





# The Realities of TUE Policy Implementation within a Diverse Athlete Population

Matthew Fedoruk, Ph.D.
WADA TUE Symposium 2014, Paris

### **Diverse Athlete Population**

### 2013 By the Numbers

81

Sports tested

4,640

Athletes tested

6,037

Out-of-competition tests conducted

3,160

In-competition tests conducted

19 Expert Physicians USADA TUEC Committee





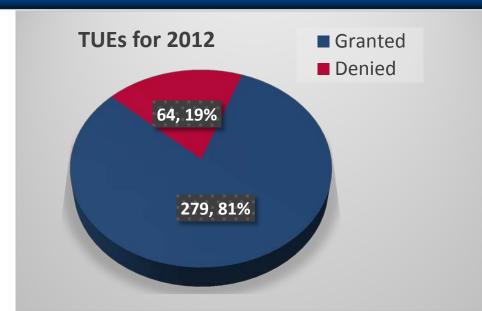
### **TUE Applications Processed 2013**

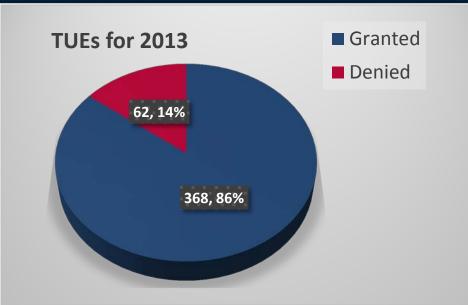
# TUE Applications Processed Grouped according to Outcome and Granting Authority

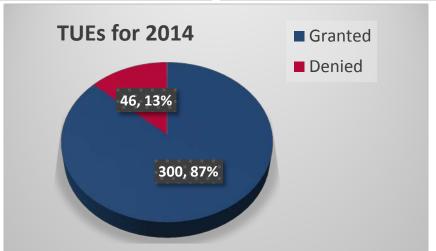
OUTCOME	IF	USADA	TOTAL
TUEs Granted	43	236	279
TUES Denied	6	45	51
Returned*	23	147	170
Decision Pending	3	2	5
Unknown Authority of TUE**	0	0	3
Grand Total	75	430	508



#### **TUEs Granted and Denied**

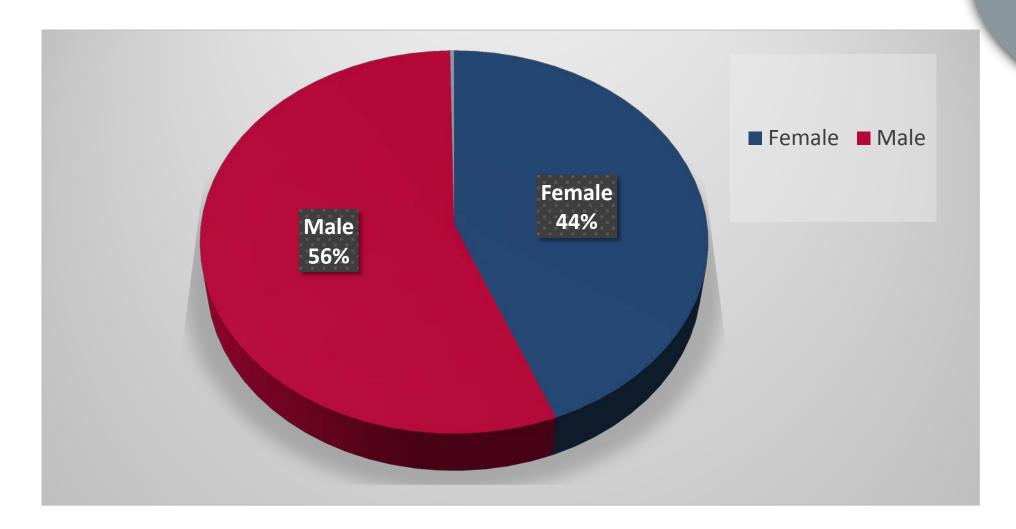






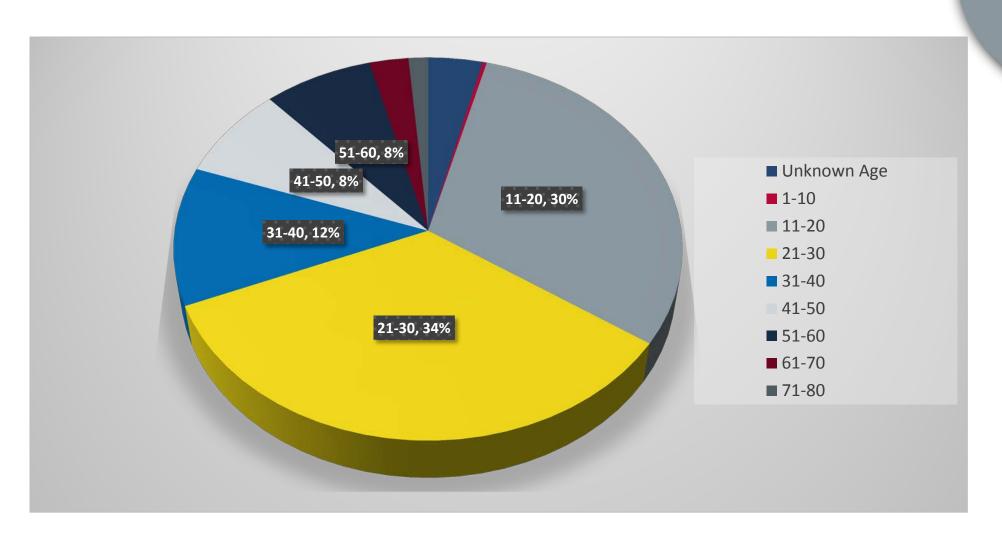


### **TUEs Granted in 2013 by Gender**



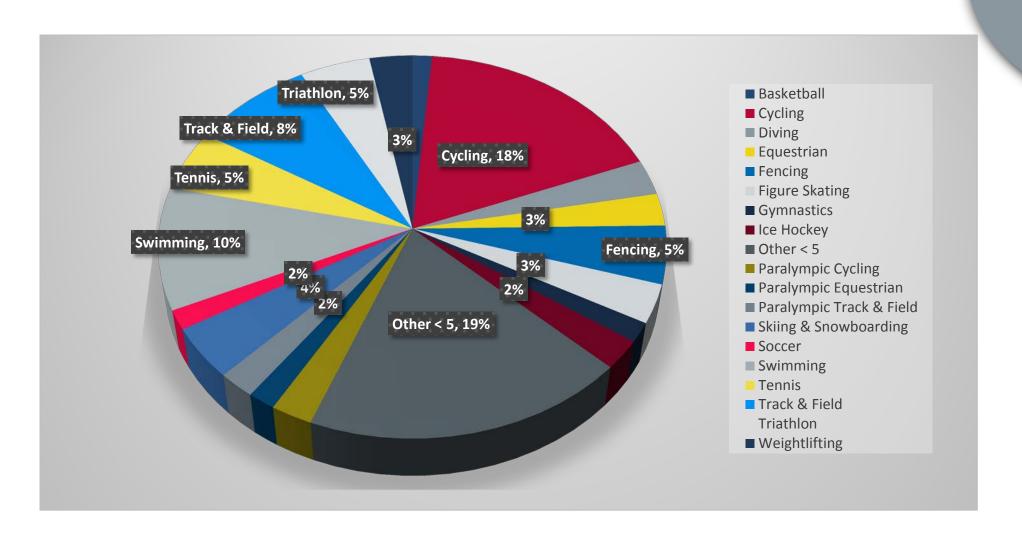


### **TUEs Granted in 2013 by Age**



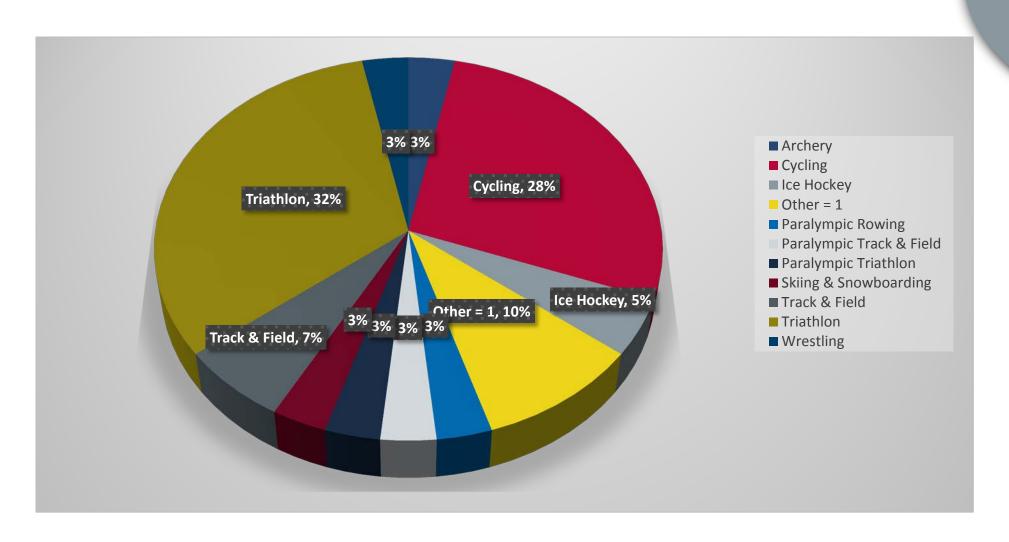


### **TUEs Granted by Sport 2013**



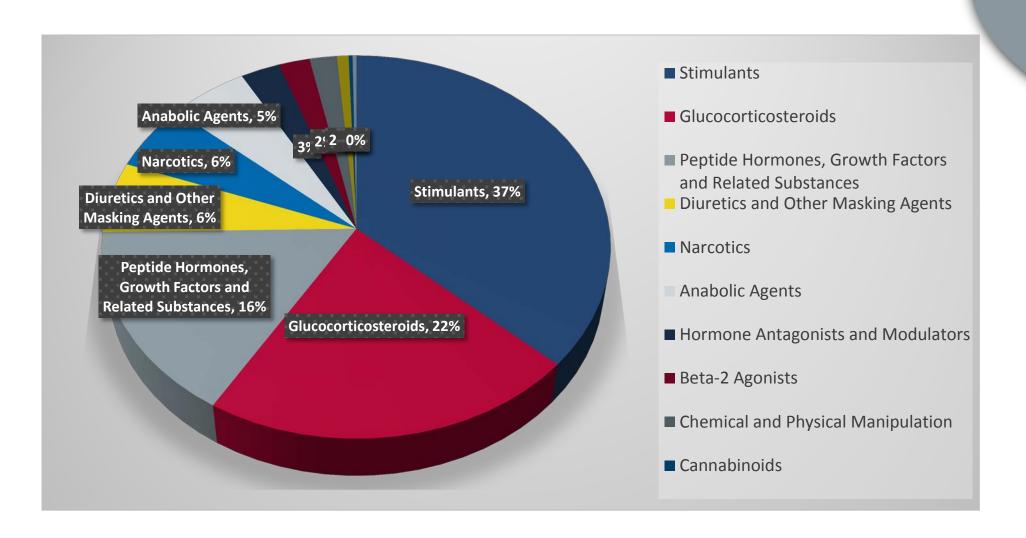


### **TUEs Denied by Sport 2013**



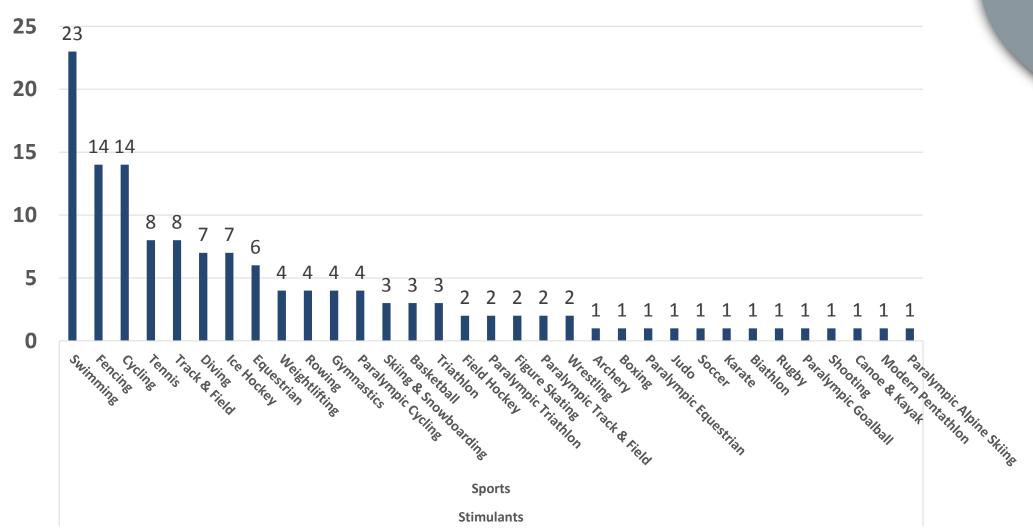


### Total TUEs Granted in 2013 by WADA Classification





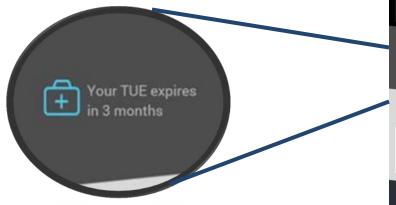
### **Top Sports for Stimulant TUEs 2013**





#### TUE Education = Drug Reference Resources

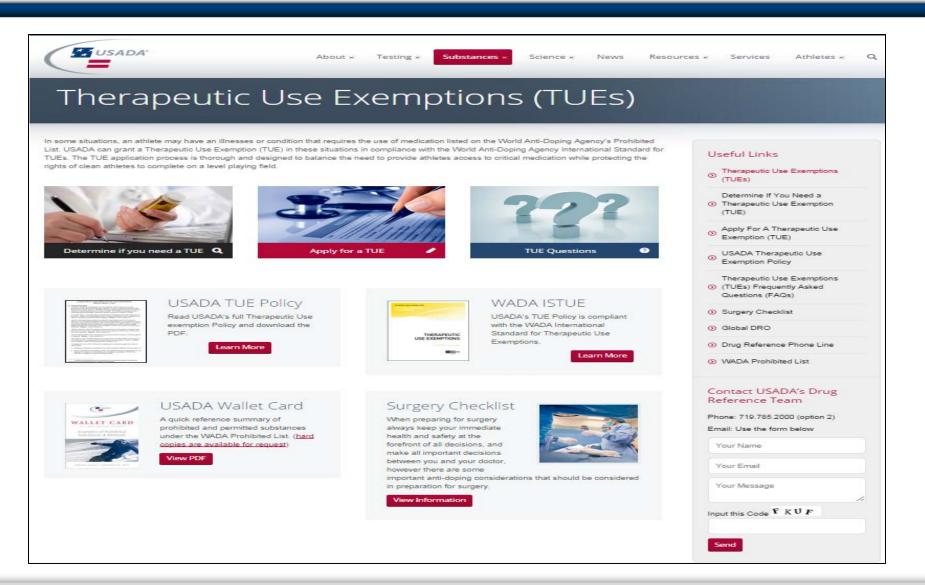
- Drug Reference TUE Process, Global DRO, Supplement 411, Drug Reference Line
- Mandatory education for athletes, coaches and health professionals
- Online & In-person
- Health Pro Portal & CME credits
- TUE information through Athlete Express Application





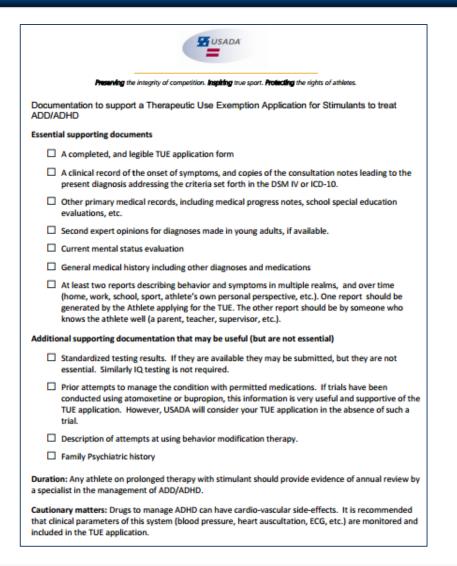


#### **USADA TUE Portal**



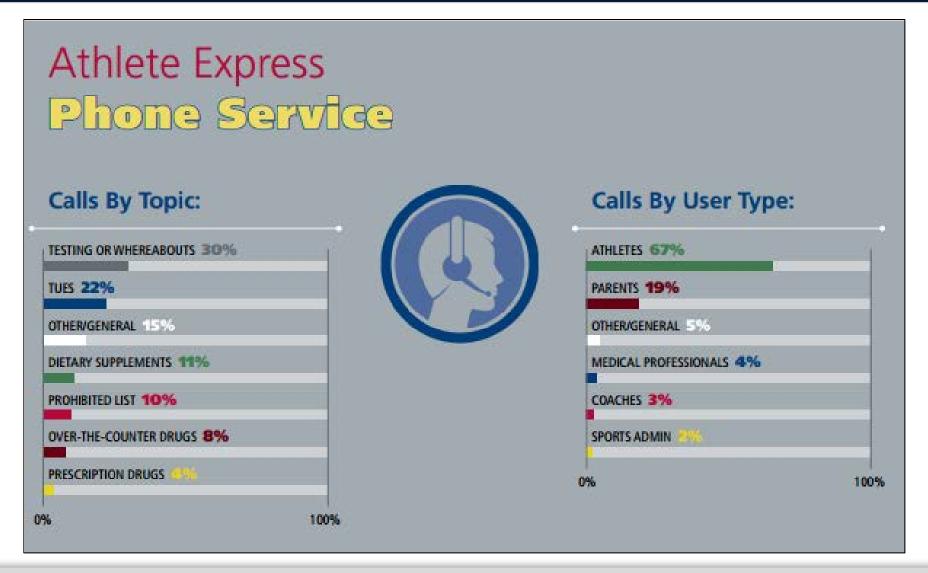


### Athlete-Physician Checklists





### Athlete's questions about the TUE process





Preserving. Inspiring. Protecting.

#### **Global DRO**





#### **Global DRO**



#### TOP 10 MOST COMMON

### Searches on Global DRO

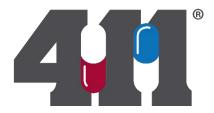
USADA	UKAD	
Albuterol	Lemsip	I
Creatine	Sudafed	
Prednisone	Salbutamol	P
Adderall	Ibuprofen	
Sudafed	Paracetamol	
Caffeine	Creatine	
NyQuil	Lemsip Max	
Testosterone	Beechams	
Tylenol	Ventolin	
Ibuprofen	Benylin	

CCES	JADA
Acetaminophen	Bufferin
Clenbuterol	Pabron
Pseudoephedrine	Prednisolone
Tylenol	Kakkonto
Advil	Meptin
Creatine	Ephedrine
Cold fx	Diclofenac
Tylenol Cold	AdoAir
Clenbuteral	Loxoprofen
Ventolin	Caffeine



### Supplement 411

## Supplement



Of the supplements USADA tested in collaboration with the DoD:

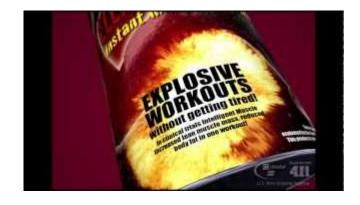




ROUGHLY HALF
of the Supplements
TESTED
were positive for
STIMULANTS
and the other half for
STEROIDS

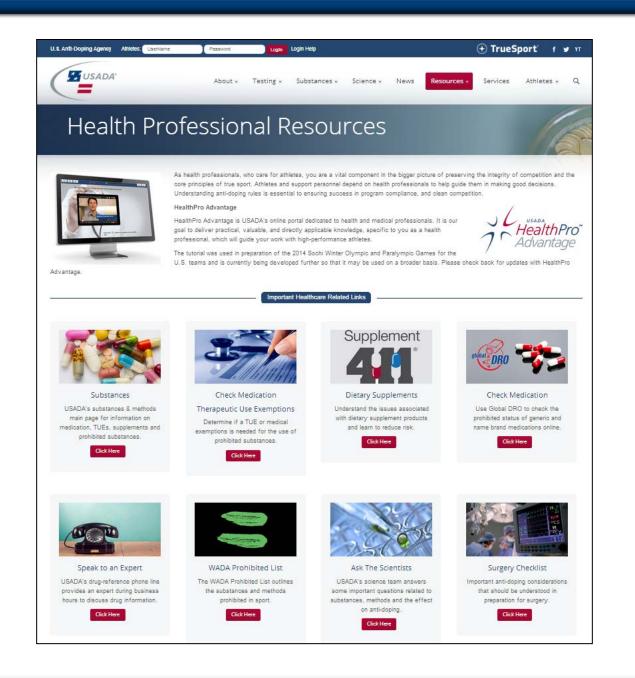






Supplement 411 High Risk List Only the website version of this list is valid, and only on the day accessed. If you are viewing a saved or printed version of this page then you are viewing an out-dated, invalid High Risk List.					
Brand Name 🕇	Company	What the label says	Prohibited List Classification	Comments	
1-Andro	Iron Mag Labs	The Supplement Facts panel lists 1-Androstene 3b-ol, 17-one	Anabolic Agents	The product lists one or more prohibited substance on the label. 1-Androstene 3b- ol, 17-one is also known as 1- Androsterone or 1-DHEA.	
17 Diol Prohormone	Sports One Nutrition	The Supplement Facts panel lists epithio-17(a)-methyletiocholanol and methylsynephrine	Anabolic Agents	The product lists one or more prohibited substances on the label.	
Absolute Fuel	Biosciences Institute Inc.	The Supplement Facts panel lists citrus aurantium	Stimulants	Testing revealed the presence of oxilofrine (also known as methylsynephrine). The product label also includes a warning for athletes to consult their sport organization for restrictions on the use of dietary supplements.	
Adipo X	Axis Labs	The Supplement Facts panel lists Advantra Z (citrus aurantium 30%)	Stimulants	Testing of Lot 50003615 revealed the presence of octopamine. Citrus aurantium (also known as bitter orange) is a plant source of synephrine (in the monitoring program, but not prohibited) and octopamine (a prohibited stimulant).	







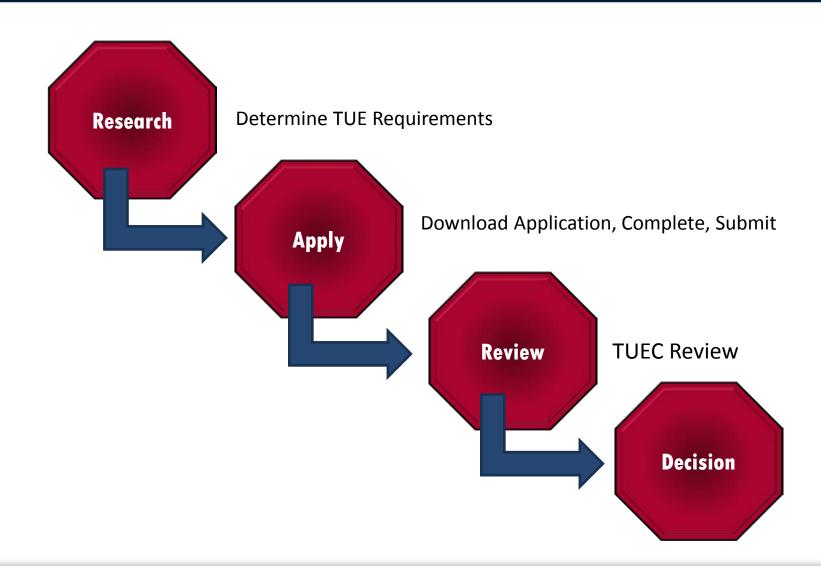
#### Global Stakeholder Collaboration

- US Athletes and USOC/National Sport Bodies
- ADO Relationships & Cooperation
- WADA Collaboration
  - WADA Medical Team
  - WADA TUE Expert Group
  - WADA List Committee
- USADA TUEC Ad-Hoc Workshops
- External Medical Community





### **TUE Application and Review Process**





### Trends and Challenges



Glucocorticosteroids



Interesting Drain in jury Conscious new Section and Consequence of the Control of











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ABOUT US PROCESS LOCATIONS FAQ ARTICLES NEWS CONTACT US

#### Low Testosterone Therapy Colorado Springs, CO – Low T Center



#### 1 CLINIC DETAILS

#### Low T Center

5134 North Nevada Avenue, Suite 100 Colorado Springs, CO, 80918

Phone: (719) 354-2928

ALSO FIND US ON



#### O HOURS OF OPERATION

Mon: 08:30AM - 05:30PM Tue: 08:30AM - 05:30PM

Wed: 08:30AM - 05:30PM

Thu: 08:30AM - 05:30PM

Sat: Closed Sun: Closed

View Holiday Hours

Fri: 08:30AM - 05:30PM

Testosterone

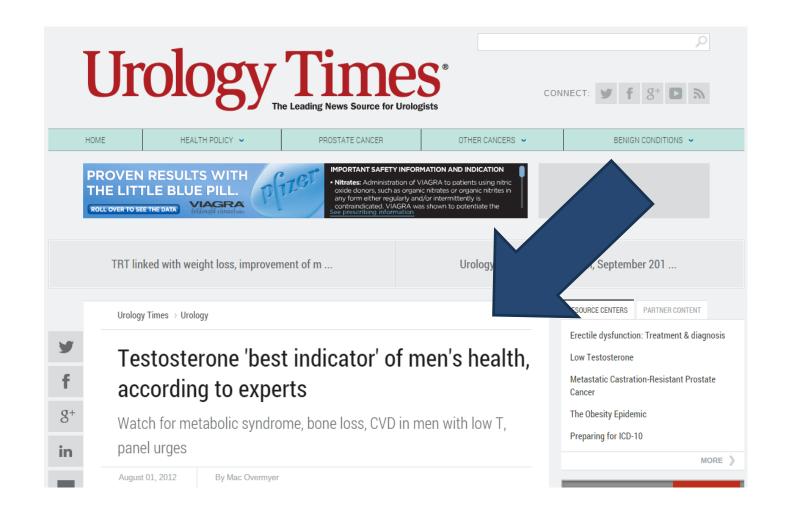
INTRODUCTORY OFFER

Assessment.

Your Name...

Your Email Address...







#### **DHEA Use in Females**



Medscape Medical News

#### Practice Guideline Nixes Testosterone Therapy for Women

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Marlene Busko October 07, 2014

56 comments

Doctors around the v surprising number of testosterone treatme Nearly 3 percent of A and older are though scripts in 2011-three in 2001. (If confirme the U.S. have been gi testosterone.) Origin hormones because of INFORMATION system, testosterone middle-aged and old to lessen some of the Female Orgasmic Disorder sex drive.

In truth, no one know its proponents claim EDITORS' RECOMMENDATIONS FDA Hits Back at Charge of Gender Bias in Libido Drug Decision



Androgen Replacement Therapy in Women

mean that perhaps ty Is Lack of Sexual Desire a Disease? Is Testosterone the Cure?

#### **DRUG & REFERENCE**

Anabolic Steroid Use and Abuse

Gonadotropin-Releasing Hormone Deficiency in Adults

There is no evidence to support the use of testosterone or dehydroepiandrosterone (DHEA) by women with low levels of these hormones, with the possible exception of postmenopausal women distressed by and diagnosed with hypoactive sexual desire disorder, according to a new clinical practice guideline issued by the Endocrine Society.

The guideline, which updates a 2006 version, is published in the October issue of the Journal of Clinical Endocrinology and Metabolism.

"We don't have any [new] data to support the use of testosterone or DHEA in [healthy] women, and there's no evidence for an androgen-deficiency syndrome," writing chair and Endocrine Society vice president, clinical science, Margaret E. Wierman, MD, from the University of Colorado in Aurora, Colorado, told Medscape Medical News.

Specifically, testosterone is not recommended to treat women with infertility or cognitive, cardiovascular, metabolic, or sexual dysfunction (other than hypoactive sexual desire) or to promote bone health or well-being, she added.

drug in men who do Limited evidence suggests that postmenopausal women who are upset by and diagnosed with hypoactive number, and their re sexual desire disorder might benefit from a 3- to 6-month trial dose of testosterone, according to the guideline. But these patients would have to be closely monitored for signs of androgen excess, such as acne or hirsutism, and the long-term safety, especially the risk for cardiovascular disease, is unknown.



#### **IV Wellness Clinics**



#### The Quickie

Need a boost but no time to spare? Order a quickie and recharge in less than 40 minutes with this vitamin packed IV.



#### JetLag

Too many air miles? Too many time zones? This drip will get your feet back on the ground and your clock ticking again.



#### Drip with an Extra Shot

Need an extra pick me up? This super packed drip recharges you with an extra shot of vitamin B12 to boot!



#### The Burnout

Running on steam? The mega dose of vitamins B5, B6 and C in this drip will get you firing on all cylinders.



#### The Einstein

Get that brain fired up and the creative juices flowing! This drip is packed with antioxidants and B vitamins specially formulated as fuel for thought.



#### The Cold Buster

Sick and tired of being sick and tired? This drip is packed with a mega dose of vitamin C, zinc and selenium guaranteed to give your immune system the boost it needs.



#### The Hot Flash

Take control of your thermostat and cool down! This drip is loaded with vitamin B6 and minerals designed to support your hormone imbalance.



#### The Mojo

This drip is a combination of vitamins B3, B6, B12, C plus magnesium, zinc, selenium and arginine, specially designed to get you feeling like yourself again.



# Parallel & Synergistic Effects of Permitted and Prohibited Substances

- Influence of Hormonal Contraceptives on the Steroidal Athlete Biological Passport
- IV cocktails with Actovegin, iron, corticosteroids, vitamins, mildronate
- Several hormones may stimulate renal and/or hepatic production of EPO, including thyroid hormone, angiotensin II, growth hormone (GH) and testosterone.
- Intravenous vs. intramuscular iron injections
- Inclusion on Prohibited List Performance-enhancing vs. beneficial side effects beyond increasing aerobic output and time to exhaustion



### **Key Conclusions**

- Managing a large and diverse TUE program requires effective stakeholder cooperation and comprehensive education
- Differing TUE Policies and ADO rules can easy confuse athletes
- Easy-to-use and easy-to-find resources are essential for athletes and support personnel to understand the TUE process
- Encourage teamwork between the athlete and their medical team
- Gaps between common and best clinical practice present unique challenges moving forward
- The increasing complexity of how athletes may be using permitted substances alone or in-combination with prohibited substances requires broadening our thinking of performance-enhancement in sport



# Thank you!!



