PIED workshop for healthcare professionals

Katinka van de Ven, Matthew Dunn, Beng Eu & William Wood
12 November 2019

SPRC
Social Policy Research Centre

DEAKIN UNIVERSITY

DPMP
Drug Policy Modelling Program

DPMP
Drug Policy Modelling Program

Uniting

HUMAN ENHANCEMENT DRUGS

prahran market clinic
A. GENERAL INFORMATION
(10 min)

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What do you think PIEDs are?
PIED definition

- PIEDs are substances that are used in order to **improve athletic abilities/performance** and/or to enhance physique/appearance.

- This includes a **wide range of substances**: e.g. anabolic-androgenic steroids to aid muscular development and ephedrine to lose weight.

> Main focus today: steroids
Common PIEDs used

- **Number 1** is anabolic androgenic steroids: e.g. boldenone, nandrolone, stanozolol and testosterone

PIEDs used in addition to AAS (N=267)

- Diuretics
- Thyroxine
- Insulin
- HGH
- GH releasing peptides
- Beta2 agonists (clenbuterol)
- Anti-oestogenics agents (e.g. tamoxifen)
- Stimulants (e.g. ephedrine)

Other illicit drug use:
- 82% lifetime, 64% past 12 months,

Most common:
- Cocaine (45%)
- Cannabis (31%) 
- Ecstasy (24%) 
- Methamphetamine (22%) 

**Sources:**
Steroid Terminology

What are cycles?
Anabolic steroids are most often used in “cycles”, where steroids are taken for a period of time (for example 8-12 weeks) known as an “on” cycle, followed by a similar period of steroid-free training known as an “off” cycle.

Why do cycles?
Cycles help prevent developing tolerance to the steroids and reduce the risk of side effects from prolonged use.

Post Cycle Therapy (PCT)
Post cycle therapy is the process of restarting natural testosterone production following a cycle of anabolic steroids.

Problem: Use becomes almost continuous, with little or no space between cycles → “blast and cruise approach”

Source: IPEDInfo
Who uses PIEDs?

- **THE YOLO TYPE**
  - Low Effectiveness
  - A TYPOLOGY OF MALE STEROID USERS AND THEIR RISKS

- **THE ATHLETE TYPE**
  - High Effectiveness
  - Mean age of first oral use of PIEDs: 25 years
  - 19% < 20 years
  - 78% < 30 years

- **THE WELL-BEING TYPE**
  - Low Effectiveness
  - Mean age of first injecting use of PIEDs: 26 years
  - 13% < 20 years
  - 73% < 30 years

- **THE EXPERT TYPE**
  - High Effectiveness

**Youthfulness**
**Sporting Performance**
**Occupational Performance**
**Aesthetics**
**Competitive Bodybuilding**
**HRT** **Sexdrive** **Other**

**Source:** Human Enhancement Drugs Network & IPED Info Survey
What do you think are the likely harms?
What are the likely physical harms?

Roid Rage = not supported!

- **Potential** – Cardiovascular & BBVs
- **Possible** – Liver, kidneys, high blood pressure, prostate & baldness
- **Common** – Injecting complications, acne, fluid retention, Gynecomastia & impotence
- **Expect** – Hormone imbalance, loss of libido, erectile dysfunction, low mood, shrunken testicles & insomnia

Source: Campbell, J. (2018)
Steroids and body image disorders

Steroid dependence

Muscle dysmorphia (i.e. “bigorexia”)
B. SAFER STEROID INJECTING
(15 min)

Dr Matthew Dunn
Senior Lecturer, Deakin University
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What are your experiences with people who inject PIEDs such as AAS?
Safer steroid injecting: instruction video

Best Practice Anabolic-Androgenic Steroid Intramuscular Injection

- Site & Equipment Selection
Injecting-related harm

- Things to be on the look out for include:
  - Bacterial abscesses and other infections
  - Scar tissue development
  - Septic shock
  - Tissue injury
  - Nerve injury
  - Blood-borne viruses
Injecting-related harm

- Thins to be on the look out for include:
  - Bacterial abscesses and other infections
  - Scar tissue development
  - Septic shock
  - Tissue injury
  - Nerve injury
  - Blood-borne viruses

Things to ponder…

- Rates of BBV among PIED consumers in AU are low
- Share of injecting equipment is low
- van de Ven et al (2018): being a person who reports injecting PIEDs and illicits had a higher uptake of recent BBV testing
- Intersection between PIED use, illicit use, and sexual behaviours
This is not not important

- BBVIs are a serious issue

- Where does the risk come from? What knowledge does this group poses? What messages are this group receptive to, and when?

- Underwood (2019): PIED consumers believe that a focus on BBV:
  1. Demonstrates ignorance
  2. Results in ineffective service
  3. Increases existing divides between consumers, service providers, and academics
What can you do?

- Strategies which help reduce BBV transmission are the same as those used to prevent other injecting-related harm so focus on those (e.g. swabbing vials and injecting sites)

- Focus on the issues they care most about (e.g. swelling, post-injection pain)
What can you do?

• Strategies which help reduce BBV transmission are the same as those used to prevent other injecting-related harm so focus on those (e.g. swabbing vials and injecting sites)

• Focus on the issues they care most about (e.g. swelling, post-injection pain)

• Consider where the client is in the ‘life cycle’ of their PIED consuming career

• The health of the ‘other’
C. PIED CASE STUDIES
(15 min)

Dr Beng EU
GP and Co-Director Prahran Market Clinic
In groups (5-10 minutes):
- Read the case study
- Answer the following Qs:
  1. What are the main issues?
  2. How would you respond?
- Group discussion (5-10 minutes)
Harm Reduction Advice

- Use pharma grade over underground products
- Avoid toxic oral steroids, minimize doses per vial
- Use less harmful agents first
- Use reasonable dosages and fewer combinations
- Learn to prepare and inject properly
- Take regular breaks
- Get regular blood tests
- Always consider risk and reward, minimum dose for effective gain

Source: Campbell, J. (2018)- modified
D. RESOURCES FOR FRONTLINE WORKERS

(5 min)

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Steroids

+ other drugs used to enhance performance and image

This guide to steroids and other image and performance enhancing drugs has been written to give easy access to quality information.

It covers the drugs that are used, how they work, how they are taken, the risks, dangers, and what we know about reducing potential harms.

Product code: P099

Order online at exchangesupplies.org
# Steroids Guide

## Choosing the Right Needle

<table>
<thead>
<tr>
<th>Needle</th>
<th>Length</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>18G</td>
<td>0.9 mm</td>
</tr>
<tr>
<td>1.5&quot;</td>
<td>20G</td>
<td>0.7 mm</td>
</tr>
<tr>
<td>2&quot;</td>
<td>23G</td>
<td>0.5 mm</td>
</tr>
</tbody>
</table>

## Injectable Steroids

<table>
<thead>
<tr>
<th>Steroid</th>
<th>Brand</th>
<th>Route</th>
<th>Half-Life</th>
<th>Onset</th>
<th>Duration</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testosterone Enanthate</td>
<td>Enan</td>
<td>IM</td>
<td>200 - 300 mg</td>
<td>10 - 15 hours</td>
<td>2 - 3 days</td>
<td>500 - 1000 mg per week</td>
</tr>
<tr>
<td>Testosterone Cypionate</td>
<td>Cyp</td>
<td>IM</td>
<td>200 - 300 mg</td>
<td>10 - 15 hours</td>
<td>2 - 3 days</td>
<td>500 - 1000 mg per week</td>
</tr>
<tr>
<td>Deca Durabolin</td>
<td>Durabolin</td>
<td>IM</td>
<td>300 - 500 mg</td>
<td>24 hours</td>
<td>3 - 5 days</td>
<td>1000 - 2000 mg per week</td>
</tr>
<tr>
<td>Nandrolone Decanoate</td>
<td>Deca</td>
<td>IM</td>
<td>300 - 500 mg</td>
<td>24 hours</td>
<td>3 - 5 days</td>
<td>1000 - 2000 mg per week</td>
</tr>
</tbody>
</table>

## Oral Steroids

<table>
<thead>
<tr>
<th>Steroid</th>
<th>Brand</th>
<th>Route</th>
<th>Half-Life</th>
<th>Onset</th>
<th>Duration</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primobolan</td>
<td>Primobolan</td>
<td>Oral</td>
<td>2 - 3 days</td>
<td>4 - 6 hours</td>
<td>2 - 3 days</td>
<td>50 - 100 mg per day</td>
</tr>
<tr>
<td>Anadrol</td>
<td>Anadrol</td>
<td>Oral</td>
<td>2 - 3 days</td>
<td>4 - 6 hours</td>
<td>2 - 3 days</td>
<td>50 - 100 mg per day</td>
</tr>
<tr>
<td>Stanolone</td>
<td>Stanolone</td>
<td>Oral</td>
<td>2 - 3 days</td>
<td>4 - 6 hours</td>
<td>2 - 3 days</td>
<td>50 - 100 mg per day</td>
</tr>
</tbody>
</table>

## Aromatase Inhibitors and Selective Estrogen Receptor Modulators

<table>
<thead>
<tr>
<th>Steroid</th>
<th>Brand</th>
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<th>Onset</th>
<th>Duration</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arimidex</td>
<td>Arimidex</td>
<td>Oral</td>
<td>2 - 3 days</td>
<td>4 - 6 hours</td>
<td>2 - 3 days</td>
<td>50 - 100 mg per day</td>
</tr>
</tbody>
</table>

## Post Cycle Therapy (PCT) Drugs

<table>
<thead>
<tr>
<th>Steroid</th>
<th>Brand</th>
<th>Route</th>
<th>Half-Life</th>
<th>Onset</th>
<th>Duration</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clomid</td>
<td>Clomid</td>
<td>Oral</td>
<td>2 - 3 days</td>
<td>4 - 6 hours</td>
<td>2 - 3 days</td>
<td>50 - 100 mg per day</td>
</tr>
</tbody>
</table>

## Fat Loss and Thyroid Drugs

<table>
<thead>
<tr>
<th>Steroid</th>
<th>Brand</th>
<th>Route</th>
<th>Half-Life</th>
<th>Onset</th>
<th>Duration</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nootropic</td>
<td>Nootropic</td>
<td>Oral</td>
<td>2 - 3 days</td>
<td>4 - 6 hours</td>
<td>2 - 3 days</td>
<td>50 - 100 mg per day</td>
</tr>
</tbody>
</table>

## Growth Enhancers and Peptides

<table>
<thead>
<tr>
<th>Steroid</th>
<th>Brand</th>
<th>Route</th>
<th>Half-Life</th>
<th>Onset</th>
<th>Duration</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.125</td>
<td>C.125</td>
<td>Oral</td>
<td>2 - 3 days</td>
<td>4 - 6 hours</td>
<td>2 - 3 days</td>
<td>50 - 100 mg per day</td>
</tr>
</tbody>
</table>

## Additional Tips

- **Choosing the Right Needle:**
  - Length:
    - 1":
    - 1.5":
    - 2":
  - Diameter:
    - 18G:
    - 20G:
    - 23G:

- **Injecting Essentials:**
  - Never reuse or share anything.
  - For intramuscular injection, the needle must be long enough to reach deep into the muscle.

- **Steroid-Related Side Effects and Risks:**
  - Increases HDL (good cholesterol) and decreases LDL (bad cholesterol).
  - Increased risk of developing heart-related complications and stroke.
  - None.

- **High Blood Pressure:**
  - Liver damage causing jaundice or swelling.

- **Nausea:**
  - Joint pain.
  - Mood swings.
  - Changes in mood.
Over the last few decades, the use of Image and Performance Enhancing Drugs (IPEDs) has become more widespread. Alongside this increase in use, there has been an associated rise in the number of reported infections and complications associated with IPED use.

This website (formally SIEDsInfo.co.uk) and supporting resources, developed by Public Health Wales, in conjunction with partners at the Centre for Public Health, Liverpool John Moores University, aims to provide reliable and evidence-based information and advice to reduce the harms associated with the use of IPEDs.

Public Health Wales is an NHS organisation providing professionally independent public health advice and services to protect and improve the health and wellbeing of the population.

THE IPED INFO SURVEY

For those who contributed in National IPED Info Survey 2016, thank you very much, your contribution has been very important.

Thanks to your support over 640 people who used IPEDs participated in the survey in 2016 from across England, Scotland and Wales. This work will allow us to continue to inform and develop harm reduction services, health messages and support in relation to IPEDs.

Please see the following infographics and reports from past surveys:
This film is intended for those who are working with, providing injecting equipment for, and those using image and performance enhancing drugs and demonstrates the safest techniques for reducing injecting related harm. The video demonstrates correct preparation and injection procedure for both anabolic steroids and peptide hormones.

Injecting carries several risks, both from the process and from the drugs themselves. It is important to be aware of these risks before attempting to inject any substance.
DELTS Project

Currently in development

PIEDs, AUS

INTRODUCTION
1. WHAT ARE PIEDs?
2. PIEDs AND THEIR CLASSIFICATION
3. MUSCLE AND STRENGTH BUILDING
4. FAT BURNING AND LOSING WEIGHT
5. OTHER SUBSTANCES: STIMULANTS, BRAIN DOPING AND EPO
6. ADVERSE EFFECT REDUCING MEDICINES
7. IMAGE-ENHANCING DRUGS
8. DIETARY SUPPLEMENTS, HERBAL PRODUCTS AND PIEDs
9. MEDICINAL USE OF PIEDs
10. PREVALENCE OF PIED USE IN RECREATIONAL SPORTS
11. CRIMINAL PROCEDURES AND LEGALITY
12. HEALTH RISKS AND SIDE-EFFECTS OF PIED USE
13. PIEDs AND SEXUALITY
14. OTHER RISKS RELATED TO USE OF PIEDs
15. IDENTIFYING PIED USERS IN THE PRACTICE

EXAM

INTRODUCTION

1. WHAT ARE PIEDs?

Pages: 2
Progress: 0/2

2. PIEDs AND THEIR CLASSIFICATION

Pages: 3
Progress: 0/3

3. MUSCLE AND STRENGTH BUILDING

Pages: 13
Progress: 0/13

4. FAT BURNING AND LOSING WEIGHT

Pages: 6
Progress: 0/6

5. OTHER SUBSTANCES: STIMULANTS, BRAIN DOPING AND EPO

Pages: 8
Progress: 0/8

6. ADVERSE EFFECT REDUCING MEDICINES

7. IMAGE-ENHANCING DRUGS

(Commonly in development)
Questions?

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Logos of Uniting, DELTS, DEAKIN University, SPRC, DPMP, HUMAN ENHANCEMENT DRUGS, and Prahran Market Clinic.
Thank you!