

International
Paralympic Committee



Anti-Doping Updates in Paralympic Sport

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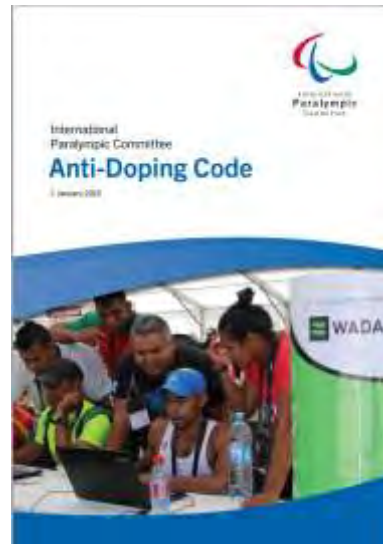
IPC Anti-Doping Committee Standing Member

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Important Resources



Dietary Supplements

- **REALIZE** there are safety issues with dietary supplements.
- **RECOGNIZE** risk when you see it.
- **REDUCE** your risk of testing positive and experiencing health problems by taking concrete steps.



Supplement

411[®]

Of the supplements USADA tested in collaboration with the DoD:





Catheters – Glycerol-based lubricants

- Glycerol is a prohibited substance
 - Unintentional positive tests resulting from glycerol-based lubricants
 - Updated IPC Position Statement On the Use of Catheters in Doping Control in January 2015
 - Glycerol thresholds recently increased by WADA (Kelly, 2013)
 - Consider alternatives which do not include the use of glycerol
-

Intravenous Infusions



PROHIBITED*



All Infusions & Injections

OVER 



50 Milliliters

PER 

Per Six Hour Period

NOT PROHIBITED



Infusions & Injections

UNDER 



50 Milliliters

& 

NOT on the Prohibited List

**Exceptions for emergency situations, check the WADA Prohibited List for details.*

The Present and Future of the Athlete Biological Passport



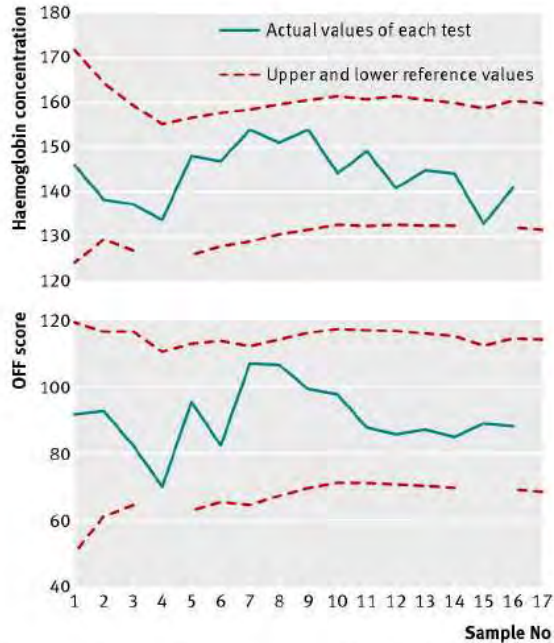
Module	BioMarkers	Status
Haematological	Hb, Ret%, Red Blood Cell Indices	2009
Steroidal	Testosterone (T), T/E, A/T, A/Etio,...	2014
Endocrine	Growth Factors (IGF-1, PIIP...)	2017?
-Omics	Genomics, proteomics, ...	?

Source: WADA

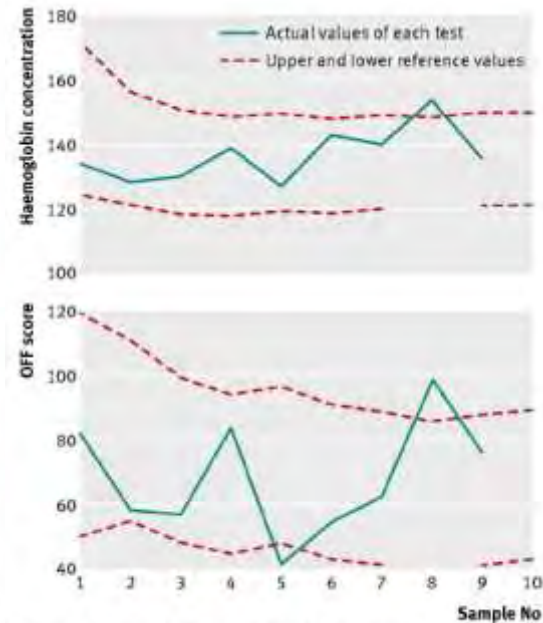
Athlete Biological Passport



BMJ 2012;344:e2077 doi: 10.1136/bmj.e2077 (Published 22 May 2012)

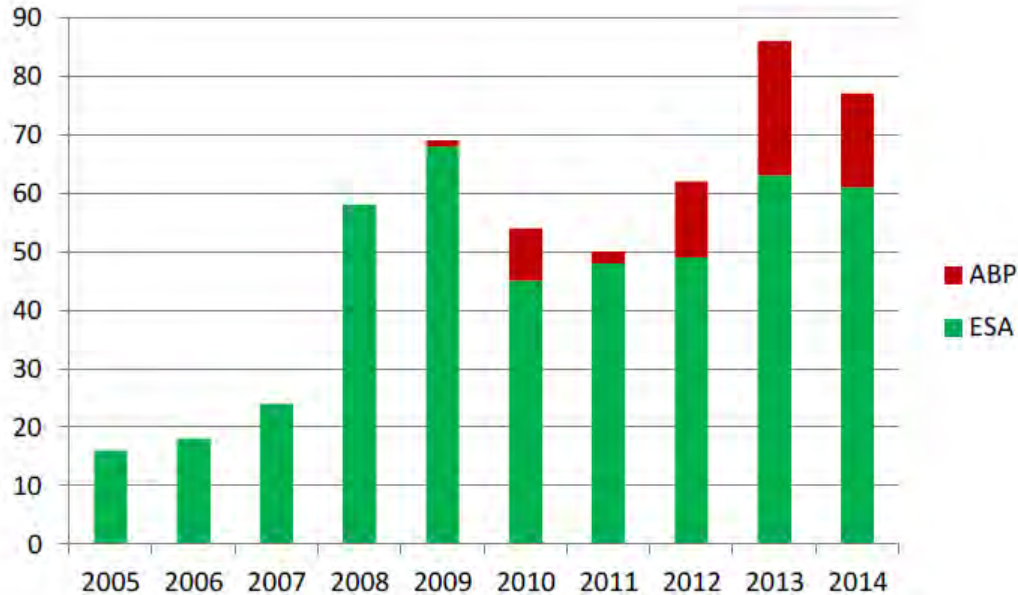


Normal haematological profile of an athlete



Profile of an athlete convicted of doping

Number of Blood Doping Cases since 2005



Source: WADA

Future of Anti-Doping



Dried Blood Spots & Oral Fluid = Less Invasive Sample Collection





Important Reminders

- Health professionals are key players in protecting clean sport
 - Awareness of anti-doping rules, athlete's rights and responsibilities is critical
 - Work together with athletes and their medical support staff to be knowledgeable on anti-doping matters
 - Act as an athlete representative in the doping control sample collection process
 - Ask questions
 - Encourage clean sport by acting a positive role model
-



Health Professional Anti-Doping Education



- <https://www.wada-ama.org/en/resources/education-and-awareness/sport-physicians-tool-kit-online-version>
- <https://med.stanford.edu/cme/courses/online/USADA.html>



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Obrigado!