

# Oregon Department of Education Anabolic Steroids and Performance-Enhancing Substances Training

General Information,  
Resources,  
and  
Prevention Strategies



# The Law

- ORS 342.726 became law in 2007 with some technical changes in 2008.
- **School districts shall:**
  - Include information on anabolic steroids and performance-enhancing substances in health and PE curricula for K-12 students.
  - Require all school district employees who are coaches and athletic directors to receive training once every four years.
  - Utilize evidence-based programs.

# Definition of “School district employee”

- An administrator, teacher or other person employed by a school district;
- A person who volunteers for a school district; and
- A person who is performing services on behalf of a school district pursuant to a contract.

# Definition of Anabolic Steroid

“Anabolic steroid” includes any drug or hormonal substance chemically or pharmacologically related to testosterone, all prohormones, including dehydroepiandrosterone and all substances listed in the Anabolic Steroid Control Act of 2004. “Anabolic steroid” does **not** include estrogens, progestins, corticosteroids, or mineralocorticoids.



# Definition of Performance-Enhancing Substance

“Performance-enhancing substance” means a manufactured product for oral ingestion, intranasal application or inhalation containing compounds that:

- Contain a stimulant, amino acid, hormone precursor herb or other botanical or any other substance other than an essential vitamin or mineral
- Are intended to increase athletic performance, promote muscle growth, induce weight loss or increase an individual’s endurance or capacity for exercise.

# Performance-Enhancing Supplements

- The Dietary Supplement and Health Education Act of 1994 – Limits the Food and Drug Administration from regulating products
- 18.6% of U.S. supplements contain anabolic steroids – International Olympic Committee (IOC) study of 240 supplements
- Many products contaminated: lead, pesticides, arsenic, mercury
- Strengths of the products available can vary

# Variations of Steroids and Performance-Enhancing Substances

Tablets



Gels, Creams & Patches



Buccal



Implants



Injectables



# Steroid Use Among Oregon Youth

- During the 2013-14 school year, 3.2% of students had taken steroid pills or shots during their life without a doctor's prescription. <sup>2</sup>
- In 2009, 3.4% of 8th graders and 2.4% of 11th graders reported using steroids in their life without a doctor's prescription<sup>1</sup>
- However, significant disparities do exist within those youth who report steroid use
  - Males are 1.7 times more likely to report steroid use than females
  - Hispanic youth are twice as likely and black youth three times as likely to report use than White/non-Hispanic youth

<sup>1</sup> All data comes from the 2009 Oregon Healthy Teens survey

<sup>2</sup> National data comes from the 2013 CDC's Youth Risk Behavior Survey.

# Steroid Use Among Oregon Youth

Steroid use by youth is related to lower academic achievement.

- 76% of students who reported that they do not use steroids also reported that they mostly get A's or B's. This compares to 64% of steroid users who reported receiving As or Bs.
- Steroid users were about one-fifth less likely to report As or Bs over the past year.

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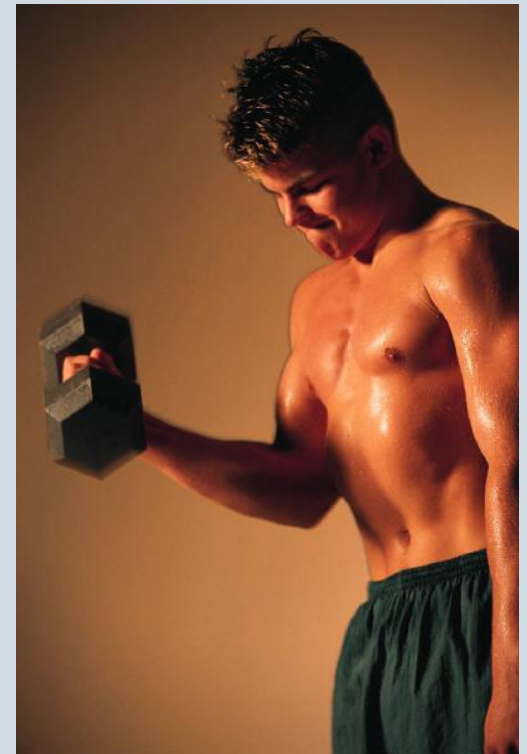
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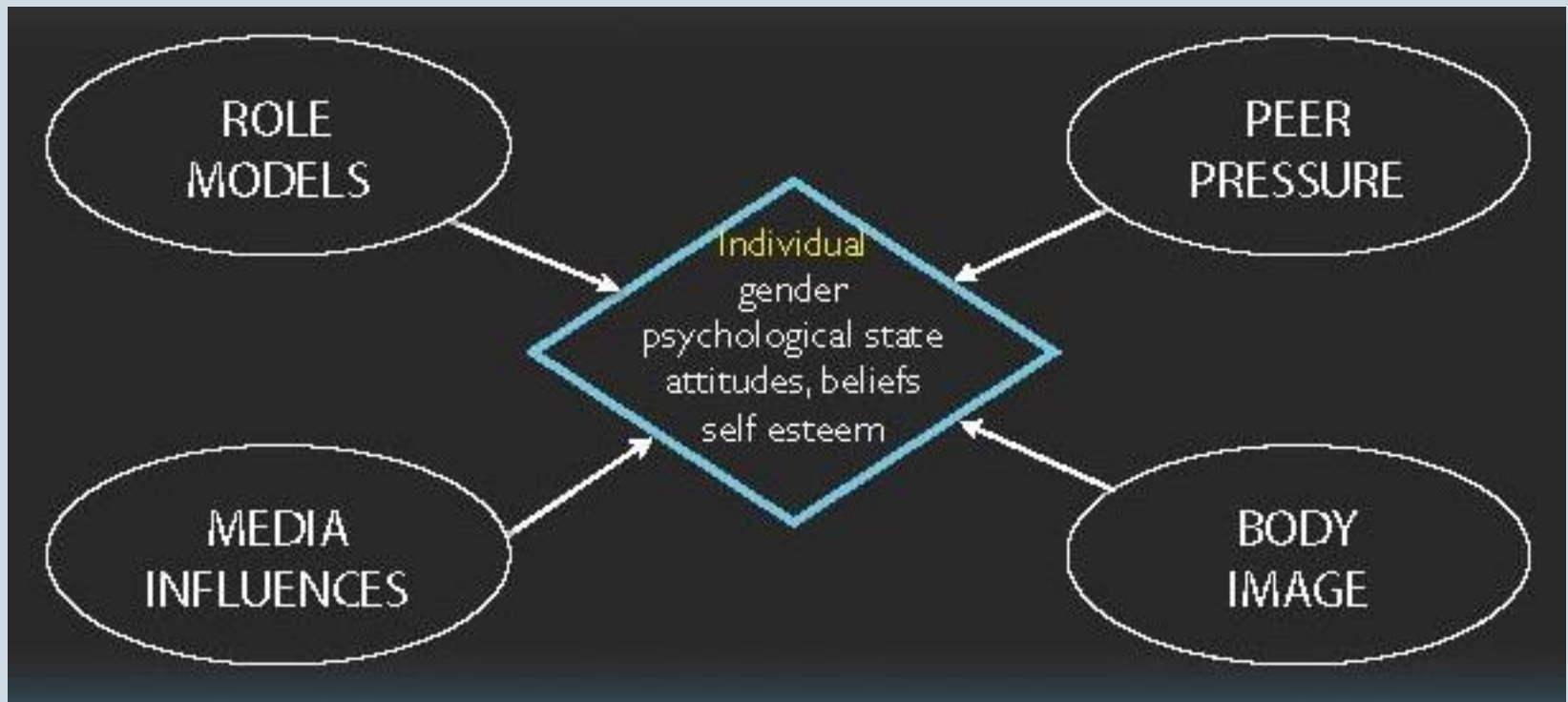
# Why do students take anabolic steroids or performance-enhancing substances?

To:

- Boost athletic performance
- Build muscle
- Increase body mass
- Lose body fat



# What influences a student to take anabolic steroids or performance-enhancing substances?

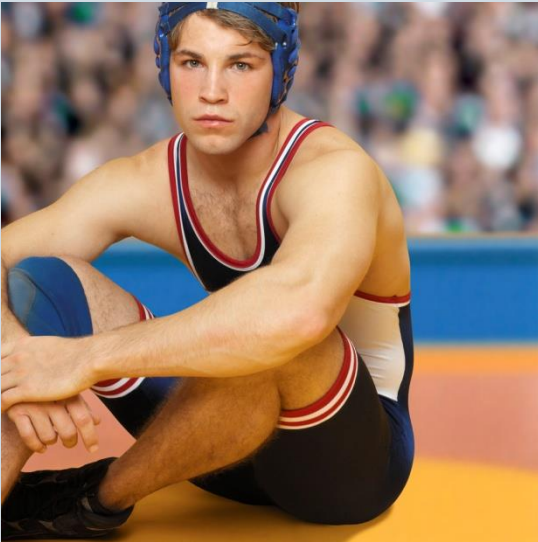




# Desire to Emulate Role Models

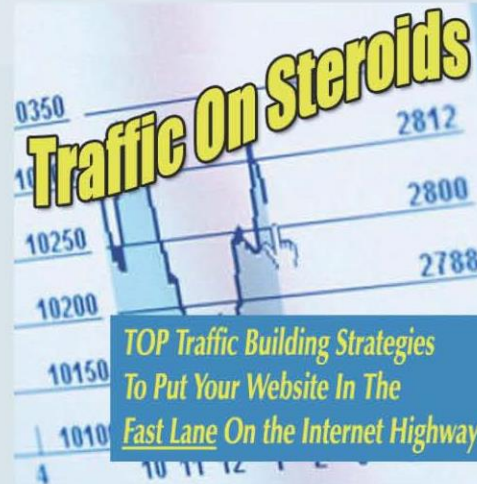
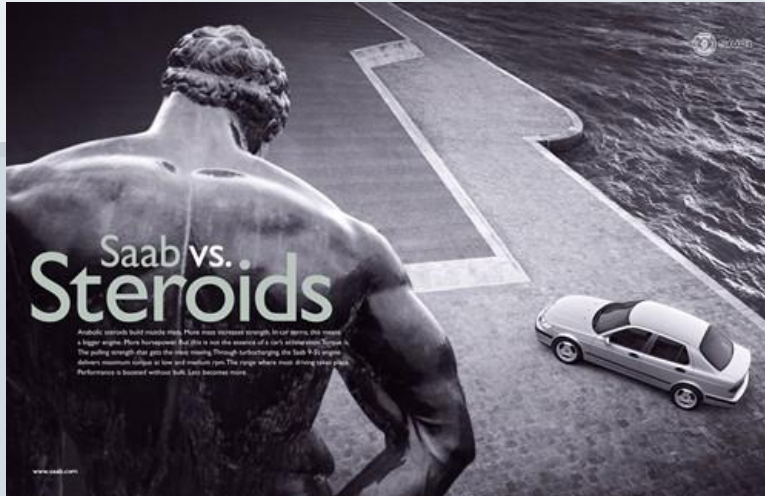


# Peer Pressure to Succeed





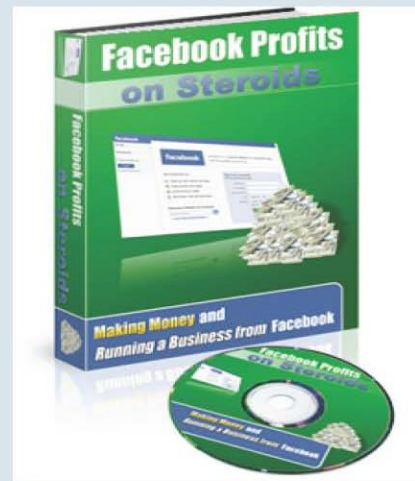
# Media Influences



**WiMax:**  
Wi-Fi on Steroids

- A new wireless technology, WiMax sends data at a blistering 70 megabits per second over distances up to 50 km (30 miles).
- Early versions are designed for fixed broadband, rivaling cable and DSL. Later versions will let users roam around.
- WiMax will be used first to connect Wi-Fi hotspots to the Internet, later for broadband service to rural households.
- It could narrow the Digital Divide in developing countries but will pose competition for mobile systems like 3G.

Data: BusinessWeek  
BRYAN LEISER



**Patch Perfect**  
Spread It 'n Forget It!

**BUY 1 GET 1 FREE**

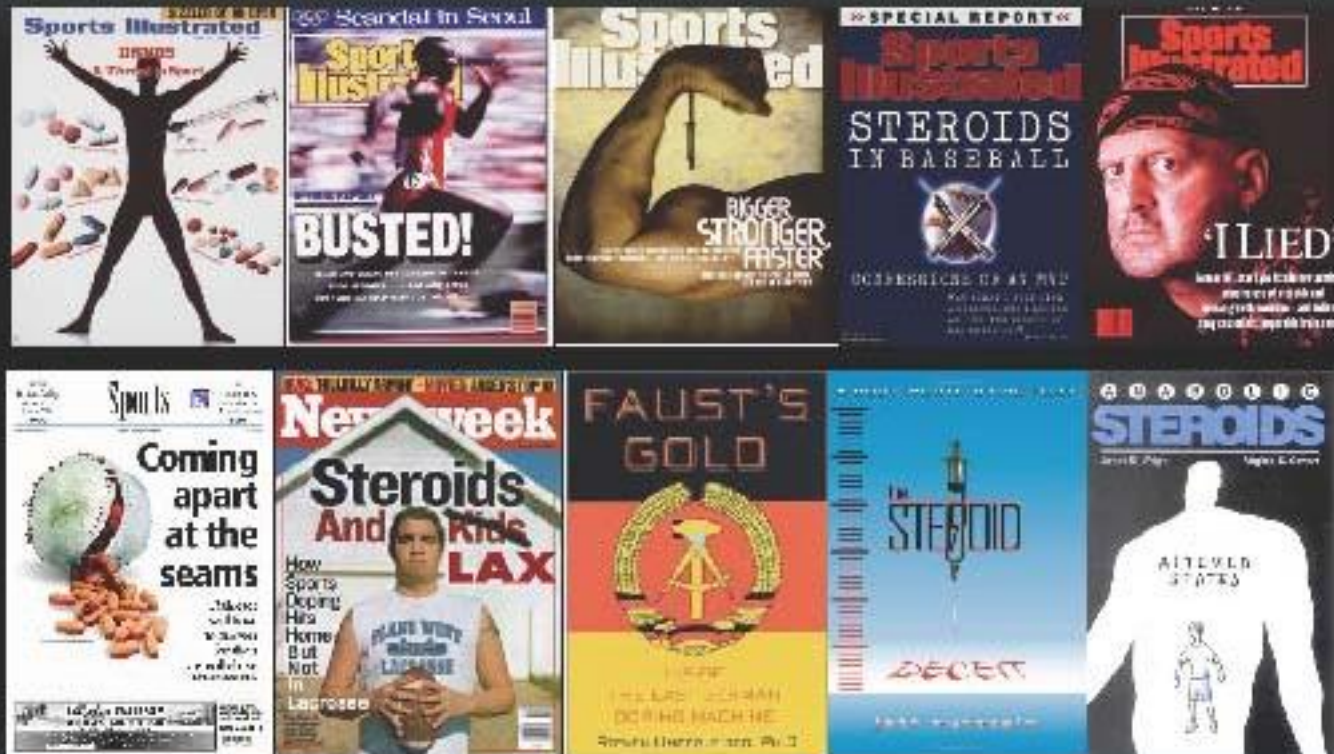
**It's Like Grass Seed On Steroids**

**ORDER NOW**

AS SEEN ON TV

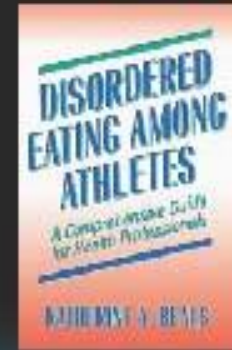
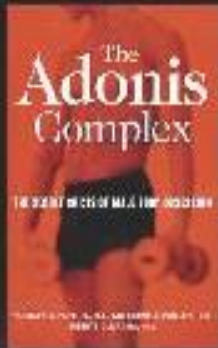
Images that portray steroids in a positive light 15

# Cover Stories About Steroids





# Desired Body Image Based on Gender



# Dangers of Anabolic Steroids and Performance-Enhancing Substances

## Steroids are dangerous for two reasons:

- They are ILLEGAL.
- At risk for infection with HIV, if share needles with other users
- They can damage a person's mental and physical health.
  - If used by adolescents, can have permanent negative consequences



# Some Health Risks for Both Males and Females:



- Acne, really bad acne, especially on face and back
- Stunted growth in teens (by causing bones to mature too fast and stop growing at an early age)
- High blood pressure, unhealthy cholesterol changes, and heart disease
- Blood clots and stroke
- Liver damage, jaundice, or liver cancer
- Headaches, aching joints, and muscle cramps
- Increased risk of ligament and tendon injuries, which can end an athlete's career for good
- Weight gain
- Baldness
- Mood Swings
- Problems Sleeping
- Agression

# Gender Differences and Risks of Drug Use

## Young Females

- Self-esteem
- Depression/mood
- Body image\*
- Media\*



## Young Males

- Risky behavior
- Impulsivity
- Body image\*
- Media\*



\*Specific, based on gender



# Health Risks for Males:

- Shrinking of the testicles
- Low sperm count
- Impotence (inability to get an erection)
- Increased breast growth in males, especially teens
- Enlarged prostate
- Pain when urinating



# Health Risks for Females:

- Breast shrinkage
- Male-type facial and body hair growth
- Deepening of the voice
- Problems with menstrual periods
- Enlarged clitoris
- Menstrual cycle changes



# Psychological Health Risks:

- “Roid rage”- severe, aggressive behavior that may result in violence, such as fighting or destroying property
- Severe mood swings
- Paranoia - extreme feelings of mistrust and fear
- Anxiety and panic attacks
- Depression and thoughts of suicide
- Delusions – believe things that aren’t true
- Higher risk for using other drugs, to counteract some of the negative effects of steroids

# Definition of “Cycling”

- Anabolic steroids are taken orally or injected, typically in cycles of weeks or months, rather than continuously.
- Cycling involves taking multiple doses of steroids over a specific period of time, stopping for a period, and starting again.



# Definition of “Stacking”

- Users often combine two or more different types of steroids to maximize their effectiveness while trying to minimize negative effects.



# Definition of “Pyramiding”

- Start with a low dose and gradually increase the dose
- Start with a low dose and gradually increase the frequency of doses
- Start with a low dose and gradually increase the number of anabolic steroids taken
- Then taper off to complete a cycle

# Slang for anabolic steroids or performance-enhancing substances

■ You may have heard steroids called:

- Roids
- Juice
- Hype
- Pumpers
- Gym Candy
- Arnolds
- Gear
- Weight Trainers
- Stackers
- 420 (pronounced “four-twenty”)



# What should you look for if you are concerned that a student/child may be taking anabolic steroids or performance-enhancing substances?

Unfortunately, many of the symptoms of steroid abuse look very similar to typical appearances and attitudes that occur during adolescence. Here are some signs to look for:

- Increased aggression
- Rapid weight gain (10 lb/month or 40lb/year)
- Pustular acne
- An obsession with and bragging about increased performance (i.e. increased bench press)
- Virilization in females (lowering of voice; facial hair, male pattern of hair growth on body)



# Common Myths

- **Steroids are safe**
- **Taking any kind of steroid will result in death**
- **Injectable steroids are safer than oral steroids**
- **Steroids won't really stunt your growth**
- **All steroids are pretty much the same**
- **Steroid abuse isn't really a big problem in the U.S.**
- **All steroids are pills**
- **Only a certain kind of person uses steroids**
- **Steroids aren't addictive**
- **Steroids aren't as illegal as other drugs**
- **Steroids build muscle without working out**
- **Women don't use steroids**
- **Roid rage isn't real**
- **It's hard to get caught buying steroids over the internet**
  
- The list (not inclusive) was gathered from the following sites:
  - Association Against Steroid Abuse - Steroid Myths  
<http://www.steroidabuse.com/steroid-myths.html>
  - Bodybuilding – The Myths and Dangers of Anabolic Steroid Usage  
<http://bodybuilding.about.com/od/supplementationbasics/a/steroiddangers.htm>
  - Roid Report <http://www.roidreport.com/steroids/steroid-myths/>



# What coaches can do...

Does your student plan to compete for athletic scholarships? If so, he or she is under considerable pressure to succeed. And besides the pressure from parents and peers, teens place a lot of pressure on themselves. Not surprisingly, the pressure may contribute to the lure of performance-enhancing drugs and supplements.

*Reassure the student of your support* — even when they do not perform well in competitive sports.

If you're worried that they may be using performance-enhancing drugs or supplements, here's what you can do:

- ▶ **Be clear** about your expectations.
- ▶ **Talk to student athletes** that unless the long-term effects of performance-enhancing drugs on young athletes are known to be safe, you expect him or her to avoid them.
- ▶ **Discuss alternatives** to performance enhancers, include sports nutrition and strength training techniques.
- ▶ **Set rules.** For example, if a student uses performance-enhancing drugs, he or she will be removed from the team.
- ▶ **Teach students** that short-term gains can lead to long-term problems.



# What coaches can do...continued

- ▶ **Discuss ethics** and proper training. Athletes should compete fairly.
- ▶ **Remind them** that using a performance-enhancing drug is similar to cheating, but even more importantly, could lead to serious health problems or even death. Another key message is that a balanced diet and rigorous training are the true keys to athletic performance.
- ▶ **Encourage the student athlete** to feel good about his or her sports performance.
- ▶ **Monitor for signs** of drug use. Signs the student may be taking anabolic steroids include increased acne and male-pattern baldness. If a female takes anabolic steroids, she may develop male characteristics, such as a deep voice or dark facial hair. Teens who take anabolic steroids may seem unusually moody and have angry outbursts known as 'roid rage'.
- ▶ **Discuss the school district's** policy concerning anabolic steroids and other performance enhancing drugs with all student athletes.

# Talking to Students About Steroids

You've probably taken the time to talk to a teen about not using illegal drugs like marijuana or cocaine, and it's just as important for you to talk with him or her about not using Steroids and Performance Enhancing Substances (SPES).

Talking about using SPESs and other drugs isn't easy, but it is important. Letting a teen know how you feel about SPES use and the potential, dangerous side effects can help him or her make the smart decision to compete drug-free.

- **Educate yourself about Steroids and Performance Enhancing Substances (SPES).** Be prepared to answer hard questions about **SPESs** and their side effects. Focus on short-term effects, like severe acne and increased body hair, rather than long-term health risks like heart disease or cancer. Teens tend to live in the here-and-now. They're really not concerned with what could happen years from now.
- **Speak out against the use of SPESs on a regular basis.** Use recent news coverage of SPESs-related scandals to start a conversation. Discuss ethics of cheating and using SPESs as well as the importance of proper training. As a coach, let your athletes know how you feel about using SPESs and cheating.
- **Talk about the pressures to use SPESs.** Help teens establish realistic and healthy expectations.

# Talking to Students About Steroids - Continued

- **Stress positive alternatives to SPESs.** Encourage hard work, good nutrition, proper training regimens, hydration and rest as the right tools to improve athletic performance. Above all, remind teens that sports are supposed to be fun.
- **Communicate that shortcuts don't work.** Gimmicks and quick-fix approaches are not the ways to enhance athletic performance or appearance. The human body responds well to nutrition and different types of training to improve strength, muscle tone and ability – safe and healthy options are out there.
- **If a teen you know is using SPESs, intervene and help him or her get support.** The most important part of intervention is reminding the teen that you care and that help is available. It's a good idea to have a medical or mental health care professional involved with a teen who wants to quit using SPESs. Many teens that stop using steroids experience severe depression and suicidal thoughts. A medical or mental health care professional can help teens work through these feelings safely and win back their sense of well-being.

# Resources for Talking to Students



- National Institute for Drug Abuse (NIDA)  
<http://teens.drugabuse.gov/parents/index.php>
- Substance Abuse and Mental Health Services Administration (SAMHSA) <http://family.samhsa.gov/be/athblocked.aspx>
- Office of Juvenile Justice and Delinquency Prevention (OJJDP) – Coaches Playbook Against Drugs  
<http://www.ojjdp.ncjrs.org/pubs/coachesplaybook/>
- Healthy Competition – Blue Cross/Blue Shield of TN  
<http://www.healthycompetitiontn.org/coaches/classroom.shtm>
- Additional resources can be found on the Oregon Department of Education web page at  
<http://www.ode.state.or.us/search/page/?id=2569>

# Anabolic Steroids and Performance-Enhancing Substances Prevention

## ■ Least Effective Method:

- Teaching students about steroids' harmful effects does not convince adolescents that they, personally, will be adversely affected.

## ■ More Effective Method:

- Presenting both the risks and benefits of steroid use is more effective in convincing adolescents about steroids' negative effects, because they find a balanced approach more credible and less biased.



# Anabolic Steroids and Performance-Enhancing Substances Prevention

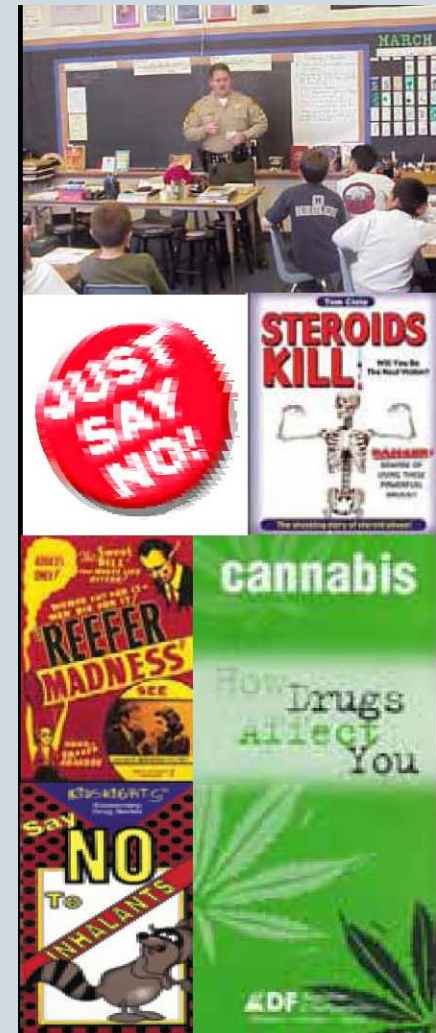
## ■ MOST EFFECTIVE Method:

- Science-based, research-based curriculum with predictable outcomes, combined with credible, unbiased facts.



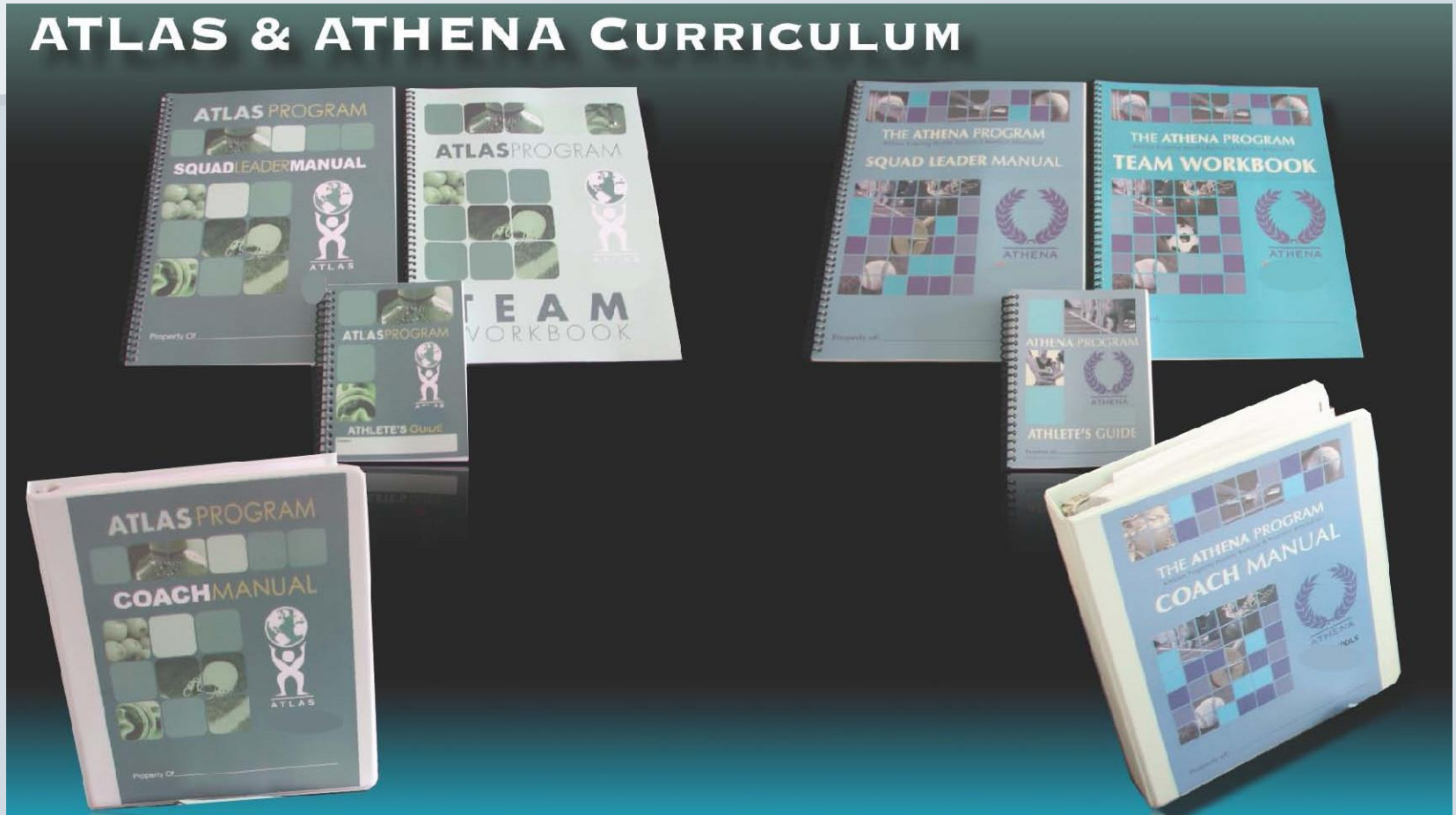
# Prevention Programs That Typically Fail

- “Just Say No” campaigns
- Scare tactics
- Knowledge-only programs and pamphlets
- “One size” fits all; not specifically focused on an age or gender
- Primarily adult lecturers



# Evidence-Based Programs

## ATLAS & ATHENA CURRICULUM



Team programs for boys and girls proven to work

# Evidence-Based Programs

## **ATLAS** (Athletes Training & Learning to Avoid Steroids)

- Male athlete program, taught by peer (squad) leaders
- Reduces anabolic steroids, alcohol, illicit drugs
- Lowers drinking and driving
- Reduces supplement use
- Improves exercise and nutrition behaviors

## **ATHENA** (Athletes Targeting Healthy Exercise & Nutrition Alternatives)

- Female athlete program, taught by peer (squad) leaders
- Reduces steroids, alcohol and other drug use
- Lowers supplement and diet pill use
- Improves nutrition and exercise behaviors

(Endorsed by the National Football League, Sports Illustrated, U.S. Department of Education, and The U.S. Department of Health & Human Services)

# Additional Resources

- Parent informational article– The Mayo Clinic  
<http://www.mayoclinic.org/healthy-living/tween-and-teen-health/in-depth/performance-enhancing-drugs/art-20046620?pg=1>
- Teen Health – Are Steroids Worth the Risk  
[http://kidshealth.org/teen/drug\\_alcohol/drugs/steroids.html#cat20140](http://kidshealth.org/teen/drug_alcohol/drugs/steroids.html#cat20140)
- US Drug Enforcement Administration  
[http://www.dea.gov/divisions/office\\_of\\_public\\_affairs/publications/brochures/steroids/public/](http://www.dea.gov/divisions/office_of_public_affairs/publications/brochures/steroids/public/)
- National Institute on Drug Abuse (NIDA)  
<http://www.drugabuse.gov/publications/research-reports/anabolic-steroid-abuse/letter-director>
- Additional resources may be found on the Oregon Department of Education web site at  
<http://www.ode.state.or.us/search/page/?id=2569>



# Acknowledgements

Information from the following articles has been included in this presentation:

- NIDA InfoFacts – Steroids (Anabolic-Androgenic) March 2007  
<http://www.nida.nih.gov/Infofacts/steroids.html>
- Addiction Intervention web site – Steroid Prevention  
<http://www.addictionintervention.com/addiction/steroidprevention.asp>
- Kids Health web site – Steroids  
<http://kidshealth.org/kid/exercise/safety/steroids.html>
- American Academy of Pediatrics web site – Teen Q&A Steroids  
[http://www.aap.org/publiced/BR\\_Teen\\_Steroids.htm](http://www.aap.org/publiced/BR_Teen_Steroids.htm)
- Healthy Kids Learn Better/ODHS – Steroid use among Oregon Youth  
<http://www.oregon.gov/DHS/ph/ah/cshp/cshp.shtml>

Special thanks to Dr. Linn Goldberg for the use of his slides and to all the representatives from the many Health, Physical Education, and sports organizations that volunteered their time to help develop this training.

Please note the inclusion of external web links in this document does not imply endorsement of either the reliability of the information presented or its suitability for a particular age group or grade level.

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# Online Assessment

After completing this training please access the Anabolic Steroids and Performance-Enhancing Substances Assessment [here](http://www.surveymonkey.com/s.aspx?sm=r1HRuNFwRnTcXsLVyaF5Yg_3d_3d) ([http://www.surveymonkey.com/s.aspx?sm=r1HRuNFwRnTcXsLVyaF5Yg\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=r1HRuNFwRnTcXsLVyaF5Yg_3d_3d)).

After completing the assessment, **print the final page** as your official Notification of Completion. This page is your notification of successfully completing the Anabolic Steroids & Performance-Enhancing Substances Assessment. No other notification will be sent.