the athletes participating at the Games, DCOs did a good job of assessing athlete knowledge and then guiding them through the sample collection process as required. The IO Team was able to observe a good range of first-time athletes going through doping control to those who had significant experience and were included in an RTP with their respective NADO or IF.

The IO Team did not observe any instances during sample collection that deviated from the ISTI that would affect the identity and integrity of the sample. Urine and blood samples were collected in a consistent manner by the DCOs present at the Games. The IO Team was able to observe the Innovero partial kit system in use to secure a partial sample without any issues reported. Additionally, while the IO Team did not observe any instances where a second sample was required because it did not meet specific gravity requirements (i.e., 'dilute sample'), based on a review of ADAMS data, when a dilute sample was provided, additional sample(s) were collected as required (i.e., until a sample that met the requirement for suitable specific gravity was provided by the athlete) and as per the policy established by the ITA where sample collection would only be terminated based on exceptional circumstances and as approved by the ITA. Furthermore, the IO Team reviewed all paperwork for samples that involved either a partial or dilute sample, and everything appeared to have been properly completed by the DCO in accordance with IDCO sample collection procedures.

Recommendation IWGA #11:

As part of their training, it should be emphasized that appropriate procedures are followed and ensure DCOs are well aware that they should continue to collect additional samples until the requirement for suitable specific gravity for analysis is met.

15.3 Storage of Samples

Following the athlete's completion of the sample collection process, the DCO who processed the athlete would bring the sealed sample to the pre-determined temporary storage location at the DCS. In the case of the UAB DCS which acted as the central location for where athletes from various sports venues were processed, a full-size fridge was used to store the samples. Storage of samples was supervised by USADA staff.

Following the completion of each day's doping control activities all samples would be transported by the lead DCO in charge back to their hotel room where they would be stored in a fridge for the night until the next day when they would be taken to the courier and shipped to the laboratory for analysis.

16.0 Sample Transport and Receipt of Samples by the Laboratory

USADA DCOs were tasked with the responsibility of shipping all urine and blood samples collected at The World Games 2022 to a WADA accredited laboratory. The Salt Lake City laboratory was identified as the lab that would be responsible for the analysis of all samples collected during The World Games 2022.

In general, urine and blood samples were sent to the laboratory the following day after they were collected.

An IO Team member was able to observe an occasion where urine and blood samples were prepared for shipment to the laboratory. The process described is as follows. Following the completion of a DCO's scheduled duties for the day, they would transfer custody of the samples that they had processed on their tablet to the lead DCO using the Compass paperless doping control program. The Lead DCO would then retain sample kits with them until transport the next morning.

As mentioned, the Lead DCO would take the samples back to their hotel accommodations at the end of each day's testing and store them securely in the fridge within their hotel room. The next morning, the collected blood and urine samples from the previous day would be brought back to the UAB DCS where they would be catalogued and packaged for shipping.

The urine and blood samples that the Lead DCO had received via transfer through Compass would then be prepared for shipment. Urine samples were packed in UPS shipping bags and then boxed for transport. Blood samples would have been prepared the evening prior in cooler boxes and then verified once again that all sample codes had been transferred to the Lead DCO before final packing.

It was noted that at the time of packaging, several urine samples were not received by the Lead DCO through Compass. As such the samples were held by the Lead DCO in order that the technical issue could be resolved in Compass prior to having them shipped.

Once all samples were packaged and prepared for shipping, the DCO drove the samples directly to a UPS location without stopping. Upon arrival at the UPS store, samples were then handed over to a UPS representative for shipment.

UPS waybill numbers were used by the ITA to track samples that had been shipped to the laboratory.

17.0 Results Management

During the Games period, there were no RM matters reported. It should be noted that no quick turnaround times were requested for sample analysis. As such, a total of three AAFs were reported following the completion of the Games. The results of testing are included within the Sample Collection Report found at the end of this report. It should be noted that the IO Team will not observe any of the RM matters handled by the IWGA or IFs following the Games, as this is beyond the mandate of the IO Team. The monitoring of the results management process and any consequences related to an ADRV will be conducted by WADA's Legal Department as part of its compliance monitoring responsibilities

18.0 Summary of IO Recommendations

Recommendation IWGA #1:

For future editions of The World Games, the IWGA should consider including a mandatory education component within their anti-doping rules as a prerequisite to participate for athletes, coaches, and support personnel.

Recommendation IWGA #2:

For future editions of The World Games, the IO Teams suggests that the IWGA expands OOC testing attempts on athletes to include training facilities and scheduled practice times at future World Games.

Recommendation IWGA #3:

For future editions of The World Games an increase to the percentage of OOC tests should be considered to contribute to the enhanced unpredictability of the overall TDP. At The World Games 2022, OOC testing represented a total of 22% of all samples collected.

Recommendation IWGA #4:

In future editions of The World Games, it is recommended to increase the total number of IC tests by, for example, testing multiple medal winners from a competition based on an evaluated risk assessment by sport.

Recommendation IWGA #5:

For future editions of The World Games, it is recommended that IWGA consider the LTSFA policy that has been developed by the ITA to determine whether the current allocated 4% of samples identified for long term storage is appropriate or whether it should be increased and whether specific criteria should be identified to ensure that samples from high-risk athletes or high sports or samples from all gold medalists (as was done for these Games) are kept.

Recommendation IWGA #6:

For future editions of The World Games, it is recommended that the IWGA work with the LOC to provide training and education on how to identify and safely secure potential doping paraphernalia.

Recommendation IWGA #7:

As many of the sports participating at the IWGA are not regularly tested by their NADO, the IFs are encouraged to make efforts to remind National Federations to educate their athletes as it relates to their TUE requirements for participating at the Games.

Recommendation IWGA #8:

At future editions of The World Games, an additional buffer of DCOs and Chaperones should be planned for that exceeds the number of tests being planned to account for any attrition that may occur. Additionally, Chaperones should be trained prior to the commencement of the Games through virtual learning or other methods, to build up their buy-in and commitment to volunteering with the anti-doping

program as well as ensure sound knowledge of their roles and responsibilities well ahead of the Games. If possible, Chaperones should also be provided with opportunities to participate in sample collection sessions prior to their participation at a major event.

Recommendation IWGA #9:

For future editions of The World Games the IWGA should prepare sport specific protocols with the respective IFs in advance of the event to assist in the training of anti-doping personnel understand the sport and the most effective way to conduct athlete notifications.

Recommendation IWGA #10:

A suitable DCS at each competition venue should be planned for in advance of the Games so that athletes are only transported as a last resort.

Recommendation IWGA #11:

As part of their training, it should be emphasized that appropriate procedures are followed and ensure DCOs are well aware that they should continue to collect additional samples until the requirement for suitable specific gravity for analysis is met.

19.0 Sample Collection Report – Sample Analysis

19.1 General

During the Games Period, the Salt Lake City laboratory received 341 urine samples and 60 blood samples (35 collected in serum tubes for GH analysis and 18 samples collected in Ethylenediaminetetraacetic acid (EDTA) tubes for ABP tests) for analysis. The number of samples and type of analysis conducted are specified in the table below.

19.2 Sample Analysis

	Number of Samples	EPO Analysis	GHRF Analysis	GH Analysis
Urine	341	39	39	N/A
Blood (serum)	42	N/A	N/A	42
Blood Passport	18	N/A	N/A	N/A
Total	401	39	39	42

All results have been reported in ADAMS as negative except 3 AAFs: one was methandriol and 2 results for canrenone which is a diuretic / masking agent. Additionally, one blood sample in ADAMS does not have a result reported associated and no explanation from the laboratory on its status.