What are performance and image enhancing drugs?

Performance and image enhancing drugs (PIEDs) is a collective term used to describe those drugs which are used: to enhance sporting performance (e.g. improving strength and/or endurance); mask the use of performance-enhancing drugs to avoid drug testing; improve the body’s appearance (e.g. increasing muscle size and/or reducing body fat); and to manage the side effects of anabolic steroid use.

The substances included in this group are anabolic-androgenic steroids (AAS), human growth hormone (HGH), other reproductive hormones, diuretics, stimulants, beta-2 agonists (e.g. clenbuterol), creatine monohydrate and hormones such as insulin (IGF-1) and thyroxine. The most commonly used PIEDs are AAS.
What are the harms associated with PIED use?

In Australia, it is illegal to use AAS without a Doctor’s prescription. Many of the PIEDS are illegally made and can contain harmful, unknown substances that increase the negative side effects. Often, the black market steroids are designed for animals and some may not contain any anabolic steroids at all.

The most common side effects of AAS include:

- acne
- reduced size of testicles
- abnormal breast development (gynaecomastia) in men
- masculinisation in women and children
- abnormal liver function (elevated enzymes)
- increased risk of hardening of the arteries and blood vessels leading to decreased blood flow and increased risk of heart attack or stroke
- risk of injection-related problems such as injection site pain, abscesses, blood-borne virus infections and injection-related injuries
- changes in sex drive
- increased irritability and aggression
- impulsivity
- depression
- paranoia
- sleep disorders.

In general, there is very little information available on the side effects of non-medical use of PIEDs other than AAS.
Supplements

What are supplements?
Dietary supplements and complementary medicines may include: vitamins, minerals, herbal preparations/botanicals, amino acids, hormones, naturopathic, homeopathic preparations as well as various combinations of these and other substances. The range of products includes pills, capsules, powders, bars, chewables, drinks and teas. Many of these are used as nutritional supplements for an inadequate diet, weight loss/gain, and medical purposes. Some may use these with the expectation of increasing physical and or mental performance.

Potential Harms
It is important to note that many of these dietary supplements and complementary medicines are not required to undergo the rigorous scientific evaluation to determine their quality, safety and efficacy that is required for registered medicines. Defence Health Service personnel do not prescribe or supply dietary supplements or complementary medicines to ADF Personnel unless there is a clear clinical indication for doing so.

Vitamins/Minerals: these common supplements have been proven to be safe at recommended daily intake levels. High does of vitamins and minerals found in many over-the-counter supplements at best provide no benefit, and at worst can cause harmful effects. Fat-soluble vitamins (A,D,E,K) are particularly dangerous as they are stored by the body.

Herbal preparations (Botanicals): these are made of plant parts or oils and are used for a variety of effects, many medicinal. Herbs may contain potent chemicals that can be dangerous or cause side effects.

Fitness Supplements: due to the poor regulation of the supplement industry, members are constantly bombarded with marketing hype that exaggerates or completely invents unproven benefits arising from the use of supplements. The risks of the present frenzy of supplements include; money being wasted on products that simply do not work, a risk of being tested positive for a banned substance and negative effects to your health.

Unknown Origin: be wary of products purchased online. There are many counterfeits that are sold online and due to poor regulation, there is no guarantee of the quality or the authenticity of the advertised products. There have been recent cases of ADF members being hospitalised due to negative effects of fitness supplements purchased online.
Performance and image enhancing drugs prevalence

Although the use of PIEDs within elite sports receives a high level of media attention, there are a number of other groups of PIED users, including people who use for occupational reasons. In research conducted by Drug & Alcohol Services South Australia in 2008, it was reported that the groups of professionals that may be at risk of functional misuse of AAS and related substances include: police; door staff/ security personnel; bodyguards; fire fighters; and members of the Defence forces.

PIEDs and the ADF

The ADF has a zero tolerance policy on the use of illicit drugs by Defence members. This means that any member found to be using illicit drugs will be required to ‘show cause’ why they should be permitted to remain in the ADF. The ADF conducts random drug testing of ADF members. PIEDs remain detectable in urine for considerable time after use, so a person could return a positive test days sometimes weeks after they have used PIEDs.
Where to seek help

Your chain of command is a primary resource that can provide advice, referral and support. You can also contact your local on base Health Centre, Mental Health Professional, Chaplain or the Duty Officer/Officer of the Day for immediate assistance and referrals.

The ADF Mental Health All Hours Support Line (ASL) is a confidential telephone service for ADF members and their families available 24/7 on 1800 628 036 or if calling from overseas +61 2 9425 3878.

If you are away from base, or for out-of-hours assistance, you can call 1800 IMSICK to locate the nearest support.

Chaplains are connected to all units in Australia and can provide support and appropriate referrals.


The Portal is an online health information resource tool for all current and ex-serving ADF Members and their families.

Other Resources

Defence Family Helpline (1800 624 608)

The Defence Family Helpline is your first point of call for support, information and connection with your community. The Helpline is available 24/7 for ADF members and their families, and is staffed by qualified human services professionals including social workers and psychologists.

You can also email the Helpline on DefenceFamilyHelpline@defence.gov.au and receive a response within 24 hours.

Veterans and Veterans Families Counselling Service (VVCS). This 24 hour service is available to veterans of all deployments and their families on 1800 011 046.