

STUDENT ATHLETES AND PERFORMANCE ENHANCING DRUG USE

ATHLETES & PED USE

IMAGINE THAT A meeting is underway in the administration office of your local high school. The Principal, Athletic Director and Head Football Coach are solemnly discussing what the schools response should be. Outside, three newspaper reporters wait impatiently to interview someone who witnessed it. In the parking lot adjacent to the office, two white vans pull up, and out comes the equipment—microphones, wires, and cameramen, along with TV news reporters. A crowd is rapidly forming outside the office.

What happened? An hour ago, a high school football player collapsed on the practice field. Rumor has it that one of the coaches had knowledge of the athlete's use of performance enhancing "supplements" (Was it ephedra, creatine, steroids or something else?). Could whatever he was taking contributed to his collapse? School administrators and coaches are now flooded with questions. How do you tell his parents, his girlfriend, and his teammates? What did the school and coaching staffs do, if anything, to safeguard against such a situation? What do you say to the media? The press is waiting for a response...

Today most prevention efforts regarding drug use are aimed at marijuana, alcohol, amphetamines, and ecstasy. But there is another class of drugs given less attention and gaining in popularity - performance enhancing drugs (PEDs). PEDs are being used at the professional athlete level on down and according to recent research, PED use is on the rise with adolescents.



by: Jerry Sherk, Jeff Erkenbeck, Fred Becker

The Edge

From the moment that cultures invented contests, athletes have strived to find the "edge"; the technique or magic ingredient that will help them to be stronger and to go higher, faster, further than their opponents. It is known that Greek Olympians ingested mushrooms as early as the third century BC, and Aztec athletes ate human hearts to gain strength. In the late 1800's, European cyclists took heroin and cocaine "speedballs" to improve their performance. Today, athletes at every level - professional, Olympic, collegiate, high school and youth sports - are looking to science to help them to achieve what they fear they cannot achieve alone. Many believe that PEDs are the answer. Why is this happening?

CONTINUED FROM PAGE 1



Remember the days of the “all-around high school athlete?” They are all but gone. High school athletes today hone their skills in a single sport with a college scholarship or perhaps even a pro career in mind. Their coaches, peers, fans, and even Mom & Dad urge these teens on. It is not unusual for a performer to spend his or her free time in the weight room or on the practice field doing countless repetitions, while talking to

others of like mind as they elevate each others hopes and dreams. No wonder athletes go out of balance and they reach for the powder, the pill, or even the syringe that will lift them from being an ordinary athlete to becoming that special performer—a champion!

What are Performance Enhancing Drugs?

PEDs are substances taken by athletes in order to improve athletic performance. These substances can be found in supplements, herbal products, and in prescription and non-prescription drugs. Athletes use these drugs to increase energy, to elevate aggressiveness, to build muscle, to reduce weight (wrestlers, gymnasts, and runners), and to mask pain. As early as high school, and sometimes even before, many young athletes begin using supplements such as protein powders, sports drinks, ephedrine, creatine, and andro or DHEA as a regular part of their training program. Any teenager can walk in a drug store or health food store and buy these supplements without a prescription.

NO FDA REGULATION

The 1994 Dietary Supplement Health and Education Act allows supplements to be sold to consumers of any age without a prescription. Companies can label their product a “dietary supplement” and it will escape testing and other Food and Drug Administration oversight. In addition, because they are often marketed as “natural” or “herbal,” some consumers error by believing that these products have no harmful side effects. One of the dangers associated with this false belief, is in increasing the recommended dosage; as many have the misconception that if a little of a “natural” product is good, a lot of it is better. In addition to other side effects, massive amounts of supplements can overload the liver, kidneys, and other filtering mechanisms of the body.

WHAT ARE YOUNG ATHLETES USING?

ATHLETES ARE USING

CREATINE

Creatine is one of the most widely used supplements. 1998 sales estimates reached \$200 million. Athletes using creatine contend that it can improve recovery time after workouts or athletic contests by hydrating the muscles. The American Pharmaceutical Association (1999) examined the clinical research on creatine and found that approximately half the studies showed that this substance has a positive effect on athletic performance, and half showed no improvement at all.

DANGERS: Short-term studies have found muscle cramps to be one of the most common side effects, and some case studies have linked creatine with liver and kidney damage.

Ephedra

Ephedra is an herbal stimulant that acts like an amphetamine or “speed.” In addition to its use as a cold and allergy medication, ephedra is marketed for weight loss, for energy gain, and as an aid in bodybuilding. Commonly marketed as “natural” or “herbal,” these products feature an active ingredient such as ma huang, or other plants containing ephedra alkaloids. Ephedra is found in Metabolife and other diet formulas. It is also a popular ingredient in protein powders and workout pills.

DANGERS: Ephedra based products have long raised concerns about side effects. Both research and anecdotal evidence point to increase in blood

pressure, tremors, coma, and seizures. Ephedra’s amphetamine-like qualities can make an athlete keep working when he or she would normally slow down or stop because of exhaustion. The NFL recently outlawed the use of ephedra after Minnesota Viking Corey Stringer died of heat exhaustion.

Steroids

Steroids are synthetic substances that promote the gain of muscle (anabolic effect) and the development of male sexual characteristics (androgenic effect). Used by athletes since the 1950’s, make no mistake, steroids do build strength and muscle mass.

DANGERS: Along with gains in body size and strength, steroids have been associated with liver and kidney damage, premature arrest of the adolescent growth spurt, high blood pressure, depression, heart attacks, the creation of “bad” cholesterol, testicular atrophy, temporary sterility, difficulty or pain in urinating, the formation of fatty deposits on the breast area, male pattern baldness, and acne. There is also a risk of contracting HIV and hepatitis through the sharing of needles. Steroids can also precipitate alarming aggressive behavior that is sometimes called “roid rage”. This can lead to fighting, physical & sexual abuse, and other antisocial behaviors.

POPULAR EPHEDRA SUPPLEMENTS MG/SERVING*

Ripped Force	25 mg
Ripped Fuel	20 mg
Metabolife 356	12 mg
Ultra Ripped	20 mg
BetaLean	20 mg

*Milligrams of chemicals derived from the ephedra plant

CONTINUED ON PAGE 6

WHAT ARE YOUNG ATHLETES USING?

PARENTAL COMMUNICATION

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THE INFLUENCE PARENTS have over their teenagers regarding substance abuse is well documented. When parents provide their children with information about drugs, drug use diminishes. In a recent survey by Blue Cross and Blue Shield, surveyed parents placed PED use as their number one concern in youth sports. This being the case, one would assume most parents have talked to their student athletes about PEDs. In fact, 82% of adolescents surveyed said they had never had a discussion with their parents about PEDs and 80% never talked to them about supplements in sports. If PEDs are the number one concern, why has their been so little communication?

The survey leads to some conclusions:

45% of parents surveyed said they did not have enough information to talk to their children about the risks associated with these substances.

52% of adults surveyed could not name any of the potential side effects of performance enhancing drugs, and 48% could not name any potential side effects for sports supplements.

Clearly, parents want to be involved when it comes to PEDs, but they do not have enough information to effectively communicate the dangers of PEDs to their children.

Drug Testing in Schools

Drug testing for athletes not only serves to level the playing field; it helps young athletes to say no when peers pressure them: “Are you crazy man—I have to get drug tested!” In addition to looking at PEDs, school testing often involves screening for marijuana, alcohol, as well as other party drugs and is coupled with prevention & intervention efforts.

The U.S. Supreme Court agrees that drug testing in school is a good idea. In June 2002, they broadened the authority of public schools to test students for illegal drugs by allowing random drug tests for all middle and high school students involved in extracurricular activities. The decision to test, or not to test, now belongs to individual school districts.

Blue Cross and Blue Shield Association’s Healthy Competition Foundation National Survey on PEDs in Sports

- 64% of parents surveyed say they have never had a conversation with their children about performance enhancing drugs and sports supplements, compared to only 19% who said they have never talked with their kids about drugs in general.
- Based on projections from the survey results, as many as one million young people age 12-17 (5%) have taken PEDs or sports supplements, and four times as many (20%) personally know someone who is taking these substances.
- Among those who knew someone using these substances, the most common substance identified was creatine (58%). Steroids (25%) were the second most cited.
- 55% of the youth surveyed who knew someone using PEDs said they did so to perform better in sports, 42% to build muscle, and 16% were taking PEDs to look better.

CONTINUED FROM PAGE 4

The question of whether to test should not be taken lightly. Each district needs to begin by including the entire community in the decision making process. If it is found that there is a need for drug testing, then experts in law, prevention, treatment, and testing should be consulted. Designing and implementing a successful drug-testing program is no small task. A booklet put out

by the Office of National Drug Control Policy called What You Need to Know About Drug Testing in Schools can help you answer questions such as "...what drug testing is all about, who pays for it, who does the testing, what it tells you about an individual's drug use, and equally important, what it does not tell you."

CONCLUSION

ALCOHOL AND DRUG use decisions are an unfortunate reality that today's teenagers must face on a regular basis. Prevention practitioners must realize that these decisions are not limited to illicit drug use within high-risk populations – all teens are exposed. Our children are aware of the demands of perfection and winning and many are willing to pay high prices

to achieve it. As long as we fail to address substance abuse of all types on all fronts with effective comprehensive programs, we will continue to lose children to abuse.

As you open the door to let the reporters in your office, what information will you be able to give showing that you tried to make a difference?

NEXT STEPS:

Changes in a young athlete's usual performance or behavior may indicate that there is a problem or that one is developing. Coaches and parents need to be vigilant, and here are some suggestions to help your athlete (or your child) stay drug free:

- **Gain Knowledge:** Find out what types of drugs students typically use, what they look like and the signs & symptoms of a person using.
- **Let Teens Know You Know:** Young people should understand that you know about drugs and that you are going to be looking and checking. Give them an excuse to say no when offered drugs.
- **Don't Deny:** Don't think that youngsters are immune to illegal drug usage. Just because they are good athletes, get good grades, are respectful, and don't talk about drugs – does not mean that they are not using.
- **Communicate:** Talk to your athlete or child about drugs and your feelings about them. Let them know that usage of drugs is not acceptable and that there will be consequences if they choose to use.
- **Promote Balance:** Let these youngsters know that proper training and conditioning, as well as nutrition and rest are the keys to becoming a good athlete - not PEDs.
- **Don't Push Too Hard:** Young students and athletes often put enough internal pressure on themselves. Coaches and parents need to remind themselves that there is a limit to the amount of stress these teens should face.
- **Hold Athletes Accountable:** Too often we allow star athletes to cross the line and then let them off because to punish them would hurt the team or their chance for a scholarship. Condoning any form of drug use in unacceptable as today's entitlement often leads to tomorrow's tragedy.

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RESOURCES:

The National Center for Drug Free Sport
<http://www.drugfreesport.com>

Healthy Competition
Features a Blue Cross / Blue Shield survey of performance enhancing drugs.
<http://www.healthycompetition.com>

What You Need to Know About Drug Testing in Schools
A comprehensive booklet published by the Office of National Drug Control Policy.
http://www.whitehousedrugpolicy.gov/publications/drug_testing/index.html

Creatine, A New Study - A Review of Efficacy and Safety
[American Pharmaceutical Association © 1999]
A discussion of effectiveness and dangers of creatine.
<http://www.shop.store.yahoo.com/vpx-sports/creatinestudy.html>

Report of a Preliminary Study: Elements of a Successful School-Based Student Drug Testing Program
http://www.datia.org/resources/stud_test_study.htm

TEAM UP: A Drug Prevention Manual for High School Athletic Coaches
<http://www.usdoj.gov/dea/demand/team-up.htm>

NIDA — National Institute on Drug Abuse
Website resource that discusses steroids, as well as other drugs of abuse.
<http://www.drugabuse.gov/DrugPages/Steroids.html>

LET'S HEAR FROM YOU!

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prevention **Tactics**

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CONTINUED FROM PAGE 3

"Legal" Steroids

Examples of these "legal" steroids are DHEA (dehydroepandrosterone) and andro (androstenedione). These substances are purchased for their anabolic qualities and believed to be converted into testosterone by the body. Little is known about their actual effectiveness as a bodybuilding agent. As Andro and DHEA are categorized as "dietary supplements" they are unregulated by the FDA and they can be obtained in many commercial outlets. Andro is the supplement found in Mark McGuire's locker the year he broke the home run record.

DANGERS: It is believed that if taken in large enough amounts to raise a person's testosterone level, they are also likely to produce the same negative side effects as anabolic steroids.

Tactics (tak'tiks) n. **1.** a plan for promoting a desired end.
2. the art of the possible.