

## Anabolic Steroids

**AKA:** Anabolic Androgenic Steroids (AAS), Steroids, Performance Enhancing Drugs, *Juice*, *Roids*.

**Specific Products:** Many hundreds with a chemical name, Product name, *slang names*: testosterone propionate, *Prop*, *Test*. Enanthate, *Test*. Cypionate, *Cyp*, Sustanon, *Sust*, Nandrolone, Deca Durabolin, *Deca*, Primobolan, *Primo*, stanozolol, Winstrol, *Winny*, methandrostenolone, Dianabol, Trenbolone, Trenbol, *Tren*

**Other products:** Adjunct compounds including Human Chorionic Gonadotrophins (HCG), Proviron, Clomid, Arimidex, Tamoxifen. These are used to help manage side effects of Anabolic Steroids or restore natural function at the end of usage.

**DRUG CATEGORY:** Anabolic Steroids are chemically part of a family of drugs called **hormones**. From a drugs-work perspective they are grouped with other substances and variously referred to as Performance Enhancing Drugs, Performance and Image Enhancing Drugs, Human Enhancement Drugs and Sports Drugs.

**SOURCE:** Key anabolic steroids are made synthetically. Some are made for legitimate medical use and are prescribed. They may be used to treat wasting illnesses, dwarfism, gender reassignment and other conditions. Others are made to pharmaceutical standards and are then sold on the grey market for body building. Others are made in "Underground Labs" (UG) around the world and sold for their use as performance drugs.

Most of the Anabolic Steroids used in the UK are manufactured abroad and imported in the UK. Some are purchased on-line; others are purchased abroad by users and imported back in to the UK for personal use. The rest are illegally imported in to the UK and then sold on by suppliers, especially through Gym circles.

**QUALITY:** Genuine pharmacy-grade products should be sterile, of known strength and quality. However faking of pharma-grade products is widespread. Counterfeits and underground lab products may vary widely in composition, strength and may not be sterile. Analysis routinely finds products on sale that contain no active product, is under (or over) dosed, or contains a different drug to that stated. As with any other non-medical compound, the quality of product is an inevitable risk.

**APPEARANCE:** Raw steroids are supplied as white powder, though they are never sold at a street level in this form.

The powder is then made up in to preparations – tablets for oral consumption, and oil (or water-based) preparations for injection.



Products intended for injection will generally come in a glass ampoule or vial. These may have a snap-off top or a rubber stopper. Vials will generally have an adhesive label or be etched with details, and distributed in printed boxes.



Some of the tablet forms may come in foil packaging, in printed boxes like "normal" medicines.

Some oral steroids will be supplied in medicine-style packaging with foil-blister tablets and product leaflets. However, other tablets may well be sold simply in plastic bags, with no additional packaging to assist with identification.



**COSTS:** Cost is hugely variable, depending on the type of steroid bought, the quality and the quantity. Single tablets are ineffective - so people will tend to use a combination of drugs over a period of time (a cycle.) A simple, short cycle that may only last a few weeks and using basic, easily sourced compounds, could cost less than £100. Longer cycles using larger combinations could cost many times this. The cost of special diets and additional compounds can make things more expensive.

**METHODS OF USE:** Some Anabolic Steroids are sold in tablet form, and are intended for oral use. However, this route tends to be more liver-toxic and so is not popular with some users. Other anabolic steroids come in oil-based (or less-commonly water-based) preparations for intramuscular injection. They are exclusively used through this route and injection in to a vein would be highly dangerous, risking an oil embolism.

**PATTERNS OF USE:** Depending on knowledge, experience, resources, and the latest wisdom doing the rounds, people will use various combinations of anabolic steroids over periods of time. Often combinations will be taken at the same time - "stacking," and over a number of weeks different substances will be used at different points - a "cycle."

At the end of a cycle, experienced users will taper their use and may use additional compounds to restore normal function - "post-cycle treatment," then rest for a number of weeks or longer, before considering another cycle.

For some people, cycles may be very infrequent, while others may undertake two or three cycles a year. A cycle could be as short as 6-8 weeks, but 12-16 weeks is more typical.

Longer cycles and higher doses, with less time off between cycles increases risk of side effects.

**MECHANISM of ACTION:** The main product groups mimic the effect of the sex hormone testosterone. Using this at significant doses puts the user in to an anabolic state – where muscle cells are instructed to take protein and convert it in to muscle. The high levels of hormone, combined with a protein-rich diet and correct exercise and rest can result in rapid and significant muscular development.

**EFFECTS:** Unlike most other drugs, Anabolic Steroids don't provide a sudden change of mental or physical state, so don't provide a "rush" in the classic sense. They help users develop larger, stronger muscles more quickly when combined with correct diet and training. However, they do also provide a psychological lift - increased libido, drive, feelings of confidence and assertiveness.

**INDICATORS of USE:** Steroid use is not always readily identified without testing or screening as successful "natural" training can result in significant muscular development and be misconstrued as steroid use. Heavy training and use of dietary supplements is not an indicator of steroid use.

Very rapid weight gain, especially if accompanied by changes in mood, increased acne, and bloating due to water retention could be indicators of steroid use.

**HEALTH IMPLICATIONS:** The use of Anabolic Steroids brings with it a large number of potential health risks, and these will vary according to the compounds being used, the quantity and route, and the age and gender of the user, and how many safety precautions they take.

With informed use, at lower doses, for shorter periods of time, risks can be significantly reduced.

Some Anabolic Steroids are C17-Alpha-Alkylated, which means that they have had their molecular structure changed to reduce metabolism by the liver. However, this makes the compounds more liver toxic and so heavy or sustained use of C17AA compounds increases the risk of serious liver damage.

In male users, the use of testosterone-based compounds can in turn lead to interruption of the user's own testosterone production. This can mean that when use of anabolic steroids stops, the person has low levels of testosterone,

and may experience testicular shrinkage, reduced libido, impotence, depression and loss of muscular development.

Male users using some anabolic steroids may experience symptoms of gynecomastia - development of breast tissue - as the excess of testosterone in the body is converted in to the hormone oestrogen. Through the careful use of post cycle treatment and oestrogen-inhibitors, these risks can be reduced.

More generally, male users may be at risk of accelerated male-pattern balding, acne, water retention, kidney problems, high blood pressure, heart problems, damage to joints or ligaments, and increased aggression or mood swings.

Women who use anabolic steroids may experience some distinct and different problems including development of facial or chest hair, lowering of the voice, changes to jaw line and throat, reduction in breast tissue, over-development of the clitoris (clitoral hypertrophy), reduced or absent periods.

Young people who use steroids may experience premature sealing of the long bones which could result in restricted height. It may also interfere with the completion of pubescent development.

**LEGAL STATUS:** Class C: Schedule 4ii. Most anabolic steroids are in this category. This makes it a criminal offence to supply anabolic steroids without authority and this offence carries a maximum of 14 years.

No authority is required to possess anabolic steroids so possession without a prescription for personal use is not an offence. There used to be a requirement that such drugs were in a "medical form" but this requirement was removed in 2012, with the effect that both pharmacy grade and UG lab products can be possessed lawfully.

In 2012 additional requirements were introduced making it a requirement to be in "personal possession" at the time steroids were imported. This was intended to restrict the on-line importation of steroids. It is legal to import for personal use, but the user must physically import the drugs personally, making on-line importation illegal.

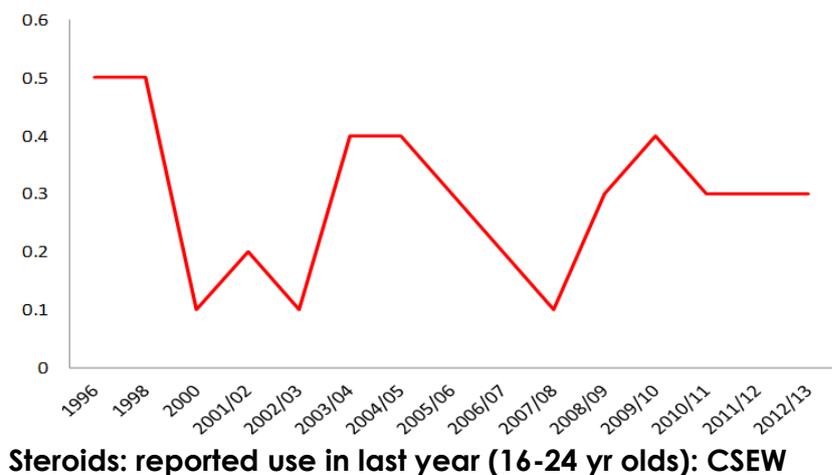
**TRENDS:** There is widespread agreement in the drugs field that there has been an increase in the number of people presenting to services, especially for needle exchange. It is likely that this is in part due to increased use of anabolic steroids, but may also be because some services are making more of an effort to engage with steroid users.

Increased interest in steroids, and easy access to both information and drugs via the internet has made steroids more readily available to a wider audience.

However, credible information about levels of steroid use in the UK is not easy to come by. Users rarely present for treatment, do not tend to commit trigger offences which would result in testing on arrest, and people are not tested for steroids anyway. Not all steroid users inject; of those that do not all use needle exchanges, and not all needle exchanges reliably record if steroids were being used.

Some steroid users are concerned that statistical evidence of growing steroid use will result in legal changes and so actively discourage use of needle exchange and of any surveys about steroid use.

The Crime Survey of England and Wales reports that around 0.3% of 16-24 year olds used anabolic steroids in the last year, but this is liable to be a significant underestimate.



### **OTHER INFORMATION:**

Steroid use has often been associated with athletics and competitive body builders. Increasingly, it is being used by people outside of these settings, including young people wanting to "bulk up," people in jobs where size and strength is helpful such as door staff, and men who feel the need to look more muscled.

Some steroid use may stem from underlying psychological issues such as body dysmorphia. Steroid use can lead to dependency - the elevation of performance and mood during use, the crash and loss of bulk afterwards, routine, ritual, companionship and lifestyle that comes with steroid use and training can make it a difficult habit to break.

Steroid use now represents a significant issue for a lot of drugs agencies. In 2014 guidance from NICE stressed the need for trained services for steroid users. While some areas have specialist services for steroid users, this is still the exception.