



Cansford Laboratories

Pioneering drug and alcohol testing

Social Workers:

What you need to know about testing for steroids.

How we detect steroid use in individuals and the science behind the hair testing process.

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1. Introduction

It's no secret that the misuse of anabolic steroids has rocketed over the past few years ...

... whether individuals use it to enhance their bodies or to improve sporting performance, we've all seen the images online, on TV, in films and splashed across social media. Maybe you've had cases yourself.

In this guide we answer some of the most common questions asked by social workers; what you need to look out for in your clients and service users, how we detect steroid use in individuals and the science behind the hair testing process.

We understand how important it is for you to have reliable and accurate information when building case histories or files.

They need to be strong enough to withstand scrutiny and cross-examination in court and hearings, which ultimately get the right result to protect children and vulnerable families.

"We understand how important it is for you to have reliable and accurate information when building case histories or files"



2. Setting the scene: bodybuilders, gym bunnies and social media.

Social media, exposure to body image influencers (such as the popularity of the Love Island look), and a normalisation of injecting practices. Being fashionable and beautiful. Looking fit and healthy, and promoting wellness.

These are just a few of the reasons behind the explosion of illegal synthetic hormones and image-and-performance-enhancing-drugs (IPEDs) in recent years* according to a fascinating and equally revealing report published by the UK Anti-Doping agency UKAD.

As social workers, you may have come across several cases where the use of steroids is prevalent and holds some influence in the final decision of a family court hearing. It's no surprise. Figures for steroids have been steadily climbing for years, but trends are indicating we may be about to see an explosion in use.

Council-run needle exchanges in England and Wales have reported a huge surge in contact with users of IPEDs. This is particularly high in Wales; in one recorded instance a boy aged 14 years old.



Social Workers:

What you need to know about testing for steroids



You might have seen the case publicised by the CPS where a drugs ring illegally transported around 15,000kg of anabolic steroids – worth £11.9 million – into the UK over a six-year period. Or another case where a body builder imported raw materials bought via the dark web, in order to make and sell his own steroid compounds for his new business. Although a Class C substance, it's not unlawful to possess anabolic steroids for personal use. Possession of a Class C controlled substance can by law, carry a penalty of up to two years custody, anabolic steroids are an exemption to this general rule.

Use of steroids has also been described as a 'emerging epidemic' with people ready to 'boost their tans' by the Local Government Association – and although this data is now four years old – steroid use shows no signs of abating.

The first steroid was created in 1931 by extracting it from 700 litres of urine.

 Image and performance enhancing drugs final report 2019 – UKAD



3. Steroid detection and side effects

What you need to be aware of (and it's not always obvious):

Male and female pattern baldness/hair loss	Dependence, addiction	
Acne	Depression	
Mood changes. Anger and violence ('roid rage)	Erectile dysfunction	
Extra growth/excess body hair	Infertility	
Gynaecomastia (man boobs)	Decreased Libido	
Genitourinary (shrinking of testicles)	Stunted bone or height growth (teenagers)	
Euphoria	Heart attack or stroke	
Hypertension – swelling in joints, feet, and hands	Paranoia, delusions	
HIV, Hepatitis B, C (injecting)	Heart arrhythmias	
Changes in or stop in the menstrual cycle	Deepened voice	

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4. What test do I choose?

A hair test is a reliable and accurate method of detecting use of steroids in the body over a long period of time, while a urine test is used to detect use 'in the moment'.

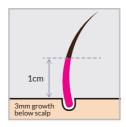
When a client or service user consumes steroids, the body breaks down the substances into metabolites. Drugs and metabolites circulate in the bloodstream and are then transferred into hair fibres on the scalp and elsewhere.

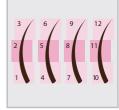
A hair sample similar to the width of a shoelace is taken from the head or body.

Hair typically grows at about one centimetre per month. When tested, each centimetre of hair therefore reflects one month's history of drug use (or non-use). This is why hair strand testing is able to provide such a large window of detection, assessing drug use as far back as six months.









Anabolic steroids can be taken orally, injected into muscles, or applied via a topical gel or cream to the skin. Doses can be 10 to 100 times higher than those prescribed to treat medical conditions.



5. Stats and facts about steroids:

Steroids are a Class C Controlled drug under the Misuse of Drugs Act 1971 Anabolic steroids are the most common type of image and performance enhancing drug*

There are almost 1 million regular steroid users in the UK – and the numbers are growing, according to the Guardian newspaper (2017)

Largest demographic use of steroids is 20 to 24-year-old males**

*UKAD – Status Report on IPEDs in the UK **IPED survey 2017 Common street (slang)
names for anabolic steroids
include Arnolds, Sterons,
Stedz, gym candy, pumpers,
'roids, stackers, weight
trainers, Vitamin S
and Juice S***

^{***}Urban Thesaurus



6. Testing for a hair sample and steroids

Cansford Laboratories has been testing individuals for anabolic steroid misuse since 2013, and while many labs choose urinalysis for this purpose, we instead test hair samples for the presence of such substances.

Hair testing offers numerous benefits over urinalysis. While a urine sample can tell if an individual has steroids in their system at that moment, hair testing will reveal trends in steroid misuse over a period of seven days to six months. This allows us to build a month-by-month picture of steroid use, establishing whether an individual's issues with steroids are worsening or becoming better.

Once the hair sample arrives at our laboratory, the donor cut-off (your client's hair sample) is cut into sections of one-centimetre length. Each hair strand is tested via LC-MS/MS, or Liquid Chromatography–Mass Spectrometry. When analysed by an expert, the cut-offs can prove substance use between seven days and a six-month period.



7. Accurate and almost impossible to cheat

As we've said, test results can also indicate the month in which a donor ingested a substance and can therefore be used to build a 'picture' of steroid use over time.

However, cheating a hair test is exceptionally difficult – and your clients need to know this.

While dyeing or bleaching hair – or using any other chemical treatments – may damage the outer sheath of an individual's hair, the sensitivity of our scientific instruments means we can still detect the remaining substances.

Should an individual's hair be completely unsuitable for testing (such as the aforementioned bleaching, shaving the hair off or having a bald scalp, quite common in male bodybuilders) we can still use body hair or fingernails to test for steroid usage.

Our scientists will take the condition of the hair into account to accurately report the findings.





8. Domestic abuse and steroids

Any potentially addictive substance which is used heavily by family members is of relevance for social care practitioners, especially when domestic abuse is involved.

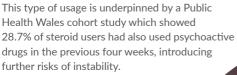
Research shows that substance misuse of any kind, including steroids taken mainly by males, is a major factor in over half of high-risk domestic abuse cases, something we're sure you are well aware of.

Steroids used with other substances

Having steroids linked to violent episodes and hallucinations present an especially compelling cause for concern.

We commonly test for the drug, but also a range of other accompanying substances, such as cocaine and other psychoactive drugs. "28.7% of steroid users had also used psychoactive drugs in the previous four weeks."

- Public Health Wales cohort study





9. Choosing your laboratory

Hair test results require expert interpretation in court, and when so much rides on the court outcome, it is essential you choose the right hair testing laboratory – and ask them questions:



Are they a genuine, established, and reputable company?



Do they carry out tests in the UK (not overseas)?



Do they comply to the Society of Hair Testing (SoHT) guidelines?



Do they have an ISO/IEC 17025 standard rating?



Do they have experience with chain of custody?



Do they have dedicated reporting scientists with experience as expert witnesses in family court?

"Top five factors when choosing the right lab: Proficiency, Speed, Cost, Accuracy, Accreditation."



10. Speed and accreditation

The time it takes to test a sample varies from laboratory to laboratory, from three working days to 30 days after the sample is received.

The cost of a hair test is more complicated and can be affected by factors including:



The number of substances being tested for

A longer period with multiple required testing points will be most expensive. Depending on the factors, a hair test can cost between £262 per section, and go to £500.



The window of detection being tested for

Of more importance is that the test is accurate, reliably conducted to professional standards and produces results that will hold up in a courtroom.



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11. Charity reports their highest ever domestic abuse contacts

In November 2020, the NSPCC charity responded to 1,053 contacts about domestic abuse – their highest ever level.

As time progresses, we are expecting to see more and more statistics emerge, particularly in relation to steroid abuse and domestic violence. We expect you may see a rise in your cases too

- if they aren't happening already. **Testosterone** molecule



12. Cafcass and the future

Delays in the system have also been mentioned by Cafcass, who recently announced adverse delays in England in relation to Domestic Abuse Perpetrator Programmes (DAPPs).

"We recognise how incredibly important it is for children and their families to receive the services they need without delay. The consequences of the pandemic and the essential need for the Domestic Abuse Perpetrator Programme to take place in-person has meant this hasn't always been possible.

"We are working with all involved in family justice to ensure that the people currently waiting to take part in the Domestic Abuse Perpetrator Programme are prioritised and that we have measures in place to ensure that waiting times are kept to a minimum and regularly reviewed for children and their families."

Cafcass Chief Executive Jacky Tiotto and Sir Andrew McFarlane, President of the Family Division. 12th May, 2021

By having a simple drug or alcohol test included in your case files, it can sometimes mean the difference between ongoing abuse, protecting vulnerable children and adults or the decision holding up in family court – or not.

... Plus major changes coming to family law

We are also about to see major changes to the world of family law, arguably some of the biggest changes for fifty years, with new protections and support in domestic abuse and divorce cases.



13. Conclusion

Steroid abuse is still growing despite the Covid-19 pandemic happening in 2020, into 2021 and beyond.

During lockdown/s, many individuals have turned to steroids and other substances in order to keep their body in shape, even though gyms and fitness centres have remained closed. Sales of gym equipment for use at home have rocketed.

Cansford Labs has also seen a marked increase in queries, calls and emails since the world has started to re-open, with requests from social workers requesting that their clients are tested for steroids and other accompanying substances.



Cansford Laboratories accreditation

Cansford Laboratories is proud to assist hundreds of social care professionals with their caseloads.

We are the only laboratory in the UK testing for steroids in hair, where 99% of the results are returned to you within three days or less.

We are members of the Society of Hair Testing (SoHT), and The International Association of Forensic Toxicologists (TIAFT.)

We are UKAS accredited for drugs and alcohol markers to ISO 17025:2017 standards.









For more information about fast, accurate drug and alcohol testing:

Call: 029 2054 0567 cansfordlabs.co.uk





