

**Diseases Associated With Steroid Use:  
Teaching High School Students on the Dangers Caused by Steroid Use**

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**Overview**

The main idea for this curriculum is to inform our students about the dangers of anabolic steroids and some of the diseases that may occur with their abuse. Most athletes are using steroids because they may be concerned with winning, increasing their strength or performing better. Others are tempted to take them to pick up the opposite sex through building their bodies up like Adonises. Neither the athletes nor the common users may realize the problems or diseases that using these steroids might do to their bodies during short term or long term use. I will attempt to present some history about how anabolic steroids were introduced and why they are still used with our present day athletes from high schools, colleges, and the professional ranks that were affected by the use of anabolic steroids. Steroids are associated with many diseases, troubles and deaths of athletes. I hope that many high school students will take serious notice of the extremely serious problems in sports today, so they may not suffer life-long unhealthiness.

**Rationale**

Many of our young high school students have the idea that they are invincible. Having the youthful belief that nothing can hurt them or no one is stronger than them can deceive these unsuspecting people. Some of our students are often misinformed about the use of these drugs to enhance the belief that they are so much stronger than others. Students want to feel like they are the strongest, the fastest or the best at anything they do, but in reality they are not what they proclaim to be. Sometimes they will go beyond the extremes to have the perfect body so they will do almost anything to give them an edge to look or to be talked about as better than the other guy. This is when they will turn to things such as anabolic steroids. As a former athlete, a parent, a coach and a teacher, I find that

high school students' use of any drug is extremely troubling. This is a life threatening chance that young athletes are willing to take in the hope that it will help them "look good." Today, athletes are using steroids at an increasingly phenomenal rate. This has encouraged expensive drug testing procedures that have become the norm at almost every level of competitive sports. As the number of drug-related fatalities increased in sports something had to be done about the use and abuse of steroids. The use of performance enhancing drugs is nothing new to athletes. A study done by The National Institute on Drug Abuse showed that the use of anabolic steroids remained stable at under 1.5 percent for students in 8th, 10th, and 12th grades in the early 1990s, then started to rise. Peak rates of annual use occurred in 2002 for 12th-graders (2.5 percent), in 2000 and 2002 for 10th-graders (2.2 percent), and in 1999 and 2000 for 8th-graders (1.7 percent).

Although steroid use among females is increasing (according to the latest news reports,) most anabolic steroids users are male, and among male students, past year use of these substances was reported by 1.3 percent of 8th-graders, 2.3 percent of 10th-graders, and 3.3 percent of 12th-graders in 2004.

**Anabolic Steroid Use by Students  
Year 2004 Monitoring the Future Survey**

	<b>8th-Graders</b>	<b>10th-Graders</b>	<b>12th-Graders</b>
<b>Lifetime</b>	1.9%	2.4%	3.4%
<b>Annual</b>	1.1	1.5	2.5
<b>30-day</b>	0.5	0.8	1.6

This survey shows that as students age, steroid use becomes more of a problem. Some peer pressure most likely comes into play so I would like to influence some of these young people who really feel pressured to use performance enhancers in order to be competitive, not to do so. Perhaps if more parents, coaches, and young athletes knew more about the effects of most performance enhancing drugs there would be far less abuse of these drugs. Team coaches and trainers need to be aware of what their athletes are up to and help these young minds make the right choices for their health. They need to show them and teach them that it is far more important to be the best that they can be, without artificially altering who they are. Although researchers have not proven conclusively that steroids are the cause of some dangerous diseases associated with their use, I feel that it is extremely important to do a study about them. There needs to be more intense educational research especially because of the high profile Congressional inquiries. In my high school classes we want to learn about how the government works to protect people. This is one of many ways we can

learn about the government and how Congress can work to protect us if we are informed through education. This curriculum is very necessary for young athletes to understand how important it is to know about steroids. This could save a lot of student lives in the long run. Therefore, I strongly recommend that a steroid curriculum be taught to high school students.

## **Objective**

I think that students need to be aware of the problems, diseases or deaths that steroid use might bring about. I will try to encourage and incorporate into a high school civics and U.S history class, a series of discussions and information from athletes as well as unsuspecting abusers of anabolic steroids (users who do not realize the negative impact of these substances.) I want to inform students of the dangers and effects of these steroids. The content area standards will include:

- Reading
- Writing
- Speaking
- Listening
- Citizenship
- Wellness and fitness
- Family and consumer science
- Environment and ecology.

These content areas will be used in class to discuss, analyze and maybe to prevent the problems of steroids associated with diseases or death in our society. I feel a strong duty as an educator and a former athlete to inform young people about the short and long-term use of using drugs to make them better; especially that using these drugs might actually lead to a serious health disaster.

## **Strategies**

I will use various tasks to teach students with different learning styles about the dangers of steroid use on both males and females. In today's news, there are questions about some of the most famous athletes in the United States and in the world that are using as well as dying from these drugs. I find that without being taught in school about the dangers of these products that many of our students watching these professional, college, and high school athletes will try some form of this product maybe once in their lives. Many of the ordinary students want to be like these athletes or at least have a body build like them, or one of their favorite rap singers. So as an educator, I feel like this is a must to let these students know about the diseases that may be connected with anabolic steroids.

The populace that I will be teaching this curriculum to are high school students. Most of these students are special education students. Some are participants on various sport teams with the school. There are both male and female athletes that want to strive to be the best or at least talk about being the best.

To begin to talk about athletes who compete to win at most any cost, we will take a historical perspective. As far back as ancient Greece, wrestlers ate huge quantities of special foods and other substances to increase their strength and performance. They filled their bodies with massive amounts of red meat to build their muscles or they ingested mind-altering plants (Hallucinogenics) to prepare their bodies for the grueling matches. Norse warriors and Dutch swimmers in the late 1800's used mind-altering substances such as strychnine, cocaine, heroin, and caffeine in an attempt to improve their performance in competition. (Lukas 2001)

Experimentation with steroids began in the late 1800's when scientists performed experiments on roosters to acknowledge the effects of the androgens (male steroid hormones) on these animals. The scientist would remove the rooster's testicles to discover if the rooster could still maintain the fleshy appendages on the rooster's head and under its beak. Testosterone is the main androgen produced by the male testicles in animals and humans. The experiment showed that removing the testicles caused a shrinking problem for the male roosters. The rooster's fleshy appendages became smaller. (Lukas 2001)

What are anabolic steroids? Anabolic steroids are compounds that resemble testosterone in male hormones. Both males and females have testosterone, but males produce much more than females. They are synthetically made in laboratories and each has a different effect. (Lukas 2001) Anabolic steroids can be taken two different ways: orally and by injection. People who inject anabolic steroids run the added risk of contracting or transmitting HIV/AIDS or hepatitis, which causes serious damage to the liver. Unlike other drugs that are taken on a daily basis, steroids are taken in cycles. Cycling is the taking of multiple doses over an extended period of time, stopping and then resuming. Commonly people combine several different types of steroids to maximize the effect, this is called stacking. (Lukas 2001)

Steroids were used to treat anemia and other diseases that caused decrease or waste of muscle mass in the 1930's. During this time, the medical profession began to use steroids to treat people who had burns, intestinal problems, asthma and cancer. When WWII ended in 1945, European researchers began to give steroids to many starving people in prisoner of war camps. This helped the skeletal prisoners build body tissue that had broken down from disease. Even

during the early research, scientists tried to find ways to minimize the masculinizing effect that steroids had on people. In the 1940's, scientists began more intensive research on testosterone. The first athlete to receive a performance enhancement with testosterone was a trotter racehorse named Halloway. Scientists implanted him with testosterone pellets because the animal did not perform as an 18-year old gelding should. The racehorse began to perform well in several races and even broke a trotting record. In the early 1950's, European athletes began experimenting more with steroids as performance enhancers. European athletes took notice that steroids did indeed improve certain aspects of their athletic performance. The athletes became more streamlined, their muscles were bigger and stronger and they showed more aggression. A new trend began after the 1952 Summer Olympics when it was discovered that the Soviet weight lifting team won several medals with the use of steroids. Many teams started ingesting steroids to enhance their athletic performance. (Lukas 2001)

In 1968, the U.S Olympic track team began using steroids while participating in the games. Eventually, steroids had become an attainable and essential part of the American athlete's training. Soon, many professional football players made it an extremely popular commodity. Many professional limelight football players like Pat Donovan, Joe Klecko, and Fred Smerlas have informed the public that anabolic steroids were on the incline in their sport. An updated report about the increase of these synthetic anabolic steroids indicates that they have very serious side effects when taken in large amounts over a certain period of time. Although some of these products can effectively treat anemia or kidney disease, in particular Erythropoietin (EPO), has been blamed for more than twenty-four deaths among competitive cyclists. EPO is a genetic copy of a hormone that stimulates production of oxygen-rich blood cells. (Balcavage 2000) This product thickens the blood, which increases the risk of heart attack in people who want to increase their endurance by using these drugs. Even though steroids are used to combat some diseases such as kidney disease, it can also cause much damage to the kidneys if not used properly or without a physician's care. (Dudley 2001)

During the 1970's steroid usage by Olympic athletes was banned by the International Olympic Committee. The Olympic Committee began requiring urine tests for all athletes that competed in the Olympic Games. Anabolic steroids were banned from most major amateur and professional sports organizations. This included the National Football League, the National Collegiate Athletic Association, the International Amateur Athletic Federation and the International Federation of Body Builders. (Monroe 1999)

By 1988, Congress passed the Anti-Drug Abuse Act, which made distributing or processing anabolic steroids for non-medical reasons to be a major federal offense. A newer law, called the Anabolic Steroids Act of 1990, re-categorized

anabolic steroids as a controlled substance and increased stricter penalties for steroid use and trafficking. When any steroid substitutes were discovered to be just as harmful to athletes as steroids themselves, the Olympic Committee in 1992 suggested stricter regulations on pharmaceutical firms who manufactured the drug for medical use or use for athletes throughout the world of the Olympics. Many Olympic athletes from several countries including the United States, China, Germany, Great Britain and the former Soviet Union were not allowed to compete because their bodies showed evidence that they had non-steroid drugs meant to imitate the effects of steroids. Because of the distributors on the black market these drugs are created in secret, illegal laboratories making them perhaps the most dangerous of all, since they were not restricted to regulations which guaranteed their purity and the strength of medically approved substances. Today, the use of performance enhancers has become so widespread that expensive drug-testing procedures have become the norm at almost all track and field events. So there is nothing new about athletes using performance enhancing drugs. What is new, however, is their current prevalence among young athletes. (Micheli 2001) Congress is aware of the use and they have decided to take charge. In January 2004 the President of the United States devoted a part of his State of the Union speech; urging athletes to “get rid of steroids now.” The Anabolic Steroid Control Act of 2004 took effect in January of 2005. Basically this act was a revision of the same act of 1990. However, in the revised version \$15 million dollars is set aside to teach students about the dangers of anabolic steroids. Obviously this is a bigger problem than we all think for the government to get as actively involved as they have.

As the demand to win at all cost comes into play with these young athletes, they will do almost anything to give themselves an edge without even considering the long term physical effects. Most people would not believe the peer pressure that many sports programs will use with youngsters abusing a performance enhancing drug. When a young athlete is put in a position to use these drugs just so he or she can compete it becomes a great travesty. Even parents and coaches influence these youngsters to get involved with enhancers because they become so obsessed with winning. According to a Penn State study, the youngsters not only take these steroids to enhance the athletic performances but many take them to look good. (Micheli 2001) Steroids may make them look more like freaks than the Adonises that these young people envision. These steroids can have an extremely dangerous effect on a young person’s health. In the young person, (adolescents) steroids can speed up maturation, but the main effect of steroids in young people is stunted growth. Many young men who use steroids develop abnormalities in their sexual organs, including smaller testicles and a lower sperm count. Young female athletes, who use steroids, may suffer an enlargement of the clitoris and an increase in body hair followed by menstrual dysfunction. (Micheli 2001) Other common changes attributed to steroid use can be viewed

psychologically such as an increase in aggression, “roid rages,” mood swings, and suicidal tendencies. “Roid rages” are the effect of using steroids by all abusers or users, similar to an episode of road rage.

Steroids will cause numerous severe side effects, some of which are not curable. Some of the effects are temporary and reversible if and when the individual user stops using them. If a user stops using any drug, some of the negative effects can be corrected, depending on the duration, frequency and dosage of their intake. Other negative effects will occur regardless of the previous variables. One of the effects on the liver is a chemical hepatitis disease and a risk of benign and malignant liver tumors. The effects on the male reproductive system have already been mentioned. This includes a decrease in sperm production, testicle shrinkage, prostate enlargement, risk of testicle and prostate tumors and a persistent and abnormal erection. A second effect is a psychological effect. It includes an increase in aggression, mood swings, sex-drive changes, and increased suicidal tendencies. A third effect of steroids is on the cardiovascular system. It includes an increase in blood pressure and decrease in the HDL “good cholesterol.” A fourth effect on young people can be devastating. They can suffer from one of the gravest effects of anabolic steroids. The most critical problem is the premature closure of the growth plates which keeps the young person from growing during late adolescence. When steroids are used by a child, it can also speed up maturation. A fifth effect is on the immune system. It makes it difficult for the natural defenses to fight against infections. A sixth area that steroids can affect is the musculoskeletal system. It causes the tendons and ligaments to weaken which increases the risk of injury. (Monroe 1999)

This is the breakdown of some of the problems caused by steroids use in males: acne, baldness, hair loss, depression, high pitched voice, inability of an erection, increase or decrease in sexual drive, increase of prostate or testicle cancer, infertility, large breast, low sperm count, pain when urinating, shrinkage of testicles, and sleeping problems.

In comparison, the females have some of the following problems caused by steroid use: acne, baldness (irreversible,) changes or stoppage of a menstrual cycle, deepened voice, hair on the face, increased or decreased sex drive, infertility, shrinking of breast.

Some problems that both males and females using steroids will display in general are as follows: aching joints, addiction, bad breath, constant headaches, feeling tired, fever, hives, muscle cramps, rashes, sore tongue, stomach pain, swelling of feet or ankles, trembling, vomiting blood, yellow skin or eyes.

Now, I'd like to mention some of the diseases for both males and females caused by using steroids. This is most important for all users of steroids because these diseases associated with the drug may cause problems for life or even death. Some of the most severe diseases that are associated with steroids are heart disease, kidney disease, liver disease, psychiatric disease and cancer.

First, how does the effect of steroids contribute to the problem of heart disease? Our heart has over 60,000 miles of blood vessels that keep us alive by pumping oxygen-rich blood throughout our bodies. Steroids users elevate the amount of nitrogen the body stores. This causes our bodies to compensate for the chemical imbalance through retaining more water. The result of retaining water called edema, elevates the body's blood pressure and makes the heart work harder than usual. This may sometimes cause our heart to fail. Another way steroids can cause heart disease associated with their use is through blocking arteries with a fatty substance. This disease is known as atherosclerosis. If you decide to overload on steroids, you could be setting yourself up for an artery block and a serious hospital visit.

Secondly, how do steroids contribute to our blood and remove wastes? Once the kidneys' job is completed, they produce a clear yellow liquid known as urine. If steroids are used abusively, they make the kidneys work harder. Eventually, the kidneys may shut down completely. This causes kidney disease which can only be treated through a dialysis machine to clean your blood several times each week. Our kidneys are important to us, so we need both of them to work properly together. A kidney transplant is the last result of this serious problem.

The third disease associated with the use of steroids is liver disease. When steroids are taken orally they make it very hard on the liver. Our liver is the main organ that metabolizes or breaks down drugs we take. Another job of the liver is to clean the blood of any toxins and wastes that are produced by our cells. If steroid doses are high, the liver cannot keep up and is overworked. The liver becomes damaged and it releases liquid called bile into the bloodstream. When bile gets into your bloodstream, it makes your skin and the white part of your eyes turn yellow. The problem becomes a process called jaundice. In most cases, if steroid use is discontinued, the liver when tested usually will return to normal. One of the most serious problems with the liver and steroid use is a condition in which a cyst becomes blood filled. This can become a fatal circumstance.

Fourthly, steroid use has been linked to psychiatric diseases such as mania, schizophrenia or paranoia. During a mania episode with steroids a person will move around a lot, talk very rapidly and do many different things all at the same time. Steroids use may also cause effects that look like schizophrenia. This is a

disease when people often hear voices and think other people are out to get them. Another psychiatric disease caused by steroid use and abuse is manic depression. In these cases people feel suicidal at times, suffer loss of appetite, lack of sleep, feelings of hopelessness and total lack of ambition. Many high school students have issues within themselves at this age; an added chemical in their system that furthers these issues could be very detrimental.

Lastly, steroids may cause the most feared disease of all...cancer. It can take a very long time to discover cancer or it can take a long time for it to become active. This is why it is hard for cancer researchers to accurately determine if any drug or chemical may have caused cancer. Our immune system helps fight off viruses, bacteria and fungi to which we are exposed. If a longtime steroid user has no help to fight off infections it may let cancer cells may develop. There are no defenses against the infections by our immune system when steroids reduce its functions. The use of steroids can be linked to liver cancer or brain cancer. But on the other hand steroids have been prescribed to treat cancer and other diseases such as diabetes or to aid healing in some way. When people abuse these drugs, they can expect to have bad results.

Many people question whether or not anabolic steroids are addicting or not. The answer is yes. As soon as a person starts to use steroids, they begin to feel better. They begin to feel stronger, faster, and start to see their bodies change. Once the user starts to see their performance improve, and their body morph into what they always sought after; it's hard to stop. Many times fear comes into play when the user thinks of stopping, afraid of what family and friends might think. The physiological dependency of wanting to impress friends, coaches and parents becomes an obsession. The stronger a user gets, the greater the desire to increase their strength. The bigger their body build gets, the greater the desire to see how big they can make their body get. It's almost as though it's a never-ending circle. The more users see results the more they want to push themselves, try more steroids, to see what they can do to chemically alter their body to what they want it to be. When students use, it's as though they are doing a science experiment on themselves. This is scary because young users don't understand that the results from this experiment will and can last throughout their adulthood. Many people also question how anabolic steroids can be dangerous. They think that the body already produces testosterone, so it must be safe to take steroids. What they don't understand it that the high concentration causes their systems to basically be poisoned by the drug; and the side effects are severe.

This brings me to the final analysis about the use of steroids. I would like to give some real-life stories to all athletes especially high school students who have chosen to abuse steroids. There are millions of testimonies about athletes that have chosen to abuse steroids; however they have done so without fully

understanding the consequences of their choices. The choices that they have made have totally devastated their lives as well as their friends and family. What is really scary personally to me is to read about parents that have persuaded their young children to use steroids to enhance their athletic ability. It seems that parents need to be totally aware of the potential for long lasting problems that will occur if they are not observing carefully the abuse of steroids by adult models in our professional and college sports. At this time, I would like to give some amazing accounts of how steroids have become one of the most talked about problems in high school, college, and professional sports lately. The topic of steroids and their use in professional sports has made exciting news nationally recently.

Since this is the television era, we have turned our recent attention to sports figures going to Congress to testify about their particular sports involvement with steroids. When young athletes see the adulation lavished on sports stars like baseball's Mark McGuire, staying away from steroids can be challenging. Mark McGuire has been accused of using androstenedione (a muscle builder to help heal injuries.) Even though the National Baseball League does not prohibit its use, researchers are not sure how safe or effective it is. Mark McGuire has retired from professional baseball, but he is still very influential to many other inspired young baseball players. I feel that a star like Mark McGuire should be telling young people not to take a performance-enhancing substance. The substance androstenedione may be sold over the counter without a prescription and not regulated by the United States, Food and Drug Administration because it is considered a dietary supplement, not a drug. But if people like Mark McGuire don't come out and say that it is not okay to use this product even though it is allowed, young people will think it is okay regardless of the unknown long-term harmful effects of using the product. I think young people will say if Mark McGuire is using it, then it's okay for me to use it. Those in the public eye have a responsibility to fulfill. They are role models; their very existence influences children's decisions. Unfortunately, sometimes those in the spotlight forget that and the result is America's children in very scary, life threatening situations. There are other professional baseball players that should be mentioned with Mark McGuire that are being called to Congress in Washington D.C... They are Jose Canseco, Sammy Sosa, Jason Biambi and Barry Bonds. The commissioners of baseball and managers as well as owners have been summoned to Congress to testify about steroid use in professional baseball. A poll was taken in 1995 of 198 Olympic-level athletes. It revealed that more than half of those surveyed would take a drug that would assure them victory but would also kill them in five years. (Dudley 2001)

Professional football is highlighted when the topic of steroids abuse is called to the attention of Congress. Both professional football and college football have

long been associated with enhanced performance substances being widely used and acceptable. Some entire teams under the authority of their coaches or other managerial leadership have been totally involved with the promotion of such performance enhancers without penalty. When penalties have been imposed by law, there have been those who have been known to get around those laws or penalties. It is hard to keep up illegal steroid use. Drug testing can be difficult because more performance enhancing drugs are beginning to be classified as illegal. Criminal laws and sanctions seem as though they don't even matter. The original Anabolic Steroid Control Act went into effect 15 years ago, however, how many professional or college level athletes have ever been arrested or imprisoned for the use of this drug? Only a few people who have been prosecuted can point out why they have been ostracized from the game for their participation in the use of drugs that are not legal or performance enhancers. Since professional football is a very visible, profitable business to most of our cities today, we should realize how the decisions they make not only influence our economy but more importantly how they will impact our youth.

Two professional football players' lives that were affected by steroid abuse were Lyle Alzado and Steve Courson. These two men have amazingly incredible stories about the real consequences that depend on the choices you make. They knew that there were good and bad sides to any choice you make in life. They both made poor choices about steroids, so they told their stories in the hope that other athletes would make better choices than they did. Lyle Alzado developed brain cancer due to abusive use of drug enhancers. He blamed the use of steroids he had abused for 20 years. The brain cancer took his life in 1991 at the age of 43. He was quoted as saying, "I just didn't feel strong unless I was taking something." Ironically, the steroids that enlarged Alzado's muscles and made him feel strong may have ultimately weakened him to such a degree that he could not get out of bed. (Balcavage 2000) Before Alzado died, he mentioned that even though there was no documentation about the proof of steroids and human growth hormone causing his cancer, he suggested that someone needed to look at it after he died.

Unlike Lyle Alazado, Steve Courson is still alive to tell his amazing story. He too was called to Washington to testify before Congress about steroid use in the NFL. Steve believes that if he tells his story to young athletes, that this would be an effective drug-prevention deterrent. As a former NFL offensive lineman, Steve Courson, has a debilitating heart disease, which he attributes to steroid abuse during his playing days. When we watch the news we will see Steve talking about taking his story to schools and other places to speak out against the abuse of steroids. One of the most asked questions by teenagers to him is, "Could you have made it in the NFL if you didn't take the steroids?" Steve lives in the city of Pittsburgh and he became a popular player with the Pittsburgh Steelers. I think that he is proud to go before Congress to talk about the abuse of steroids in the

NFL. He wants to get the word to young people that steroids have a long term effect on your life once you start to use them. The Pittsburgh Steelers team during the 1970's has been marked as a team that used steroids to help them become the city of champions. Steve Courson is able to talk about this from first hand experience. These men are expected to play the steroid game without mentioning it; running the risk of forsaking their careers if they do speak out.

We now come to the reality of steroid use in all levels of our society. Steroids are still being widely used and obtained by athletes in all different kinds of sports from A to Z. Athletes all over the world can obtain steroids legally in this country by pharmaceutical companies for medical use, but the black market can get involved to make a serious problem for all athletes. Illegal drugs can be made in secret, illegal laboratories exist throughout the world as well as in this country. We see that there is a demand for steroids from athletes at home and abroad; and the use of these drugs has become even more popular to our young athletes. Studies show that six to ten percent of high school girls will use steroids before they graduate. (Balcavage 2000) Many young people will use steroids to simply improve their performance as athletes. If young people can actually listen to Congressional reports or those professional athletes that have a "death" threatening disease, they must learn exactly what anabolic steroids can do to their minds and bodies. If students are provided with enough information, then hopefully they will make wise decisions when it comes to the use of anabolic steroids. It is our duty as adults to keep the young people of America informed. If students are unaware of the true reality of taking steroids, we can only blame ourselves for not providing them with the crucial information that they deserve and desperately need. It's our responsibility to show students that living a healthy life is more important than being in the spotlight for only few moments. What we need to realize that this is not only a drug crisis, but an ethical dilemma. When students take anabolic steroids, they are cheating. There is no difference between them taking pills to get better in sports than cheating on a term paper...except one...they could die. It is our duty as teachers, parents, and coaches, to not only let students know the physical reasons they should not take these drugs, but also the ethical reasons they should not either. When athletes ingest these pills, they are not their true selves. When they make that touchdown, or get that home run; it is merely their chemically altered self against athletes that are just giving the game their best. We need to teach today's youth that the winning at all cost attitude is the wrong attitude. Taking short cuts like taking steroids to get a better athletic performance has risks, irreversible risks that can alter who they are and what they can and will become in life.

The series of lessons which follows will be used in special education high school classes regarding the various effects that using steroids may have on students' lives. All levels of high school students can benefit from following these

lesson plans for health class and history study. These content standards can be used to meet all Pittsburgh public school requirements.

### **Classroom Activities**

Weekly lessons for five weeks content standard reading, writing, speaking and listening number 5 (30-40 minute class time) All students analyze and make critical judgments about all forms of communication, separating facts from opinions, recognizing propaganda, stereotypes and statements. I will start with a pre-test to see what students know, and finish with a final test to see what they learned over the five week period.

### **General Questions**

#### **Pretest-Steroids**

**Name:** \_\_\_\_\_ **Score:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**1.) What are two reasons why a high school age person would use steroids?**

1. \_\_\_\_\_

2. \_\_\_\_\_

**2.) Name five diseases that may be associated with steroid use?**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

**3.) What main sports are associated with fairly heavy steroid use?**

1. \_\_\_\_\_

2. \_\_\_\_\_

**4.) What are some of the most common effects of steroid use?**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**5.) What are steroids?** \_\_\_\_\_

\_\_\_\_\_

**6.) What branch of government is questioning athletes about steroids?**

\_\_\_\_\_

**7.) What is a legitimate use for steroids?** \_\_\_\_\_

\_\_\_\_\_

1<sup>st</sup> week

-Suggested assignments: (30-40 minute class time)

-*Monday*: Students will read newspapers, magazines, search websites or local news for information concerning steroids.

-*Tuesday*: Students will discuss and share information with their classmates in an orderly fashion so that each student may be heard.

-*Wednesday*: Students will write a short essay (3-5 paragraphs) using materials discussed and gathered through class assignments.

-*Thursday*: Students will record information about steroid use presented on the news from the nightly or daily news, sports news, national news. Students will be asked to chart this information.

-*Friday*: Students will observe a video about steroids and write important information from that video to share with the class.

## 2<sup>nd</sup> week

-Suggested assignments: (30-40 minute class time)

-*Monday*: Students will learn about history of performance enhancement drugs and why they are used by athletes. Student information will be put together to do writing lesson on what they learned and how it affects them.

-*Tuesday*: Students will explain why during the twentieth century the use and abuse of drugs increased in sports for young people.

-*Wednesday*: Students will learn about what are the physical effects that occur with the use of steroids.

-*Thursday*: Students will discuss what signs, assistance and safety measures can be used by parents, coaches, teachers and students themselves to recognize the use of steroids and to help the students involved.

-*Friday*: Students will view a video that shows what some of the observable problems parents and coaches should be checking for and how to help students (athletes) that have symptoms of steroid abuse.

## 3<sup>rd</sup> week

-Suggested assignments: (30-40 minute class time)

-Content standards citizenship number 4 all students examine and evaluate problems facing citizens in their communities, state, nation and world by incorporating concepts and methods of inquiry of various social sciences.

-*Monday*: Students will explore what high school, college and professional sports along with the media can do to prevent student abuse of performance enhancers.

-*Tuesday*: Students will look at the signs for detecting the use of possible steroid abuse in our communities and homes etc.

-*Wednesday*: Students can discuss what parents can do/not do to help with athletes who are faced with negative health effects of steroids abuse. (Teacher gives at least seven guidelines to direct the discussion.)

*-Thursday:* Students can discuss what coaches can do or not do to help athletes faced with one of the most difficult dilemmas in the sports “business” today.

*-Friday:* Students will view the congressional hearings on drug abuse where the professional teams of football and baseball athletes testify to Congress. Students give their opinions and facts about how the athletes view the performance-enhancer drugs.

4<sup>th</sup> week

-Suggested assignments (30-40 minutes class time)

-Content standards wellness and fitness number 3 all students demonstrate their knowledge of the benefits associated with physical fitness and good personal health habits, including health promotion and disease prevention.

*-Monday:* Students will learn about heart disease and the effects of steroids on heart disease.

*-Tuesday:* Students will learn about kidney disease and the effects of steroids on the kidneys.

*-Wednesday:* Students will learn about liver disease and the effects of steroids on the liver.

*-Thursday:* Students will learn about psychiatric diseases and how steroids may affect the disease.

*-Friday:* Students will learn about how steroids can lead to cancer of the brain; and study the numerous ways that steroids may cause cancer.

5<sup>th</sup> Week

-Suggested assignments (30-40 minutes class time)

-Content standards environment and ecology number 3. All students think critically and generate potential solutions to environmental issues.

*-Monday:* Students will write or give a 5-minute question and answer response about what they feel about steroids use in high school sports.

-*Tuesday*: Students will give their response to a series of critical thinking questions about college sports and the use of steroids.

-*Wednesday*: Students will choose one of the professional athletes given to make up a series of questions to ask these athletes. Then the class will address these questions orally or in writing to give possible responses that these athletes might give.

- *Thursday*: Students will write five questions about steroids to ask the teacher or a guest athlete from their high school.

-*Friday*: Students will have a guest speaker from high school, college, or professional sports to come in to talk about steroids and how they have played a part at their level.

### **General Questions**

#### **Post-test Steroids**

**Name:** \_\_\_\_\_

**Score:** \_\_\_\_\_

**Date:** \_\_\_\_\_

#### **1.) What did you learn about steroids?**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

#### **2.) What would athletes use steroids for?**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

#### **3.) What is most disturbing about steroids?**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4.) **Where did steroids begin?** \_\_\_\_\_

\_\_\_\_\_

5.) **What are anabolic steroids?** \_\_\_\_\_

\_\_\_\_\_

6) **What is EPO?** \_\_\_\_\_

\_\_\_\_\_

7.) **Name five countries that were not allowed to compete in the Olympics in 1992?**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

8.) **What are some of the changes that happen to young men using steroids?**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

**9.) What are some of the changes that happen to young women using steroids?**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

**10.) Name 6 professional players that have been called before Congress to explain their involvement with steroids.**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

**11.) Why do most people get into steroid use?**

1. \_\_\_\_\_

2. \_\_\_\_\_

**12.) Name the 5 effects that the use of steroids may cause**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

**13.) Name two professional football players that were affected by the use of steroids?**

1. \_\_\_\_\_ 2. \_\_\_\_\_

## ANNOTATED BIBLIOGRAPHY

- Balcavage, D. (2000). *Steroids*. Philadelphia: Chelsea House Publishers.  
This book describes why people used steroids and how it was very widespread. In fact, it was so widespread that expensive drug testing procedures became the norm for sporting events. Young people typically took the steroids to enhance performance or to improve their appearance. The effects on the different genders were also outlined in the book.
- Dudley, W. (2001). *Drugs & Sports*. San Diego: Greenhaven Press. Inc.  
This book gives an outlook on how prevalent is the use of performance enhancing drugs by professional athletes. It talks about the ethical questions raised by these drugs widely used to help athletes perform better, even when there is a great risk for poor health later on in life or even sudden death. The problem of how these athletes are being looked at as heroes and how so many young athletes emulate them to become better sports participants is also discussed.
- Kuhn, C. (2000). *Pumped: Straight Facts for Athletes*. New York: W.W. Norton & Company.  
This book talks about the dangerous side effects of anabolic steroids on the heart, lungs, psychological effects, brain and kidneys.
- Lukas, S. (2001). *Steroids*. (2001). Hillside: Enslow Publishers, Inc.  
This book gives information about why people use steroids and the history of how early athletes used steroids, even consuming poisons. The edge this supposedly gave them led to later developments in steroid use.
- Micheli, L. (2001). *The Sports Medicine Bible for Young Athletes*. Sourcebooks, Inc.  
The main focus of this book is to describe how parents, coaches and teachers can play a big part in keeping kids safe from being destroyed by these drugs. It describes how to parent, coach and teach children the dangers of these drugs.
- Monroe, J. (1999). *Steroid Drug Dangers*. Springfield: Enslow Publishers, Inc.  
This book gives individual accounts of athletes in high school, college and the professional ranks that have used steroids. It talks about how steroids changed them, made them stronger, but also had many different and negative effects in their life. This also gives an accurate account of how steroids affect males versus females.

National Institute on Drug Abuse Website

<http://www.drugabuse.gov/Newsroom/04/2004MTFDrug.pdf>

Statistics retrieved from the Internet June 29, 2005.