Doping Control at Major Events: Rio 2016

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Objective for Major Event Organizers

1. Plan and implement a **high volume of tests during a short period of time.**

2. Ensure that **appropriate resources** are allocated to support effective, efficient and well thought-out *Testing* program requirements.

WADA Independent Observer Program

Role of WADAs Independent Observer Program:

- Help instill confidence in both athletes and the public in the quality, effectiveness, and reliability of the anti-doping program at a Major Event.

Tasks for IO Team in Rio:

1. Observe all aspects (testing, analysis, TUE, Results Management etc.) of the Games anti-doping Program.

2. Provide feedback to IOC and the Local Organizing Committee on a daily basis and suggest improvement.

3. Make recommendations in its post-Games report for potential improvements to the program for future editions of the Games.

Independent Observer Report Rio 2016

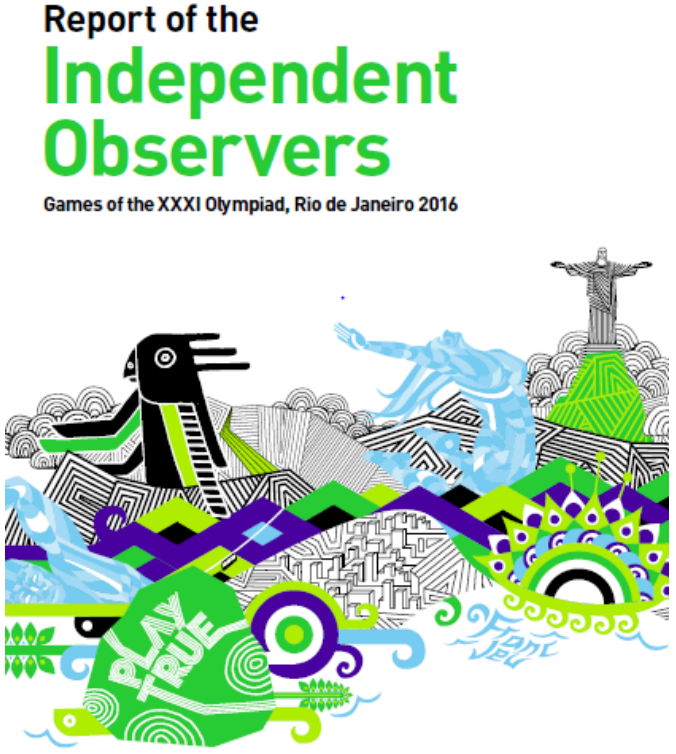
<u>Main Achievements by IOC in Rio</u>:

- Established a Pre-Games Intelligence Task Force resulting in Test distribution planning based on an intelligence-led risk assessment rather than random selection

- The introduction of separate Out-of-Competition and In-Competition testing periods (previously only in-competition)

- 'IOC Athlete Passport Management Unit' examining Athlete Biological Passport during the Games

- Special anti-doping counsel to support the IOC legal team (results management), and CAS Anti-Doping Division (first instance hearing panel for ADRV cases)



Establishment of Pre-Games Intelligence Task Force

Participant NADOs: UKAD (Secretariat), ASADA, ADD, JADA, SAIDS, and USADA

Objectives

1. Identify ‘gaps’ in the testing plans of IFs or NADOs.

2. Participant NADOs to share with the Taskforce other trends of interest that are apparent from information/intelligence they review/receive.

3. Make recommendations to the Lead NADO (UKAD) about athletes that should be targeted for testing.

4. Where these recommendations are not acted on by the NADO or IF, the Lead NADO will advise WADA for either IF/NADO follow up or Lead NADO to initiate testing under WADA’s authority.

The Taskforce was active from March 2016 until the opening of the Olympic Village on 24th July 2016.

Recommendations

The following 'standard' recommendations will apply:

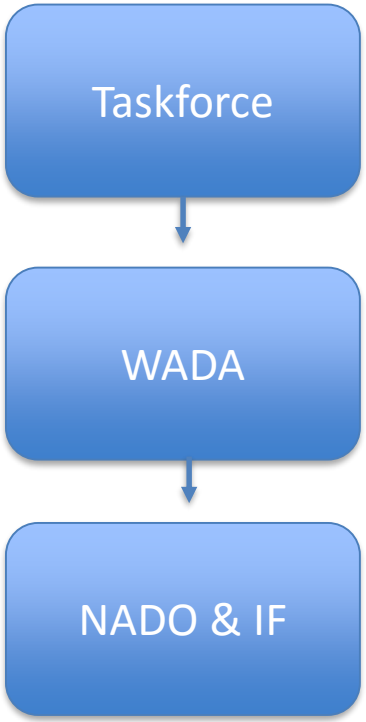
High priority for strongly recommended target testing:

- Athletes with Atypical steroid or blood ABP status (in consultation with APMU)
- Previous test history indicates non-compliance with TDSSA requirements
- Athletes located overseas (i.e. not in their home nation) prior to Rio 2016
- Athletes with large gaps in their test history
- Where relevant intelligence dictates (depending on the nature and provenance)

High priority for immediate mandatory testing:

- Athletes with a top eight VMT ranking, and no tests recorded in 2016
- Athletes from a high risk country
- VMT ranking has changed significantly
- Where relevant intelligence dictates (depending on the nature and provenance)

Taskforce Recommendations

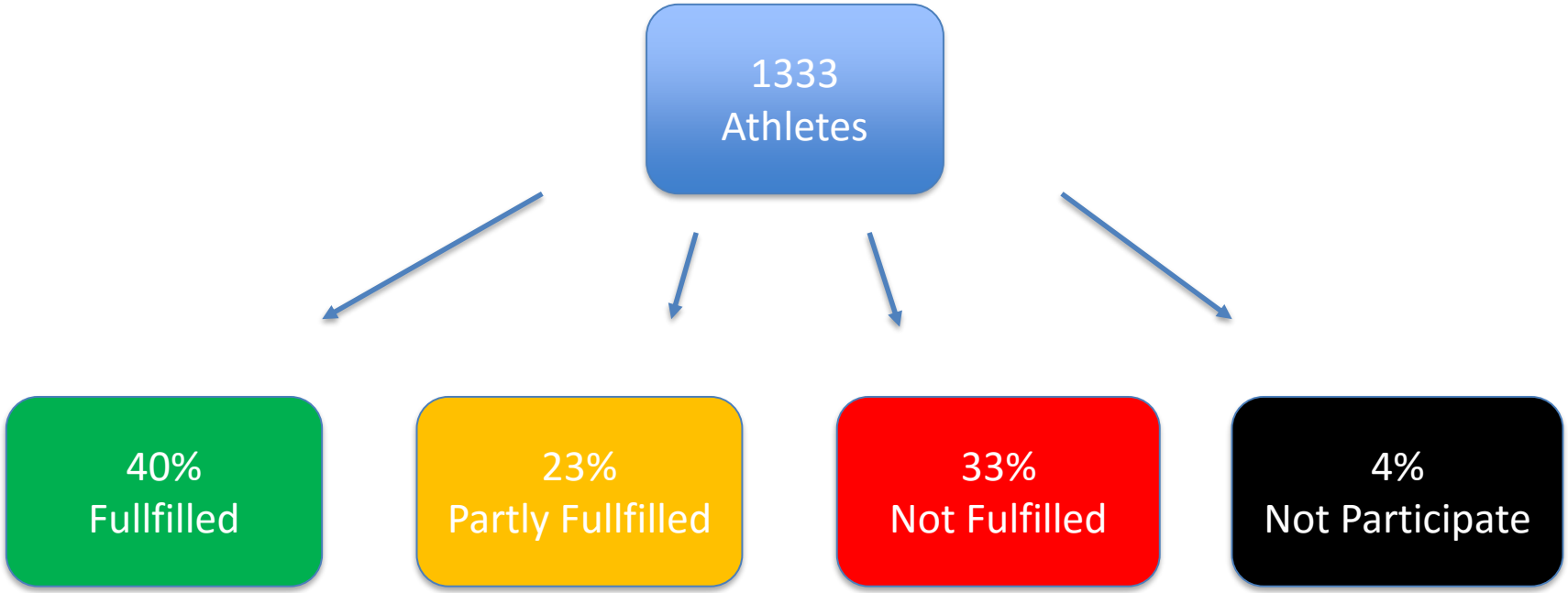


Recommendations:

- Types of testing
- Types of samples
- Types of analysis
- Addition of athletes to RTP

- A failure by an IF or NADO to implement the testing recommendations during the Pre-Games period should be reported to the IOC and to WADA. WADA should consider such information as part of its broader compliance and monitoring program.

Taskforce recommendations



Adverse Analytical Findings

15 AAFs

- Six different sports
- Twelve different nationalities
- Test by eight different IFs or NADOs.

Tests were conducted less than two months prior to the Games!

- Eight of the AAFs were for anabolic steroids and two were for GHRPs, potentially indicating that the athletes in question had not expected to be tested and thought they could dope right up to the Games.
- In addition, the IOC funded the Taskforce to conduct 162 Out-of-Competition tests that were focused on the 33 percent of athletes not tested by their IFs/NADOs, resulting in five AAFs (three for clenbuterol, and two for GHRPs).

Information Transfer to IOC and Rio 2016

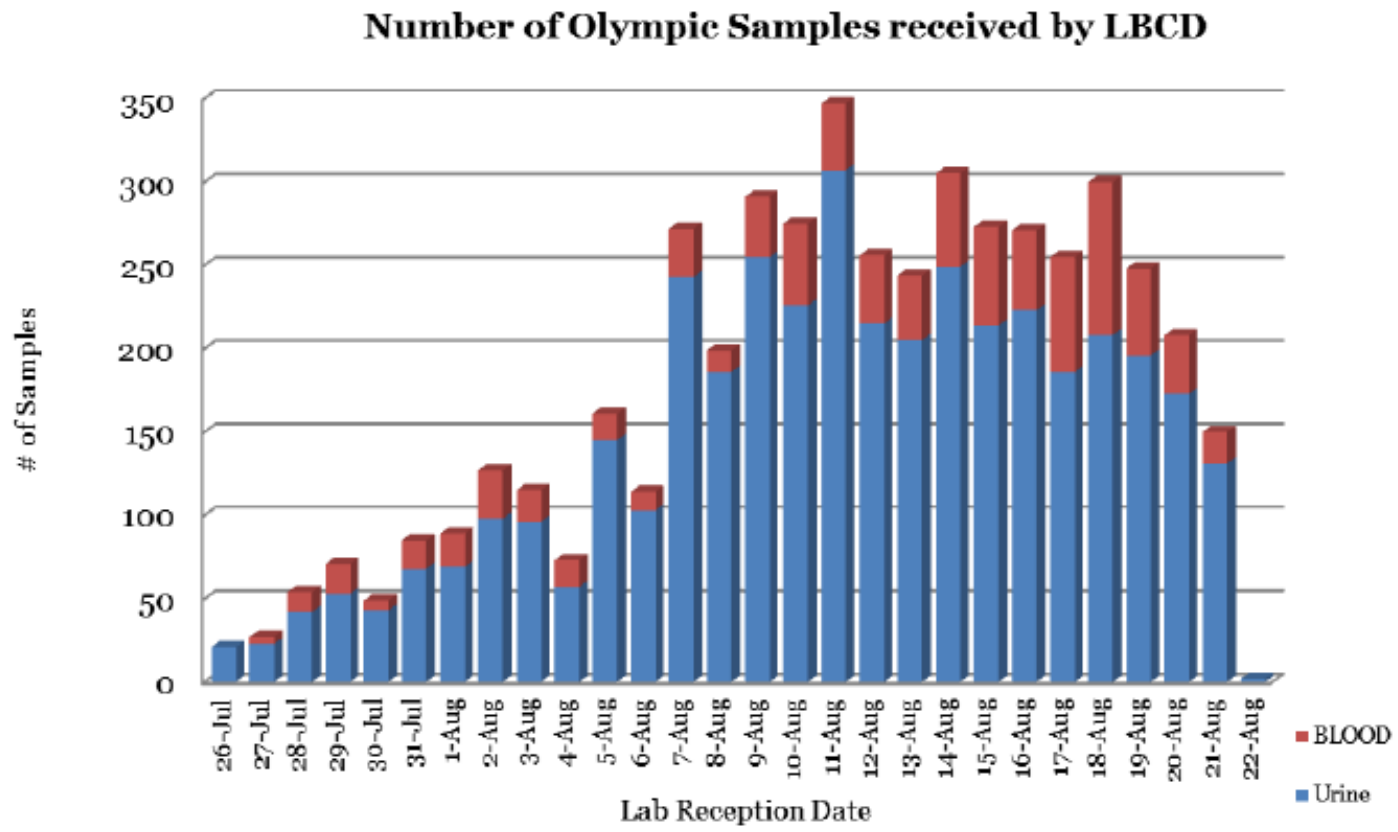
In addition, in the week prior to the opening of the Athletes Village in Rio on 24 July 2016, the Taskforce delivered to the IOC and Rio 2016:

- A full 2016 test history (number and type of tests) for athletes on the IOC confirmed entrants list at that time:
  - 11,470 athletes on this list: 4,125 had no record of any testing in 2016, of which 1,913 were in the ten higher risk sports
- 38 pages of specific athlete intelligence and recommendations; and
- A full log of all tests recommended by the Taskforce and details of the extent to which its recommendations had been actioned by the IF/NADO in Question. This greatly assisted the IOC and Rio 2016 in informing and refining the TDP during the Games period.

Samples Planned and Collected in Rio

Type of Test[30]	Planned[31]	Samples Collected by					Actual Total
		Rio 2016			Other SCAs[32]		
		IC	OOC	Subtotal	IC	OOC	
Urine	4,480	2,723	1,157	3,880[33]	-	157	**4,037**
Blood	450	129	274	403	-	8	**411**
Blood + ABP	-	50	298	348	-	39	**387**
ABP blood	450	5	24	29	-	18	**47**
Subtotal	5380	2,907	1,753	4,660	-	222	**4882**
Total	5,380	4,660			222		**4,882**

Samples Received by Lab during the Games pr. Day



Challenge 1: Locating Athletes in Village

WADA Guideline on Major Events:

Athlete not in a Registered Testing Pool in the period for which the Athlete is subject to [MEO]'s Testing authority:

[MEO] may require him/her to provide such information about his/her whereabouts in that period as it deems necessary and proportionate in order to conduct Testing upon him/her, up to and including information equivalent to the Whereabouts Filings that an Athlete would have to make in accordance with Annex I to the International Standard for Testing and Investigations if he/she were in a Registered Testing Pool.

Challenge 2: Lack of and non-educated Staff

- An appropriate training program for each position within the workforce team, tailoring sessions so that each position is clear on his/her role and responsibility had not been unertaken.
- Very few workshops had been undertaken. The LOC did not use the capacity of the NADO although they had available ressources and workforce
- No Face-to-face training, including practical, scenario-based training. Training was sparse and only based on theory.

Test Distribution Plan

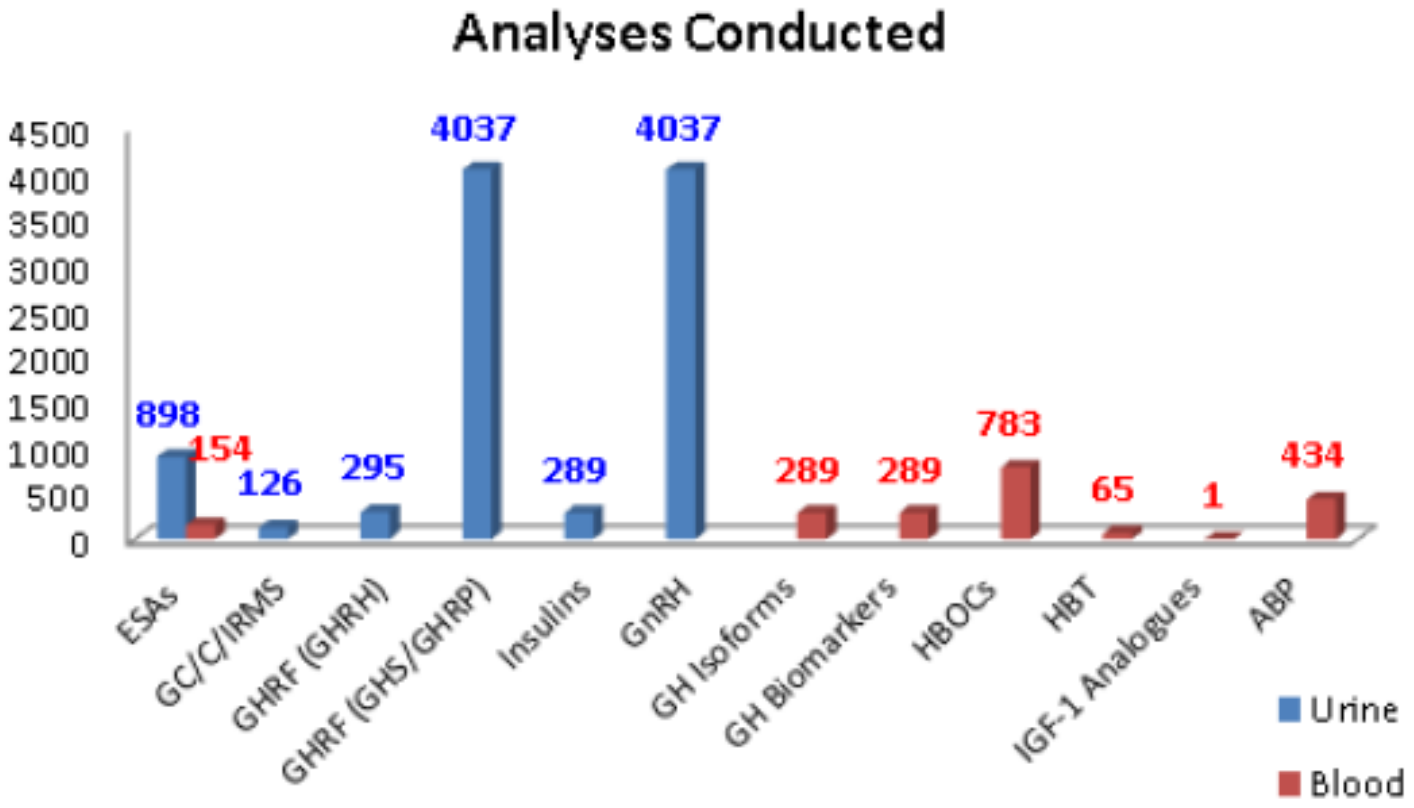
Technical Document for Sport Specific Analysis

- As mentioned previously, the *MEO* and/or *ADO* must consider the Minimum Levels of Analysis (MLAs) for testing of certain substances across all sports and disciplines attending the Major *Event*.

- It is recommended that the *MEO* focus TDSSA requirements on the *OOC* period under its jurisdiction, and consider all participating *Athletes* as *International-Level Athletes* subject to the TDSSA.

- Should a *MEO* wish to perform analysis at a lower level than that dictated by the TDSSA, it must apply to *WADA* for a reduction (*Code* Article 6.4.2, ISTI Article 4.7.2) stating clearly why a reduction is deemed necessary.

Special Analyses



TDP was continously updated

The *MEO* should also build in contingency around additional tests that may arise due to:

- Intelligence received during the *Event (hot line or dedicated e-mail)*
- Unusual behavior by Athletes or Athlete Support Personnel
- Target tests for suspicious analysis reports and ABP (APMU)

Athlete's tests

Number of Athletes Tested (as reported in ADAMS)	Number	% of total of 11,303 athletes participating
Athletes tested once	2,611	23.10%
Athletes tested twice	527	4.66%
Athletes tested three times	81	0.72%
Athletes tested four times	13	0.1%
Athletes tested five times	4	0.04%
Athletes tested six times	1	-
Athletes tested (total) – from 137 countries	3,237	28.62%[1]

Re-Testing of 2008 and 2012 Samples

- Before Rio, the IOC retrieved from storage 840 samples that had been collected at the 2008 Beijing Games and 403 samples that had been collected at the 2012 London Games.
- Re-analyzed by the WADA-accredited laboratory in Lausanne using improved analytical techniques developed in the intervening period.
- As of the time of writing the IO report, that re-analysis had resulted in a reported 98 AAFs (53 from Beijing and 45 from London).
- The IOC reacted quickly by initiating disciplinary proceedings against the athletes concerned and provisionally suspending them from competition pending resolution of those proceedings.
- 41 athletes whose Beijing and/or London samples re-tested positive were on the original long list for the Rio Games.

Long-term Storage Strategy

In creating a *Sample* retention strategy, the *MEO* should consider:

1. Number of *Samples* from each *Event* to be stored;
2. Priority of sport/discipline *Samples* to be stored;
3. Timeframes for reviewing stored *Samples*;
4. Type(s) of analyses to be conducted.

Adverse Analytical Findings

13.2 AAFs and Outcomes From the Games Period as of 05 October 2016

	Sample Collection Date	Sport	Substance(s) Found	Athlete Gender	Test Type	Sample Type	Outcome
1	2016-07-31	Cycling	methoxy polyethylene glycol-epoetin beta (CERA)	M	OOC	Blood	ADRV upheld*
2	2016-07-31	Weightlifting	GC/C/IRMS result for 19-Norandrosterone consistent with an exogenous origin	M	OOC	Urine	ADRV upheld
3	2016-07-31	Cycling	methoxy polyethylene glycol-epoetin beta (CERA)	M	OOC	Urine	ADRV upheld*
4	2016-08-01	Athletics	methoxy polyethylene glycol-epoetin beta (CERA)	F	OOC	Blood	ADRV upheld**
5	2016-08-01	Athletics	methoxy polyethylene glycol-epoetin beta (CERA)	F	OOC	Urine	ADRV upheld**
6	2016-08-04	Cycling	methoxy polyethylene glycol-epoetin beta (CERA)	M	OOC	Blood	ADRV upheld*
7	2016-08-04	Cycling	methoxy polyethylene glycol-epoetin beta (CERA)	M	OOC	Urine	ADRV upheld*
8	2016-08-07	Weightlifting	GC/C/IRMS result with exogenous origin of testosterone and four other markers of the steroid profile	M	OOC	Urine	ADRV upheld
9	2016-08-07	Field Hockey	betamethasone	M	IC[a]	Urine	TUE
10	2016-08-08	Aquatics	hydrochlorothiazide	F	IC	Urine	ADRV upheld
11	2016-08-08	Shooting	methylphenidate	M	IC	Urine	TUE
12	2016-08-09	Weightlifting	Strychnine	M	IC	Urine	ADRV upheld
13	2016-08-09	Aquatics	prednisone; prednisolone	F	IC	Urine	TUE
14	2016-08-10	Aquatics	Amphetamine	M	IC	Urine	TUE
15	2016-08-11	Gymnastics	methylphenidate	F	IC	Urine	TUE***
16	2016-08-12	Weightlifting	GC/C/IRMS result with exogenous origin of testosterone and four other markers of the steroid profile	M	IC	Urine	Case pending
17	2016-08-12	Aquatics	Terbutaline	F	IC	Urine	TUE
18	2016-08-12	Athletics	dexamethasone; triamcinolone acetonide	M	IC	Urine	TUE
19	2016-08-14	Gymnastics	methylphenidate	F	IC	Urine	TUE***
20	2016-08-14	Aquatics	Terbutaline	F	IC	Urine	TUE
21	2016-08-14	Aquatics	Terbutaline	F	IC	Urine	TUE
22	2016-08-15	Gymnastics	methylphenidate	F	IC	Urine	TUE***
23	2016-08-16	Gymnastics	methylphenidate	F	IC	Urine	TUE***
24	2016-08-17	Modern Pentathlon	hydrochlorothiazide	F	OOC	Urine	Case pending ****
25	2016-08-18	Triathlon	Prednisolone	M	IC	Urine	TUE
26	2016-08-19	Modern Pentathlon	hydrochlorothiazide	F	IC	Urine	Case pending ****
27	2016-08-20	Basketball	Amphetamine	F	IC	Urine	TUE
28	2016-08-21	Boxing	tuaminoheptane	M	IC	Urine	Case pending

* Entries marked * involve the same cyclist.

** Entries marked ** involve the same track and field athlete.

*** Entries marked *** involve the same gymnast.

**** Entries marked **** involve the same modern pentathlon athlete

Practical Considerations for MEO (1)

1. Base you Test Distribution Plan on a Risk Assessment. Peak number of *Samples* to be collected and the variability of tests in each venue between preliminary rounds and final *Competitions* should be considered.
2. *OOC testing r*equires early start times and long daily shifts.
3. Consider carefully the number of venues, Doping Control Stations and processing rooms.
4. Number of daily shifts required to fulfill *Testing* obligations.
5. Number of days off Sample Collection Personal will be given during multi-day *Events* (e.g. after every 5 days worked, SCP receive 2 days off).
6. If *ABP blood is collected it requires* two-hour wait after competition.
7. If the Doping Control Station will remain open at all times to act as a deterrent to *Athletes* or will close when tests are not planned.

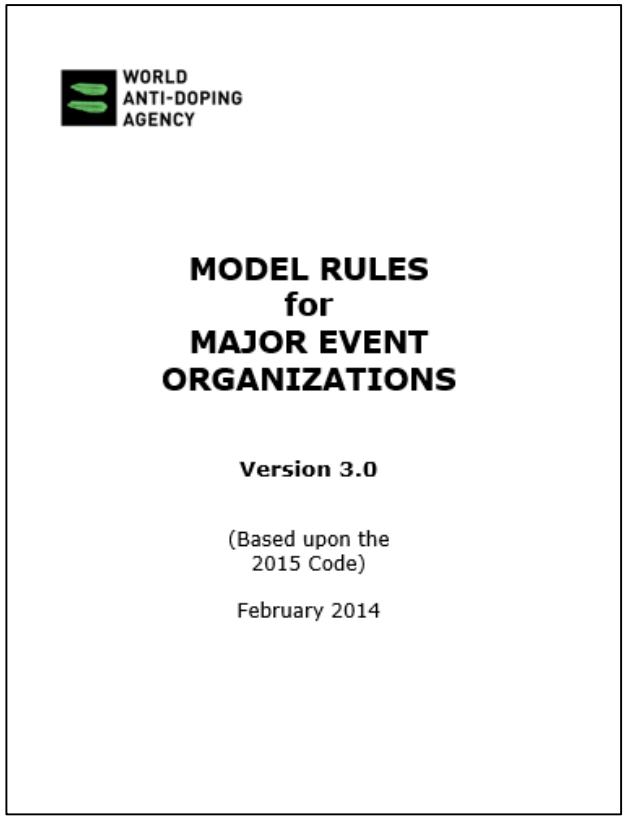
Practical Considerations for MEO (2)

1. The LOC should also consider any local factors that will influence the modelling process (infrastructure, way of living etc.)
2. Unknown nature of *Doping Control,* particularly the length of time it may take *Athletes* to provide their *Samples*. Sports with weight limits often see *Athletes* dehydrate to make a certain weight, impairing their ability to provide a urine *Sample* in a timely fashion. This will effect shift length and SCP fatigue.
3. Geographical layout of venues and the distances from accommodation to the venues must be considered. If SCP are travelling for long periods, then this time may be considered part of their shift length.
4. Available transport for SCP, particularly late at night, will effect the modelling process and will impact on other areas (e.g. dedicated transport or local accommodation provisions).
5. Language skills required for SCP, and the need to recruit international SCP or provide individuals to act as volunteers.
6. Volunteer drop out should be built into plans
7. Flexibility should be built in, e.g. an *Athlete* requires *Target Testing* for blood in a venue where blood *Testing* is not scoped.

Outsourcing Possibilities

- Transportation of *Samples* to the Laboratory via a courier company or the *NADO's* system.
- Hiring of BCOs through a reputable phlebotomy agency.
- Contracting of expert *Sample Collection* services (where no *NADO* with sufficient resources exists).

Supporting Information



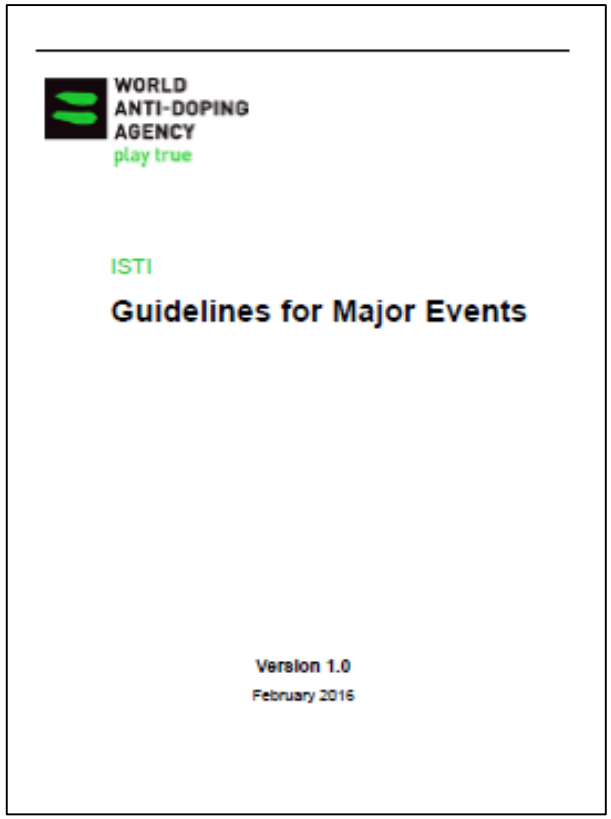
WORLD ANTI-DOPING AGENCY

MODEL RULES for MAJOR EVENT ORGANIZATIONS

Version 3.0

(Based upon the 2015 Code)

February 2014



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Guidelines for Major Events

Version 1.0

February 2016

Thank you for your attention!