

# 2020 TESTING FIGURES REPORT QUESTIONS AND ANSWERS

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## DEFINITIONS

### 1. What is an Adverse Analytical Finding (AAF)?

An AAF is a report from a [WADA-accredited Laboratory](#) or other [WADA-approved Laboratory](#) that, consistent with the [International Standard for Laboratories](#) (ISL) and related Technical Documents, identifies in a sample the presence of a Prohibited Substance or its metabolites or markers (including elevated quantities of endogenous substances) or evidence of the use of a Prohibited Method.

### 2. What is an Atypical Finding (ATF)?

An ATF is a report from a WADA-accredited Laboratory or other WADA-approved Laboratory, which requires further investigation, as provided by the ISL or related Technical Documents, prior to the determination of an AAF.

### 3. What is an Anti-Doping Organization (ADO)?

An ADO is a [Signatory](#) to the [World Anti-Doping Code](#) (Code) that is responsible for adopting rules for initiating, implementing or enforcing any part of the Doping Control process. This includes, for example, the International Olympic Committee (IOC), the International Paralympic Committee (IPC), other Major Event Organizations (MEOs) that conduct testing at their events, International Federations (IFs), and National Anti-Doping Organizations (NADOs).

### 4. What is a Testing Authority (TA)?

A TA is the organization that has authorized a particular sample collection, whether:

- An ADO; or
- Another organization conducting testing pursuant to the authority of, and in accordance with, the rules of the ADO (for example, a National Federation that is a member of an IF).

### 5. What is ADAMS?

ADAMS (Anti-Doping Administration and Management System) is a web-based database management tool for data entry, storage, sharing, and reporting designed to assist stakeholders and WADA in their anti-doping operations in line with data protection legislation.

### 6. What is the Athlete Biological Passport (ABP)?

The fundamental principle of the ABP is to monitor selected variables (‘biomarkers of doping’) over time that indirectly reveal the effect of doping, as opposed to the traditional direct detection of doping by analytical doping controls.

# 2020 TESTING FIGURES REPORT QUESTIONS AND ANSWERS

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## ABOUT THE REPORT

### 7. What does the 2020 Testing Figures Report represent?

The 2020 Testing Figures Report (2020 Report) is a summary of all doping control samples analyzed and reported by 26 WADA-accredited Laboratories and three WADA-approved Laboratories for the ABP in 2020. This includes all testing conducted worldwide by Signatories to the Code – in- and out-of-competition for urine; blood and ABP blood data; and the analytical results of such analysis – including AAFs and ATFs.

The 2020 Report offers a comprehensive reflection of global anti-doping testing figures, which allows organizations to observe patterns of doping control programs by sports, organizations, substances and Laboratories, and as a result, adapt their anti-doping strategies accordingly.

The 2020 Report represents the sixth set of global testing data since the revised Code came into effect on 1 January 2015.

### 8. What figures are included in the 2020 Report?

The 2020 Report includes all analyses reported into ADAMS by the WADA-accredited Laboratories and the Laboratories that were approved by WADA to conduct blood testing exclusively for the purposes of the ABP ('Approved Laboratories').

The figures of urine and blood samples (not including ABP samples) are compiled according to the 'Sample Collection Date' (and not the sample 'Reception Date' by the Laboratory) as a result of efforts made by the Laboratories to incorporate the collection date into their ADAMS reporting. It is considered that this will allow TAs to more closely align the ADAMS data with their annual testing programs. These figures are associated with specified sport categories. The figures of ABP samples are still compiled according to the "Reception Date" by the Laboratory as the sample collection date is not a mandatory reporting parameter for the ABP for the Laboratories.

### 9. Did the implementation of the 2015 Code and 2017 International Standard for Testing & Investigations (ISTI) by ADOs [including the Technical Document for Sport Specific Analysis (TDSSA)], impact the results?

Yes.

The [TDSSA](#) is a mandatory, level two document that came into effect on 1 January 2015.

The TDSSA is intended to ensure that Prohibited Substances within the scope of the TDSSA, which are deemed to be at risk of abuse in certain sports/disciplines, are subject to an appropriate and consistent Minimum Level of Analysis (MLA) by all ADOs. Under the TDSSA, ADOs are required to conduct an MLA for the following three groups of Prohibited Substances: Erythropoietin Stimulating Agents (ESAs), Growth Hormone (GH) and GH Releasing Factors (GHRFs).

## 2020 TESTING FIGURES REPORT QUESTIONS AND ANSWERS

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The findings of the 2020 Report highlight that there was a significant decrease in testing by ADOs when compared to 2019, due to the impact of the COVID-19 pandemic including:

- A decrease in the overall number of Anti-Doping samples (Urine, Blood, Blood ABP) analyzed;
- A decrease in ESA testing (urine plus blood), GH testing and GHRF testing.

For more details, please refer to the [Executive Summary](#).

### 2020 REPORT VERSUS 2019 REPORT

#### 10. How does the data from the 2020 Report compare to the 2019 Report?

The COVID-19 pandemic had significantly impacted sporting competitions in 2020 and thus the opportunity for ADOs to collect samples was more focused on out-of-competition testing. Consequently, all measures of the Anti-Doping Testing Figures Reports were affected:

Based on the ADAMS results reported by the Laboratories, there was a 46% decrease in the number of overall urine and (non-ABP) blood doping control samples. The number of urine samples decreased from 278,047 to 138,818 while the number of blood samples decreased from 25,339 to 10,940 between 2019 and 2020. The ABP blood (passport) samples analyzed in WADA-accredited and WADA-approved Laboratories decreased 38% between 2019 and 2020 ([2020 Laboratory Report Executive Summary—Third Table](#)).

All WADA-accredited Laboratories had a decrease in the total number of overall samples recorded in 2020 compared to 2019.

In terms of AAFs, the percentage of AAFs reported in ADAMS decreased: 0.97% in 2019 (2,701 AAFs from 278,047 samples) to 0.67% in 2020 (1,009 AAFs from 149,758 samples).

In addition, the percentage of Total Findings (AAFs and ATFs - combined) decreased from 1.07% in 2019 to 0.82% in 2020.

There was a decrease in the percentage of AAF findings from the gas chromatography combustion isotope ratio mass spectrometry (GC/C/IRMS) test applied to the markers of the steroid profile: 2.57% in 2019 (184 AAFs from 5,231 tests) to 1.31% in 2020 (47 AAFs from 3,588 tests). Furthermore, there was one AAF finding from the application of the GH test to blood samples: 0 AAFs in 2017, 2 AAFs in 2018, 6 AAFs in 2019 and 1 AAF in 2020.

All 12 drug classes saw a decrease in the number of Prohibited Substances reported as AAFs.

There was a decrease in the overall number of non-ABP blood samples analyzed: 25,339 in 2019 and 10,940 in 2020.

#### 11. Was the 2020 data collected differently than in 2019?

## 2020 TESTING FIGURES REPORT QUESTIONS AND ANSWERS

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No, the 2020 data was collected using ADAMS, as has been the case since 2012.

The increased use of ADAMS by ADOs to record Doping Control Form (DCF) information into ADAMS has allowed more precise information to be compiled for these Reports. Data related to the tests, such as TA, sport and discipline, were extracted from the DCF where the information was available.

Aggregated data which is not reported into ADAMS (predominantly from professional leagues and universities in North America) is no longer included in the report as in previous years. This reflects the increased focus on Signatory results for WADA, the Code and International Standards. Since 2012, the Laboratories have reported negative data in addition to the AAFs and ATFs reported. This has allowed all data - negatives as well as AAFs and ATFs - to be compiled from ADAMS. The details and structure of the data in ADAMS are the reason that the 2012 to 2020 Reports offer a much more thorough view of anti-doping data than the Reports prior to 2012.

As an example, the use of ADAMS has allowed the Testing Figures Reports to differentiate the testing figures by discipline, TA, and in- and out-of-competition testing. This offers stakeholders a more detailed view of the worldwide fight for the protection of clean sport.

### **12. Are there any differences in format between the 2020 and 2019 Reports?**

The two Reports are structurally similar.

For the fifth year, the 2020 Report includes the number of samples analyzed by the GC/C/IRMS method on 19-norandrosterone and boldenone as per the Technical Document TD IRMS. Since the 2019 Report, the number of samples analyzed by the GC/C/IRMS method on formestane is also included. ADAMS has continued to allow the reporting of GHRFs, GnRH, Insulin, IGF-I, and hGH biomarkers, when conducted in a standardized way. WADA has been encouraging ADOs to conduct more comprehensive testing in line with the TDSSA and, in the 2020 Report, the number of these analyses is included.

The 2020 Report, as the 2019 Report, includes testing data related to Gender ([See TA Report](#)).

The 2020 Report, as the 2019 Report, includes enhanced data on the countries involved in Regional Anti-Doping Organization (RADO) testing in 2020 ([See TA Report](#)).

#### Categorization of Sport Disciplines

The sports continue to be compiled in the following eight major categories:

1. ASOIF (Association of Summer Olympic International Sports Federations)
2. AIOWF (Association of International Olympic Winter Sports Federations)
3. ARISF (Association of IOC Recognized International Sports Federations)
4. AIMS (Alliance of Independent Recognized Members of Sport)
5. IPC (International Paralympic Committee)
6. Sports for Athletes with an Impairment
7. Other Sports – Code Signatories

## 2020 TESTING FIGURES REPORT QUESTIONS AND ANSWERS

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### 8. Other Sports

The sports data is further differentiated based on the disciplines that are included within the associated IFs' authority and the structure provided by the sport-discipline codes in ADAMS (as determined by the IF).

In addition, the sport figures can differentiate sports within the Olympic program that emanate from university sport disciplines, e.g. those disciplines that are not likely to be under the authority of the relevant IF. This provides more accurate data than previously with respect to the relevant IFs.

### RELATIONSHIP TO OTHER WADA REPORTS

#### 13. How does this 2020 Report differ from the Anti-Doping Rule Violations (ADRVs) Reports?

The 2020 Report highlights the results of analyses performed by WADA-accredited Laboratories on urine and blood samples for 2020, as reported into ADAMS. It does not illustrate statistics on whether the AAFs or ATFs reported became ADRV.

The data in the 2020 Report may not correspond with the number of ADRVs reported by ADOs because all reported results are subject to the full results management process conducted by ADOs. This includes matching results with Therapeutic Use Exemptions (TUEs) – through which the use of a banned substance can be approved by an ADO for legitimate medical reasons – longitudinal studies and ensuring that sample collection and analysis were conducted in accordance with the relevant International Standards.

In simple terms, not all AAFs or ATFs lead to ADRVs.

Meanwhile, the [2019 ADRV Report](#), issued earlier in December 2021, illustrates the incidence of doping in global sport during 2019. The ADRV Report shows both analytical and non-analytical ADRVs (or sanctions, as they are commonly known). The Report breaks down sanctions by sport, TA and nationality.

The reason the ADRV Report which was published in 2021 includes 2019 statistics while this Testing Figures Report includes 2020 statistics, is because for ADRVs, the results management process can take a long time from the first signs of a potential violation through to the end of a case. Cases can take time to be resolved before they can be adequately prepared and published.

The 2020 Testing Figures Report, and the 2020 ADRV Report that will be released in 2022, will provide powerful data, which will help ADOs gain a better understanding of global doping patterns. This will help them adapt their strategies to protect clean athletes further.

#### 14. Why doesn't ADAMS itself illustrate the number of ADRVs or anti-doping sanctions?

## 2020 TESTING FIGURES REPORT QUESTIONS AND ANSWERS

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ADAMS cannot provide a full and accurate picture of the number of ADRVs or anti-doping sanctions as not all ADOs are using ADAMS.

ADAMS has the capability to record ADRVs by Results Management Authorities. ADAMS also has the capability to record sample collection information and athlete profiles all within a secure and Code-compliant environment. This information is not reflected in the 2020 Report because the figures were compiled with data entered by the WADA-accredited Laboratories and not the ADOs themselves.

All these functions are available to ADOs at no cost. With the full adoption of ADAMS by ADOs, the sporting community would have a more transparent means for tracking results from collection to sanction, while respecting confidentiality. In addition, a complete analysis of data would be available, including linking AAFs to TUEs and sanctioned cases.

### THE DATA

#### 15. How many TAs are included?

The 2020 Report includes data from 277 different TAs, a decrease over the 399 from 2019 which is primarily due to a decrease in National and Regional Sport Federations which conduct testing as the TA. The Report continues to include a number of National Federations (NFs) which conduct testing although NFs themselves are not Signatories to the Code and therefore are not entitled to authorize testing independently (although the rules of some NADOs and IFs may delegate testing authority to these bodies). As a result, tests attributed to NFs may in some instances be part of NADO or IF programs.

NADOs continue to be responsible for a significant portion of worldwide anti-doping efforts, having been the responsible TAs for 77% of the samples analyzed in 2020. IFs, meanwhile, were responsible for over 18% of samples analyzed and reported into ADAMS (comprising testing conducted by AIMS, ARISF, AOIWF and ASOIF-member organizations as well as other Code Signatories).

#### 16. Which disciplines and sports organizations are included within the sports listed?

The sports and disciplines listed in the 2020 Report are reported by the TAs as they were designated on the DCF information entered into ADAMS (or, in the absence of a DCF in ADAMS, as designated on the DCF received and reported by the Laboratories into ADAMS) relating to the sample at the time of its collection. In addition, data from the DCFs entered into ADAMS was also utilized to confirm and assign the sport and disciplines. The sport codes (names) in ADAMS ensure that all Laboratories are reporting sports in a more standardized manner. The 2020 Report by sport shows improvements in the reporting of specified disciplines in each sport instead of simply the sport.

IFs are encouraged to report any corrections or updates in relation to sports and disciplines under their authority to the [ADAMS team](#).

## **2020 TESTING FIGURES REPORT QUESTIONS AND ANSWERS**

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In addition, while some NFs or Continental Sport Confederations conduct testing under the delegation of their relevant IFs, others initiate testing independently of their IF. In the latter case, the test does not appear in the IF statistics, but rather in the Confederation testing statistics provided they were noted as the TA.

### **17. Do Laboratories have to analyze a minimum number of samples?**

Yes.

The ISL requires that a WADA-accredited Laboratory performs analysis on a minimum of 3,000 (including urine, blood and ABP) samples per year. Any Laboratory which is accredited for the entire year and does not meet this figure is monitored closely by WADA. In some cases, Laboratory suspensions may have been the reason for the reduced total in sample analysis. The impact of the pandemic will certainly be taken into account when assessing the Laboratories' compliance to this ISL requirement.

### **18. Why is there such a large gap between the number of AAFs for in-competition as opposed to out-of-competition?**

In prior years, more samples were collected in-competition than out-of-competition. However, the 2020 Report illustrates a higher number of out-of-competition samples were collected in 2020. In ADAMS, a total of 56,886 urine and non-ABP blood samples were collected in-competition (equating to 38%), while 92,872 samples were collected out-of-competition (equating to 62%). The relative number of out-of-competition tests in 2019 was 48%. In 2020, the impact of the pandemic reduced the number of sporting competitions in 2020 and thus out-of-competition collections were the predominant Sample type.

By its very nature, the in-competition menu contains more drug classes and therefore more Prohibited Substances are subject to detection compared to the out-of-competition menu. This is particularly the case with substances such as stimulants, cannabinoids and glucocorticoids, which are typically reported in greater numbers because they are only prohibited in-competition.

## **OTHER QUESTIONS**

### **19. Is the use of ADAMS mandatory?**

On 12 May 2016, WADA's Foundation Board decided to make it a mandatory requirement for Code Signatory ADOs to enter all DCFs and TUEs into ADAMS no later than 15 business days after sample collection or receipt of a TUE decision. This requirement came into effect on 1 June 2016.

## **2020 TESTING FIGURES REPORT QUESTIONS AND ANSWERS**

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### **20. Does every single sample/result in the 2020 Report represent an individual athlete?**

No.

One athlete may be associated with multiple samples. Several samples may be taken from one athlete during the same sample collection session. AAFs and ATFs in the 2020 Report may also correspond to multiple findings on the same athlete, or measurements performed on the same athlete, such as through the ABP haematological and steroidal modules, over a period of time.

### **21. How many TAs conducted ABP blood testing?**

There were 90 unique TAs that contributed to the ABP testing figures reported into ADAMS in 2020 (compared to 102 TAs that contributed to the 2019 ABP figures). The number of IFs incorporating ABP blood testing is similar from 25 in 2019 to 24 in 2020, while the number of NADOs has decreased slightly in 2020 (46 in 2016 to 53 in 2017, 59 in 2018, 68 in 2019 to 60 in 2020). In 2020, there were three Laboratories approved by WADA to analyze blood samples uniquely for the ABP that analyzed and reported results into ADAMS. The total number of blood samples collected and analyzed for the ABP decreased from 36,401 in 2019 to 22,666 in 2020 (a % decrease).

### **22. Why are the ABP samples reported separately from other blood samples?**

Blood samples are collected with the typical 'A' and 'B' samples to report AAFs (for hGH, EPO, etc.) while ABP samples can be collected as single samples in order to measure an athlete's specified blood variables, which are then compared to his or her previous data over time. This establishes an athlete biological profile, and therefore offers an indirect method that can indicate doping or help target traditional testing.