SUPPLEMENTS POSITION STATEMENT

National Federation of State High School Associations (NFHS)
Sports Medicine Advisory Committee (SMAC)

The National Federation of State High School Associations (NFHS) recently advised the membership of a heightened level of concern about nutritional supplements. Empirical data has demonstrated widespread use of such products by persons of high-school age. The products are unregulated by the Food and Drug Administration (FDA), and they may contain potentially harmful ingredients such as (but not limited to) creatine, ephedrine or excessive amounts of caffeine.

In 1998, the NFHS Board of Directors issued a position statement on the use of drugs, medications and supplements by participants in interscholastic sports. The NFHS' strong recommendation then and remains today that all student-athletes and their parents/guardians should consult with their physicians before taking any supplement product. In addition, school personnel, including coaches should not dispense any drug, medication or supplement except with extreme caution and in accordance with state regulations and school district policy. School district policies should be developed in consultation with health-care professionals, senior administrative staff of the school district and parents.

The new warning about nutritional supplements was issued by the NFHS through its Sports Medicine Advisory Committee, and was intended to serve as a reminder to student-athletes, parents and school officials. The warning reminded all interested parties that supplements in the form of pills, powder, drinks and food sources (medications, supplements and consumables) purporting to enhance strength and/or endurance should be ingested, if at all, only in accordance with applicable laws, and the advice of one's own health-care provider. Now because of the reported high level of supplement usage by teenagers, the NFHS is asking that its warning be given increased emphasis by all concerned parties.

Approved November 2002

INVASIVE MEDICAL PROCEDURES ON THE DAY OF COMPETITION

POSITION STATEMENT

National Federation of State High School Associations (NFHS)
Sports Medicine Advisory Committee (SMAC)

The NFHS SMAC was formed in 1996 to assist the NFHS in ensuring the safety of high school athletes across the nation. The SMAC investigates numerous issues, rules, and situations and considers their potential risks to athletes. Recently, the SMAC has reviewed the issue of invasive medical procedures such as intravenous (IV) rehydration and the use of injectable anesthetic/analgesic drugs during or before athletic contests and events.

While we believe these practices are not widespread at the high school level, a handful of such incidents have been reported to the SMAC over the past year. It is reported that these procedures are carried out at the college and professional levels. The SMAC is very concerned that occurrence of, or the desire for, such medical procedures will continue to "trickle down" to high school athletics.

The SMAC encourages a philosophy that high school athletics serve the purpose of providing young men and women the opportunity for personal growth in a controlled environment. The pursuit of victory is not, by itself, justification for medical intervention. We believe that invasive procedures such as the administration of IV fluids and the use of injectable anesthetic/analgesic drugs performed on the day of competition with the sole purpose of enabling a student athlete to participate are inconsistent with the philosophy of high school sports.

This position applies to any athlete requiring a local (example: lidocaine) or systemic (example: Toradol) pain-killing medication to enable him or her to play. This practice increases the risk of further injury to the affected body part. The use of prescription medication that is administered by injection for chronic medical conditions (such as insulin for diabetes or Imitrex for migraine headaches) is appropriate, and will not be affected.

Second, performing medical procedures in a locker room, training room, or other facility is fraught with the potential for infection and other complications. The placement of an intravenous catheter or the administration of an intramuscular or subcutaneous

injection is a medical procedure and should be treated as such. Thus, a medical facility is the proper venue for any such invasive procedures to be carried out.

Finally, while our primary concern is with protecting the health of the young athlete, we believe this is also a matter of participation equity. Due to a variety of factors, few high school sports programs have team physicians attending their competitions and in many instances these volunteers do not have special training in sports medicine. Thus, teams and individuals who have a physician or other medical provider willing and able to provide such services will have a significant competitive advantage over their opponents who may not have such a specialist available.

After a review of the potential risks, consequences, and limited medical benefits of these invasive procedures, the NFHS Sports Medicine Advisory Committee takes the position that there is no proper role for these procedures in high school athletics. We strongly recommend to coaches, school administrators, athletic trainers, and team physicians that athletes should not be allowed to participate in athletic contests or events if they have received IV hydration or been injected with an anesthetic or analgesic medication on that same day.

Approved April 2009

POSITION STATEMENT ON ANABOLIC STEROIDS

National Federation of State High School Associations (NFHS)
Sports Medicine Advisory Committee (SMAC)

EXISTING POLICIES/STANDS

The NFHS strongly opposes the use of anabolic steroids and other performance-enhancing substances by high school student-athletes. Such use violates legal, ethical and competitive equity standards, and imposes unreasonable long-term health risks. The NFHS supports prohibitions by educational institutions, amateur and professional organizations and governmental regulators on the use of anabolic steroids and other controlled substances, except as specifically prescribed by physicians for therapeutic purposes.

BACKGROUND

Anabolic, androgenic steroids (AAS) are synthetic derivatives of the male hormone testosterone. Natural testosterone regulates, promotes and maintains physical and sexual development, primarily in the male, but with effects in the female as well. Like testosterone, AAS have both an anabolic effect (increase in muscle tissue) and an androgenic effect (masculinizing effects that boys experience during puberty). No AAS is purely anabolic. As a result, the use of AAS won't lead to muscle growth without also leading to other unintended, undesirable side effects.

According to national surveys, the use of AAS among high school students has been decreasing since about 2001. There are no national studies that measure the extent of AAS use by high school student-athletes, although some states publish statewide prevalence data. Nearly one-third of high-school age steroid users do not participate in organized athletics and are taking AAS primarily to modify their physical appearance. Athletes who use AAS do so for two main reasons: 1) to gain strength and 2) to recover more quickly from injury.

AAS are controlled substances and are illegal to use or possess without a prescription from a physician for a legitimate medical diagnosis. Some AAS are used by veterinarians to treat pigs, horses and cows. In humans, medical uses of AAS include weight gain in wasting diseases such as HIV-infection or muscular dystrophy, absent gonadal function in males, and metastatic breast cancer in women. AAS should not be confused with corticosteroids, which are steroids that doctors prescribe for medical conditions such as asthma and inflammation. AAS are prohibited by all sports governing organizations.

FACTS ABOUT ANABOLIC STEROIDS

- Anabolic steroids are controlled substances and are illegal to possess or sell without a prescription for a legitimate medical condition by the prescribing physician.
- Androstenedione, norandrostenedione and other similar prohormones, at one time available over the counter as dietary supplements, are now defined as controlled anabolic steroids.
- Athletes who have injected anabolic steroids in high school have tested positive in collegiate drug tests – months after they stopped injecting.
- Athletes who have injected anabolic steroids are at greater risk for infections, HIV and hepatitis.

POTENTIAL NEGATIVE SIDE EFFECTS FROM THE USE OF ANABOLIC STEROIDS

- Decreased eventual height if consumed before growth plates have fused in pre-pubertal youngsters
- Secondary sex characteristic changes
- Increased acne
- Growth of body/facial hair in girls
- Loss of hair in boys
- Permanent voice-lowering in girls
- Violent, combative behavior
- Sexual dysfunction and impotence
- Mood swings, loss of sleep, paranoia
- Depression upon stopping use
- Organ damage and death from heavy use

PREVENTING ATHLETES FROM TAKING ANABOLIC STEROIDS

- School personnel, coaches and parents can reduce steroid abuse by speaking out against such use.
- Talk with your athletes about frustrations they may have about how they look or how they are performing in their sport. Help them establish healthy expectations of their bodies.
- Talk to athletes about realistic performance standards.
- Focus on proper nutrition and hydration. Work with a registered dietician to develop a plan for appropriate weight gain and/or weight loss.
- Don't trust Internet marketing messages about quick fixes.
- Restrict athletes' access to environments where steroid use might occur and to people who are involved with anabolic steroids.
- Don't subscribe to publications such as muscle magazines that depict unrealistic pictures of men and women.
- Help athletes understand that using anabolic steroids not only is illegal but also is cheating.
- Consider initiating a formal performance-enhancing, drug-education program to educate athletes and deter use.

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Revised and Approved in April 2009

Rethinking Steroid-testing Programs

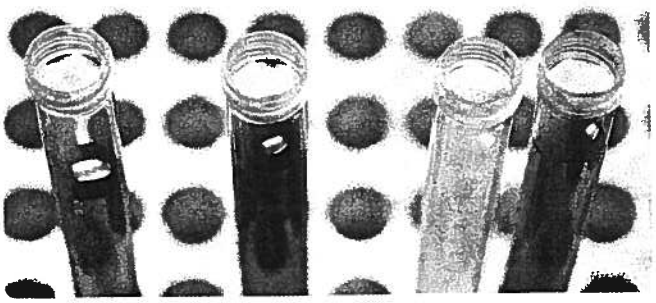
BY STEVE APPELHANS

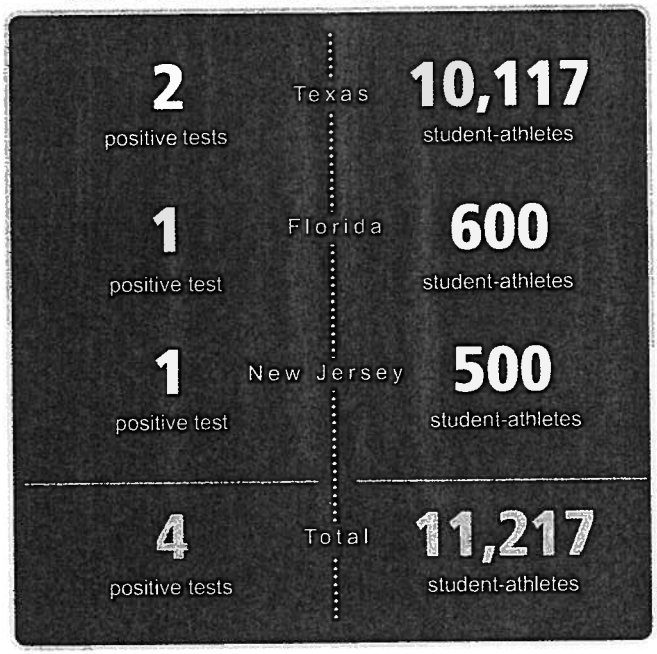
With the concern about steroids and other performance-enhancing drugs at an all-time high, it seems logical that testing high school student-athletes for such illegal substances is a good thing. So why are many state representatives thinking twice before implementing steroid-testing programs? And why are some of those states with a steroid-testing program choosing to discontinue it?

Simply put – almost no one has tested positive.

According to the most recent statistics, only four of the 11,217 student-athletes who were screened nationwide tested positive for steroids.

The vast majority of student-athletes who were tested – 10,117 to be exact – reside in Texas, and only two of them tested positive. One positive test came from the 600 student-athletes tested in Florida, while the other came from one of 500 student-athletes tested in New Jersey.





In addition to Texas, New Jersey – which started the nation's first high school testing program in 2006 – and Illinois – which is starting its first year of testing – currently have steroid-testing programs in place. On the other hand, Florida discontinued its program after one year, and Indiana has decided against implementing a program of its own.

"We're not against steroid testing," Bobby Cox, assistant commissioner at the Indiana High School Athletic Association, told USA Today. "You look at Florida and New Jersey, and they have two positive tests. Is it really worth it to put that much money to get that kind of return?"

That kind of money ranges from Florida's former $100,000 program to Texas's current $3 million program. So the question becomes: Is it worth it?

For many states, the answer is no.

In most cases, individual state governments are responsible for funding the steroid testing programs. However, some legislators believe the money used for testing could be put to better use.

"I thought it was a ridiculous use of money at the time and now we're finding it's even more ridiculous than I expected," Debbie Riddle, Texas State Representative, told USA Today. "Their intentions are honorable, but I think if they had to do it again, I bet there would be four people voting for it rather than four people voting against it."

Riddle doubts the program, which concludes after the 2008-09 school year, will be renewed.

The Illinois High School Associations (IHSA) has decided to take a different approach. Instead of getting the state to fund a program, the IHSA is spending $150,000 to test as many as 750 students – a cost that will be covered by ticket sales during the postseason. ◉

*See related story on page 26.

Steve Appelhans was a summer intern in the NFHS Publications/Communications Department. He is a senior at the University of Wisconsin-La Crosse majoring in sport management.

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People informing People THE HAWK EYE
THE HAWK EYE

Steroid testing working in high schools

Only 20 tests in four states have come back positive.

By GEOFF MULVIHILL

The Associated Press

MOUNT LAUREL, N.J. -- At one time, testing high school athletes for steroids was seen as the best way to fight performance-enhancing drug use among the young. Now, those efforts are losing steam because of high costs and few positive results.

New Jersey, Florida, Texas and Illinois have tried steroid testing since 2006, and an examination of the results by The Associated Press shows that only 20 tests out of 30,799 have come back positive.

That's far short of what one study concluded about use of the drugs that are associated with stunted growth, hormonal problems, strokes and heart ailments. University of Michigan surveys conducted in 2007 and '08 each found 2.2 percent of seniors said they had tried steroids at least once -- down from 4 percent in 2002.

Testing advocates argue that results from the four states show the program works as a deterrent. Critics say they show the flaws in how the tests were conducted. Either way, it's becoming harder amid a recession to justify spending up to $200 each on tests that rarely catch cheaters.

Missouri state Sen. Matt Bartle tried to push his colleagues to adopt a statewide high school steroid testing program because he was concerned that young athletes were emulating the bad habits of some professionals.

But when Florida dropped its program in 2008 after a costly one-year trial in which there was only one positive out of 600 students tested, Bartle decided a similar effort wouldn't be cost-effective in Missouri, and he didn't submit a proposal this year.

"Is there enough steroid use out there that spending a couple million bucks a year against everything else that the state needs to spend money on is worth it?" Bartle asked.

The state programs grew out of health concerns and doping scandals in baseball, cycling and track and field. Last month, New York Yankees slugger Alex Rodriguez became the latest name tied to performance-enhancing drugs, admitting he used them while with the Texas Rangers from 2001-03.

All four states chose athletes at random. In New Jersey and Illinois, only those on teams in state tournaments were subject to the testing, while all athletes in Texas were, although no tests were given in the summer after the academic and athletic year is over. In Florida, all participants in six sports (baseball, football, softball, girls' flag football and boys' and girls' weightlifting) were eligible.

The AP's examination of the states' steroid tests showed limited impact when it came to catching users:

-- While 20 tests came back positive, six were granted medical exemptions.

-- Another 12 tests in Texas are being rechecked because the results were unresolved. Officials there also have classified another 70 cases as "process positives" because students refused to give urine samples or had unexcused absences when they were called.

-- Accounting for the exemptions and process positives, and assuming every unresolved test is positive, that still means tests revealed 78 steroid users at most. That translates into one user for every 320 tests given.

Bob Colgate, assistant director of the National Federation of State High School Associations, used to get calls from sports administrators across the country asking about steroid testing. As state budgets have tightened, he said, such calls have ended. And those involved with high school sports still debate whether testing is effective.

"Did we have a problem? Do we have a problem, or is this taking care of the problem?" Colgate asked. "I don't think everybody's come to grips with this."

Such uncertainty doesn't play well in legislatures.

Critics in Texas say the program has failed to get enough positive results to justify the cost -- $6 million to test up to 50,000 students for two years.

State Sen. Dan Patrick of Houston said in 2008 that the program should be abolished, calling it "a colossal waste of taxpayer money." He was unsuccessful, although testing advocates concede the program is likely to be scaled back for the upcoming school year.

"I could support something that is narrowed and tailored to focus on the students and sports who are more likely to be implicated in those tests," Patrick said.

The state representative who championed the program counters that testing works as a deterrent.

"The idea was not a 'gotcha' program," said Texas state Rep. Dan Flynn. Because of testing, coaches, parents and students know more about dangers of steroids and how to identify the signs that a teen is using them, he said.

New Jersey state Senate President Richard Codey said he knew something should be done in 2005 when his basketball-playing sons -- then in high school and college -- told him they were aware of peers who used steroids.

At Codey's urging, the state began testing for the 2006-07 school year, randomly checking students who were in state tournaments. The cost of $100,000 per year is split between the state government and the New Jersey Interscholastic Athletic Association.

In the first two years, two of the 1,001 tests given to players chosen at random from playoff teams in all sports came back positive.

Linn Goldberg, a professor at the Oregon Health and Science University, said New Jersey's program -- which is similar to Illinois' -- doesn't work because students know they'll only be tested during the

playoffs.

That means they can use steroids with no chance of being caught for most of the year, he said.

Frank Uryasz, president of Drug Free Sport of Kansas City, which conducts testing for all the states with mandatory tests, as well as for the NCAA, said surveys on steroid use by college athletes show that testing is a deterrent.

He acknowledges there are built-in problems in testing high school students.

"How likely is it we're going to test a high school athlete in July?" he asked. "Zero. It's not going to happen."

Codey disagrees.

"You've got to think it makes a kid say, 'I'm going to lay off for the next four months,'" he said. "That's a positive."

Goldberg, who developed a steroids education program that was implemented in schools with funding from the NFL, said testing is not "a quick fix." He added: "There has to be peer pressure to do the right thing."

Zach Greenwald, a star on the powerhouse football and wrestling teams at New Jersey's Paulsboro High, said peer pressure works.

He said he's not aware of anyone at his school using steroids and he isn't tempted because he knows about their health effects.

Still, the 17-year-old junior said not everyone his age has the same perspective, which is why he doesn't mind that he was tested last fall.

"It cuts back on teams cheating," he said.

Associated Press writer Jim Vertuno in Austin, Texas, contributed to this.

FLORIDA PROGRAM – DROPPED AFTER 2007-2008

2007-08 State of Florida/FHSAA Anabolic Steroid Testing Program

The State of Florida has directed the FHSAA to test student-athletes in grades 9-12 for the use of anabolic steroids during the 2007-08 school year. Student-athletes who are participating in the sports of baseball, football and weightlifting will be randomly selected to undergo testing. Florida Law 2007-192 establishes the basic guidelines for the testing program.

This document contains information on how the testing program will be conducted, the penalties for tests resulting in positive findings, and the procedures for appealing positive findings and the resulting penalties. It also outlines the responsibilities and obligations of member schools and individual student-athletes.

WHO WILL BE TESTED?

Approximately 1 percent of all student-athletes in grades 9-12 who participate in the sports of boys baseball, girls flag football, boys tackle football, girls softball and girls & boys weightlifting may be tested. Student-athletes in grades 6-8 will not be tested. Neither will student-athletes in grades 9-12 who participate in sports other than the six target sports.

WHO WILL CONDUCT THE TESTS?

The FHSAA has contracted with the National Center for Drug Free Sport, Inc.™ to administer the testing program. Specimens will be analyzed at UCLA's Olympic laboratory, the leading anti-doping lab in the world, which is certified by the World Anti-Doping Agency (WADA).

HOW WILL STUDENT-ATHLETES BE SELECTED FOR TESTING?

FHSAA will submit to Drug Free Sport, a list of all athletes who participate in the identified sports. Drug Free Sport will first randomly select the schools and then randomly select students from each school. At the end of the 2007-08 school year, a maximum of 1 percent of student-athletes participating in the named sports will have been tested.

IS IT POSSIBLE THAT A STUDENT-ATHLETE COULD BE TESTED TWICE?

Yes. Because the method of selection is completely random a student-athlete who participates in more than one of the six targeted sports could possibly be selected for testing in any one or more of those sports.

WHAT SUBSTANCES WILL STUDENT-ATHLETES BE TESTED FOR?

Student-athletes will be tested for anabolic steroids, including but not limited to THG and Madol, as well as substances that are used to mask the use of anabolic steroids. Student-athletes will not be tested for recreational drugs.

WHAT IS THE PROCESS FOR REPORTING NAMES OF PARTICIPATING STUDENT-ATHLETES TO THE FHSAA OFFICE?

Each school must provide to the FHSAA Office by sport a roster containing the names of all student-athletes in grades 9-12 who are participating in any of the six target sports. Each roster must be submitted by email on the Microsoft Excel spreadsheet template that is available for download at

http://www.fhsaa.org/compliance/steroid_testing/

Only the name of each student-athlete – last name followed by first name and current grade level– is needed. The initial roster in each target sport must be received in the FHSAA Office the week before the first permissible date of competition in that sport. The rosters will be forwarded to Drug Free Sport, which will make confidential, objective random selections of student-athletes from the rosters submitted by the schools selected for testing in the target sport.

HOW OFTEN DOES A SCHOOL HAVE TO SUBMIT UPDATED ROSTERS IN A SPORT AND WHAT HAPPENS IF A STUDENT-ATHLETE LEAVES THE PROGRAM?

It is not necessary for a school to submit an updated roster in a sport unless the school is selected for testing. Once a school is notified that it has been selected for testing in a sport, the school must submit to the FHSAA Office within 72 hours (3 days) a complete and up-to-date roster. The roster is to include **ALL** participants, including injured student-athletes. If a student-athlete leaves the program, for whatever reason, he/she **WILL NOT** be allowed to rejoin the team at any time during the 2007-08 school year.

WHAT IF A SCHOOL DOES NOT WANT ITS STUDENT-ATHLETES TO BE TESTED?

Participation in the testing program by a school is not optional. Florida Law 2007-192 has made participation in the testing program a prerequisite for membership in the FHSAA. If your school does not consent to participate in the testing program, its membership in the FHSAA will be suspended for the 2007-08 school year. There will be no exceptions.

WHAT IF A STUDENT-ATHLETE DOES NOT WANT TO BE TESTED, OR A STUDENT-ATHLETE'S PARENT(S)/LEGAL GUARDIAN(S) REFUSE TO CONSENT FOR THEIR CHILD TO BE TESTED?

Participation in the testing program by a student-athlete is not optional. Florida Law 2007-192 requires each student-athlete participating in the target sports, as well as the student-athlete's parent(s), to give their consent in writing for the student-athlete to be tested as a prerequisite for eligibility to participate in these sports. If a student-athlete does not provide to the school a consent form signed by the student-athlete and his/her parent(s), the student-athlete will not be eligible to participate in practice or competition in these sports. The student-athlete, however, will be eligible to participate in other sports.

WHEN WILL THE TESTING TAKE PLACE?

Student-athletes participating in any one of the six target sports will be subject to selection and testing at any time during the season for each of those sports.

WHAT WILL BE THE PROCEDURE FOR THE ACTUAL TEST?

Once Drug Free Sport randomly selects a student-athlete for testing, the procedure will be as follows:

1. Drug Free Sport will notify both the school administration and the FHSAA Office at least seven days in advance of when a certified specimen collector will visit the school to collect a urine specimen from the student. The name of the student to be tested, however, will not be disclosed.

2. When the specimen collector arrives at the school, he/she will disclose to the school administration the name(s) of the student-athlete(s) selected for testing. The student-athlete(s) will be called to the main office, directed to a private room, and required to provide a specimen.

3. The specimen collector will forward the specimen(s) to the lab, which will divide the specimen into an "A" sample and a "B" sample. The lab will only analyze the "A" sample during this period of testing. The "B" sample will be retained for analysis in the event of a challenge to a positive finding. The lab will provide to the FHSAA Office its findings within 10 – 14 business days, and the FHSAA will immediately notify the schools.

4. If a test produces a positive finding, the school administration, upon receipt of the notification, must immediately suspend the student-athlete from practice and competition in all sports. The school administration must notify and schedule a meeting with the student-athlete and his/her parents to review with them the positive finding, the procedure for challenging the finding, the penalties, and the procedure for appealing the penalties.

WHAT IF A STUDENT-ATHLETE WHO IS SELECTED FOR TESTING IS ABSENT ON THE DAY OF TESTING OR OTHERWISE FAILS TO REPORT FOR THE TEST WHEN CALLED?

Regardless of the reason why a student-athlete does not report to be tested when called (including an excused absence), the student-athlete must be immediately suspended from practice and competition in all interscholastic sports until a specimen is provided. A Drug Free Sport representative will be required to make a second trip to the school to collect that specimen. Therefore, the cost of the test will be the responsibility of the student-athlete or school. A test administered by any entity other than Drug Free Sport will not be accepted.

WHAT ARE THE PENALTIES TO A STUDENT-ATHLETE WHO TESTS POSITIVE?

1. **Suspension from practice and competition.** A student-athlete who tests positive will be suspended from practice and competition in all sports for 90 school days. The suspension will begin immediately on the day the school receives notice of a positive finding. The student-athlete must undergo a mandatory exit test no sooner than the 60th school day of the suspension. If the

exit test is negative, the student-athlete will be immediately reinstated. If the exit test is positive, the student-athlete will remain suspended until a subsequent retest results in a negative finding.

2. **Drug education program.** The student-athlete must attend and complete a drug education program conducted by the school, the school district or a third-party organization contracted by the school or school district.

WHAT IF A SCHOOL ALLOWS A STUDENT-ATHLETE WHO HAS NOT BEEN REPORTED TO THE FHSAA OFFICE FOR TESTING TO PARTICIPATE IN ONE OF THE TARGET SPORTS?

The student-athlete is ineligible. The school, therefore, will be required to forfeit each and every contest in which the student-athlete participated (dressed in uniform). Furthermore, the school may face a minimum fine of $2,500 and administrative or restrictive probation in the sport in which the violation occurred.

WHAT RIGHTS DO A SCHOOL AND/OR STUDENT-ATHLETE HAVE TO CHALLENGE A POSITIVE FINDING OR APPEAL A SUSPENSION?

1. **Challenging a positive finding.** A school may challenge a positive finding and must challenge the finding at the request of the student-athlete. The challenge must be filed with the FHSAA Office. The "B" sample of the student-athlete's original specimen that was retained by the lab will be analyzed. The cost of this analysis must be paid by the school or the student-athlete's parent(s). If the analysis results in a confirmed positive finding, the student-athlete will remain suspended. If the analysis results in a negative finding, the FHSAA will reinstate the student-athlete and refund the cost of the analysis. The student-athlete will remain suspended during the challenge.

2. **Appealing a suspension.** A school may appeal a suspension and must appeal the suspension at the request of the student-athlete. The appeal must be made to the Commissioner, who may uphold the full suspension, reduce the suspension by half, or reinstate the student-athlete. The school and/or student-athlete may appeal an unfavorable decision by the Commissioner to the Board of Directors, which, likewise, may uphold the full suspension, reduce the suspension by half or reinstate the student-athlete. The student-athlete, however, will remain suspended until he/she tests negative on an exit test.

WHO PAYS FOR THE TESTS?

The FHSAA will pay for the initial test of a student-athlete (analysis of "A" sample) and one exit test if needed. The school or student-athlete's family must pay the cost of any subsequent exit tests. If the school or student-athlete challenges a positive finding, then they must pay for the cost of the "B" sample analysis. If the challenge test produces a negative finding, the FHSAA will reimburse them for the cost of the challenge test

CAN A STUDENT-ATHLETE SUBMIT TEST RESULTS FROM ANOTHER AGENCY?

No. Only those tests administered by Drug Free Sport will be accepted.

WILL THE RESULTS OF A TEST BECOME A PART OF A STUDENT-ATHLETE'S PERMANENT EDUCATIONAL RECORD?

No. Florida Law 2007-193 states that all records relating to the test, and to any challenge or appeal resulting from a positive finding, must be maintained separately from the student-athlete's educational records.

WILL A POSITIVE TEST SUBJECT A STUDENT-ATHLETE TO CRIMINAL PROSECUTION?

No. Florida Law 2007-193 states that the result of test is not admissible as evidence in a criminal prosecution.

ARE RECORDS AND PROCEEDINGS PERTAINING TO THE TESTS SUBJECT TO PUBLIC RECORDS AND PUBLIC MEETINGS REQUIREMENTS?

No. Florida Law 2007-194 exempts all records relating to the tests from Florida's public records laws. Test results may be disclosed only to the FHSAA Office, the student-athlete, the parents of the student-athlete, the administration of the student-athlete's school, and the administration of any other school to which the student-athlete may transfer during a suspension resulting from a positive finding. All these individuals must keep the information confidential. Likewise, appeals before the FHSAA Board of Directors relating to the tests are exempt from the state's open meetings laws and will be closed to the public.

HOW LONG IS THE TESTING PROGRAM EXPECTED TO LAST?

The testing program currently is for the 2007-08 school year only. Florida Law 2007-193 will stand repealed on Oct. 2, 2008, unless renewed by the Florida Legislature during its 2008 session.

WILL SCHOOLS BE PROVIDED INFORMATION REGARDING THE SUBSTANCES THAT MAY CAUSE A POSITIVE FINDING SO THAT IT CAN EDUCATE ITS STUDENT-ATHLETES AND THEIR PARENTS?

Anyone needing information regarding anabolic steroids and other substances can visit the Center for Drug Free Sport web site, www.drugfreesport.com. The Hanley Center web site, www.hanleycenter.org, or its facility at 5200 East Avenue, West Palm Beach, Florida, also can provide resources to schools, student-athletes and parents.

WHAT RESPONSIBILITIES ASSOCIATED WITH THE TESTING PROGRAM DOES A MEMBER SCHOOL ADMINISTRATION HAVE?

The administration of each member senior high school sponsoring a program in baseball, football and/or weightlifting will have the following responsibilities:

1. Meet with student-athletes participating in the six target sports, as well as their parents, before the first day of practice in the sport to explain the testing program.

2. Distribute to every student-athlete participating in the six target sports a consent form for the testing program. This form must be signed by the student-athlete and his/her parents and returned to the school before the student-athlete can be permitted to participate in any practice or competition in these sports.

3. Provide to the FHSAA Office using the Microsoft Excel template a roster by sport containing the name of every student in grades 9-12 participating in the target sports who has turned in a signed consent form. A student-athlete will not be eligible to participate in any of these sports until his/her name has been reported to the FHSAA Office.

4. Provide to the FHSAA Office an updated roster in a sport for which it has been selected for testing within 72 hours (3 days) of receiving notification of the test.

5. Do not inform coaches or student-athletes as to when a specimen collector will visit the school.

6. Provide a site coordinator, who must cooperate fully with a specimen collector who visits the school. The site coordinator is responsible for calling the selected student-athlete to the office, presenting signed consent forms, and helps maintain proper conduct in the testing area.

7. Provide a private room for the specimen to be given. Remember, a student-athlete who does not provide a specimen, regardless of the reason, must be suspended from all practice and competition until a specimen is provided.

8. Notify the student-athlete and his/her parents of the results of the test. If the test is positive, the school administration must immediately suspend the student-athlete from all practice and competition in all sports. The school administration also must schedule a meeting with the student-athlete and his/her parents to explain the penalties and the procedures for challenging the finding or appealing the suspension.

9. File a challenge of a positive finding or an appeal of the suspension at the request of the student-athlete.

10. Do not include in the student-athlete's permanent school record any documentation relative to the test.

11. Keep all information pertaining to the test confidential.

WHO DO I CONTACT IF I HAVE QUESTIONS REGARDING THE TESTING PROGRAM?

Contact Assistant Director of Eligibility Sedeirdra Smith in the FHSAA Office by email at ssmith@fhsaa.org or by phone at (352) 372-9551 ext. 380.

Consent of Student-Athlete and Parents to Participate in Random Testing for Use of Anabolic Steroids

For:	Each student in grades 9-12 who participates in the sports of baseball, flag football, tackle football, softball, girls weightlifting or boys weightlifting, as well as the student's parent.
Action:	Must be completed, signed by you and your parents, and returned to your athletic director before you can participate in any one of these sports during the 2007-08 school year.
Due date:	Prior to participation in in any of the six sports.
Required by:	Florida Law 2007-193.
Purpose:	Consent of student and parents to participate in random testing program.

TO: STUDENT-ATHLETE AND PARENTS

The State of Florida has directed the FHSAA to test student-athletes in grades 9-12 for the use of anabolic steroids. Student-athletes who are participating in the sports of boys baseball, girls flag football, boys tackle football, girls softball, and girls & boys weightlifting will be randomly selected to undergo testing. Florida Law 2007-193 states that a student-athlete who participates in any one of these six target sports and the student-athlete's parents must consent for the student-athlete to provide a specimen if the student-athlete is selected for testing. Failure to give this consent in writing will cause the student-athlete to be ineligible to participate in any one of the three sports.

You must consent to you/your child's testing by completing, signing and returning the attached form to your school before you can participate in practice or competition in any one of the six target sports. If you do not consent to you/your child's testing by signing the attached form, you/your child will not be eligible to participate in practice or competition in any one of the six target sports during the 2007-08 school year.

Please read the information preceding the attached form carefully. It includes a brief description of the testing program; the penalties for a positive finding, the procedure for challenging a positive finding, and the procedure for appealing the penalties imposed as a result of a positive finding.

BRIEF DESCRIPTION OF THE TESTING PROGRAM

The FHSAA has contracted with the National Center for Drug Free Sport™ to administer the testing program. Drug Free Sport, in turn, contracts with UCLA's Olympic laboratory, which is certified by the World Anti-Doping Agency, to analyze the specimens that are collected.

Each high school that sponsors a program in one of the six target sports must provide the FHSAA Office with a roster containing the names of the student-athletes in grades 9-12 who will be participating in the sport. The FHSAA Office will forward these rosters to Drug Free Sport. Drug Free Sport will randomly select for testing approximately 1 percent of the schools that participate in one of the six sports. Drug Free Sport then will randomly select 1 percent of the student-athletes on the rosters submitted by those schools.

A student-athlete who is selected will not know about the test until the certified specimen collector shows up at the student-athlete's school. The student-athlete will be called to the office and directed to a private room to provide a specimen (urine sample). If the student-athlete fails to provide a specimen for any reason, even an absence from school on that day, the student-athlete will be suspended from practice and competition until the specimen is provided.

The specimen collector will send the specimen to the lab where it will be analyzed for anabolic steroids, as well as substances that mask the use of anabolic steroids. The student-athlete will not be tested for the use of recreational drugs. Drug Free Sport will notify the school administration, which in turn will notify the student-athlete and parents, of the test results within 10 business days.

PENALTIES FOR TESTING POSITIVE

A student-athlete who tests positive will be immediately suspended from practice and competition in all sports for a period of 90 school days, and must attend and complete a drug education program conducted by the student-athlete's school, the school district or a third-party organization contracted to provide such a program. The student-athlete will be required to undergo an exit test no sooner than the 60th school day of the suspension. If the student-athlete tests negative on the exit test, the student-athlete will be reinstated. If the student-athlete tests positive on the exit test, the student-athlete will remain suspended until he/she tests negative on a subsequent exit test.

PROCEDURE FOR CHALLENGING A POSITIVE FINDING

A student-athlete who tests positive may ask the school administration to challenge the finding. The school administration, which must honor the student-athlete's request, will file the challenge with the FHSAA Office. A sample of the student-athlete's original specimen, which has been retained by the lab, will undergo a second analysis. The student-athlete's family or school will have to pay the cost of this second analysis. If the challenge is successful (the second analysis is negative), the student-athlete will be immediately reinstated and the FHSAA Office will refund the cost of the analysis. If the challenge is not successful (the second analysis also is positive), the student-athlete will remain suspended.

PROCEDURE FOR APPEALING THE PENALTIES FOR A POSITIVE FINDING

A student-athlete who chooses not to challenge a positive finding but wishes to seek a waiver of or reduction in the penalties for the positive finding may ask the school administration to appeal the penalties. The school administration, which again must honor the student-athlete's request, will file the appeal with the FHSAA Office. The Commissioner may uphold the suspension, reduce the length of the suspension by one-half or reinstate the student-athlete. If the student-athlete is not satisfied with the decision of the Commissioner, the student-athlete may then appeal that decision to the Board of Directors, which has the same three options. Regardless of the outcome of the appeal, however, the student-athlete cannot be reinstated until he/she tests negative on an exit test.

PAYING FOR THE TESTS

The FHSAA Office will pay the costs of the initial test and one exit test if needed. If subsequent exit tests are needed, the student-athlete's family or school must pay for those tests. The FHSAA Office also will reimburse the cost of a challenge if the challenge is successful.

CONFIDENTIALITY OF TEST RESULTS

Test results are confidential and will not be disclosed to anyone other than the FHSAA Office, Drug Free Sport, the testing facility contracted by Drug Free Sport, the school administration, the student-athlete and parents, and the administration of any school to which the student-athlete transfers if the test results are positive. These individuals must ensure the confidentiality of the test results is maintained. Test results will not become a part of the student-athlete's permanent school record and cannot be used in any criminal proceeding. Any hearing before the Board of Directors during which penalties for a positive test are being appealed will be closed to the public.

Consent of Student-Athlete and Parents to Participate in Random Testing for Use of Anabolic Steroids

Must be completed and signed by a student-athlete in grades 9-12 participating in the the sports of baseball, flag football, tackle football, softball, and girls & boys weightlifting, as well as the student-athlete's parents, and submitted to the school before the student can participate in practice or competition in any of these sports.

Name of your school _____

You must sign this form before you/your child can participate in interscholastic practice or competition in the sports of baseball, flag football, tackle football, softball, and girls & boys weightlifting during the 2007-08 school year. Florida Law 2007-193 requires that you sign this form. See your principal or athletic director with any questions you have.

Anabolic Steroid Testing Consent

By signing this form, I affirm that I am aware of the State of Florida/FHSAA Anabolic Steroid Testing Program, which provides:

> A student-athlete who is found to have used an anabolic agent will be suspended from all interscholastic practice and competition for a period of 90 school days from the date the school administration is made aware of the positive finding. The student-athlete also will be required to attend and complete a drug education program conducted by the school, the school district or a third-party organization contracted by the school or school district to provide the program. The student-athlete must undergo an exit test for reinstatement of eligibility no sooner than the 60th school day of the suspension. If the exit test is negative, the student-athlete will be reinstated. If the exit test is positive, the student-athlete will remain suspended until such time as he/she tests negative on a subsequent exit test.

I agree that I was provided an opportunity to review the procedures for the testing program that accompanied this form and understand the test procedures, penalties for a positive finding and my/my child's rights to challenge a positive finding or appeal the penalties imposed as a result of a positive finding.

I agree to allow the Center for Drug Free Sport to test me/my child in relation to participation in the sports of baseball, flag football, tackle football, softball, and girls & boys weightlifting. I agree that I/my child will provide a urine sample to a certified specimen collector upon request. I understand that if I/my child fails to do so, I/my child will be immediately suspended from interscholastic practice and competition until such time as a specimen is provided.

I understand that this consent form and the results of steroid tests are confidential and will be shared only with the FHSAA Office, Drug Free Sport, the testing facility contracted by Drug Free sport, the school administration and me/my child, as well as the administration of any other school I/my child may transfer to during any period of suspension resulting from a positive test. I further understand that the test results will not be made a part of my/my child's permanent school record and cannot be used as evidence in any criminal proceeding.

I affirm that I understand that if I/my child sign this statement falsely or erroneously, I am violate FHSAA Bylaws that prohibit providing false information to gain eligibility, and I will further jeopardize my/my child's eligibility.

Date _____ Signature of student _____

Name of student _____

Date _____ Signature of parent _____

Name of parent _____

Date _____ Signature of parent _____

Name of parent _____

Home address _____ City _____ Zip Code _____

Sport(s): [__ Baseball] [__ Flag Football] [__ Tackle Football] [__ Softball] [__ Girls Weightlifting] [__ Boys Weightlifting]

What to do with this form: Complete, sign and return to your principal or athletic director before the first day you intend to participate in practice in any of the sports you check above. This form is to be kept on file in the school for **four years**.

NEW JERSEY PROGRAM – MANDATED BY STATUTE

NJSIAA STEROID TESTING POLICY

FREQUENTLY ASKED QUESTIONS

On June 7, 2006, New Jersey became the first state in the nation to require steroid testing for high school athletes. The testing policy was developed by the New Jersey State Interscholastic Athletic Association (NJSIAA), a private, nonprofit association of public, parochial and private high schools that organizes high school sports in New Jersey. These frequently asked questions address common questions and concerns about the policy.

1. *How did the NJSIAA's steroid testing policy come about?*

   In 2005, then-Governor Richard Cody convened a Governor's Task Force on Steroid Use and Prevention. The task force was chaired by Monsignor Michael E. Kelly, Headmaster of Seton Hall Preparatory School, and included physicians, attorneys, school administrators, coaches and athletic trainers. The task force reported the following: "According to the National Institute on Drug Abuse, 3.4% of high school seniors have used anabolic steroids at least once, and 1.9% of eighth graders admitted to trying steroids. Numerous studies have shown the use of steroids and steroid precursors to be on the upswing. Unfortunately, the compulsions to achieve a desirable body image, to succeed in athletics, or to obtain a college scholarship are strong motivators and influences. These influences cause some young people to risk their long-term health by using performance-enhancing substances as a short cut to meeting their goals." (Task Force Report, page 26.) Based on the task force's recommendations, on December 20, 2005, Governor Cody signed Executive Order 72, which directed the New Jersey Department of Education to work in conjunction with the NJSIAA to develop and implement a program of random testing for steroids.

2. *Why test for steroids?*

   First, using steroids without a prescription can cause serious, adverse health effects. **Second**, using steroids and other performance-enhancing drugs can give athletes an unfair advantage over their competition, and is cheating. **Third,** testing for steroids can help deter their use among high school students. **Finally**, steroids are drugs that should be used to treat medical conditions. Possession or use of most steroids without a prescription is illegal. The NJSIAA recognizes that it will take a community-wide effort by parents, coaches, athletes, teachers and physicians to attack this growing challenge. Random steroid testing is one tool that can be used to help discourage athletes from taking steroids.

3. *What are some of the specific health problems associated with steroid abuse?*

   The Governor's Task Force found that steroid abuse can result in a host of serious health problems. The following is a partial list of health problems associated with steroid abuse: severe acne, excessive hairiness in both sexes, male pattern baldness, deepening of the voice, abnormal permanent enlargement of the clitoris, loss of female body contour, altered menstrual cycling, increased libido in women, testicular atrophy, elevated blood pressure and other adverse cardio-vascular effects, thickening of the blood, liver disease, increased aggressiveness, obstructive sleep apnea, enlarged breasts in men and women, impotence, blood clots, diabetes, elevated fats in the blood, premature closure of the growth plates resulting in reduction of height, migraine headaches, premature puberty and infertility.

4. *How did the NJSIAA develop its steroid testing policy?*

   In early 2006, the NJSIAA staff worked with a specially-appointed "Steroid Committee" and with its Medical Advisory Committee to develop a list of banned substances and a policy for testing student athletes. The policy was formally adopted by the NJSIAA Executive Committee on June 7, 2006.

5. *What does the steroid testing policy say?*

   The NJSIAA steroid testing policy states, "It shall be considered a violation of the NJSIAA sportsmanship rule for any student athlete to possess, ingest or otherwise use any substance on the list of banned substances, without written prescription by a fully-licensed physician as recognized by the American Medical Association, to treat a medical condition." **In short, use of performance-enhancing drugs by student athletes in New Jersey is considered to be cheating and will be penalized.**

6. *What is the penalty for violating the steroid testing policy?*

   Any person who tests positive in an NJSIAA-administered test, or any person who refuses to provide a testing sample, or any person who reports his or her own violation, will immediately forfeit his or her eligibility to participate in NJSIAA competition for a period of one year from the date of the test. Any such person will also forfeit any individual honor earned while in violation. No person who tests positive, refuses to provide a test sample, or who reports his or her own violation will resume eligibility until he or she has undergone counseling and produced a negative test result.

7. *What is the consent form?*

   Before participating in interscholastic sports, all student athletes and their parents or guardians must consent, in writing, to the random testing. Failure to sign the consent form renders the student athlete ineligible to participate in interscholastic sports until the form is signed.

8. *Who will be tested?*

   Under the policy, any athlete who qualifies for a state championship tournament can be tested. This means that if a team qualifies for a state tournament, any athlete on the team can be tested, or if an athlete qualifies for a state championship in an individual sport like track and field or wrestling, that individual can be tested.

9. *When will the testing take place?*

   Testing begins with the Fall, 2006 sports season. Athletes may be tested before, during or after any phase of state championship competition.

10. *How many tests will be done?*

    The NJSIAA will test 500 student athletes during the 2006-2007 school year.

11. *What sports will be tested?*

    Sixty percent of the tests will be from football, wrestling, track and field, swimming, lacrosse and baseball. The remaining 40% of the tests will be from any of the other NJSIAA sports.

12. *Who will administer the testing program?*

    The NJSIAA has contracted with The National Center for Drug Free Sport, Inc. to administer the testing program. The National Center for Drug Free Sport is the official administrator of the NCAA drug testing program and the Minor League Baseball drug prevention program.

13. *What laboratory will test the samples?*

    The NJSIAA will utilize the UCLA Olympic Analytical Laboratory to test samples from student athletes in New Jersey. The UCLA laboratory is the only laboratory in the United States that is fully accredited by the World Anti-Doping Agency.

14. *What type of test will be used?*

    The test will analyze a urine sample. The NJSIAA policy does not allow for blood tests.

15. *How will athletes be selected for testing?*

    Selection of the individuals to be tested will be done by the program's administrator, The National Center for Drug-Free Sport, by computer-generated random numbers.

16. *What drugs will the NJSIAA test for?*

    The NJSIAA has adopted a list that includes four banned-drug classes and 87 examples of banned substances. This list is patterned after the NCAA's list of banned substances, and contains the same types of substances that are banned by the International Olympic Committee and the World Anti-Doping Agency (WADA). During the 2006-2007 school year, the NJSIAA will test for steroids, diuretics, urine manipulators, and HCG (in males). **Using any substance belonging to a banned class violates the rules of sportsmanship, can be detrimental to the student's health, and is considered cheating**.

17. *Why is caffeine on the list of banned substances?*

    Caffeine is a stimulant. It is banned by the NCAA. The amount of caffeine needed to result in a positive drug test is the equivalent of drinking 12 cups of coffee over a two-hour period.

18. *Are nutritional and dietary supplements on the list of banned substances?*

    No, they are not on the list of banned substances; however, all athletes must be aware that many nutritional and dietary supplements contain NJSIAA banned substances. In addition, the U.S. Food and Drug Administration does not strictly regulate the supplement industry, and therefore purity and safety of nutritional dietary supplements cannot be guaranteed. Impure supplements may lead to a positive NJSIAA test. **The use of supplements is at the student athlete's own risk.** Student athletes should contact their physician or athletic trainer for further information.

19. *How can I find more information about dietary supplements and banned substances?*

    The NJSIAA has contracted with The National Center for Drug Free Sport to offer a subscription service called the "Resource Exchange Center," or "REC," to principals and athletic directors of NJSIAA member schools. The REC provides

accurate and confidential information about dietary supplements and dangerous or banned substances.

20. *What assurances are there that the results of the steroid test will be accurate?*

    The NJSIAA has hired experienced professionals to collect the samples, and will utilize the top laboratory in the country to perform the tests. In addition, every urine sample will be split into an "A" and a "B" sample. If the A sample is positive, the athlete and the athlete's parents or guardian will be notified. They then have the right to have the B sample tested. No result is considered positive unless both the A and the B samples are positive.

21. *What if a student has a health condition that requires the student to take a drug that appears on the list of banned substances?*

    If a test result is positive for a banned substance, the testing company will notify the NJSIAA's Medical Review Officer, who is a medical doctor with experience in the field. The Medical Review Officer will contact the student and the student's family, and, if necessary, review the student's medical records to determine whether there is any medical reason for the positive result. If the Medical Review Officer determines that there is a medical reason for the positive result, no further action will be taken and the NJSIAA will not consider the test to be a positive result.

22. *Will the results of the tests be confidential?*

    Yes. Results of all tests will be considered confidential, and will only be disclosed to the individual, his or her parents, and his or her school.

23. *Can a positive result be challenged?*

    Yes. If the laboratory reports that the student's sample has tested positive, and the Medical Review Officer confirms that there is no medical reason for a positive result, the student can still challenge the result by proving that he or she bears no fault or negligence for the violation. Appeals will be heard by an NJSIAA committee consisting of two members of the Executive Committee, the Executive Director or his designee, an athletic trainer and a physician. Further appeal of the committee's decision would be to the Commissioner of Education (for public school athletes) or to the Superior Court (for non-public school athletes).

24. *What happens if an athlete tests positive under a school's testing program?*

    Many schools have their own drug testing programs. Some of those schools test for steroids and other performance-enhancing drugs. NJSIAA violations found as a result of a school test will be penalized in accordance with the school's policy, and will not be reported to the NJSIAA.

25. *Will a team be penalized if an individual tests positive for steroids?*

    No, a team will not be penalized if an individual tests positive for steroids. The NJSIAA has decided that only the individual user will forfeit his or her eligibility.

SPG/vgk
C:njsiaa-steroid testing FAQs

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NJSIAA'S STEROID TESTING POLICY

In accordance with Executive Order 72, issued by the Governor of the State of New Jersey, Richard J. Codey, on December 20, 2005, the NJSIAA will test a random selection of student athletes, who have qualified, as individuals or as members of a team, for state championship competition.

1. **General prohibition against performance enhancing drugs:**
   - **A.** It shall be considered a violation of the NJSIAA's sportsmanship rule for any student-athlete to possess, ingest, or otherwise use any substance on the list of banned substances, without written prescription by a fully licensed physician, as recognized by the American Medical Association, to treat a medical condition.
   - **B.** Violations found as a result of NJSIAA's testing shall be penalized in accordance with this policy.
   - **C.** Violations found as a result of member school testing shall be penalized in accordance with the school's policy.

2. **List of banned substances:**

   A list of banned substances shall be prepared annually by the Medical Advisory Committee, and approved by the Executive Committee. (See list)

3. **Consent form:**

   Before participating in interscholastic sports, the student-athlete and the student-athlete's parent or guardian shall consent, in writing, to random testing in accordance with this policy. Failure to sign the consent form renders the student-athlete ineligible.

4. **Selection of athletes to be tested:**
   - **A.** Tested athletes will be selected randomly from all of those athletes participating in championship competition.
   - **B.** Sixty percent of all tests shall be from football, wrestling, track & field, swimming, lacrosse and baseball. The remaining forty percent of all tests shall be from all other NJSIAA sports.

5. **Administration of tests:**

   Tests shall be administered by a certified laboratory, selected by the Executive Director and approved by the Executive Committee.

6. **Testing methodology:**

   The methodology for taking and handling samples shall be in accordance with current legal standards.

7. Sufficiency of results:

No test shall be considered a positive result unless the approved laboratory reports a positive result, and the NJSIAA's medical review officer confirms that there was no medical reason for the positive result. A "B" sample shall be available in the event of an appeal.

8. Appeal process:

If the certified laboratory reports that a student-athlete's sample has tested positive, and the medical review officer confirms that there is no medical reason for a positive result, a penalty shall be imposed unless the student-athlete proves, by a preponderance of the evidence, that he or she bears no fault or negligence for the violation. Appeals shall be heard by a NJSIAA committee consisting of two members of the Executive Committee, the Executive Director/designee, a trainer and a physician. Appeal of a decision of the Committee shall be to the Commissioner of Education, for public school athletes, and to the superior court, for non-public athletes. Hearings shall be held in accordance with NJSIAA By-Laws, Article XIII, "Hearing Procedure."

9. Penalties

Any person who tests positively in an NJSIAA administered test, or any person who refuses to provide a testing sample, or any person who reports his or her own violation, shall immediately forfeit his or her eligibility to participate in NJSIAA competition for a period of one year from the date of the test. Any such person shall also forfeit any individual honor earned while in violation. No person who tests positive, refuses to provide a test sample, or who reports his or her own violation shall resume eligibility until he or she has undergone counseling and produced a negative test result.

10. Confidentiality:

Results of all tests shall be considered confidential and shall only be disclosed to the individual, his or her parents and his or her school.

11. Compilation of results:

The Executive Committee shall annually compile and report the results of the testing program.

12. Yearly renewal of the steroid policy:

The Executive Committee shall annually determine whether this policy shall be renewed or discontinued.

NJSIAA

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NJSIAA STEROID TESTING POLICY

CONSENT TO RANDOM TESTING

In Executive Order 72, issued December 20, 2005, Governor Richard Codey directed the New Jersey Department of Education to work in conjunction with the New Jersey State Interscholastic Athletic Association (NJSIAA) to develop and implement a program of random testing for steroids, of teams and individuals qualifying for championship games.

Beginning in the Fall, 2006 sports season, any student-athlete who possesses, distributes, ingests or otherwise uses any of the banned substances on the attached page, without written prescription by a fully-licensed physician, as recognized by the American Medical Association, to treat a medical condition, violates the NJSIAA's sportsmanship rule, and is subject to NJSIAA penalties, including ineligibility from competition. The NJSIAA will test certain randomly selected individuals and teams that qualify for a state championship tournament or state championship competition for banned substances. The results of all tests shall be considered confidential and shall only be disclosed to the student, his or her parents and his or her school. No student may participate in NJSIAA competition unless the student and the student's parent/guardian consent to random testing.

By signing below, we consent to random testing in accordance with the NJSIAA steroid testing policy. We understand that, if the student or the student's team qualifies for a state championship tournament or state championship competition, the student may be subject to testing for banned substances.

_____	_____	_____
Signature of Student-Athlete	Print Student-Athlete's Name	Date
_____	_____	_____
Signature of Parent/Guardian	Print Parent/Guardian's Name	Date

May 1, 2009

NJSIAA Banned-Drug Classes
2009 - 2010

The term “related compounds” comprises substances that are included in the class by their pharmacological action and/or chemical structure. No substance belonging to the prohibited class may be used, regardless of whether it is specifically listed as an example.

Many nutritional/dietary supplements contain NJSIAA banned substances. In addition, the U. S. Food and Drug Administration (FDA) does not strictly regulate the supplement industry; therefore purity and safety of nutritional dietary supplements cannot be guaranteed. Impure supplements may lead to a positive NJSIAA drug test. **The use of supplements is at the student-athlete’s own risk.** Student-athletes should contact their physician or athletic trainer for further information.

The following is a list of banned-drug classes, with examples of banned substances under each class:

(a) Stimulants
amiphenazole
amphetamine
bemigride
benzphetamine
bromantan
caffine[1] (guorana)
chlorphentermine
cocaine
cropropamide
crothetamide
diethylpropion
dimethylamphetamine
doxapram
ephedrine
(ephedra, ma huang)
ethamivan
ethylamphetamine
fencamfamine
meclofenoxate
methamphetamine
methylenedioxymethamphetamine
(MDMA, ecstasy)
methylphenidate
nikethamide
pemoline
pentetrazol
phendimetrazine
phenmetrazine
phentermine
phenylpropanolamine (ppa)
picrotoxine
pipradol
prolintane
strychnine
synephrine
(citrus aurantium, zhi shi, bitter orange)
and related compounds

(b) Anabolic Agents
anabolic steroids
androstenediol
androstenedione
boldenone
clostebol
dehydrochlormethyl-testosterone
dehydroepiandro-sterone (DHEA)
dihydrotestosterone (DHT)
dromostanolone
epitrenbolone
fluoxymesterone
gestrinone
mesterolone
methandienone
methenolone
methyltestosterone
nandrolone
norandrostenediol
norandrostenedione
norethandrolone
oxandrolone
oxymesterone
oxymetholone
pregnelone
stanozolol
testosterone[2]
tetrahydrogestrinone (THG)
trenbolone
and related compounds
other anabolic agents
clenbuterol

(c) Diuretics
acetazolamide
bendroflumethiazide
benzhiazide
bumetanide
chlorothiazide
chlorthalidone
ethacrynic acid
flumethiazide
furosemide
hydrochlorothiazide
hydroflumenthiazide
methyclothiazide
metolazone
polythiazide
quinethazone
spironolactone
triamterene
trichlormethiazide
and related compounds

(d) Peptide Hormones & Analogues:
corticotrophin (ACTH)
human chorionic gonadotrophin (hCG)
leutenizing hormone (LH)
growth hormone (HGH, somatotrophin)
insulin like growth hormone (IGF-1)

All the respective releasing factors of the above-mentioned substances also are banned:
erythropoietin (EPO)
darbypoetin
sermorelin

(e) Definitions of positive depends on the following:

[1] for caffine – if the concentration in urine exceeds 15 micrograms/ml

[2] for testosterone – if administration of testosterone or use of any other manipulation has the result of increasing the ratio of the total concentration of testosterone to that of epitestosterone in the urine of greater than 6:1, unless there is evidence that this ratio is due to a physiological or pathological condition.

TEXAS PROGRAM – BEING CONSIDERED FOR SUSPENSION DUE TO PERCEIVED LACK OF SUCCESS

The University Interscholastic League (UIL)
Anabolic Steroid Testing Program Protocol
2008-2009

For purposes of this protocol and the UIL Anabolic Steroid Testing Program, the terms listed below have the following definitions:

Alkaline Specimen: Specimen that does not meet the pH requirements set forth in this protocol.

Anabolic Steroid(s): Any steroid as described in section 481.104 of the Texas Health and Safety Code.

Beaker Bar Code: Uniquely numbered stickers selected by the student-athlete from a supply of such and placed on the specimen collection beaker by the student-athlete. This number links the student-athletes identity to the specimen collection beaker.

Client: The School at which an Anabolic Steroid testing event is occurring.

Collection Beaker: Container with a cap utilized for the collection of the urine Specimen.

Collection Station: The entire facility used to collect the urine Specimen, including the restroom, toilet stall, and the area used by the Collector to process the Specimen.

Collector: Individual member of Testing Crew who works with the Crew Chief and assists in the testing Specimen collection process.

Complete Specimen: A Specimen that meets the volume, temperature, specific gravity and pH measurements contained in this protocol.

Contractor: The entity selected by the UIL to administer the Anabolic Steroid testing program.

Crew Chief: Individual in charge of the Testing Crew who is responsible for working with the School to schedule location and start time of the test as well as the general administration of the testing Specimen collection process.

Digital pH Meter: Instrument used by the Processing Collector to measure the pH of the Specimen for validity.

Documented Medical History: Medical records provided by a licensed practitioner with prescriptive authority documenting that an Anabolic Steroid was dispensed, prescribed, delivered and administered for a valid medical purpose in the course of professional practice.

Excused Absence: Has the meaning as defined in §25.087 of the Texas Education Code, or as delineated in local school district policy as approved, prior to the beginning of the current school year, by the board of trustees of the ISD the Student-athlete attends.

Exit Test: Anabolic Steroid test conducted by the Contractor as a condition of eligibility restoration for a Student-athlete who has been subjected to a penalty for a positive Anabolic Steroid test result.

Laboratory: Anabolic Steroid testing entity with a current certification from the Substance Abuse and Mental Health Services Administration of the United States Department of Health and Human Services, the World Anti-Doping Agency, or another appropriate national or international certifying organization contracted by the Contractor to analyze Complete Specimens provided in conjunction with this testing program.

Medical Review Officer (MRO): A physician holding a current, valid and unrestricted license to practice medicine, provided by the Contractor, who is responsible for reviewing requests for medical exception; reviewing the data of Anabolic Steroid tests; and reviewing documents submitted on behalf of a Student-athlete with a positive Specimen A result to determine whether there is a Documented Medical History which would qualify for a medical exception.

Member School Representative (MSR): A representative of the selected School, who is the primary liaison between the testing company and the School and is responsible for assisting the Testing Crew with notification and identification of the Student-athletes selected for testing.

Monitor: Member of the Testing Crew that accompanies a Student-athlete of the same gender into the restroom and supervises the voiding of a Specimen.

Parent: A biological or adoptive parent, a guardian or other person standing in parental relation to the Student-athlete.

Processing Collector: Member of the Testing Crew responsible for verifying the validity of the Specimen, according to Contractor specifications included in this protocol, working with **SCAN**®, and packaging the Specimen for shipment to the Laboratory.

Reagent Strip: Instrument used by the Processing Collector to measure the pH of the Specimen for validity.

Refractometer: Instrument used by the Processing Collector to measure the specific gravity of the Specimen for validity.

SCAN® (Secure Collection Automated Network): Computerized paperless system utilizing handheld mobile computers, barcode scanners, modems, data servers, and the Internet to provide automated drug-testing collections that is provided by the Contractor and used to document all information pertinent to the collection and testing of a Complete Specimen.

School: A school, which is a member of the University Interscholastic League, that is a unit of a school district and offers instruction in the ninth, tenth, eleventh or twelfth grades, or any combination thereof, whether all of the grades are offered instruction in the same building.

A school also fits this definition if it has: (1) only one ninth grade, one tenth grade, one eleventh grade,

and one twelfth grade; (2) with one principal in charge of all four grades; and (3) if all grades have the same school colors, the same school song, and the same school paper. That school would be eligible for League membership as one four-year (grades nine through twelve) high school unit, even though all grades are not on the same campus or in the same building.

School Personnel: An individual, who is an employee of the School or school district where Anabolic Steroid testing is occurring, and who may assist in identifying the Student-athletes selected for testing who do not have photo identification. This could include the MSR or TSC.

Shipping Kit: Box or bag used to package sealed Specimens for the purpose of shipping to the Laboratory.

Specimen Collection Kit: Supplies consisting of two vials (A and B), Specimen shipping bag, and shipping box.

Specimen: Urine provided by Student-athlete for Laboratory analysis for the presence of Anabolic Steroids.

Specimen Bar Code: Uniquely numbered set of bar codes selected by the student-athlete from a supply of such and after laboratory analysis is completed is used by the contractor to identify the Student-athlete who provided the specimen.

Split Specimen Packaging: Process of pouring a single urine Specimen into two vials, an A and a B.

Student-athlete: An individual enrolled as a student in a School who participates, through practices or contests before, during or after school, in any athletic activity listed in section 380 of the UIL Constitution and Contest Rules.

Surrogate: A person provided by the Laboratory who has no relationship with the Contractor or any known bias concerning the test outcome, who, in lieu of the Student-Athlete and his/her Parent or their designated representative, will attend the testing of a Specimen B as described in 8.16-19 below.

Testing Crew (Crew Member): Individual(s) who perform the role(s) of Monitor, Collector, and Processing Collector and work under the direction of the Crew Chief to assist in the testing Specimen collection process. Members of the Testing Crew may perform multiple roles in the collection process.

Testing Site Coordinator (TSC): A representative of the School, who is responsible for assisting the Testing Crew by providing a Collection Station in which to administer Anabolic Steroid testing.

1.0. Standards.

1.1. The presence in a Student-athlete's urine of an Anabolic Steroid is cause for the loss of athletic eligibility, unless a medical exception has been granted.

1.2. Presence of an Anabolic Steroid will be determined from analysis of the Student-athlete's urine and confirmation by an Anabolic Steroid testing laboratory with a current certification from the Substance Abuse and Mental Health Services Administration of the United States Department of Health and Human Services, the World Anti-Doping Agency, or another appropriate national or

international certifying organization through mass spectrometry in combination with gas chromatography, liquid chromatography or isotope mass spectrometry.

1.3 Only Anabolic Steroid tests conducted by the Contractor will be considered for the purposes of this program.

1.4. The current UIL Anabolic Steroid List is available from the UIL and can be found at www.uil.utexas.edu. The UIL Anabolic Steroid List includes the substances listed below which meet the description of Anabolic Steroid contained in section 481.104 of the Texas Health and Safety Code. The 2008-2009 Anabolic Steroid List will be posted prior to August 1, 2008.

UIL Anabolic Steroid List

androstenediol	methandrostenolone
androstenedione	methenolone
boldenone	methyltestosterone
chlorotestosterone (4-chlortestosterone)	mibolerone
clostebol	methandriol
dehydrochlormethyltestosterone	nandrolone
dehydroepiandrosterone (DHEA)	norandrostenediol
dihydrotestosterone (DHT)	norandrostenedione
dromostanolone	norethandrolone
drostanolone	oxandrolone
epitrenbolone	oxymesterone
ethylestrenol	oxymetholone
fluoxymesterone	stanolone
formebulone	stanozolol
gestrinone	testolactone
mesterolone	testosterone*
methandienone	tetrahydrogestrinone (THG)
methandranone	trenbolone
	and any substance, such as a compound or metabolite, that is chemically or pharmacologically related to testosterone, other than an estrogen, progestin, or corticosteroid, and promotes muscle growth

* For testosterone the definition of positive depends on an adverse analytical finding (positive result) based on the methods listed in section 1.2 which shows that the testosterone is of exogenous origin, or if the ratio of the total concentration of testosterone to that of epitestosterone in the urine is greater than 6:1, unless there is evidence that this ratio is due to a physiological or pathological condition.

1.5. The UIL Anabolic Steroid Testing program shall be limited to testing to determine the presence or use of Anabolic Steroids. Recreational drugs are not included in the testing program.

1.6. Results of an Anabolic Steroid test conducted under this program are confidential and, unless required by court order, may be disclosed only to the Student-athlete and the Student-athlete's Parent and the activity directors, principal, and assistant principals of the School attended by the

Student-athlete. If a Student-athlete who is under penalty imposed by this protocol enrolls in another School within Texas, the sending School MSR is required to notify the receiving School MSR that the Student-athlete in question has tested positive for an Anabolic Steroid and inform the receiving School of the length of the applicable penalty for that Student-athlete.

2.0. Organization.

2.1. The UIL has final authority over the procedures and implementation of the UIL Anabolic Steroid testing program.

2.2. The Contractor will be responsible for the general administration of the Anabolic Steroid testing program under the supervision of the Director of the UIL.

2.3. Contractor is responsible for selection, certification and training of the Crew Chiefs and the Testing Crews.

2.4. Contractor may utilize the services of outside collection agencies to conduct Anabolic Steroid testing Specimen collections.

2.5. Crew Chief assignments and the random selection of Schools and Student-athletes for testing are the responsibility of Contractor.

2.6. No member of an Anabolic Steroid Testing Crew may participate in Anabolic Steroid testing at a School at which they are employed, or at which they would have any other conflict of interest as determined by the UIL.

2.7. At the beginning of each school year, Schools shall identify one (1) Member School Representative (MSR) and two (2) individuals (one male and one female) to serve as Testing Site Coordinators (TSC) to assist the Crew Chief assigned to that testing event. The identities of these individuals shall be reported to the UIL at the beginning of each school year.

2.8. All testing for Anabolic Steroids within this program will be performed only by an Anabolic Steroid testing laboratory with a current certification from the Substance Abuse and Mental Health Services Administration of the United States Department of Health and Human Services, the World Anti-Doping Agency, or another appropriate national or international certifying organization.

3.0. Causes for Loss of Eligibility.

3.1. Acknowledgement and Consent Required

A Student-athlete is prohibited from participating in an athletic competition sponsored or sanctioned by the UIL unless:

1) the Student-athlete agrees not to use Anabolic Steroids; and,
2) if enrolled in high school, the Student-athlete submits to random testing for the presence of Anabolic Steroids in the Student-athlete's body; and

3) the UIL obtains from the Student-athlete's Parent, a UIL-approved acknowledgement and consent form signed by the Parent and acknowledging that:
    a) the Parent's child, if enrolled in high school, may be subject to random Anabolic Steroid testing; and
    b) the Parent or guardian consents to such testing; and
    c) state law prohibits possessing, dispensing, delivering, or administering a steroid in a manner not allowed by state law;
    d) state law provides that bodybuilding, muscle enhancement, or the increase of muscle bulk or strength through the use of a steroid by a person who is in good health is not a valid medical purpose;
    e) only a licensed practitioner with prescriptive authority may prescribe a steroid for a person; and
    f) a violation of state law concerning steroids is a criminal offense punishable by confinement in jail or imprisonment in the Texas Department of Criminal Justice.

3.2. Positive Anabolic Steroid Test Results

3.2.1. First Positive Test Result. Upon a report of confirmation of a first positive Specimen B Anabolic Steroid test result during his/her high school participation, or upon a refusal to submit to testing after random selection, a Student-athlete shall be suspended for thirty (30) school days of competition in all UIL athletic activities. Prior to eligibility restoration, a Student-athlete must undergo an Exit Test and receive a negative result.

3.2.2. Second Positive Test Result. Upon a report of confirmation of a second positive Specimen B Anabolic Steroid test result during his/her high school participation, or upon a refusal to submit to testing after random selection of a Student-athlete who has previously been subjected to the first positive test penalty, a Student-athlete shall be suspended from all UIL athletic contests for one (1) calendar year. Prior to eligibility restoration, a Student-athlete must undergo an Exit Test and receive a negative result.

3.2.3. Third Positive Test Result. Upon a report of confirmation of a third positive Specimen B Anabolic Steroid test result during his/her high school participation, or upon a refusal to submit to testing after random selection of a Student-athlete who has previously been subjected to the first and second positive test penalties, a Student-athlete shall be suspended from all UIL athletic contests for the remainder of his/her high school career at any UIL member school.

The UIL will cover the cost for the first Exit Test for purposes of eligibility restoration for the penalties outlined in 3.2.1 and 3.2.2 above. Any subsequent Exit Test(s) for purposes of eligibility restoration are conducted at the expense of the School, Student-athlete or the family of the Student-athlete. Only Anabolic Steroid tests conducted by the Contractor will be considered for the purposes of this program.

3.3. Any violation by the Student-athlete of this protocol as determined by the Crew Chief, will be treated as if there was a positive Specimen B result for an Anabolic Steroid and subject the Student-athlete to applicable penalties as described in 3.2.1. through 3.2.3. These violations will be noted on the Crew Chief's report that is filed with the Contractor after a testing event. The Contractor will report such violations to the Student-athlete, his/her parent and the MSR in the same manner as positive specimen B results are reported under this protocol. Subsequent to

serving the penalty for a first positive test, a violation by the Student-athlete of this protocol in relation to a later test, will subject the Student-athlete to penalties as described in 3.2.2 and 3.2.3, as applicable.

4.0. School and Student-athlete Selection.

4.1. The method for randomly selecting Schools or Student-athletes to be tested for Anabolic Steroids will be approved by the UIL in advance of Anabolic Steroid testing, administered by Contractor and implemented by the assigned Anabolic Steroid testing Crew Chief.

4.2. Student-athletes in the 9th, 10th, 11th and 12th grades at Schools are subject to random selection for Anabolic Steroid testing.

4.3. Selection of Student-athletes will be based upon a random selection process approved by the UIL and conducted by the Contractor.

4.4. Student-athletes will be randomly selected from the current UIL Anabolic Steroid Testing Student-athlete Listing Form. The UIL Anabolic Steroid Testing Student-athlete Form shall be the official list of all Student-athletes in grades 9-12 participating in UIL athletic activities. The School is required to utilize the UIL Anabolic Steroid Testing Student-athlete Listing Form, which is available for download on the UIL web site.

4.5. A substitution, who will also have been randomly selected, shall be made for a Student-athlete who is selected for Anabolic Steroid testing but is absent on the day of Anabolic Steroid testing. Randomly selected Student-athletes who do not appear for testing for reasons other than an Excused Absence will be treated as if there was a positive test result for an Anabolic Steroid and subject to applicable penalties as described in 3.2.

5.0. School and Student-athlete Notification of Testing.

5.1. The MSR and TSCs at a selected School will be officially notified of the Anabolic Steroid testing a minimum of twenty-four (24) hours (1 business day) but no more than forty-eight (48) hours (2 business days) before the day of testing by the Contractor.

5.2. The MSR, TSCs and/or any other School Personnel notified of an Anabolic Steroid testing event are required to keep such notification confidential. Failure of a MSR, TSC(s) and/or any other School Personnel so notified to keep such notification information confidential will be considered a violation of UIL rules and appropriate sanctions from the range of penalties in section 27 of the UIL Constitution and Contest Rules will be applied.

5.3. Upon notification of testing, the MSR will be required to provide an accurate and current list of all Student-athletes in grades 9-12 participating in UIL athletic activities at the School to Contractor for Student-athlete random selection. The MSR will be required to submit the list within the time frame specified by the Contractor in their notification. The School is required to utilize the UIL Anabolic Steroid Testing Student-athlete Listing Form, which will be available for download on the UIL web site.

5.4. Upon arrival at the School, the Anabolic Steroid testing Crew Chief will provide the MSR with a list of the randomly selected Student-athletes for Anabolic Steroid testing. The randomly

selected Student-athletes will be notified of Anabolic Steroid testing by the MSR. The MSR will notify the Student-athlete in person to report immediately to the Collection Station.

5.5. Upon notification the MSR will have the Student-athlete read and sign the UIL Student-athlete Notification Form. The time of notification will be recorded on the form. The Student-athlete will report for Anabolic Steroid testing immediately upon notification. Failure of the Student-athlete to report immediately may be found by the Crew Chief to be a violation of this protocol.

5.6. School Personnel will be available in the Collection Station at all times to certify the identity of Student-athletes who cannot provide photo identification and will be responsible for security of the Collection Station at all times.

6.0. Specimen Collection Procedures.

Management of the Collection Station

6.1. Only those persons authorized by the Crew Chief or the TSCs will be allowed in the Collection Station. Should there be disagreement over who is allowed in the Collection Station, the decision of the Crew Chief will prevail.

6.2. Upon entering the Collection Station, the Student-athlete will provide photo identification or, in the absence of photo identification, the School Personnel present shall identify the Student-athlete and the Student-athlete will be officially signed into the Collection Station. Time of sign-in to the Collection Station will be noted in the Secure Collection Automated Network (SCAN®) Device.

6.3. The use of a cell phone, camera, and any video or audio recording device or any other recording or electronic communication device in the Collection Station is prohibited.

6.4. Only the Crew Chief may release a sick or injured Student-athlete from the Collection Station or may release a Student-athlete to meet academic obligations. Such release shall only be made after appropriate arrangements for having the Student-athlete tested have been made and documented by the Crew Chief.

6.5. The Student-athlete will select a Collection Beaker and a Beaker Bar Code bearing a unique identifier at the direction of a Testing Crew member.

6.6. Student-athletes may not carry any item other than his/her Collection Beaker into the restroom when providing a Specimen. The Student-athlete must remove all outer clothing, such as a jacket, sweater, or sweatshirt, prior to entering the restroom. Failure to follow the direction of a crew member to remove outer clothing may be found by the Crew Chief to be a violation of this protocol.

Specimen Collection Process

6.7. A crew member will serve as a Monitor to assure the integrity of the Specimen until the designated volume (approximately 90 mL) of urine has been collected and will stay with the Student-athlete in the restroom. The crew member serving as a Monitor must secure the room being used for the collection so that no one except the Student-athlete, and the crew member

serving as a Monitor can enter it until after the collection has been completed. The crew member serving as a Monitor will add dying agents to toilet bowls, as needed to keep the water in the toilet dyed, to prevent Specimen substitution. No unsupervised access to water will be permitted during the collection process.

6.8. Any crew member serving as a Monitor must be a member of the official Anabolic Steroid Testing Crew and of the same gender as the Student-athlete providing the Specimen. After entering the restroom but prior to entering an individual restroom stall, the Student-athlete is required to empty contents of all pockets and place those contents in a container to be placed in a location where the Student-athlete and a crew member serving as a Monitor can observe. The Student-athlete is required to raise his/her shirt/clothing high enough to observe the midsection area in an effort to rule out attempts to manipulate or substitute a Specimen.

6.9. The crew member serving as a Monitor will instruct the Student-athlete to rinse their hands with water only.

6.10. The crew member serving as a Monitor will allow the Student-athlete to enter the stall and close the door for privacy during the voiding process.

6.11. Fluids given to Student-athletes who have difficulty voiding must be from sealed containers, approved by the Crew Chief, which are opened and consumed in the Collection Station.

6.12. If the Specimen is not complete, the Student-athlete must remain in the Collection Station until a Complete Specimen is provided. An initial temperature reading from the Collection Beaker containing the incomplete Specimen will be recorded. During this period, the Student-athlete is responsible for keeping the Collection Beaker closed and controlled.

a) If the Student-athlete with a Specimen that is not complete must leave the Collection Station for a reason approved by the Crew Chief, the Specimen may be discarded at the discretion of the Crew Chief.

b) Upon return to the Collection Station, this Student-athlete will begin the collection procedure again.

6.13. Once a Specimen of adequate volume is provided (approximately 90 mL), the Student-athlete is responsible for keeping the Collection Beaker closed and controlled. After collection, the crew member serving as a Monitor will escort the Student-athlete to the collection processing area.

6.14. Following collection of the Specimen, the Processing Collector will take an initial temperature reading, which must be between 90.5 and 99.8 degrees Fahrenheit, from the Collection Beaker and it will be recorded. If the Specimen has a temperature outside the limits mentioned above, the Specimen will be discarded by the Student-athlete. The Student-athlete must remain in the Collection Station until another Specimen is provided in compliance with this protocol.

6.15. Once a Specimen is provided that meets the temperature requirements, the Processing Collector will pour off a small volume of the Specimen into a separate container to perform Specimen validity checks, including specific gravity and pH measurements. Specific gravity will be measured first with a Refractometer, followed by pH measurement with a Reagent Strip. The following parameters will be used for processing the Specimen:

a) If the specific gravity is greater than or equal to 1.005, the Collector will then measure the pH of the urine in the presence of the Student-athlete.

b) If the specific gravity is below 1.005, the Specimen will be discarded by the Student-athlete. The Student-athlete must remain in the Collection Station until another Specimen is provided in compliance with this protocol.

c) If the Specimen has a pH greater than 7.5 or less than 4.5 as measured with a Reagent Strip or Digital pH Meter, the Specimen will be discarded by the Student-athlete. The Student-athlete must remain in the Collection Station until another Specimen is provided. No more than three Alkaline Specimens will be collected. The third Alkaline Specimen will be packaged and sent to the Laboratory.

d) If the Specimen has a specific gravity of greater than or equal to 1.005 as measured with a Refractometer and the urine has a pH between 4.5 and 7.5 inclusive, as measured with a Reagent Strip or Digital pH Meter, the Specimen will be processed and sent to the Laboratory.

6.16. If the Student-athlete is having difficulty providing a Complete Specimen, the Crew Chief immediately will notify the Contractor to determine how to proceed.

Packaging the Specimen

6.17. Once a Complete Specimen has been provided, the Student-athlete will select a Specimen Collection Kit and a uniquely numbered set of Specimen Bar Code seals.

6.18. A Collector will record the temperature, specific gravity and pH values for the Complete Specimen

6.19. The UIL Anabolic Steroid Testing Program will utilize Split Specimen Packaging. For split Specimen testing, the Collector will pour a minimum of 60 mL (90 mL maximum) of the Specimen into the A vial and the remaining amount (approximately 25 mL) into the B vial in the presence of the Student-athlete.

6.20. The Collector will place the cap on each vial and will then seal each vial with the Specimen Bar Code seal, in the presence of the Student-athlete.

6.21. The Student-athlete, crew member serving as Processing Collector and Monitor will sign confirming that all procedures were followed as described in the protocol. Any deviation from the procedures contained in this protocol, by anyone other than the Student-athlete being tested, must be documented. Such occurrences will be documented in the Crew Chief's report that is filed with the Contractor following a testing event.

If deviations from the procedures contained in this document, by anyone other than the Student-athlete being tested, are alleged, the Student-athlete will be required to provide another Specimen following this protocol, during that testing event. Both Complete Specimens will be packaged and forwarded to the Laboratory for analysis.

6.22. After the collection has been completed, all sealed vials will be secured in a Shipping Kit. The Collector will prepare the kit for forwarding to an Anabolic Steroid testing laboratory with a current certification from the Substance Abuse and Mental Health Services Administration of the United States Department of Health and Human Services, the World Anti-Doping Agency, or another appropriate national or international certifying organization. All copies of all forms, if any, will be forwarded to the designated persons.

6.23. Vials and any paperwork sent to the Laboratory shall not contain the name of the Student-athlete.

6.24. The Specimens are the property of the UIL.

7.0. Chain of Custody.

7.1. The Crew Chief will deliver the Shipping Kit(s) to a common carrier for transport to the Laboratory. The Crew Chief shall forward all shipping documents, such as bills of lading and tracking numbers, to the Contractor.

7.2. Upon arrival at the Laboratory, the receipt of the Shipping Kit(s) from the carrier will be recorded by a Laboratory employee. The Laboratory shall retain as part of its records all shipping related documents.

7.3. The Laboratory will record whether the Specimen Bar Code seal on each vial arrived intact.

7.4. If a Specimen arrives at the Laboratory with any Specimen Bar Code seal not intact, the UIL may require that Contractor collect another Specimen from the Student-athlete. Any Specimen that arrives at the Laboratory with any Specimen Bar Code seal not intact will not be tested and will be discarded by the Laboratory.

8.0. Laboratory Procedures, Notification of Results, and Medical Exceptions.

Laboratory Procedures

8.1. The Laboratory will make the final determination of Specimen adequacy.

8.2. If the Laboratory determines that a Student-athlete's Specimen is inadequate for analysis, the UIL may require that Contractor collect another Specimen from the Student-athlete.

8.3 Once the Laboratory determines that a Student-athlete's Specimen is adequate for analysis, the Laboratory will use a portion of Specimen A for its initial analysis.

8.4. Analysis will consist of Specimen preparation, instrument analysis and data interpretation.

8.5. The Laboratory director or designated certifying scientist will review all results showing a positive finding for an Anabolic Steroid in Specimen A.

8.6. The Laboratory will inform Contractor of the results by each respective Specimen Bar Code.

Notification of Results

8.7. Upon receipt of the results, the Contractor will reconcile the Specimen Bar Code with the information contained in **SCAN**® to identify individuals with positive and negative findings. The Contractor will inform the MSR of all negative results. The MSR shall notify the Student-athlete and their Parent of the negative result. Test results are confidential as described in section 1.6 of this protocol.

8.8. When Specimen A of a Student-athlete is found to be positive for an Anabolic Steroid by the Laboratory, the Contractor will contact the designated MRO by telephone as soon as possible. The MRO will provide the final review of Specimen A results.

Contractor will provide the Student-athlete's contact information to the MRO. The telephone contact notifying the MRO of positive findings on Specimen A will be followed by a letter (marked "confidential"), which will be provided to the MRO.

8.9. The MRO will contact the Parent of the Student-athlete with a positive finding on Specimen A to tell the Parent of the test result and to inform the Parent how to request a medical exception. Initial contact by the MRO will be attempted by telephone to be followed by letter to the Parent. The letter will include information and forms applicable to seeking a medical exception. The MRO will attempt to contact the Parent of the Student-athlete for 48 hours (2 business days). If the MRO is unable to make contact with the Parent of the Student-athlete within 48 hours (2 business days), the time period for submission of materials mentioned in 8.10 will begin.

Medical Exceptions

8.10. A Student-athlete or his/her Parent may request a medical exception for use of an Anabolic Steroid either (1) prior to being selected for Anabolic Steroid testing, or (2) after being informed of a positive result for Specimen A.

8.10.1. A Student-athlete or his/her Parent may request a medical exception prior to being selected for Anabolic Steroid testing by (1) providing the Contractor with the Request For Medical Exception Form, and (2) requesting the Student-athlete's physician to provide a Documented Medical History of the need for the use of an Anabolic Steroid to the Contractor. The Documented Medical History is to be sent directly from the physician to the Contractor. Upon receipt, the Contractor will forward the Student-athlete's Request For Medical Exception Form and the Documented Medical History from the Student-athlete's physician to the Contractor-approved MRO for review. Only the Contractor-approved MRO may grant a medical exception. The MRO will make a decision regarding a medical exception within five (5) business days of receiving the Request for Medical Exception Form and Documented Medical History, and forward that decision to the Contractor. Contractor will inform the Student-athlete and his/her Parent regarding the outcome of the exception request by telephone. The telephone contact will be followed by a letter from the Contractor (marked "confidential") to the Student-athlete and his/her Parent documenting the MRO's decision.

The decision of the MRO is final and is not subject to appeal. The Contractor will keep the MRO's decision on file for the remainder of that school year for use if the Student-athlete is selected for Anabolic Steroid testing.

8.10.2. A Student-athlete or his/her Parent may request a medical exception within 48 hours (2 business days) of the first notification of a positive test result for Specimen A by (1) providing the MRO with the Request For Medical Exception Form, and (2) requesting the Student-athlete's physician to provide a Documented Medical History of the need for the use of an Anabolic Steroid to the MRO. A Student-athlete's Request For Medical Exception Form and Documented Medical History must be received by the MRO within 48 hours (2 business days) after the first notification or it will not be reviewed. Only the

Contractor-approved MRO may grant a medical exception under this program. The MRO will make a decision regarding a medical exception within five (5) business days of receiving the Request for Medical Exception Form and Documented Medical History, and forward that decision to the Contractor. Contractor will inform the Student-athlete and his/her Parent regarding the outcome of the exception request by telephone. The telephone contact will be followed by a letter (marked "confidential") from the Contractor to the Student-athlete and his/her Parent documenting the MRO's decision.

The decision of the MRO is final and is not subject to appeal.

8.11. If a medical exception is already on file with or granted by the MRO for a Student-athlete with a positive finding on Specimen A, no further action will be taken. The Contractor will report the Student-athlete's result as 'medical exception granted' to the MSR.

8.12. If a medical exception is not granted by the MRO for a Student-athlete with a positive finding on Specimen A, Specimen B will automatically be tested. The Contractor will notify the MSR by telephone as soon as possible of the initial positive finding on Specimen A. The telephone contact will be followed by a letter (marked "confidential"), which will be mailed to the MSR. Contractor will, during the telephone conversation, advise the MSR that Specimen B will be tested.

Specimen B

8.13. For Student-athlete's not granted a medical exception and with a positive finding on Specimen A, there is no penalty imposed until completion of analysis of Specimen B.

8.14. Contractor will contact the Parent by telephone as soon as possible and notify them of the positive finding in reference to Specimen A and that Specimen B will be tested. The telephone contact will be followed by a letter (marked "confidential"), which will be mailed to the Parent. A UIL Positive Anabolic Steroid Test Appeal Form (see section 9.0 below) will be included with this mailing.

8.15. Contractor will, during the telephone conversation, advise the Parent that Specimen B will be tested. Contractor also will inform the Parent that the Student-athlete may have representation at the Laboratory for the testing of Specimen B and that the Student-athlete in question is not subject to penalty until completion of analysis of Specimen B.

8.16. Notification by the Parent of the intent to have representation at the Laboratory must be given to Contractor within 48 hours (2 business days) of being advised that Specimen B will be tested. Notification of the desire to have a representation at the Laboratory can be accomplished via telephone, fax, e-mail or in writing to the Contractor.

8.17. If the Parent desires representation for the Student-athlete at the Laboratory, they must present themselves, or, upon appropriate permissions for confidentiality being granted, their representative, at the Laboratory, at an appointed date and time, within 2 business days of the notification of intent to have representation. Any expenses associated with travel to the Laboratory for this purpose are the responsibility of the Student-athlete or their Parent. If the

Parent of the Student-athlete cannot arrange for such representation, the Laboratory will arrange for a Surrogate to attend the testing of Specimen B.

8.18. The Surrogate will not otherwise be involved with the analysis of the Specimen.

8.19. At the testing for Specimen B, the Student-athlete, the Parent, their representative or the Surrogate will verify by signature as to the Specimen Bar Code on Specimen B, that the Specimen Bar Code seal is intact, and that there is no evidence of tampering. If the Specimen Bar Code seal on Specimen B does not match, is not intact or there is evidence of tampering, Specimen B will not be tested and will be discarded by the Laboratory. The result for that Specimen Bar Code will be reported to the Contractor as negative and the Student-athlete will not be subject to penalty. In this scenario, the UIL may require that the Contractor collect another Specimen from the Student-athlete.

8.20. Specimen preparation, analysis and interpretation for Specimen B analysis will be conducted by a Laboratory staff member other than the individual who prepared, analyzed and interpreted the Student-athlete's Specimen A.

8.21. Specimen B findings will be final. The Laboratory will inform Contractor of the results.

8.22. For Student-athletes who have a Specimen B negative finding, no further action will be taken and the Student-athlete will not be subject to penalty. Negative results for Specimen B will be communicated in the same manner that negative results for Specimen A are communicated. For Student-athletes who have a Specimen B positive finding, Contractor will contact the Parent and the MSR by telephone as soon as possible and notify each of the Specimen B positive finding and of the ability to appeal the finding, the process for filing the appeal and refer them to the Appeal Form previously mailed.

8.23. Upon notification of the Specimen B positive finding, the School shall be required to immediately enforce the applicable penalty to the Student-athlete as referenced in section 3.2.

8.24. A positive finding may be appealed by the Student-athlete or by the Parent on the Student-athlete's behalf to the UIL.

8.25. Specimens with negative results are kept for five (5) business days and then discarded by the Laboratory. Specimens with positive results are kept by the Laboratory for a minimum of one (1) year.

9.0. UIL Anabolic Steroid Testing Appeals Process.

General Provisions

9.1. After notice that a Student-athlete's Specimen B has been found to be positive for Anabolic Steroids, the Student-athlete and his/her Parent or the School (all of whom are referred to elsewhere in this section as Appellants) may file an appeal. The student athlete and his/her Parent must waive their right of confidentiality to allow the UIL and any other persons necessary to the appeals process to review and make use of the test results as well as other relevant documents and information. However, the School may only appeal if the student athlete or his/her Parent waives their right to confidentiality and the Student-athlete and his/her Parent do not object to the appeal.

The filing of an appeal does not suspend imposition of the penalty. Upon notice of a positive Specimen B test, the School must enforce the penalty applicable to the Student-athlete who is the subject of the appeal as referenced in section 3.2. The penalty may only be lifted upon exhaustion of the appeals process and a finding in favor of the Student-athlete.

All appeals will be considered and ruled upon by a hearing officer chosen by UIL from a pool of hearing officers appointed by the UIL State Executive Committee. Any challenge to the hearing officer appointed to preside over the appeal must be based on evidence of actual bias. The hearing officer's decision in any appeal is final.

Scope of Appeal and Method of Consideration

9.2. Appeals may only be based upon alleged errors in the collecting, testing and analysis of the Specimen that, if true, would materially affect the test result. The alleged errors that form the basis of the appeal must be clearly stated in the Appeal Form. No other allegations or issues will be considered on appeal. There is no appeal concerning a medical exception.

As provided below in 9.4, an Appellant may choose for the appeal to be considered by the hearing officer in one of two ways: either by written submission or by telephonic hearing. Generally, the two methods are conducted as follows:

Written Submission- All matters are submitted in writing to the hearing officer. There is no hearing of any sort and the hearing officer only considers the written submissions of the student athlete and his/her Parent and/or the School along with any written submission from the UIL and other relevant entities or persons.

Telephonic Hearing- After being given a reasonable time to submit any written documentation to the hearing officer, a telephonic hearing is conducted during which Student-athlete and his/her Parent and/or School and UIL staff present their respective cases to the hearing officer in a conference call.

The choice of whether to proceed by written submission or telephonic hearing must be clearly shown on the Appeal Form at the time of its submission to UIL. Failure to clearly indicate a choice will result in the appeal being considered by written submission.

Initiating an Appeal

9.3. An appeal of a positive Anabolic Steroid test result must be initiated by the filing of a properly completed UIL Anabolic Steroid Testing Program Appeal Form (Appeal Form). The completed Appeal Form must be received by the UIL office not later than three (3) business days after notification by telephone to the Parent of the Student-athlete and the MSR of the Specimen B positive finding. (Telephone notification to the Student-athlete and his/her Parent and the MSR, will be confirmed subsequently by confidential letter.) As part of the Appeal Form, the Student-athlete and his/her Parents must agree to waive confidentiality of the test results and any other documents and information relevant to the appeal in favor of UIL and persons such as employees of the testing program Contractor, members of the Testing Crew, the Laboratory and other persons that UIL determines are necessary to conduct the appeal.

The Student-athlete and his/her Parent or School may be represented by legal counsel at any point in the process. However, if not previously provided as part of the Appeal Form, the hearing officer and the UIL must be provided the counsel's name and contact information at least twenty-four (24) hours prior to any deadline for written submission or telephonic hearing.

Additionally, representatives of the Contractor, the Laboratory and/or Testing Crew, in addition to UIL staff members, may participate in either the written submissions or telephonic hearing and provide relevant testimony, evidence, information and/or documentation.

Hearing Officer, Scheduling and Process

9.4. As soon a practical after the receipt of the completed Appeal Form from a Student-athlete and his/her Parent or the School, a hearing officer shall be appointed to hear the appeal. Appellants are to be given notice of the name of the hearing officer appointed to hear the appeal as soon as practical. Any objection along with any relevant evidence showing actual bias by the hearing officer must be submitted to the hearing officer within seven (7) days from the date of an Appellant being notified of the hearing officer's identity. The hearing officer will make the determination whether or not he or she can continue forward and preside over the appeal.

If the appeal is one where a telephonic hearing has been requested, as soon as practical after his or her appointment, the hearing officer shall set a conference call with the parties, or their respective counsel, to set a date for the telephonic hearing.

A written schedule for either the written submission or telephonic hearing appeal process shall be issued by the hearing officer within seven (7) calendar days of his or her appointment. If the hearing officer has not been able to conference with the parties to set a date for a telephonic hearing, he or she may set a hearing date in the scheduling order.

No ex-parte communications with the hearing officer are permitted. Each party must copy the other side on all written communications with the hearing officer and allow participation in any phone calls to the hearing officer.

9.5. Every appeal will be scheduled and conducted substantially as follows:

a) The appeal schedule will require that within fourteen (14) calendar days of the issuance of the schedule, each party to the appeal to submit to the hearing officer, and exchange with each other, written statements of their respective positions and any written evidence, such as documents or sworn affidavits, that support or refute the allegations of errors put forth by the Appellants in the Appeals Form. When a telephonic hearing is to be held, the parties shall also exchange a list of witnesses and a summary of their expected testimony. No written statements by witnesses will be considered unless they are in the form of a sworn affidavit.

b) The hearing officer may grant extensions of time regarding the submission and exchange of documents or concerning any other scheduling deadline in the appeals process at his or her discretion as circumstances warrant. Agreed motions by the parties for extensions of time will be given particular consideration. However, unless an extension of time has been previously granted by the hearing officer, the failure to comply with the schedule may result in the hearing officer imposing sanctions on the offending party, including the exclusion of evidence or witnesses.

c) The schedule shall include all relevant contact information of the parties. If it is reasonably believed that confidentiality can be maintained, the contact information shall include fax numbers and email addresses. Fax numbers and email addresses that are so identified may be used as a method for communication between the parties and the hearing officer.

d) Members of the UIL Medical Advisory Committee or other experts in the field of Anabolic Steroid testing may be utilized as consultants by the hearing officer. Any documents or opinions from such advisory experts that are considered by the hearing officer will be promptly made available to each party to the appeal.

e) If the appeal is by written submission, each side shall be given seven (7) calendar days after the receipt of the other party's initial submission and exchange of documents to submit to the hearing officer a rebuttal statement along with any additional relevant documents. Each side may submit one such rebuttal, after which the evidence will be closed and no further argument or evidence will be considered.

f) If the appeal is by telephonic hearing, the parties shall take turns presenting their respective cases to the hearing officer with the Appellants going first. Witnesses may be called to testify provided that the other party has been given timely prior notice of the name of the witness and the summary of their expected testimony. Witnesses may be questioned by the hearing officer. No cross-examination of witnesses by the parties will be allowed. A court reporter shall make a record of the telephonic hearing in its entirety and place any witnesses under oath. A transcript of the telephonic hearing may be purchased from the court reporter by either party. The conclusion of the hearing will close the evidence and no further argument or evidence will be considered.

g) The hearing officer may set page limits on written submissions and time limits on all or any part of a telephonic hearing and otherwise oversee and manage the appeals process in order to achieve a fair and just result.

h) Within seven (7) business days after the evidence is closed in either the written submission or telephonic hearing appeals process, the hearing officer will issue a written finding as to whether or not the Appellant has met the burden of proving by the greater weight of the credible evidence that errors in the collecting, testing and analysis of the Specimen materially affected the test result.

If the hearing officer finds that the Appellant has met the burden of proof, the Appeal will be sustained and the Student-athlete regains eligibility for participation immediately.

If the hearing office finds that the Appellant has not met the burden of proof, the Appeal will be denied and the Student-athlete remains subject to the applicable sanction as contained in 3.2. Upon completion of the applicable sanction period, the Student-athlete is required to follow the restoration of eligibility procedures outlined in section 10.

10.0. Restoration of Eligibility.

10.1. Any Student-athlete found to be positive for an Anabolic Steroid, or who refuses to submit to testing after random selection, shall be subject to penalties as outlined in section 3.2. Student-athletes who are ineligible for athletic contests as a result of a UIL positive Anabolic Steroid test

finding must be tested by the Contractor and receive a negative result to qualify for eligibility restoration. Only Anabolic Steroid tests conducted by the Contractor will be considered for the purposes of this program.

10.2. Student-athletes who are ineligible for athletic contests as a result of a first positive Anabolic Steroid test finding may request the mandatory Exit Test no earlier than the 20th school day of the 30 school day suspension for a first positive Specimen B Anabolic Steroid test result or refusal to submit to testing after random selection of a Student-athlete.

Student-athletes who are ineligible as a result of a second positive test finding may request the mandatory exit Anabolic Steroid test no earlier than the eleventh month of the 12 month suspension for a second positive Specimen B test result or refusal to submit to testing after random selection of a Student-athlete who has previously been subjected to the first positive test penalty.

10.3. The MSR shall submit a request for an Exit Test to the Contractor upon the request of the suspended Student-athlete. The Student-athlete is not required to make such request until they choose to do so, regardless of whether this is a first or second positive test.

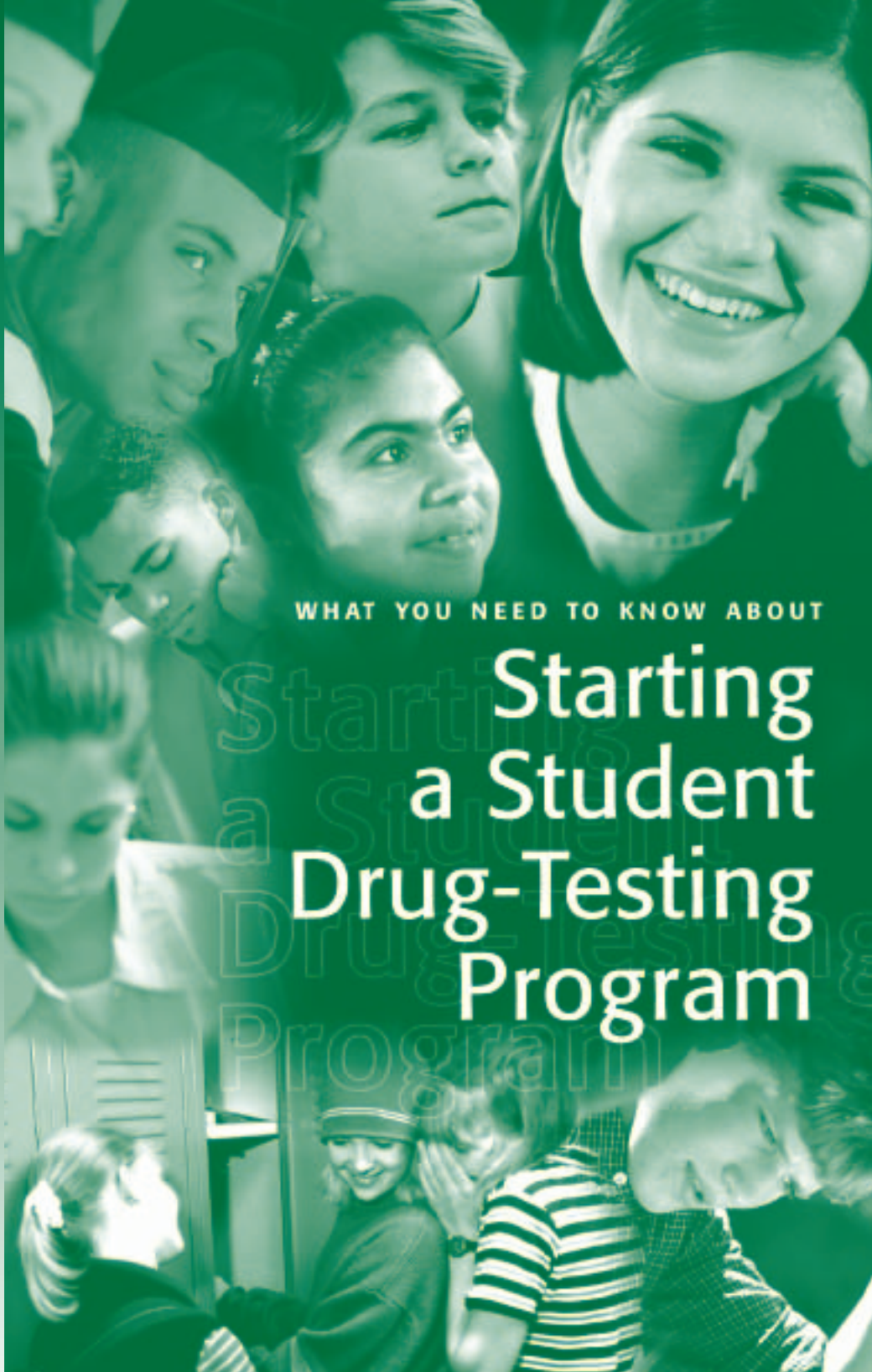
Upon receiving the request for the Exit Test, the Contractor shall determine the date that the Student-athlete will be tested. This date shall be no later than ten (10) school days following the receipt of the request for the Exit Test.

10.4. Exit Tests will be conducted according to the UIL Anabolic Steroid Testing Program Protocol.

10.5. Restoration of eligibility shall not occur until after the Student-athlete serves the applicable penalty in section 3.2, tests negative on the Exit Test and the MSR has received the negative results from the Contractor.

10.6. Should an exit Anabolic Steroid test show ‘new use’ of an Anabolic Steroid, including, but not limited to, a different Anabolic Steroid from the previous positive test or an increased level of the same Anabolic Steroid from the previous positive test, the Student-athlete in question is subject to the next highest penalty as outlined in section 3.2 of this document. The UIL Anabolic Steroid Testing Program Protocol applies.

10.7. The UIL will cover the cost for the first Exit Test for purposes of eligibility restoration for the penalties outlined in 3.2.1 and 3.2.2. Any subsequent Exit Test(s) for purposes of eligibility restoration are conducted at the expense of the School, Student-athlete or the family of the Student-athlete.



WHAT YOU NEED TO KNOW ABOUT

Starting a Student Drug-Testing Program

OFFICE OF NATIONAL DRUG CONTROL POLICY

"In my budget, I proposed new funding to continue our aggressive, community-based strategy to reduce demand for illegal drugs. Drug testing in our schools has proven to be an effective part of this effort. …The aim here is not to punish children, but to send them this message: We love you, and we don't want to lose you."

President George W. Bush
STATE OF THE UNION ADDRESS
JANUARY 20, 2004

WHAT YOU NEED TO KNOW ABOUT

Starting a Student Drug-Testing Program

OFFICE OF NATIONAL DRUG CONTROL POLICY

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Foreword

In his 2004 State of the Union speech, President George W. Bush reminded Congress and the Nation of our responsibility to help children make the right choices. "One of the worst decisions children can make," he said, "is to gamble their lives and futures on drugs."

JOHN P. WALTERS

The President directed our attention to recent good news: survey results showing that drug use among American teenagers has dropped 11 percent in the past two years. This achievement not only marked improvement not seen in a decade, it also met the national goal the President set in February 2002 to reduce drug use among 12- to 17-year-olds by 10 percent within two years.

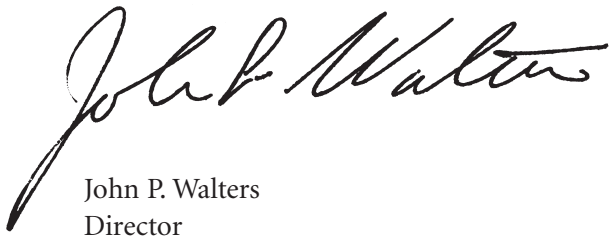
Our progress demonstrated that, when we push back against drug use, it will recede. And now that effort has been given an added boost. In his speech, the President pledged $23 million in additional funding to support one of the most powerful tools for preventing youth substance abuse: school-based drug testing.

In June 2002, the U.S. Supreme Court broadened the authority of public schools to test students for illegal drugs, thereby making this powerful tool available to any school battling drug problems. Since that historic ruling, a number of schools across the country have seized this opportunity to implement drug-testing programs of their own.

Parents and educators have a responsibility to keep children and teens safe from drug use. We have made important progress. Our task is now to move further. We must identify and use the best tools at our disposal to protect kids from a behavior that destroys bodies and minds, impedes academic performance, and creates barriers to success and happiness. Drug testing is just such a tool—powerful, safe, and effective. It is

available to any school, public or private, that understands the devastation of drug use and is determined to confront it. Many schools urgently need effective ways to reinforce their anti-drug efforts. Drug testing can help them.

I hope that schools considering adding a testing program to their current prevention efforts will find reassurance in knowing that drug testing can be done effectively and compassionately. Testing, after all, cannot be used to punish kids who use drugs. Its purpose is to prevent use in the first place, and to make sure users get the help they need to stop placing themselves and their friends at risk. Random drug testing is not a substitute for all our other efforts to reduce drug use by young people, but it does make all those efforts much stronger and more effective.



John P. Walters
Director
Office of National Drug Control Policy
October 2004

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Introduction

School administrators faced with the task of keeping their students drug-free have used a variety of prevention and education programs. A precipitating event—a tragic drug-overdose death or an alarming escalation in the level of drug use, for example—will often spur a school to seek additional means of reducing the drug problem. Now, as a result of a 2002 Supreme Court decision *(Board of Education of Independent School District No. 92 of Pottawatomie County vs. Earls)*, public middle and high schools are free to use a powerful new tool for deterring and detecting drug use: random drug tests. Drug testing previously was available only for students involved in sports. In the 2002 ruling, however, the Court broadened the scope of testing to include all students who take part in after-school activities—teams, clubs, and other organizations—in which the participants compete against students at other schools.

Student drug testing is but one part of a comprehensive drug and alcohol prevention, intervention, and treatment program. Prevention messages will keep many students from using drugs, and they may also prompt some who experiment with drugs to stop. There are others, however, who have begun using alcohol or drugs and who are not responsive to prevention messages. Many of these users have not yet experienced adverse health effects of their drug use, nor have they faced criminal or social sanctions. It is through this group of users that a serious community drug problem spreads.

Early intervention

One of the best ways to block the spread of drug use is through an approach called early intervention, which encourages friends, family, care-givers, and others to get actively involved in the lives of drug users—and the sooner the better. The idea is to identify nondependent users, through drug testing and other means, then steer them from drugs and into counseling, if necessary, before they become addicted or entice others to use drugs. Kids whose drug use has already progressed to abuse and dependence may require more intense or clinical intervention, such as specialty treatment. Drug testing not only helps identify students who use drugs, it also creates a deterrent to use. It helps young people cope with peer pressure, giving them a convenient reason to say "no" to drugs, and it underscores the message that drugs are a barrier to achieving one's full potential.

Student drug testing has proven to be effective in schools that have tried it. For example, Hunterdon Central Regional High School in Flemington, New Jersey, experienced an overall decrease in student drug use between 1997 and 2000. The only change in the school's substance-abuse program during that three-year period was the implementation of random drug tests for student athletes. In September 2000, Hunterdon suspended all random drug testing after the American Civil Liberties Union filed a lawsuit in New Jersey state court on behalf of students who claimed their 4th Amendment rights were violated. Over the next two years, during which the school made no other changes in its substance-abuse program, the level of drug use at Hunterdon increased.

In a similar scenario, 85 percent of schools in Indiana that suspended their drug-testing programs during a court challenge by the Indiana Civil Liberties Union found that drug use increased during the suspension, then decreased when testing resumed.

Results such as this show the power and the promise of student drug testing. It is important to note, however, that drug testing may not be appropriate for every school. An earlier ONDCP publication, *What You Need to Know About Drug Testing in Schools*, provided an overview of the complex issues involved in student drug testing, and it raised some important issues that parents and administrators must consider before starting such a program. For example: Will your school and community support such a program? What are the legal requirements? Which students should be tested? What kinds of tests are available, and which are best suited for your school?

As that booklet cautions, random drug testing should never be used to punish students. Rather, it should be used to deter young people from using drugs, or to identify current drug users so they may be referred to counseling or treatment. And because no two communities face exactly the same drug problem, each school must develop its own unique drug-testing program, carefully tailored to its particular needs and circumstances.

What You Need to Know About Starting a Student Drug-Testing Program is meant to complement and build on the information provided in the earlier publication. This booklet assumes that you, as a school administrator, staff member, or parent involved in the decision, have considered all the issues, weighed the pros and cons, collected data, and are now ready to put together a plan for starting a drug-testing program in your school. It reviews the steps you need to take before implementing a testing program, such as conducting a needs assessment, consulting legal counsel, enlisting the support of both the school and the local community, developing a written policy, and providing access to student assistance. It offers guidance on how to find funding for your program, and it also includes a discussion of how some schools select students for testing and what types of tests they use. A list of resources includes Web sites and contact information for agencies and other organizations that can answer any further questions you may have about student drug testing.

The benefits of drug testing

Drug use can turn to dependence and addiction, trapping users in a vicious cycle that destroys families and ruins lives. Students who use drugs are statistically more likely to drop out of school than their peers who don't.

Drugs and alcohol not only interfere with a student's ability to learn, they also disrupt the orderly environment necessary for all students to succeed. Studies show that students who use drugs are more likely to bring guns and knives to school, and that the more marijuana a student smokes, the greater the chances he or she will be involved in physical attacks, property destruction, stealing, and cutting classes. Parents and students expect schools to offer protection from violence, racism, and other forms of abuse. It is likewise their right to expect a learning environment free from the influence of illegal drugs.

As a parent or school administrator, you have a responsibility to ensure that student drug use does not become a barrier to learning. *What You Need to Know About Starting a Student Drug-Testing Program* can help you meet that responsibility. If you conclude that drug testing would be an effective method of detecting, confirming, and deterring drug use among the young people under your care, this booklet offers valuable advice and information that can guide you in the development of a program that is effective, confidential, and compassionate.

Before You Begin

A great deal of preparation goes into developing a successful drug-testing program. Before you begin testing, it is important that you cover all the bases and take these necessary first steps:

- Collect data to determine the scope and nature of your school's drug problem
- Consult legal counsel
- Enlist support within the school and local community
- Develop a clear, written policy
- Obtain the approval of an Institutional Review Board, if necessary
- Provide access to student assistance

Collect data

Would your school really benefit from a drug-testing program? For some schools, prevention and education programs may be sufficient responses to the drug threat. For others, more powerful tools are needed to help reduce student drug use.

A school might begin a drug-testing program to confront an escalating drug problem, for example, or when overdose deaths among the student body prompt action to avert more tragedy. The Capistrano Unified School District in California launched a student drug-testing program after requests from the community for a program that would help students say "no" to drugs. The voluntary program, which started in 2002 at San Clemente High School with the support of the school board, principal, and parents, now has a participation rate of more than 50 percent.

The needs assessment should be done in the early stages, when you are considering whether your school's drug problem warrants a drug-testing program. Collecting data is important to help you determine the scope and characteristics of your drug problem and to establish a baseline from which to measure the effectiveness of your testing program later on. Some schools find it helpful to establish an advisory committee or task force. Such a group could be comprised of school administrators, students, teachers, parents, student assistance counselors, coaches, club advisors, and representatives from local treatment programs and police departments.

The advisory committee can be helpful in many ways, including the collection and assessment of data. Reports by teachers, staff, and parents can yield useful information about the nature and extent of your school's drug problem. Keep data about drug paraphernalia or residue found in or around the school. Look at indirect evidence, such as local police reports and overdose data in the aggregate, to help fill out the picture. Local treatment programs can also provide useful information about drug use by students without breaching the confidentiality of their individual patients.

Government-funded surveys such as the National Survey on Drug Use and Health, Monitoring the Future, and The Youth Risk Behavior Survey all have questions regarding drug use that can be adapted for a school survey. A number of states, as well as several private, non-profit organizations, can also provide support and survey materials designed to reflect student drug and alcohol use. Student surveys can pinpoint which drugs your students are using and, in turn, can help you decide which drugs to target in your test panel.

Consult legal counsel

In June 2002, the U.S. Supreme Court upheld a drug-testing program for students involved in competitive extracurricular activities, thereby expanding the authority of public schools to test students for drugs. Although the ruling allows schools to drug-test greater numbers of students, it is not a blanket endorsement of drug testing for all students. Schools therefore should engage legal counsel familiar with Federal, State, and local law regarding drug testing before implementing a testing program. It is important to obtain a full legal review of your drug-testing policy and program before you begin testing.

Enlist community support

A key part of the development of an effective testing program is building partnerships and trust with those in the community who would be affected: parents, students, the Board of Education, the Superintendent, local health care agencies, local businesses, legal counsel, community coalitions, and others.

For some, student drug testing is an emotional and controversial issue—all the more reason to keep everyone informed and listen to every point of view, including the voices of opposition. Addressing concerns whenever possible will strengthen your program. Holding focus-group or town-hall meetings gives you an opportunity to share the information that led to your decision to implement a drug-testing program. You may find that some who were in denial about the drug problem will become convinced when they see the results of the data you have collected.

There's no guarantee that everyone will agree with the concept of random drug testing, of course. But with careful preparation—educating parents and students, and by assuring them that the program will not be punitive, that confidentiality will be closely maintained, and that they may freely voice their opinions—you can greatly improve your chances of success. For those who will not be swayed, point out that no student will be forced to submit to a drug test. Although children whose parents refuse to give their consent may lose the privilege of taking part in extracurricular activities, parents must always have the ability to opt out of the drug-testing program.

Once your school's leadership has understood and agreed to implement a drug-testing program, and once parents, students, teachers, and other school personnel have been fully informed, widen the circle of influence by including local officials, merchants, and owners of area businesses. In some areas, companies give incentives, such as discounts or preferential employment status, to students who take part in student drug-testing programs.

Develop a clear, written policy

The committee or task force you have formed can help you decide whether the tests will be administered by school staff or by someone hired from outside the school. Many schools use the staff nurse to administer the tests. Others, including those in Polk County, Florida, hire staff from the local drug court who are trained in collection procedures and chain-of-custody issues. Your advisory committee can weigh the pros and cons of the various types of tests—urine, hair, sweat, and saliva—and also offer advice, based on the data you collected, on which drugs to include in your test panel. A test normally targets a standard group, or "panel," of drugs—marijuana, cocaine, opiates, amphetamines, and PCP. If steroids or other drugs outside the standard panel are a problem in your school, you can decide to include them in your list of target drugs. Once such decisions are made, the committee can help you develop your school's drug-testing policy.

There is no single model policy that will fit every school's particular needs. However, effective policies do share a number of common elements that you should incorporate in yours. First of all, it should be a written policy, rendered in clear, concise language that allows no ambiguity in what you are proposing.

There are four primary areas of concern that should be addressed in a school drug-testing policy: First, the policy should contain a statement about the need for a drug-free school. Second, it should have an introduction/position statement on substance use and student health, safety, confidentiality, and implementation of your student drug-testing program. Third, the policy should address the key components of the drug-testing program, such as which categories of students will be tested, how they will be selected for a drug test, what drugs will be tested for, specimen collection and chain-of-custody issues, how consent for

testing will be obtained, how confidentiality of student information will be maintained, how drug-test results will be protected, and what consequences will follow a positive test result or refusal to take the test. Finally, the policy should provide a list of student rights, as well as an explanation of the school's responsibilities to the students.

Those who read your policy should be able to understand the testing procedure, and that positive test results will undergo further review by qualified medical personnel to determine the likelihood of legitimate medications causing the positive reading. Make sure your policy indicates whether the school or the parents will pay for the confirmation test.

The policy should explain what recourses are available to a student if he or she believes a positive result was an error, and it must articulate the consequences of a true positive test. If students who test positive are suspended from extracurricular activities until they provide a negative test, the policy should make this clear, as well as whether graduated sanctions will be imposed with repeated positive tests.

By the same token, the policy should state clearly that no academic consequences will follow as a result of a positive drug test. Your drug-testing policy should clearly state the permissible use of test results, indicating precisely who may (and may not) see them, and it should underscore, above all, that school administrators will maintain strict confidentiality.

Working with your advisory committee, develop consent forms for parents and students to sign indicating they have read your policy, understand it, and agree to take part in the drug-testing program. Announce the policy at least 90 days before testing begins. When collecting information from students on drug use, be mindful of the

U.S. Department of Education's regulations on confidentiality and release of information. The two primary regulations are the Family Educational Rights and Privacy Act (FERPA) and the Protection of Pupil Rights Amendment (PPRA). See the Resources section for more information. Also listed among the Resources are links to Internet sites offering samples of student drug-testing policies, as well as contact information for non-profit organizations that can provide technical assistance on developing a policy.

Obtain the approval of an Institutional Review Board, if necessary

If your school district receives Federal funds to develop, enhance, or implement a student drug-testing program, the project may be subject to the approval of an Institutional Review Board (IRB), a special panel charged with protecting the rights and welfare of human research subjects. Projects that are designed to test or demonstrate the effectiveness of drug testing are considered "research" by some agencies under a Federal policy governing human subjects. Not all student drug-testing programs fall within the scope of this policy. But it is essential that you determine early in the process, before you begin drug-testing students, whether your project requires IRB review. Check with your funding agency to see if it has adopted the Federal policy for the protection of human subjects. Some agencies, including the U.S. Department of Education, offer guidance to grant recipients on finding an IRB and obtaining the necessary approval. (See the Resources section for more information, including lists of IRBs and a complete list of agencies that have adopted the Federal policy regarding the protection of human subjects.)

Provide access to student assistance

Some schools may be reluctant to initiate a testing program for lack of understanding what to do with those students who test positive for drugs. Indeed, it is essential for any school contemplating a student drug-testing program to have some sort of mechanism in place for working with students whose test results are positive. For those who have just started using drugs or use them only occasionally, a few words from a counselor and/or parents—coupled with the prospect of future drug tests—may be enough to discourage further use. The counselor may refer the student for recovery support services, which can be an intermediary step for those not requiring clinical treatment services. Frequent users or those in danger of becoming chemically dependent will likely need clinical treatment.

One good way to assure these young people receive the appropriate level of counseling or treatment is to provide access to a student assistance program. Operating in much the same way as employee assistance programs in the workplace, student assistance programs have a long history of helping schools remove barriers to learning. Some schools use a core team of trained staff to provide student assistance services. Others designate a single counselor as the student assistance counselor, while still others contract with outside non-profit mental health or substance abuse agencies to provide student assistance services. Whatever the arrangement, student assistance programs help young people improve their success in school by connecting them with the most appropriate resources for the many issues that interfere with learning, such as family problems, peer conflicts, depression, isolation, illness, and substance abuse.

Student assistance services typically include linking students and their families to appropriate community resources and school-based support services. A positive drug test may result in referral to ongoing drug testing, educational classes, attendance in a chemical awareness group, or treatment for chemical dependency. Some students with positive test results are referred through the student assistance program to a behavioral health assessor, a professional counselor who specializes in working with chemically dependent youth. Maintaining strict confidentiality throughout the process, the assessor can determine whether the student's alcohol or drug use requires recovery support or clinical treatment

services, or can be dealt with in less intrusive ways. For students who have completed treatment and who are in recovery striving to stay "clean," returning to the school environment can be a difficult experience. Student assistance eases the re-entry process by offering aftercare and other support services, then stays in touch with the students to monitor their progress over time.

Studies have found that students who were referred through a student assistance program to behavioral health specialists show improved attendance, fewer discipline problems, and better performance in school. For more information, call the National Student Assistance Association at 800-257-6310 or visit the group's Web site at www.nsaa.us.

Conducting the Test

Just as the drug problem differs from one school to another, so do the mechanisms by which various schools conduct drug tests. You should work closely with your advisory committee and legal counsel to map out a strategy and set clear guidelines for the nuts-and-bolts operation of the testing program. Your plan should cover, in detail, every step from beginning to end, including procedures for choosing which students can be tested, when and how they are summoned to the collection area, how the tests are performed and analyzed, and what happens in the event of a positive test.

Although there is no "one size fits all" approach to drug testing, there are strategies and techniques that have proven to be effective. Understanding these, and knowing how other schools have tackled some of the same issues you are facing, can be immensely valuable in helping you develop a plan for your school. Key issues, questions, and topic areas include:

- Whom to test, and when
- The procedure
    - Specimen collection
    - Certified labs
    - Point-of-collection urine tests
    - The confirmation test
    - Medical review officer
- Alternative testing methods
- Consequences of a positive test

Whom to test, and when

Methods and procedures vary widely, but on average, schools with drug-testing programs submit approximately 10-25 percent of their eligible students to drug tests each month. Typically, a school will test some students weekly, but there are those that test bi-weekly or even monthly. Most schools use a computerized system to select students randomly for drug testing. Others rely on a lottery system and pull names out of a "pool" of eligible students. On test days, schools often select a few alternate candidates to account for absences.

The procedure

For years, urine has been the only specimen collected for many federally regulated and most private-sector drug-testing programs. Today, the majority of schools with drug-testing programs continue to use urine tests because of the proven reliability, accuracy, and fairness of this method. However, schools are increasingly using tests of hair and oral fluids because both are easier to collect and more resistant to cheating.

Specimen collection. For urine tests, a school staff member usually escorts those chosen from the testing pool to the collection site. Here, students typically are given a specimen cup and sent to the lavatory unobserved. Blue dye has been placed in the toilets, and the water to the sink has been shut off or the faucets taped shut to lessen the risk of having the specimen adulterated. The person overseeing the collection procedure also checks the temperature of the specimen to make sure it is valid and that no substitution has occurred.

Once the specimen is determined to be valid, the cup is sealed and then initialed by the student, and the proper chain of custody is applied. To preserve confidentiality, an identification number rather than the student's name or initials may be used for marking the specimens and test results. Many schools send the specimens to a laboratory, where they are analyzed by sensitive and carefully calibrated instruments. Laboratory analysis gives the most accurate reading, but the test results may not be known for 24 to 48 hours from the time the lab receives the specimen.

At the laboratory, technicians check every specimen for possible substitution or adulteration by substances that the student may have ingested or put in the specimen afterward to "cleanse" it. (Specimen tampering or adulteration is less of a concern in hair or saliva testing.) Even if it turns out that an adulterated specimen does not reveal the presence of drugs or drug metabolites, the fact that it has been tampered with should bring on the same consequences as positive drug test.

Certified labs. Drug testing is mandated for Federal employees in safety- or security-sensitive positions. Because a positive drug test could cost someone in such a position his or her job, every possible precaution is in place to assure test accuracy. All specimens, for example, must be sent to laboratories certified by the Substance Abuse and Mental Health

Services Administration (SAMHSA). Although school drug-testing programs are not bound by the same strict procedures, many schools use SAMHSA-certified labs to ensure a high level of accuracy. (For more information about the Federal drug-testing program, as well as a list of certified labs, see http://workplace.samhsa.gov/ResourceCenter/lablist.htm.) This certification procedure is currently only for urine testing, but Federal guidelines under development will extend the process to hair, oral fluids, and sweat-patch testing.

Point-of-collection urine tests. Some schools perform a screening test of the collected specimens on-site, in a procedure known as point-of-collection testing. For urine testing, the collection procedure is the same as that for specimens being sent to a laboratory. The difference is that, in point-of-collection screening, the specimen is read by the test administrator, not by laboratory instruments. A variety of testing devices are available that allow the tester to "dip and read," "tilt and read," or "drop and read" the test results. This on-site collection test yields immediate results, most of which will be negative. However, because of the human involvement in reading the tests, it is imperative that the tester be properly trained. If a point-of-collection specimen tests positive, it is then sent to a laboratory, using proper chain-of-custody procedures, for a confirmation test.

Parents should be notified each time their child is tested, and the results—positive or negative—should be shared with them. It is up to each school to determine which staff members, if any, are permitted to see the test results. High schools generally allow at least one staff member access to the results. A middle school, on the other hand, might send the results to the parents only, along with literature on what to do if the test is positive.

The confirmation test. If the results of the screening test are negative, no further action is necessary. However, if the specimen tests positive, regardless of the testing method, a confirmation test should be done. In the case of urine testing, the confirmation test involves an analytical process known as gas chromatography/mass spectrometry (GC/MS). Technicians use gas chromatography to separate the various substances in the specimen, and then make a positive identification through mass spectrometry. Some schools automatically authorize a confirmation test

in the event of a positive screening; others do so only at a parent's request. If the confirmation test also comes up positive, a qualified "medical review officer" should determine whether the positive reading was caused by illicit drugs or by proper prescription medication.

Medical review officer. A medical review officer is a licensed physician who is also an expert in drug and alcohol testing and the Federal regulations governing such testing. It is the job of a medical review officer to ensure the integrity of the drug test. If a test is positive, the medical review officer consults with the student and/or the student's family and gives them an opportunity to supply evidence that there was a justifiable reason for the positive test, such as a properly prescribed drug. If the medical review officer determines that the positive test was not the result of illegal drug use, the test is reported as negative. Having a medical review officer on board helps protect the rights of students and can have the added benefit of strengthening the school's position if the test results are ever challenged.

Most laboratories can provide a list of available medical review officers. To verify the certification status of medical review officers, see the American Society of Addiction Medicine (ASAM) Web site at http://www.asam.org/search/search4.html. For more information about certified labs, visit the Web site for SAMHSA's Division of Workplace Programs at http://workplace.samhsa.gov/DrugTesting/MedicalReviewOfficers

Alternative testing methods

Drugs or drug metabolites can be detected in hair, oral fluids, and sweat. Several factors, including the stigma of wearing a sweat patch, make sweat testing more suited for use in the criminal justice system and for follow-up testing after drug treatment.

Hair testing is less intrusive and has a longer detection window than urine testing, but it may present some special problems. If, for example, a student athlete shaves his head, where would you take a sample? (In this case, a urine test could be used as an alternative.) Moreover, hair specimens can be analyzed only in a laboratory.

Another less-intrusive alternative involves the testing of oral fluids, the generic term for saliva and other material collected from the mouth. Due to the sensitivity of testing devices required to detect marijuana and cocaine in oral fluids, specimens should be sent to a laboratory to ensure the most accurate readings. Although drugs and drug metabolites do not remain in oral fluids as long as they do in urine, oral-fluids testing offers a number of advantages. For example, specimens can be collected relatively easily—a swab of the inner cheek is the most common way—and in virtually any environment. Oral fluids are also harder to adulterate or substitute, and collection is less invasive than in urine or hair testing.

Consequences of a positive test

Depending on the school's policy, students who test positive for drug use may be suspended from their extracurricular activities for a period of time. They may also be required to attend drug education classes, undergo counseling, or seek treatment for clinical dependency. These students usually must submit to follow-up drug tests as well. What's most important, once users have been identified through drug testing, is for those involved in their lives—family, friends, counselors, treatment providers—to practice early intervention and do all they can to dissuade these students from using drugs. Recovery support services can be especially helpful at this time.

If subsequent tests also yield positive results, students might face graduated sanctions, such as a longer suspension from an extracurricular activity. On the other hand, when a student admits drug use and shows a willingness to come to grips with the problem, this is usually seen as a positive step toward stopping the use, in which case sanctions may be much lighter or lifted altogether. Whatever the consequences, it is essential that students who test positive for drugs, particularly those who are in recovery after treatment for chemical dependency, get all the help and support they need, whether through student assistance or other services.

Drug testing in schools will let students be accountable

By Kyle Brown

Reprinted here, in part, is an opinion piece published June 23, 2004, in the Fort Wayne, Indiana, Journal Gazette. *Its author, then a rising senior at Homestead High School, wrote the article in response to an editorial in the newspaper urging Southwest Allen County Schools to reject drug testing.*

I applaud Southwest Allen County Schools for taking the initiative to stop drug and alcohol use in my school. The party atmosphere at Homestead continues to grow every year, and the present methods of education and prevention are proving to be ineffective. A new way of thinking has to be developed to curb the trend, and that's what Superintendent Brian Smith and his administration have put together: a well-thought-out program designed to help students rather than punish them.

Monday's editorial stated that random drug tests are too expensive, of questionable deterrent value and a violation of privacy rights. Let me dispense with those objections quickly. My school is considering drug tests that cost $15 each. The first three years of this program will be financed entirely from private donations, local foundations and government grants. If drug testing works during its three-year trial, then the tests would cost my school and the two middle schools $54,000 annually. That's just $18,000 per school per year. When you consider the costs of students missing school because of drugs and alcohol and the lost revenue to the school system resulting from their absences, this is a no-brainer.

Monday's editorial said drug testing violates my privacy rights. This assumes that my fellow students and I value our privacy over the lives of our friends. I would assert that it is just the opposite: We want accountability. It seems the only reason to deny drug testing in the schools is to protect underage drinking and drug use. And, frankly, I give up my privacy every time I change clothes in the locker room.

Let me give you three reasons why I support drug testing in my school. First, the program will encourage students to make constructive decisions rather than destructive ones. Second, it gives teeth to the drug-free promise that athletes and other students participating in extracurricular activities currently sign. (Currently, most of my peers just consider that promise a joke; there's simply no means to keep students accountable to it.) Finally, the new drug testing program will give students a reason to say no to drugs and alcohol. It will give students an opportunity to say "no" to drugs and alcohol and "yes" to athletics, band, show choir, journalism and all the activities that make school a complete experience.

The program Dr. Smith and other members of the community have developed will make the schools safer and stronger. Students will knowingly or even unknowingly help themselves by participating. Grades will increase, athletes will perform better and students will be able to learn in a safer environment.

Furthermore, the program will keep students and athletes accountable for their actions. The contractual promise every athlete and extracurricular participant signs will no longer be worthless. By establishing this program, we may never know all the good that will come from it because of all the bad that is stopped before it gets started.

As a member of a new generation who embraces accountability rather than the gross indulgences of personal freedoms that previous generations have embraced, I would urge you as a reader of this paper to lend your support for a safer and stronger school community by becoming a vocal advocate for random drug testing.

Assessing your program's effectiveness

One important measure of success for a student drug-testing program is whether drug use at your school declines over time. Launching the program is only part of the process. It is essential that you also monitor the program closely and regularly by conducting surveys, watching for signs of progress, and making any necessary fine-tuning adjustments along the way, such as modifying the list of drugs in your test panel. On a continuing basis, you should collect as much information as you can about the amount and extent of drug use at your school.

Anecdotal evidence of the sort collected before starting the program, together with signs of changes in overall student productivity and incidents of disruption and detention, will give you a fairly good idea of how the program is working. However, quantitative data—including the results of student surveys compared to your baseline data and the percentage of positive test results found each year during the course of your program—will allow you to more definitively gauge your program's success. In some cases, schools have hired outside evaluators to review the progress of their programs.

A recent survey of student athletes underscores the preventative power of drug testing. As part of the Student Athlete Testing Using Random Notification (SATURN) study, researchers compared rates of drug use among student athletes at one Oregon high school with those at another Oregon school that did not have a testing policy. At the start of the year, 7 percent of student athletes at both schools reported past-month use of illicit drugs. By the end of the school year, however, drug use by student athletes in the school with a testing program had decreased to 5 percent,

while use among athletes at the non-testing school had jumped to 19 percent. (This increase was due in part to the fact that the school did not have a drug-testing program that would have provided students the opportunity to say "no" to drugs.)

Funding your program

In a survey conducted recently by the Office of National Drug Control Policy, more than 37 percent of respondents said they did not consider implementing a drug-testing program in their public school because of concern it would be too expensive.

While cost is certainly an important factor when weighing the pros and cons of drug testing, it should not be viewed as an insurmountable hurdle for schools eager to start a program. Depending on the type of test used and the range of target drugs, individual tests can cost between $10 and $50. Funds for drug-testing programs can come from any number of Federal, State, local, or private sources, including those listed below.

Safe and Drug-Free Schools and Communities Program. The *No Child Left Behind Act* states that funds from the Safe and Drug-Free Schools Program can be used for student drug testing as part of a comprehensive program. It is important that schools follow the procedures set forth in *No Child Left Behind* for using state formula money. To view or download the *No Child Left Behind Act*, visit http://www.ed.gov/policy/elsec/leg/esea02/index.html

Grants for Student Drug Testing. Each year, Congress provides funds through the Department of Education's Office of Safe and Drug-Free Schools, National Programs, for a variety of activities related to alcohol, drug, and violence prevention. In FY 2003, $2 million was provided to eight grantees nationally for student drug testing. The grants were available to local education agencies and to other public and private entities for implementing, enhancing, or evaluating school-based drug-testing programs.

Faith-based organizations are eligible to apply for these grants. Confidentiality of student identities must be preserved, and the grant must contain a comprehensive plan for referral to treatment or counseling of those students who have been identified in the student drug-testing program. More information can be found at http://www.ed.gov/about/offices/list/osdfs/programs.html#national

Asset Forfeiture Funds. In some jurisdictions, asset-forfeiture statues require that a percentage of funds forfeited be used for drug-prevention programs. Because the primary purpose of student drug testing is to deter drug use, some jurisdictions have used forfeiture funds for their school drug-testing programs.

Community Foundations. Tax-exempt, non-profit organizations called community foundations are the fastest growing sector of American philanthropy. Usually found in areas with a population of over 100,000, these foundations are autonomous and publicly supported, operating from an endowed permanent asset base that has been created by local residents over a period of years. For more information, see the Web site for the Council on Foundations at http://www.cof.org

Local Businesses. Many businesses today have drug-testing programs of their own. Companies in your community can provide expertise in conducting drug tests and devising strategies for assessment and referral. Local businesses may also provide financial and other kinds of support for your school's drug-testing program.

Activity Fees. Some schools add the cost of drug testing to the student activity fees charged to parents or allocate a portion of athletic booster-club funds to pay for drug tests.

Existing Contracts. Some schools have reduced the cost of drug tests by linking up with city or state agencies that already have contracts with drug-testing companies. Small schools, in particular, can make testing more affordable by "piggybacking" on existing contracts.

Conclusion

Drugs are a significant barrier to learning, and the use of drugs by even a small number of students can affect the entire atmosphere of a school. Recognizing this, many administrators, parents, and students appreciate having a tool as powerful as student drug testing available as an additional component in their school's comprehensive drug-and-alcohol prevention and early intervention program.

Drug testing may not always be the solution to drug use by young people, nor is it right for every school. But for those schools that have determined that drug use is a significant problem and that testing is an appropriate response, it is important to keep in mind that the purpose is not to punish students who use drugs. The goals are to deter non-using students from ever using drugs, to encourage non-dependent users to stop before they get into more serious trouble with drugs or encourage others to follow suit, and to identify those who need early intervention, recovery support, and/or clinical treatment services.

Drug testing reinforces all other drug-prevention strategies and is a vital part of a comprehensive approach to preventing adolescent drug use. Because drug testing detects use at every level, it can identify not only those users who are dependent on drugs, but also those who have just begun using or who have not yet experienced the negative effects of their use. Knowing which students are using drugs makes it much easier for parents, counselors, and others to step in with early intervention, provide the care these kids need, and put them on the road to better health.

Student drug testing should not be used just on a hunch or the assumption that drug use is a problem. Rather, it should be implemented only when a specific threat has been identified, and when the evidence, carefully collected over time, reveals a genuine need. A successful testing program involves extensive pre-planning, which must include every effort to enlist the support of school officials, parents, students, and anyone else who would be affected by it. Before testing begins, some sort of student assistance program should be in place to provide help to students who test positive for drugs. Every step of the program should be designed to ensure fairness, accuracy, and respect for confidentiality.

For schools with successful drug-testing programs, the rewards can be abundant. With declining drug use comes less disruption in the classroom and in the community, fewer health problems, higher productivity, better academic performance, and, for students, the promise of a healthier, brighter future.

Resources

Government Agencies and Services

Substance Abuse and Mental Health Services Administration (SAMHSA)

U.S. Department of Health and Human Services
www.samhsa.gov
SAMHSA offers information on prevention, treatment, and mental health services, as well as free literature, topical searches, and identification of model programs and approaches for preventing and treating substance abuse.

National Clearinghouse for Alcohol and Drug Information

U.S. Department of Human Services/SAMHSA
Phone: 1-800-729-6686
TDD (Hearing Impaired): 1-800-487-4889
Fax: 301-468-6433
Spanish Line: 1-877-767-8432
E-mail: info@health.org
http://ncadi.samhsa.gov
The clearinghouse is a one-stop resource for the most current and comprehensive information about substance abuse prevention and treatment.

Substance Abuse Treatment Facility Locator

www.findtreatment.samhsa.gov

Division of Workplace Programs

SAMHSA offers information about testing technologies, products, and services.
www.drugfreeworkplace.gov

State list of certified labs

SAMHSA's list of certified laboratories is updated every month.
http://workplace.samhsa.gov/ResourceCenter/lablist.htm

Office of Safe and Drug-Free Schools

U.S. Department of Education
http://www.ed.gov/about/offices/list/osdfs/index.html

Family Educational Rights and Privacy Act (FERPA)

www.ed.gov/offices/OM/fpco/ferpa

Protection of Pupil Rights Amendment (PPRA)

www.ed.gov/offices/OM/fpco/ppra

The Drug-Free Communities Program

A program of the Office of National Drug Control Policy and the Substance Abuse and Mental Health Services Administration, Drug-Free Communities is designed to strengthen community-based coalition efforts to reduce youth substance abuse. The site provides a database of funded coalitions nationwide.
www.drugfreecommunities.samhsa.gov

Office of National Drug Control Policy

www.whitehousedrugpolicy.gov

The Anti-Drug.com

www.theantidrug.com

Freevibe.com

www.freevibe.com

National Youth Anti-Drug Media Campaign

mediacampaign.org
druganswer.com (Asian languages)

National Institute on Drug Abuse

www.nida.nih.gov

Medical Review Officers

American Society of Addiction Medicine (ASAM)
http://www.asam.org/search/search4.html

Division of Workplace Programs (SAMHSA)
http://workplace.samhsa.gov/DrugTesting/MedicalReviewOfficers

Institutional Review Boards

Institutional Review Board Registry
Office for Human Research Protections
U.S. Department of Health and Human Services
http://ohrp.cit.nih.gov/search/asearch.asp#ASUR

Agencies that have adopted the Federal policy for the protection of human subjects

Department of Agriculture
Department of Energy
National Aeronautics and Space Administration
Department of Commerce
Consumer Product Safety Commission
Agency for International Development
Department of Housing and Urban Development
Department of Justice
Department of Defense
Department of Education
Department of Veterans Affairs
Environmental Protection Agency
Department of Health and Human Services
National Science Foundation
Department of Transportation

Grant Information

U.S. Department of Education
http://www.ed.gov/fund/landing.jhtml

Office of Safe and Drug-Free Schools
Programs/Initiatives
U.S. Department of Education
http://www.ed.gov/about/offices/list/osdfs/programs.html#national

What Should I Know about ED Grants?
U.S. Department of Education
http://www.ed.gov/fund/grant/about/knowabtgrants/index.html

Developing Competitive SAMHSA Grant Applications: Participants Manual
Substance Abuse and Mental Health Services Administration (SAMHSA)
http://alt.samhsa.gov/grants/TAManual/toc.htm

Student Surveys

2005 State and Local Youth Risk Behavior Survey
Department of Health and Human Services
Centers for Disease Control and Prevention
http://www.cdc.gov/HealthyYouth/yrbs/pdfs/2005highschoolquestionaire.pdf

2005 Youth Risk Behavior Survey: Middle School Questionnaire
Department of Health and Human Services
Centers for Disease Control and Prevention
http://www.cdc.gov/HealthyYouth/yrbs/pdfs/2005middleschoolquestionaire.pdf

Drug-Testing Guidelines

National Student Drug-Testing Coalition

www.studentdrugtesting.org
The booklet "Model Legislation For Student Drug-Testing Programs: State Bill and Insertion Language" is available online at http://www.studentdrugtesting.org/model%20state%20bill%20web%20file.PDF

Guidelines Concerning Student Drug Testing in Virginia Public Schools

http://www.pen.k12.va.us/VDOE/PC/DrugTestingGuidelines.pdf

Other Organizations

Community Anti-Drug Coalitions of America

Phone: 1-800-54-CADCA (1-800-542-2322) or 703-706-0560
Fax: 703-706-0565
E-mail: webmaster@cadca.org, or info@cadca.org
www.cadca.org

Drug-Free Schools Coalition, Inc.

Phone: 908-284-5080
Fax: 908-284-5081
E-mail: drugfreesc@aol.com

National Student Assistance Association

Phone: 800-257-6310
www.nsaa.us

Recovery Network

For information about substance abuse, addiction, and mental health problems.
www.recoverynetwork.org

Monitoring the Future
www.isr.umich.edu/src/mtf

American Medical Association
www.ama-assn.org

American Society of Addiction Medicine
www.asam.org

American Public Health Association
www.apha.org

HOW TO ORDER

This document is available online at www.whitehousedrugpolicy.gov. Additional copies may be obtained from the ONDCP Drug Policy Information Clearinghouse by calling 1-800-666-3332, or by sending an e-mail to ondcp@ncjrs.org.


EXECUTIVE OFFICE OF THE PRESIDENT OF THE UNITED STATES
OFFICE OF NATIONAL DRUG CONTROL POLICY


NCJ 206126

ILLINOIS PROGRAM – UNDER REVIEW

FAQ's (continued)

A (con't:): year from the date of their notification of the violation. Students may petition for reinstatement of their athletic eligibility after 90 provided they meet the requirements set forth by the Board of Directors. Additionally, member schools will be subject to penalties for a violation of the testing program as determined by the Executive Director on a case by case basis.

Q: What other resources are available for students, coaches, or parents regarding the dangers of steroids and dietary supplements?

A: The IHSA has a dedicated page for Sports Medicine Special Topics and can be accessed by going to www.ihsa.org. Over the past three school years, the IHSA has attempted to raise awareness on the use of performance-enhancing drugs by high school student-athletes through a number of educational units and other media. A number of resources are available through the associations SMAC page noted above, including specific information on the performance-enhancing drug testing program. The IHSA has also developed a video detailing the drug testing program that schools can access through the Schools Center on the IHSA website.

Conclusion

The IHSA's Sports Medicine Advisory Committee has studied the issues surrounding anabolic steroid and dietary supplement use and drug testing of student-athletes for a number of years. The committee has taken efforts to raise awareness on these issues and is committed to continuing efforts to provide resources to schools.

Studies have shown that high school students across the nation, including Illinois, are using anabolic steroids and dietary supplements to increase athletic performance at great risk to themselves. And it is because of this concern for the health of student-athletes that the IHSA is considering developing a drug testing program.

During the 2007-08 school term, additional information regarding drug testing, including all testing protocols that would be utilized, will be made available to member schools and the public through the IHSA website.

Illinois High School Association

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ILLINOIS HIGH SCHOOL ASSOCIATION

Performance-Enhancing Drug Testing

FAQ's

Illinois High School Association

Tel: 309.663.6377

Background

This brochure is designed to answer some of the most frequent questions asked of the IHSA regarding anabolic steroids, dietary supplements, and drug-testing. Its aim is to provide interested individuals with the necessary and correct information in order to ensure the safety of student-athletes. Individuals with further questions can contact the IHSA electronically at general@ihsa.org.

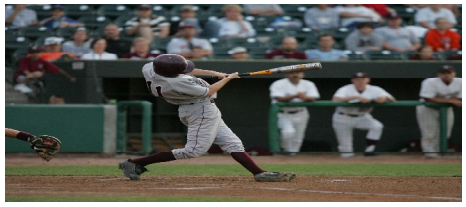
FAQ's

Q: What exactly does IHSA By-Law 2.170 address?

A: Approved overwhelmingly by the membership in 2006, By-Law 2.170 prohibits individuals associated with member schools from distributing anabolic steroids or performance-enhancing dietary supplements to student-athletes. It further details what things school personnel can distribute although the ultimate responsibility for taking any kind of substance is the student-athlete. The by-law also establishes "banned drug classes" that student-athletes should be aware of when they consider taking anything aimed at improving their performance.

Q: How will the association's testing program be effected by the "Banned Drug Classes"?

A: All tests conducted as a part of the association's testing program will be for the established banned drug classes.



FAQ's (continued)

Q: Can I take creatine?

A: Creatine is a dietary supplement that is sold in many forms by a number of manufacturers. Dietary supplements that are sold over the counter and through the internet are under-regulated by the U.S. FDA. Athletes are advised that the use of dietary supplements is at the user's own risk.

The list of ingredients and claims made by a manufacturer are not necessarily backed up by reliable, scientific research.

Q: Speaking of supplements, how do I know if one is okay or not?

A: As mentioned earlier, passage of IHSA By-Law 2.170 created a "banned drug classes" that are prohibited from being distributed to student-athletes. That list also provides direction to the association and its performance-enhancing drug-testing program in terms of what substances for which students will be tested. As mentioned earlier, ultimately the use of supplements is at the student's own risk.

FAQ's (continued)

Q: What is the penalty then for taking a substance that is on the IHSA's banned list?

A: The IHSA's performance-enhancing drug testing program will randomly select students who represent their school in any IHSA athletic state series contest. At this time, the testing program will not extend into the summer months or the regular season. In the event a member school discovers that one of it student-athletes has taken a substance from the association's banned drug classes will be subject to the penalties called for in his/her school's Athletic Policy/ Code of Conduct. The penalties associated with the IHSA's performance-enhancing drug testing program pertain to those violations found as a result of the association's post-season testing.

Q: What will the penalties be for a student who tests positive for a banned substance?

A: The IHSA Board of Directors have determined that student-athletes who have been found to have violated the association's performance-enhancing drug testing program will be suspended from interscholastic participation for a period of one

Warning Signs and Symptoms of Steroid Use

Possible Signs of Steroid Use:

"Puffy", swollen look to the face; acne, especially on shoulders, back, or chest; excessive time spent working out; frequent nosebleeds; frequent muscle cramps; increased aggression and violence; increased irritability; periods of depression; quick strength and weight gain; wide mood swings

Possible Adverse Effects in Both Males and Females

Acne, especially on chest, shoulders, and back; addiction; blood cots; breast enlargement and pain (males); deepening of the voice (females); deformed sperm/possible birth defects (males); frequent nosebleeds; growth of permanent facial and chest hair (females); hardening of the arteries, higher cholesterol levels; increased risk of heart attack, increased blood pressure; increased violence and aggression ("roid rages"); increased risk of injury and slower healing time; insomnia, restlessness, depression; liver damage, including cancer; loss of hair and partial baldness; lowered sperm count/temporary sterility (males); menstrual irregularities (females); muscle tendon damage; pain when urinating (males); reduction of breast size (females); shrinking of the testicles/sterility (males); stunted growth; suicidal thoughts; swelling of feet and lower legs; unpleasant breath odor

Evaluating Ergogenic Aid Claims

The following are considerations coaches, students, and/or parents should make when examining ergogenic aids.

1. What is the source of the information?
- Peer-reviewed journal
- Magazine, newspaper or book
- Company selling a product

2. Who wrote the article?
- A professor or someone with a degree (Is the degree in a field related to sports medicine, nutrition, or biochemistry?)
- Someone with credentials
- Unsure, article doesn't state

3. Critical Analysis
- Does the product sound too good to be true?
- If a research study is cited, is it done on a healthy population or a diseased population, well-trained subjects or sedentary subjects, animals, or humans?
- Does the dosage seem large or unsafe?
- Does the article make conclusive statements suggesting that a particular supplement will make you lose weight?
- Does the product promise quick improvements in healthy or physical performance?
- Does the item contain some secret ingredient or formula?
- Are currently popular personalities or star athletes used in its advertisements?

4. Is the product effective?

If it is still unclear whether the supplement is effective, seek other sources of information such as more articles on the topic or opinions of professionals in the field of nutrition and exercise.

5. Is the product safe at the recommended dosages?

6. Does the product cause long-term health problems?

7. Are possible side-effects identified?

8. Is taking the supplement ethical?

This is often a hard question to answer. The thrill of competition is to strive to be the very best, but does being the very best mean enhancing your performance through external substances. The ancient Greek ideal and that of the International Olympic Committee is that an athlete should succeed through their own unaided effort. Every individual must assess his/her ethical standards. In doing so, he/she should consider the policies of his/her team or the governing body for a sport, the possibility a substance is banned, and the understanding that taking such a supplement is considered cheating.

Provided by the IHSA

The IHSA would like to thank the following for providing information and/or resources in making this brochure possible:

NCAA Banned Drug List

Wisconsin Interscholastic Athletic Association

Iowa High School Athletic Association

By-Law 2.170:

Distribution of Steroids and Performance-Enhancing Dietary Supplements

(effective July 1, 2007)

IHSA®

Illinois High School Association

The future plays here.

Background

The value of high school interscholastic programs is found in the over-all physical, emotional, and intellectual development of student-athletes. In that pursuit, anabolic steroids and performance-enhancing dietary supplements offer no positive contribution. Rather, their use jeopardizes not only the health of student-athletes, but also impedes in their over-all development. And since this use runs counter to the purpose and value of interscholastic programs, coaches, administrators, school officials or employees, or booster club/support group members have an obligation and responsibility to provide only healthy, safe, and approved substances to student-athletes. IHSA By-Law 2.170, which will take effect on July 1, 2007, will strengthen the relationship between students and their schools by affirming the school's commitment to offering a safe environment in which their students can develop.

Over the past few years, the IHSA, through the work of its Sports Medicine Advisory Committee and in conjunction with the National Federation of State High School Associations, has attempted to increase awareness on steroid use by high school students and provided resources that schools, athletes, and parents could use to reinforce the dangers of anabolic steroids and performance-enhancing dietary supplements.

The purpose of this brochure is to provide schools, athletes, and parents with a description of those substances that are considered banned by the IHSA, and, therefore, substances student-athletes can not take and maintain their athletic eligibility.

This brochure presents the expected list of banned drug classes to be in effect for the 2007-08 school year. On July 1st, 2007, the official list shall be published on the IHSA website and will be distributed in hard copy to member schools in the August 2007 All-School Mailing.

Banned Drug Classes

The term "related compounds" comprises substances that are included in the class by their pharmacological action and/or chemical structure. No substance belonging to the prohibited class may be used, regardless of whether it is specifically listed as an example.

Many nutritional/dietary supplements contain banned substances. In addition, the U.S. Food and Drug Administration (FDA) does not strictly regulate the supplement industry; therefore purity and safety of nutritional dietary supplements cannot be guaranteed. Impure supplements may lead to a violation of IHSA by-laws. The use of supplements is at the student-athlete's own risk. Student-athletes should contact their physician or athletic trainer for further information.

The following is a list of banned-drug classes, with examples of banned substances under each class:

1. Stimulants

amiphenazole, amphetamine, bemigride, benzphetamine, bromantan, caffeine[1] (guarana), chlorphentermine, cocaine, cropropamide, crothetamide, diethylpropion, dimethylamphetamine, doxapram, ephedrine (ephedra, ma huang), ethamivan, ethylamphetamine, fencamfamine, meclofenoxate, methamphetamine(MDMA, ecstasy), methylphenidate, Nikethamide, Pemoline

pentretrazol, phendimetrazine, phenmetrazine, phentermine, phenylpropanolamine (PPA), picrotoxine, pipradol, prolintane, strychnine, synephrine (citrus aurantium, zhi shi, bitter orange)
and related compounds

2. Anabolic Agents: Anabolic Steroids

androstenediol, androstenedione, boldenone, clostebol, dehydrochlormethyltestosterone, dehydroepiandrosterone (DHEA), dihydrotestosterone (DHT), dromostanolone, epitrenbolone, fluoxymesterone, gestrinone, mesterolone, nethyltesosterone, nandrolone, norandrostenedione, norethandrolone, oxandrolone, oxymesterone, oxymetholone, stanozolol, testosterone[2], tetrahydrogestrinone (THG), trenbolone
and related compounds

Banned Drug Classes (con't.)

3. Diuretics

acetazolamide, bendroflumethiazide, benzhiazide, bumetanide, chlorothiazide, chlorthalidone, ethacrynic acid, furosemide, hydrochlorathiazide, methyclothiazide, metolazone, polythiazide, quinethazone, spironolactone (canrenone), triamterene, trichlormethiazide
and related compounds

4. Peptide Hormones and Analogues

Corticotrophin (ACTH), human chorionic gonadotrophin (hCG), luteinizing hormone (LH), growth hormone (HGH, somatotrophin), insulin like growth hormone (IGF-1)

All the respective releasing factors of the previously-mentioned substances also are banned:

erythropoietin (EPO), darbepoetin, sermorelin

Definitions of unacceptable levels depend on the following:

[1]for caffeine — if the concentration in urine exceeds 15 micrograms/ml

[2]for testosterone — if the administration of testosterone or use of any other manipulation has the result of increasing the ratio of the total concentration of testosterone to that of epitestosterone I the urine to greater than 6:1, unless there is evidence that this ratio is due to a physiological or pathological condition.

The Coach's Game Plan

Against Anabolic Steroids

Your Role in Prevention

WINDSOR - ESSEX COUNTY
HEALTH UNIT
Unité sanitaire
de Windsor comté d'Essex
WINDSOR • ESSEX • LEAMINGTON
www.wechealthunit.org

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Coaches of sports teams are in a unique position to influence players and discourage drug use.

Introduction

Why should I care if members of my team are taking anabolic steroids or dietary supplements?

Coaches of sports teams are in a unique position to influence players and discourage drug use. You are a role model, a mentor, and an educator, especially for young athletes. Coaches create the sports environment for the team and influence team morale, sportsmanship, and competition. Good sportsmanship and fair play are valuable qualities in athletics and are transferable to academics and personal relationships.

Both coaches and players are subjected to the pressure of winning at their sport. Athletes are overwhelmed by the pressure to win and perform well. There is also a general desire to achieve results more quickly. As one student put it: “Everyone is looking for the easy way out and that is what they are doing. Just trying to get there faster”, (Youth and Steroids Needs Assessment, 2006 p.13). The pressure to perform well and win may lead youth to use anabolic steroids or dietary supplements.

Team spirit and cohesiveness may be affected by unfair competition from students who use anabolic steroids or dietary supplements. The reputation of the school may also be negatively impacted. Because of the serious side effects of anabolic steroid use, students’ health is a major concern.

When young athletes use anabolic steroids or dietary supplements a win may be achieved but at the expense of team morale, cohesiveness, fair-play, school reputation, and student health!

The athlete’s health should <u>always</u> be the first concern of a coach.

Steroids 101 - The Basics

Steroids are:

- a man-made artificial form of the male hormone, testosterone
- taken by pill or injection
- sold illegally
- used to improve athletic performance and build muscles

Health Effects

Short Term:

- aggression ("roid rage"), extreme mood swings accompanied by suicidal thoughts
- acne, oily hair and skin, thinning scalp hair and baldness in both sexes
- stops bone growth, preventing the user from ever growing to full height

In men:

- impotence
- permanent breast development
- shrinking of testicles
- reduced sperm count

In women:

- reduced breast size
- coarsening of the skin
- deepening of the voice
- excessive growth of body hair
- changes in or cessation of the menstrual cycle

Long Term:

- liver tumours/cancer, jaundice, hepatitis, liver enlargement
- abnormalities of the heart, high blood pressure, blood clots, heart attack, stroke
- male pattern baldness
- reduced fertility in both women and men
- tendon ruptures, cessation of growth in adolescents
- infections such as HIV/AIDS and Hepatitis from used or dirty needles

Note:

Short term health effects can become permanent even when drug use is stopped.

Are Steroids Addictive?

Tolerance to the effects does not develop as it does with other drugs. However, users may experience withdrawal symptoms such as mood swings, fatigue, loss of appetite, restlessness, depression, insomnia, reduced sex drive, and the desire to take more steroids.

Dietary Supplements

- Dietary supplements (e.g., creatine) may also be used by athletes to enhance physical performance.
- Steroid supplements are converted into testosterone or a similar compound in the body and may produce the same effects as anabolic steroids.
- Prohormones are a supplement similar in chemical structure to steroids but are not considered illegal.
- Many supplements are sold as ergogenic aids in nutrition stores. Ergogenic aids are any external influence that may directly affect the physiological capacity of a particular body system, improving performance and increasing the speed of recovery from training and competition.
- The most common ergogenic aid is androstenedione or “Andro.”
- Many other dietary supplements are also available. These may be sold illegally in nutrition and health food stores. Refer to the Health Canada website for warnings about these substances.

Key "Plays"
Preventing Steroid Use

Whether the goal is to improve specific skills of young athletes or to win games, results can be achieved by using a plan. As a team coach, you realize that the best offense is a good defense!

Consider these 13 "Plays" in your defense against anabolic steroid use:

1. Encourage participation by making sports teams an important part of school life. Emphasize that education occurs both in and out of the classroom setting.

2. Advocate for clear policies on student athlete drug use. Educate students and parents on those policies.

3. Clearly state your expectation that players will not use performance-enhancing drugs. Set firm limits and enforce policies.

4. Educate players about the risks, especially those that affect their future. Discuss the short term effects and how steroids can impact long term goals. (e.g. loss of respect). Use "teachable opportunities" as they arise (i.e. current events).

5. Emphasize the benefits of participating in sports, especially those that matter to young people (i.e. respect of peers, self-worth and self-respect, personal growth).

Plays"

6. Encourage athletes to set personal goals and assist them in making progress. Refer only to reputable professionals for further skill development and training.

7. Be aware that negative comments have the ability to impact an athlete for life. Provide encouragement along with constructive concrete comments.

8. Help team members to develop decision-making skills so they are able to make appropriate choices. Emphasize that there are consequences to the decisions they make.

9. Let players know that they can talk to coaches about their fears and concerns.

10. Develop meaningful relationships with the athletes that you coach. You are in a special position to prevent the use of performance enhancing drugs.

11. Invite experts and positive role models to deliver positive messages and answer questions about nutrition, competition and performance.

12. Implement a Peer Mentoring program. Have older players who don't use drugs meet with and mentor younger players as a group. Remind senior students that they are role models!

13. Have team members make a written commitment and pledge not to use anabolic steroids or supplements as a precondition to playing. Create awareness by conducting a contest with other teams within the school or with other schools to get the greatest percentage of team members with signed pledges.

How Do I Approach My Students?

When you suspect a student may be using performance enhancing drugs:

1. Always check policies that have been established by the school board and/or athletic association prior to taking any action.

2. In the absence of policies about the use of performance enhancing drugs, consult with the head coach, the principal, and/or the superintendent prior to confronting the student. Determine a course of action and who will be present when the student is confronted.

3. Make sure the athlete knows that you know. If you fail to act, the student may assume that his "bulked up" size and behaviour are okay or that you don't care.

4. Confront the athlete as soon as possible in a neutral, private area such as an office or a classroom. Always show concern for the student's health and participation as a team member.

Websites and Resources

Bodysense
www.bodysense.ca

Bodysense promotes positive body image in sport, targeted at female as well as male athletes, coaches, and parents. It also provides nutrition information for athletes.

Canadian Centre for Ethics In Sport
www.cces.ca

The Steroid and Body Image Project features lesson plans and posters with facts about steroids and information on body image. Ideal for students, mainly young men, ages 14 and over.

Coaches Association of Ontario
www.coachesontario.ca

Check here to find downloadable articles for coaches on sports psychology, coaching children, coaching science and sports parents.

Health Canada
www.hc.sc.gc.ca

Stay informed on up-to-date warnings about illegal supplements that may be available in Canada.

National Criminal Justice Reference Service
www.ojjdp.ncjrs.org/pubs/coachesplaybook

The “Coaches’ Playbook Against Drugs: Portable Guide” is a downloadable handbook with tips for keeping the team drug free.

(continued on next page)

Steroids 101 - The Basics

National Institute on Drug Abuse (NIDA)
www.steroidabuse.gov

NIDA's specialized website on anabolic steroids provides resources and links for students, educators, and parents.

Oregon Health and Science University
www.ohsu.edu/hpsm/index.html

Visit this link for ATLAS (Athletes Training and Learning to Avoid Steroids) and ATHENA (Athletes Targeting Healthy Exercise and Nutrition Alternatives) Programs. These school based prevention programs funded by NIDA give student athletes the knowledge and skills to resist steroid use and achieve their athletic goals in more effective, healthier ways. Each program is gender specific.

Positive Coaching Alliance
www.positivecoach.org

Look here for fact sheets on engaging parental cooperation and helpful information and fact sheets for coaches.

Public Broadcasting System
www.pbs.org/inthemix

"In The Mix" Reality Television is a weekly PBS Reality series for teens. The video clip of "Steroids: The Hard Truth" is viewable on the website with downloadable lesson plans and discussion guide with questions.

True Sport Foundation
www.truesportpur.ca

This site features discussion on topics such as fair play, doping, and parental conduct, as well as responses and related documents from ethics experts.

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The best offense is a good defense!

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de Windsor comté d'Essex
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www.wechealthunit.org

For more information contact the Windsor-Essex County Health Unit at: 519-258-2146 ext. 1260 www.wechealthunit.org

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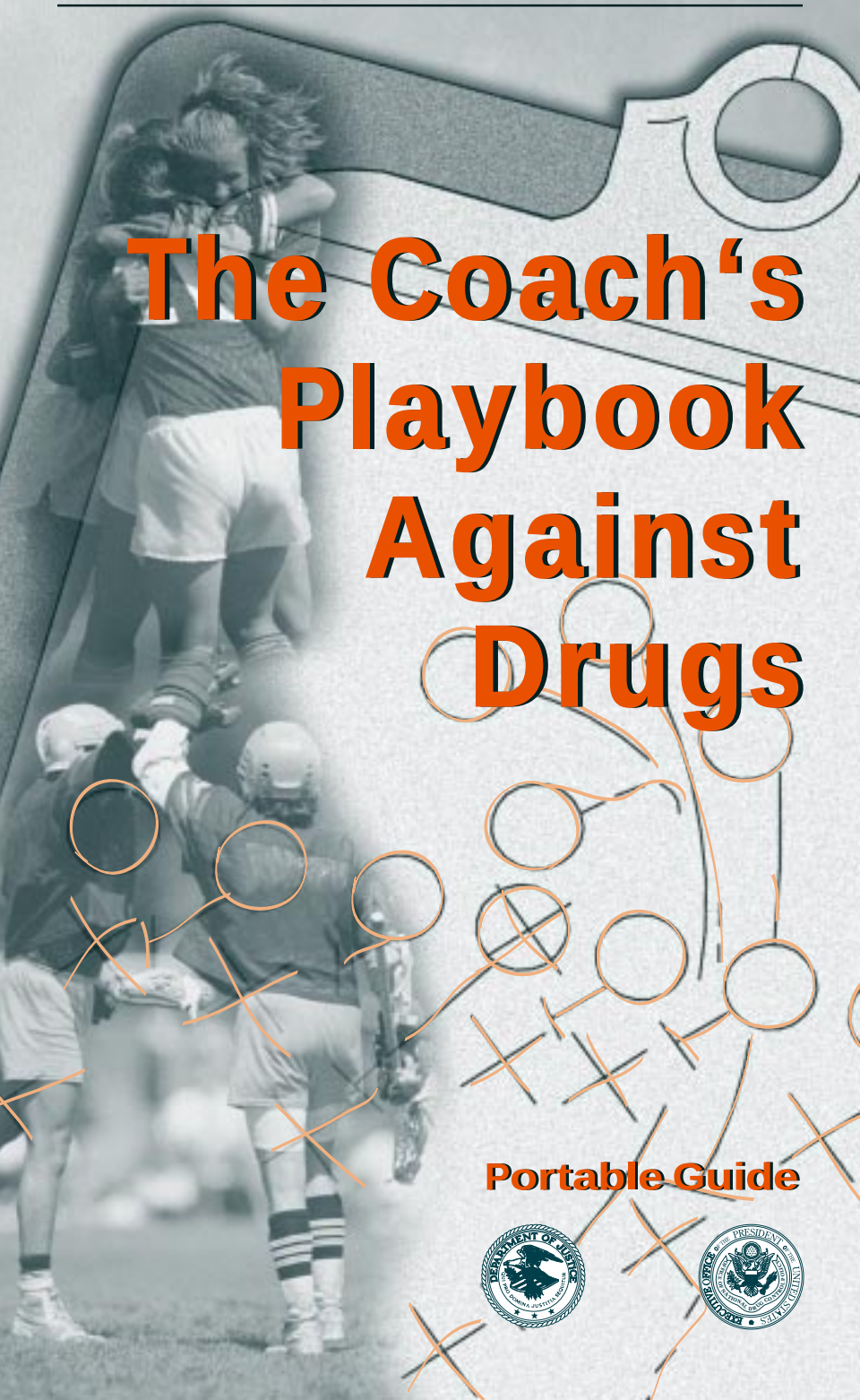
Other Resources Available to Help Educate and Promote Awareness to Your Students:

11”x17” Posters
For Locker Rooms, Washrooms, Gymnasiums, etc.

Youth Wallet Card
(Unfolds to Three Panels)

U.S. Department of Justice
Office of Justice Programs
Office of Juvenile Justice and Delinquency Prevention



The Coach's Playbook Against Drugs

Portable Guide

DO YOU KNOW THE SCORE—

ON YOUR SPECIAL ROLE?

The purpose of this playbook is to help you as a coach educate your athletes about the dangers of drugs. Each year, 7 million boys and girls in this Nation are involved in sports at middle schools, junior high schools, or high schools. These students are the catalysts for a healthy chain reaction of involvement and school spirit that includes team captains, players, other students, school personnel, and the community. And it all begins with you—the coach—as the pivotal player.

Athletic coaches have a special relationship with athletes and other students but often underestimate their influence on these young people. You are a role model in the eyes of a young athlete, and you occupy this leadership role at a very significant and impressionable time in the athlete's life. When you talk to your players and students about the dangers of drugs, the message is more effective because "Coach" is behind those words.

What you tell your athletes about the use of alcohol and other drugs is very important. Don't take the subject lightly—the lives and future of the young people you coach are truly at stake. Equally important, the standards that you set by example will become the guide for students' behavior. If you want athletes to stay away from alcohol and other drugs, you must send that message clearly

"Coaching your students to remain drug free is a championship play. Join our team."

Larry Bird
Coach—Indiana Pacers
Former Boston Celtic
1998 Basketball Hall of Fame Inductee
12-Time All Star
3-Time NBA MVP
2-Time NBA Finals MVP

and forcefully, in words and in actions. If team members do not hear your opinion on this important subject, they may assume that you don't care. Many coaches may believe that their players are not the ones who are using alcohol and drugs, but they may be mistaken.

ON WHY PLAYERS USE DRUGS?

Coaches need to be aware of why athletes—perhaps even their own players—may be using alcohol and other drugs.

Athletes can be overwhelmed by pressure:

- Pressure to win.
- Pressure to perform well.
- Pressure to maintain a "cool" image.

Some athletes turn to drugs, including alcohol, to relieve stress and feel good. When athletes use alcohol or other drugs, they may achieve this goal by feeling an initial "high." Other times, players turn to drugs to sustain a good feeling. Coming off the field after a winning game, for example, athletes may try to prolong that winning feeling by turning to a mind-altering drug. On the other hand, if their team has lost the game, they may want to replace depressed feelings with a "high" from a mood-altering drug.

ON HOW DRUGS REALLY AFFECT ATHLETES?

As you know, using drugs will not relieve stress or allow a game high to last forever. By clearing up your players' misconceptions about the effects of drugs and explaining how drugs really affect our bodies, you may be able to keep your team drug free. In particular, explain that:

- Drugs may make players feel good initially, but that the good feelings are typically followed by unpleasant ones. Drugs

don't solve problems; they create problems and make coping with them even harder. Drugs don't make stress go away; they create stress.

- Drugs will not enhance performance on the playing field. With the possible exception of one type of drug—anabolic steroids—it is simply not true that using drugs will enhance players' performance.
- Drugs actually interfere with an athlete's physical and mental ability. And, even though steroids may improve short-term performance, the physical side effects and emotional damage they cause far outweigh any gains.

YOU CAN KEEP YOUR TEAM DRUG FREE

You are in a special position to prevent drug use. The "do's and don'ts" below are commonsense guidelines for handling situations that you or your fellow coaches are likely to encounter at one time or another.

Don't—

Pretend that you did not hear an athlete discussing plans for a party that will involve alcohol or drugs.

Do—

Immediately address the problem with the athlete and tell him or her that the plans are inappropriate and unacceptable

"It's important for coaches to take an active part in their players' lives—both on and off the field. Positive role models are needed in our children's lives, and coaches have a special opportunity to deliver a powerful and consistent message about the dangers of drugs."

Darrell Green
Defensive Back—
Washington Redskins #28
Six-Time Pro Bowler

for any member of your team. Tell the athlete that you are concerned and that you care. Ask if he or she needs any help. Tell him or her that drug use weakens an athlete's body and increases the risk of motor vehicle and other accidents.

Don't—

Choose to ignore the smell of marijuana.

Do—

Confront the athlete immediately. Make sure that he or she knows that you know. If you fail to act, the athlete may assume that this behavior is OK or that you don't care. Explain that marijuana is illegal and that the athlete can be arrested or suspended from school and sports for using it.

Don't—

Avoid enforcing rules—or enforce them selectively.

Do—

Be firm, set limits, and stick to them. Be sure that the rules you set are helpful in changing an athlete's behavior. Don't alienate or stigmatize athletes; engage them in the rulemaking.

Don't—

Ignore drug use because the team "needs" a particular athlete to play.

Do—

Set rules and enforce them consistently. Once you look away, team morale will suffer, as will your moral leadership. By opting to look the other way, you also fail in your responsibility to the athlete. If he or she gets hurt, how will you feel? Emphasize that the same rules apply to all team members and that you, as a coach, have a responsibility to enforce rules consistently.

Don't—

Ignore drug use by the coaching staff.

Do—

Ensure that everyone on your staff sets a good example. Your players will heed not just what you say, but what you do.

KEY PLAYS— HOW TO GET YOUR MESSAGE ACROSS

The best defense is a good offense. If you want to follow through and keep drugs and alcohol off the playing field and out of your players' lives, here are 10 key plays to help you get your message across.

1. **Encourage participation in athletics by making your team an integral and exciting part of school or community life.** Spending large amounts of time unsupervised after school and on weekends greatly increases the odds that teenagers will experiment with drugs. Therefore, you should make a special effort to involve youth in constructive after-school activities, such as athletics. Equally important, however, is for teenagers to find these activities fun and rewarding. Try to provide opportunities for kids of all abilities to participate and have fun.

> ***"A soccer team needs players who are responsible and make good decisions. Taking drugs of any kind is not a good decision. As a coach, I have tremendous respect for those people who stand up to the pressure and won't tolerate drug use. We all need these kinds of people."***
>
> ***Bob Bradley***
> ***Head Coach—Chicago Five***

2. **Clearly express your expectation that players will not use drugs.** Some adults, especially those who have used drugs themselves, find it difficult to talk to youth about drugs. Unless adults clearly state an expectation that youth should not use drugs, however, adolescents may not understand what standard, if any, they are being held to.

3. **Ensure that your players know the risks of drug use, especially those that affect athletic performance and their future.** Getting high has both long- and short-term consequences for an athlete—consequences that young people may not be aware of, but that you, the expert on performance, understand. For example, short-term risks of marijuana use include decreased stamina, weight gain, and reduced muscle strength. Steroids can lead to heart disease, infertility, and skin disease, and cause aggression in a person's daily life. Laziness, lack of motivation, loss of control, and poor decisionmaking are additional risks associated with drug use. Any of these can affect a player's long-term goals, like winning a championship or getting a college scholarship.

4. **Emphasize the benefits of participating in sports, particularly benefits that young people care about, including:**

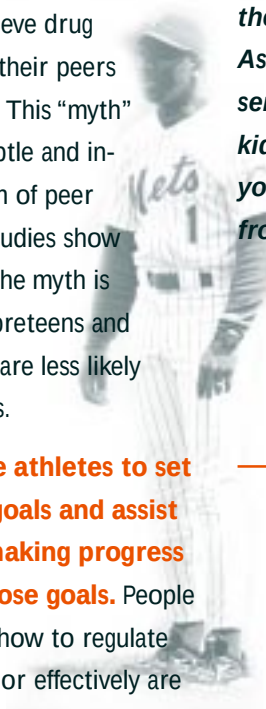
   - Gaining the respect of peers.
   - Sharing new and exciting experiences with close friends.
   - Earning the respect and trust of parents and siblings.
   - Setting a good example for others (especially younger siblings).
   - Having a strong sense of self-worth and self-respect.

- Increasing control over one's life and its direction.
- Achieving personal growth and progress toward one's goals.

The last three benefits are particularly important to high school students.

Psychologists have long made the case that the "carrot-and-stick" approach works far better than the "stick" alone. When you link the attainment of benefits that young people care most about to activities other than using drugs, you help them develop closely held reasons for staying drug free.

5. **Make sure your players know that drug use among preteens and early teens (ages 11 to 14) is a "fringe" behavior.** Eighty percent of eighth-grade students do not use drugs, yet most eighth graders believe drug use among their peers is common. This "myth" exerts a subtle and insidious form of peer pressure. Studies show that when the myth is debunked, preteens and early teens are less likely to try drugs.



"As a former player, I know the value of a good coach. As a coach, I know you can send the right message to kids about drugs. Coach your students away from drugs."

Mookie Wilson
First Base Coach—
New York Mets
Former Outfielder for the
1986 World Series
Champion New York Mets

6. **Encourage athletes to set personal goals and assist them in making progress toward those goals.** People who know how to regulate their behavior effectively are

more likely to set and achieve goals. Studies show that adolescents who learn self-regulation skills are far less likely to use drugs (presumably because they become more involved in setting and pursuing larger goals).

All athletes can set goals for what they want to achieve throughout the season. Help them to do so, and assist them in tracking their progress. Let them know that you have noticed their accomplishments, and praise them to other team members and peers. This gives young people specific, measurable ways to gauge the benefits of spending time on athletics.

Skills shown to be helpful to teens in setting goals and measuring progress toward them include identifying appropriate goals, not only for the short term but also for the long term; recognizing situations and people that are a threat to accomplishing the goals; and thinking through the consequences of one's actions.

7. **Have older players reinforce the idea that real "cool" kids don't use drugs—they disapprove of them.** The vast majority of preteens and early teens disapprove of drug use, and even a majority of older teens disapprove. Yet, preteens and early teens routinely underestimate this disapproval; most believe that the majority of their peers approve of drug use. Heightening the perception of disapproval by peers and older teens is one of the most powerful ways to prevent drug use.

   A simple way to do this is to select a number of your older players who don't use drugs (including some likely to be considered "cool" by younger players) and have them meet as a group with your younger players. Encourage the older

players to speak openly about the negative consequences of using drugs that they have observed—including effects on physical abilities and school performance. Most importantly, have these players talk about how using drugs lets other people—parents, teachers, friends, teammates—down. Remind your older players that they are role models. Encourage them to speak out, and reach out, to younger kids.

8. **Help young people to develop appropriate decision-making skills.** Adolescence is a time of life when teens must make an increasing number of decisions. Many adolescents, however, have not been taught how to make good decisions.

   To help your players develop decisionmaking skills, let them share in decisions that affect the team as a whole. For example, let players help decide on the structure of a practice or the specific skills to work on during a practice session. Guide athletes through the decisionmaking process by teaching them to (1) identify/clarify the decision to be made; (2) consider all possible options and outcomes; (3) choose the best option; and (4) follow through.

9. **Let players know that they can talk to you about their fears and concerns regarding drug use.** Most adolescents yearn for a close relationship with a caring adult and for the ability to communicate honestly. They may find it easier to talk to a coach than to their parents about sensitive topics such as sex and drugs. By responding openly when such a topic is raised, you will help your players learn new ways to broach sensitive subjects and keep important lines of communication open. Tell players where they can find more information and steer those who need help toward it. One place to start is the Office of National Drug Control Policy

(ONDCP) Web site: www.whitehousedrugpolicy.gov. For additional information, refer to the Resources section at the end of your playbook.

10. **Develop meaningful relationships with the young people you coach.** The most common reason young people give for not wanting to use drugs is a desire to please the caring adults in their lives. Be a caring adult—someone your athletes can count on for support and guidance.

EFFECTS OF USING DRUGS

Key Play #3 advises you to be sure that your players are aware of the risks of drug use. A simple description of the effects of using drugs is often more effective than a long lecture filled with drug horror stories. Using short, to-the-point descriptions of the negative effects of drugs—such as those listed below—will work well in capturing your students' attention and keeping them engaged.

"As a professional athlete, it is important to maintain a body that is healthy and physically fit. By maintaining a drug-free lifestyle, I am able to keep my mind sharp, uphold a winning attitude, and put forth my best performance—both on and off the field. I hope to communicate a positive message to young people by setting a drug-free example, as well as encourage them to do the same in their own schools and communities."

Dante Washington
Forward—Dallas Burn
Former U.S. Olympic Team Member

PERFORMANCE IN MANY AREAS IS HAMPERED

Drugs can have lasting effects on the brain and body. Using drugs often compromises judgment and physical abilities and makes a person unable to perform in a variety of contexts:

- Academics.
- Athletics.
- Music or dramatic arts.
- Decisionmaking in everyday situations.
- Driving any kind of vehicle.
- Operating equipment or tools.

Drug use also diminishes health, physical appearance, and motivation. It impairs judgment, leading to risky decisions and behaviors, and it directly reduces physical and intellectual performance in many areas.

THE RISK OF DRUG-RELATED PROBLEMS IS INCREASED

A young adult who uses drugs increases his or her risk of experiencing any (or all) of the following:

- Legal problems.
- Addiction.
- Involvement in a traffic accident.
- Involvement in a swimming, boating, or other type of accident.
- Engaging in risky sexual behaviors that may spread disease.
- Athletic injuries.

DEVELOPMENT OF LIFE SKILLS IS IMPAIRED

An adolescent's drug use will also mask problems and interfere with the normal development of such important life skills as:

- Stress management.
- Conflict resolution.
- Problem solving.
- Goal setting.

PHYSICAL, EMOTIONAL, SOCIAL, AND SPIRITUAL DEVELOPMENT IS DAMAGED

A young person's sense of independence, responsibility, and purpose is best achieved without the interference of drugs. The following types of development depend on a young person remaining drug free:

- Normal psychological development.
- Appropriate moral and spiritual development.
- Ability to solve daily problems and cope with stress.
- Ability to interact and get along with others.

THE GAME WILL BE AFFECTED

Sports were designed to be a fun and competitive way to gain exercise. They were not designed to include drug use. Communicate the serious effect of drugs on the game by asking your players to guess how their foul shots, field goals, or home runs would be affected by drugs. To put it simply, they won't happen. Scientific studies show that drugs impair coordination and abilities. How does this translate on the athletic field?

- A basketball player using drugs is more likely to miss a game-winning free throw.

- A football receiver using marijuana is less likely to outrun a defender. Speed, lung capacity, muscle strength, and stamina all can drop with marijuana use.
- A skier using drugs likewise dramatically increases his or her chances of suffering a career-ending injury.

If a player's performance is weak because of drug use, the player will have to live knowing that he or she has disappointed the team, the coach, and others—all for a few minutes of a false high.

TEAM SPIRIT WILL SUFFER

Drugs negatively affect not only a team's performance, but its sense of team spirit and cohesiveness as well. In particular, drug use can cause the following effects on the morale of the team:

- Lack of togetherness.
- Lack of concentration.
- Lack of commitment.
- Lack of energy.
- Lack of trust.

"America's coaches need to let kids know it's critical to stay drug free for many reasons. Two big reasons are that drugs can damage your health and it's cheating if athletes use drugs to assist their performance. Olympic athletes know that taking drugs violates the competitive spirit of the Games, is irresponsible toward your own health, and is not fair play."

Benita Fitzgerald Mosley
1984 Olympic Gold Medalist,
Women's 100-Meter Hurdles
Director of Training Centers,
U.S.Olympic Committee
President—Women's Sports Foundation

PLEDGE TO BEAT DRUGS

Coaches and athletes all across the country can make a written commitment to take steps that will throw drugs and alcohol for a loss. The pledges below can be copied, modified, or used as samples to fit the needs of your team and school. Think creatively about how best to use these pledges. Signed pledges could be displayed in your school's main office or library. Teams and organizations could require the pledge as a precondition to playing or managing a sport. Neighboring schools might conduct a contest to see which could secure the greatest number of signed student, coach, or even parent, pledges. Talk to school administrators, parents, and community officials about how to monitor adherence to pledges and what consequences should result if players or coaches break their pledges. Generate interest in the pledges by placing an article in your school newspaper or PTA newsletter.

STUDENT'S PLEDGE

As an athlete, I agree to abide by all rules regarding the use of drugs. I understand that drug addiction is a disease and, even though it may be treatable, it has serious physical and emotional effects—effects that would hurt me, my family, my team, and my school. Given the serious dangers of drug use, I accept and pledge to follow all rules and laws established by my school, team, and community regarding the use of drugs. These include the rules listed in my school's student and athletic handbooks and any other rules established by my coach.

To demonstrate my support, I pledge to:

1. Support my fellow students by setting an example and abstaining from the use of illegal drugs.
2. Avoid enabling any of my fellow students or teammates who use these substances. I will not cover up or lie for them if any rules are broken. I will hold my fellow students and teammates fully responsible and accountable for their actions.
3. Seek information and assistance in dealing with my own or other students' problems relating to drugs.
4. Be honest and open with my parents or guardians about my feelings and problems.
5. Be honest and open with my coach and other school or community personnel.

Student _____

School Name _____

Date _____

*** PARENTS OR GUARDIANS: We ask that you co-sign this pledge to show your support.*

Parent or Guardian _____

Date _____

Parent or Guardian _____

Date _____

COACH'S PLEDGE

As a coach, I agree to abide by the training rules regarding the use of drugs and to support and enforce all training rules. Given the serious dangers of drug use, I pledge to assist my team members in playing and staying drug free.

To demonstrate my support, I pledge to:

1. Discuss thoroughly with my team the impact of drug use on athletes.
2. Ensure that my athletes understand their commitment to training rules and the consequences of violating any of those rules.
3. Encourage my players and their parents to sign the Student's Pledge and submit their pledges to the athletic director, who will have received a copy of my pledge.
4. Enforce rules consistently when I learn that training rules have been or are likely to be broken.
5. Avoid enabling athletes' drug use or other unhealthy habits by ignoring or refusing to deal with a player who has broken the rules.
6. Provide information and referrals to any student experiencing difficulty with or having concerns about the use of drugs.
7. Provide assistance to students who are re-entering school or rejoining my team after receiving treatment for drug or alcohol use.

Coach _____

School Name _____

Date _____

RESOURCES

Office of Juvenile Justice and Delinquency Prevention (OJJDP)
810 Seventh Street NW.
Washington, DC 20531
202–307–5911
Internet: www.ncjrs.org/ojjhome.htm

OJJDP provides Federal leadership on juvenile justice and delinquency prevention efforts, which include alcohol and other substance abuse. OJJDP also sponsors the Juvenile Justice Clearinghouse, which offers easy access to information on all topics relating to delinquency prevention and juvenile justice. The Clearinghouse can be reached at 800–638–8736.

Office of National Drug Control Policy (ONDCP)
Executive Office of the President
Washington, DC 20503
202–395–6700
Internet: www.whitehousedrugpolicy.gov/ or www.ondcpsports.org

ONDCP's Athletic Initiative provides coaches, parents, and young people with information about prevention programs focusing on sports. ONDCP also supports the Drug Policy Information Clearinghouse, a single source of statistics, data, research, and referrals useful for developing or implementing drug policy. The Clearinghouse can be reached at 800–666–3332.

FOR MORE INFORMATION

Center for Substance Abuse Prevention (CSAP)
Division of Community Education
5600 Fishers Lane
Rockwall II, Suite 800
Rockville, MD 20857
301–443–0373
Internet: www.samhsa.gov/csap/index.htm

The Center for Substance Abuse Prevention (CSAP) sponsors the National Clearinghouse for Drug and Alcohol Information (NCADI), one of the Federal Government's central clearinghouses for alcohol and drug information. NCADI can be reached at 800–729–6686, TDD 800–487–4889, or online at www.health.org.

Drug Enforcement Administration (DEA)

Prevention Branch
700 Army Navy Drive
Arlington, VA 22202
202–307–7936
Internet: www.usdoj.gov/dea/

DEA's Prevention Branch plays a leading role in developing antidrug training programs and materials for the athletic community, such as Team Up: A Drug Prevention Manual for High School Athletic Coaches, which was developed in conjunction with the National High School Athletic Coaches Association and provides coaches with information necessary to develop a prevention program for their teams, classes, and schools.

The Fellowship of Christian Athletes

8709 Leeds Road
Kansas City, MO 64129
816–921–0909
Internet: www.gospelcom.net/fca/

The Fellowship's "One Way to Play" (OW2P!) offers young people a comprehensive program aimed at positive opportunities and drug-free lifestyles.

Join Together

441 Stuart Street
Boston, MA 02166
617–437–1500
Internet: www.jointogether.org/

Join Together is a national resource center and meeting place for communities working to reduce substance abuse and gun violence.

National Federation of State High School Associations (NFHS)
11724 NW Plaza Circle
Kansas City, MO 64153
816–464–5400, ext. 3263
Internet: www.nfhs.org/

NFHS serves over 10 million young people who participate in school activities. NFHS, with the American Sports Education Program, has developed the National Federation Interscholastic Coaches Education Program (NFICEP). Specific examples include:

- NFICEP's Drugs and Sports Course provides coaches with training in preventing the use of tobacco, alcohol, and other drugs.
- Coaches Guide to Drugs and Sports is one of the foremost guides for coaches about drug use and prevention.

National High School Athletic Coaches Association (NHSACA)
P.O. Box 2569
Gig Harbor, WA 98335
253–853–6777
Internet: www.hscoaches.org

NHSACA provides training seminars for coaches in drug prevention and counseling.

National Institute on Drug Abuse (NIDA)
Division of Epidemiology and Prevention Research
5600 Fishers Lane, Room 9A–53
Rockville, MD 20857
301–443–1514
301–443–6504
Internet: www.nida.nih.gov/

NIDA's mission is to apply the science of public health epidemiology and to describe the nature and extent of drug abuse, the disease of addiction, and related consequences.

National Institute on Alcohol Abuse and Alcoholism (NIAAA)
Division of Clinical and Prevention Research
Prevention Research Branch
6000 Executive Boulevard
Rockville, MD 20892
301–443–1677
Internet: silk.nig.gov/niaaa1/grants/dcpr_ph.htm

NIAAA's Division of Clinical and Prevention Research (DCPR) has as its primary objective the fostering of state-of-the-art research in the treatment and prevention of alcohol abuse and alcoholism.

Safe and Drug-Free Schools
Office of Elementary and Secondary Education
U.S. Department of Education
600 Independence Avenue, SW.
Washington, DC 20202–0498
800–624–0100
Internet: www.ed.gov/offices/OSES/

The Safe and Drug-Free Schools Program is the Federal Government's primary vehicle for reducing drug use and violence, through education and prevention activities in our Nation's schools.

NCJ 173393

National Federation of State High School Associations

Highlights from the 2008 Consensus Statement on Concussion in Sport

The NFHS Sports Medicine Advisory Committee (SMAC) regularly discusses and reviews the latest medical evidence regarding sports-related concussions in high school athletes. The past decade has witnessed significant changes in the management of sports-related concussions as new research findings have been published. Consequently, the NFHS SMAC has recently updated the "Concussion" section of the NFHS Sports Medicine Handbook (2008 Third Edition) and the 2009 NFHS brochure on "Suggested Guidelines for Management of Concussion in Sports."

In November of 2008, a panel of experts convened for the 3rd International Conference on Concussion in Sport in Zurich, Switzerland. The group has now published the Consensus Statement on Concussion in Sport. Previous consensus statements released in 2001 and 2004 have helped shape and define state of the art management of the concussed athlete during this decade.

After a thorough review of the newly released document, there are no substantial changes to report from the position the NFHS SMAC and the Centers for Disease Control and Prevention (CDC) articulated in 2005. However, the NFHS SMAC would like to emphasize three of their conclusions.

"A player with diagnosed concussion should not be allowed to return to play on the day of an injury."

While consistent with the recent recommendations of the NFHS SMAC, this statement represents a significant change from the previous statement released after the 2nd International Conference on Concussion in 2004. In the past, many medical experts stated that an athlete could return to play in an event if he or she no longer had any "symptoms" of a concussion 15 minutes after the time of the injury. The "15 minute rule" had come under increasing scrutiny by concussion experts as studies have found that most athletes are not fully recovered from a concussion within 48 hours of the injury, let alone 15 minutes. Therefore, over the past few years, the NFHS SMAC has maintained a policy of no same day return to play for high school athletes who have suffered a concussion.

"The cornerstone of concussion management is physical and cognitive rest until symptoms resolve and then a graded program of exertion prior to medical clearance and return to play."

Cognitive rest is a relatively recent concept which highlights the need for the concussed athlete to refrain from strenuous physical and mental activity while having concussion symptoms. Experts believe that allowing the brain to rest by limiting reading, studying and other forms of "mental exertion" will result in quicker recovery. Other activities to avoid include playing video games, text messaging, listening to loud music and using a computer. In some instances, individuals who have suffered a concussion may be told by their health care provider to take a few days off from school to allow symptoms to lessen.

Once all symptoms have resolved and the athlete has been cleared by a health care provider, the athlete may then begin a slow increase in physical activity over several days. If symptoms do not recur over this period of time, the athlete may then return to full activity. The NFHS SMAC and the CDC have advocated this approach to managing concussed athletes.

"There is no good clinical evidence that currently available protective equipment will prevent concussion."

The group of experts emphasized that there is currently no good evidence to support the notions that certain football helmets will eliminate the risk of concussion, or that soccer headgear or mouthguards will do so. Of course, well maintained and properly fitted equipment are always appropriate to reduce risk.

For further information regarding concussion in sports, please see:

McCrory P, Meeuwisse W, Johnston K, Dvorak J, Aubry M, Molloy M and Cantu R. Consensus Statement on Concussion in Sport: The 3rd International Conference on Concussion in Sport held in Zurich, November 2008.

NFHS. Suggested Guidelines for Management of Concussion in Sports. Brochure from the NFHS Sports Medicine Advisory Committee. 2009.

NFHS. Concussions. 2008 NFHS Sports Medicine Handbook (Third Edition). 2008: 77-82.

Applicable NFHS Sports Medicine Advisory Committee Position Statements, Guidelines and Recommendations on the NFHS web site under Sports Medicine at http://www.nfhs.org.

Consensus Statement on Concussion in Sport 3rd International Conference on Concussion in Sport Held in Zurich, November 2008

Paul McCrory, MBBS, PhD, Willem Meeuwisse, MD, PhD,† Karen Johnston, MD, PhD,‡ Jiri Dvorak, MD,§ Mark Aubry, MD,‖ Mick Molloy, MB,¶ and Robert Cantu, MA, MD#*

(*Clin J Sport Med* 2009;19:185–200)

Preamble

This paper is a revision and update of the recommendations developed following the 1st (Vienna) and 2nd (Prague) International Symposia on Concussion in Sport.[1,2] The Zurich Consensus statement is designed to build on the principles outlined in the original Vienna and Prague documents and to develop further conceptual understanding of this problem using a formal consensus-based approach. A detailed description of the consensus process is outlined at the end of this document under the "Background" section (see Section 11). This document is developed for use by physicians, therapists, certified athletic trainers, health professionals, coaches and other people involved in the care of injured athletes, whether at the recreational, elite or professional level.

While agreement exists pertaining to principal messages conveyed within this document, the authors acknowledge that the science of concussion is evolving and therefore management and return to play decisions remain in the realm of clinical judgment on an individualized basis. Readers are encouraged to copy and distribute freely the Zurich Consensus document and/or the Sport Concussion Assessment Tool (SCAT2) card, and neither is subject to any copyright restriction. The authors request, however, that the document and/or the SCAT2 card be distributed in their full and complete format.

The following focus questions formed the foundation for the Zurich concussion consensus statement:

Acute Simple Concussion

- Which symptom scale and which sideline assessment tool is best for diagnosis and/or follow up?
- How extensive should the cognitive assessment be in elite athletes?
- How extensive should clinical and neuropsychological (NP) testing be at non-elite level?
- Who should do/interpret the cognitive assessment?
- Is there a gender difference in concussion incidence and outcomes?

Return to Play (RTP) Issues

- Is provocative exercise testing useful in guiding RTP?
- What is the best RTP strategy for elite athletes?
- What is the best RTP strategy for non-elite athletes?
- Is protective equipment (eg, mouthguards and helmets) useful in reducing concussion incidence and/or severity?

Complex Concussion and Long-term Issues

- Is the Simple versus Complex classification a valid and useful differentiation?
- Are there specific patient populations at risk of long-term problems?
- Is there a role for additional tests (eg, structural and/or functional MR Imaging, balance testing, biomarkers)?
- Should athletes with persistent symptoms be screened for depression/anxiety?

Paediatric Concussion

- Which symptoms scale is appropriate for this age group?
- Which tests are useful and how often should baseline testing be performed in this age group?
- What is the most appropriate RTP guideline for elite and non-elite child and adolescent athletes?

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Consensus panelists (listed in alphabetical order): In addition to the authors above, the consensus panelists were Steve Broglio, Gavin Davis, Randall Dick, Ruben Echemendia, Gerry Gioia, Kevin Guskiewicz, Stan Herring, Grant Iverson, Jim Kelly, Jamie Kissick, Michael Makdissi, Michael McCrea, Alain Ptito, Laura Purcell, and Margot Putukian. Also invited but not in attendance: Roald Bahr, Lars Engebretsen, Peter Hamlyn, Barry Jordan, and Patrick Schamasch.

Competing Interests: The authors have no competing interests to declare.

Reprints: not available.

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Future Directions

- What is the best method of knowledge transfer and education?
- Is there evidence that new and novel injury prevention strategies work (eg, changes to rules of the game, fair play strategies, etc.)?

The Zurich document additionally examines the management issues raised in the previous Prague and Vienna documents and applies the consensus questions to these areas.

SPECIFIC RESEARCH QUESTIONS AND CONSENSUS DISCUSSION

1. CONCUSSION

1.1 Definition of Concussion

Panel discussion regarding the definition of concussion and its separation from mild traumatic brain injury (mTBI) was held. Although there was acknowledgement that the terms refer to different injury constructs and should not be used interchangeably, it was not felt that the panel would define mTBI for the purpose of this document. There was unanimous agreement, however, that concussion is defined as follows:

Concussion is defined as a complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces. Several common features that incorporate clinical, pathologic and biomechanical injury constructs that may be utilized in defining the nature of a concussive head injury include:

1. *Concussion may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an "impulsive" force transmitted to the head.*
2. *Concussion typically results in the rapid onset of short-lived impairment of neurologic function that resolves spontaneously.*
3. *Concussion may result in neuropathological changes, but the acute clinical symptoms largely reflect a functional disturbance rather than a structural injury.*
4. *Concussion results in a graded set of clinical symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive symptoms typically follows a sequential course; however, it is important to note that, in a small percentage of cases, post-concussive symptoms may be prolonged.*
5. *No abnormality on standard structural neuroimaging studies is seen in concussion.*

1.2 Classification of Concussion

There was unanimous agreement to abandon the Simple vs. Complex terminology that had been proposed in the Prague agreement statement, as the panel felt that the terminology itself did not fully describe the entities. However, the panel unanimously retained the concept that the majority (80%-90%) of concussions resolve in a short (7-10 day) period, although the recovery time frame may be longer in children and adolescents.[2]

2. CONCUSSION EVALUATION

2.1 Symptoms and Signs of Acute Concussion

The panel agreed that the diagnosis of acute concussion usually involves the assessment of a range of domains including clinical symptoms, physical signs, behavior, balance, sleep and cognition. Furthermore, a detailed concussion history is an important part of the evaluation both in the injured athlete and when conducting a pre-participation examination. The detailed clinical assessment of concussion is outlined in the SCAT2 form, which is an appendix to this document.

The suspected diagnosis of concussion can include one or more of the following clinical domains:

(a) Symptoms: somatic (eg, headache), cognitive (eg, feeling like in a fog) and/or emotional symptoms (eg, lability)
(b) Physical signs (eg, loss of consciousness, amnesia)
(c) Behavioural changes (eg, irritablity)
(d) Cognitive impairment (eg, slowed reaction times)
(e) Sleep disturbance (eg, drowsiness)

If any one or more of these components is present, a concussion should be suspected and the appropriate management strategy instituted.

2.2 On-field or Sideline Evaluation of Acute Concussion

When a player shows **ANY** features of a concussion:

(a) The player should be medically evaluated onsite using standard emergency management principles, and particular attention should be given to excluding a cervical spine injury.
(b) The appropriate disposition of the player must be determined by the treating healthcare provider in a timely manner. If no healthcare provider is available, the player should be safely removed from practice or play and urgent referral to a physician arranged.
(c) Once the first aid issues are addressed, then an assessment of the concussive injury should be made using the SCAT2 or other similar tool.
(d) The player should not be left alone following the injury, and serial monitoring for deterioration is essential over the initial few hours following injury.
(e) A player with diagnosed concussion should not be allowed to return to play on the day of injury. Occasionally, in adult athletes, there may be return to play on the same day as the injury. (See section 4.2.)

It was unanimously agreed that sufficient time for assessment and adequate facilities should be provided for the appropriate medical assessment both on and off the field for all injured athletes. In some sports this may require rule change to allow an off-field medical assessment to occur without affecting the flow of the game or unduly penalizing the injured player's team.

Sideline evaluation of cognitive function is an essential component in the assessment of this injury. Brief neuropsychological test batteries that assess attention and memory function have been shown to be practical and effective. Such tests include the Maddocks questions[3,4] and the Standardized

Assessment of Concussion (SAC).[5–7] It is worth noting that standard orientation questions (eg, time, place, person) have been shown to be unreliable in the sporting situation when compared with memory assessment.[4,8] It is recognized, however, that abbreviated testing paradigms are designed for rapid concussion screening on the sidelines and are not meant to replace comprehensive neuropsychological testing which is sensitive to detect subtle deficits that may exist beyond the acute episode nor should they be used as a stand-alone tool for the ongoing management of sports concussions.

It should also be recognized that the appearance of symptoms might be delayed several hours following a concussive episode.

2.3 Evaluation in Emergency Room or Office by Medical Personnel

An athlete with concussion may be evaluated in the emergency room or doctor's office as a point of first contact following injury or may have been referred from another care provider. In addition to the points outlined above, the key features of this exam should encompass:

(a) A medical assessment including a comprehensive history and detailed neurological examination including a thorough assessment of mental status, cognitive functioning and gait and balance.
(b) A determination of the clinical status of the patient including whether there has been improvement or deterioration since the time of injury. This may involve seeking additional information from parents, coaches, teammates and eyewitness to the injury.
(c) A determination of the need for emergent neuroimaging in order to exclude a more severe brain injury involving a structural abnormality.

In large part, these points above are included in the SCAT2 assessment, which forms part of the Zurich consensus statement.

3. CONCUSSION INVESTIGATIONS

A range of additional investigations may be utilized to assist in the diagnosis and/or exclusion of injury. These include:

3.1 Neuroimaging

It was recognized by the panelists that conventional structural neuroimaging is normal in concussive injury. Given that caveat, the following suggestions are made: Brain CT (or, where available, MR brain scan) contributes little to concussion evaluation but should be employed whenever suspicion of an intra-cerebral structural lesion exists. Examples of such situations may include prolonged disturbance of conscious state, focal neurological deficit or worsening symptoms.

Newer structural MRI modalities including gradient echo, perfusion and diffusion imaging have greater sensitivity for structural abnormalities. However, the lack of published studies, as well as absent pre-injury neuroimaging data, limits the usefulness of this approach in clinical management at the present time. In addition, the predictive value of various MR abnormalities that may be incidentally discovered is not established at the present time.

Other imaging modalities such as fMRI demonstrate activation patterns that correlate with symptom severity and recovery in concussion.[9–13] Whilst not part of routine assessment at the present time, they nevertheless provide additional insight to pathophysiological mechanisms. Alternative imaging technologies (eg, positron emission tomography, diffusion tensor imaging, magnetic resonance spectroscopy, functional connectivity), while demonstrating some compelling findings, are still at early stages of development and cannot be recommended other than in a research setting.

3.2 Objective Balance Assessment

Published studies using both sophisticated force plate technology, as well as those using less sophisticated clinical balance tests (eg, Balance Error Scoring System (BESS)), have identified postural stability deficits lasting approximately 72 hours following sport-related concussion. It appears that postural stability testing provides a useful tool for objectively assessing the motor domain of neurologic functioning and should be considered a reliable and valid addition to the assessment of athletes suffering from concussion, particularly where symptoms or signs indicate a balance component.[14–20]

3.3 Neuropsychological Assessment

The application of neuropsychological (NP) testing in concussion has been shown to be of clinical value and continues to contribute significant information in concussion evaluation.[21–26] Although in most case cognitive recovery largely overlaps with the time course of symptom recovery, it has been demonstrated that cognitive recovery may occasionally precede or more commonly follow clinical symptom resolution suggesting that the assessment of cognitive function should be an important component in any return to play protocol.[27,28] It must be emphasized, however, that NP assessment should not be the sole basis of management decisions; rather, it should be seen as an aid to the clinical decision-making process in conjunction with a range of clinical domains and investigational results.

Neuropsychologists are in the best position to interpret NP tests by virtue of their background and training. However, there may be situations where neuropsychologists are not available and other medical professionals may perform or interpret NP screening tests. The ultimate return to play decision should remain a medical one in which a multidisciplinary approach, when possible, has been taken. In the absence of NP and other (eg, formal balance assessment) testing, a more conservative return to play approach may be appropriate.

In the majority of cases, NP testing will be used to assist return to play decisions and will not be done until the patient is symptom free.[29,30] There may be situations (eg, child and adolescent athletes) where testing may be performed early whilst the patient is still symptomatic to assist in determining management. This will normally be best determined in consultation with a trained neuropsychologist.[31,32]

3.4 Genetic Testing

The significance of Apolipoprotein (Apo) E4, ApoE promotor gene, Tau polymerase and other genetic markers in the management of sports concussion risk or injury outcome is unclear at this time.[33,34] Evidence from human and animal studies in more severe traumatic brain injury demonstrates induction of a variety of genetic and cytokine factors such as: insulin-like growth factor-1 (IGF-1), IGF binding protein-2, Fibroblast growth factor, Cu-Zn superoxide dismutase, superoxide dismutase-1 (SOD-1), nerve growth factor, glial fibrillary acidic protein (GFAP) and S-100. Whether such factors are affected in sporting concussion is not known at this stage.[35–42]

3.5 Experimental Concussion Assessment Modalities

Different electrophysiological recording techniques (eg, evoked response potential (ERP), cortical magnetic stimulation and electroencephalography) have demonstrated reproducible abnormalities in the post concussive state; however, not all studies reliably differentiated concussed athletes from controls.[43–49] The clinical significance of these changes remains to be established.

In addition, biochemical serum and cerebral spinal fluid markers of brain injury (including S-100, neuron specific enolase (NSE), myelin basic protein (MBP), GFAP, tau, etc.) have been proposed as means by which cellular damage may be detected if present.[50–56] There is currently insufficient evidence, however, to justify the routine use of these biomarkers clinically.

4. CONCUSSION MANAGEMENT

The cornerstone of concussion management is physical and cognitive rest until symptoms resolve and then a graded program of exertion prior to medical clearance and return to play. The recovery and outcome of this injury may be modified by a number of factors that may require more sophisticated management strategies. These are outlined in the section on modifiers below.

As described above, the majority of injuries will recover spontaneously over several days. In these situations, it is expected that an athlete will proceed progressively through a stepwise return to play strategy.[57] During this period of recovery, while symptomatically following an injury, it is important to emphasize to the athlete that physical AND cognitive rest is required. Activities that require concentration and attention (eg, scholastic work, videogames, text messaging, etc.) may exacerbate symptoms and possibly delay recovery. In such cases, apart from limiting relevant physical and cognitive activities (and other risk-taking opportunities for re-injury), while symptomatic, no further intervention is required during the period of recovery, and the athlete typically resumes sport without further problem.

4.1 Graduated Return to Play Protocol

Return to play protocol following a concussion follows a stepwise process as outlined in Table 1.

With this stepwise progression, the athlete should continue to proceed to the next level if asymptomatic at the current level. Generally, each step should take 24 hours so that an athlete would take approximately one week to proceed through the full rehabilitation protocol once they are asymptomatic at rest and with provocative exercise. If any post-concussion symptoms occur while in the stepwise program, then the patient should drop back to the previous asymptomatic level and try to progress again after a further 24-hour period of rest has passed.

4.2 Same Day RTP

With adult athletes, in some settings, where there are team physicians experienced in concussion management and sufficient resources (eg, access to neuropsychologists, consultants, neuroimaging, etc.), as well as access to immediate (ie, sideline) neuro-cognitive assessment, return to play management may be more rapid. The RTP strategy must still follow the same basic management principles, namely, full clinical and cognitive recovery before consideration of return to play. This approach is supported by published guidelines, such as the American Academy of Neurology, US Team Physician Consensus Statement, and US National Athletic Trainers' Association Position Statement.[58–60] This issue was extensively discussed by the consensus panelists, and it was acknowledged that there is evidence that some professional American football players are able to RTP more quickly, with even same day RTP supported by NFL studies without a risk of recurrence or sequelae.[61] There is data, however, demonstrating that, at the collegiate and high school level, athletes

TABLE 1. Graduated Return to Play Protocol

Rehabilitation Stage	Functional Exercise at Each Stage of Rehabilitation	Objective of Each Stage
1. No activity	Complete physical and cognitive rest	Recovery
2. Light aerobic exercise	Walking, swimming or stationary cycling keeping intensity <70% MPHR; no resistance training	Increase HR
3. Sport-specific exercise	Skating drills in ice hockey, running drills in soccer; no head impact activities	Add movement
4. Non-contact training drills	Progression to more complex training drills, eg, passing drills in football and ice hockey; may start progressive resistance training	Exercise, coordination, and cognitive load
5. Full contact practice	Following medical clearance, participate in normal training activities	Restore confidence and assess functional skills by coaching staff
6. Return to play	Normal game play	

allowed to RTP on the same day may demonstrate NP deficits post-injury that may not be evident on the sidelines and are more likely to have delayed onset of symptoms.[62–68] It should be emphasized, however, that the young (<18) elite athlete should be treated more conservatively even though the resources may be the same as an older professional athlete. (See section 6.1.)

4.3 Psychological Management and Mental Health Issues

In addition, psychological approaches may have potential application in this injury, particularly with the modifiers listed below.[69,70] Care givers are also encouraged to evaluate the concussed athlete for affective symptoms such as depression, as these symptoms may be common in concussed athletes.[57]

4.4 The Role of Pharmacological Therapy

Pharmacological therapy in sports concussion may be applied in two distinct situations. The first of these situations is the management of specific prolonged symptoms (eg, sleep disturbance, anxiety, etc.). The second situation is where drug therapy is used to modify the underlying pathophysiology of the condition with the aim of shortening the duration of the concussion symptoms.[71] In broad terms, this approach to management should be only considered by clinicians experienced in concussion management.

An important consideration in RTP is that concussed athletes should not only be symptom free but also should not be taking any pharmacological agents/medications that may mask or modify the symptoms of concussion. Where antidepressant therapy may be commenced during the management of a concussion, the decision to return to play while still on such medication must be considered carefully by the treating clinician.

4.5 The Role of Pre-participation Concussion Evaluation

Recognizing the importance of a concussion history, and appreciating the fact that many athletes will not recognize all the concussions they may have suffered in the past, a detailed concussion history is of value.[72–75] Such a history may pre-identify athletes that fit into a high risk category and provides an opportunity for the healthcare provider to educate the athlete in regard to the significance of concussive injury. A structured concussion history should include specific questions as to previous symptoms of a concussion, not just the perceived number of past concussions. It is also worth noting that dependence upon the recall of concussive injuries by teammates or coaches has been demonstrated to be unreliable.[72] The clinical history should also include information about all previous head, face or cervical spine injuries, as these may also have clinical relevance. It is worth emphasizing that, in the setting of maxillofacial and cervical spine injuries, co-existent concussive injuries may be missed unless specifically assessed. Questions pertaining to disproportionate impact versus symptom severity matching may alert the clinician to a progressively increasing vulnerability to injury. As part of the clinical history it is advised that details regarding protective equipment employed at time of injury be sought, both for recent and remote injuries. The benefit a comprehensive pre-participation concussion evaluation allows for modification and optimization of protective behavior and is an opportunity for education.

5. MODIFYING FACTORS IN CONCUSSION MANAGEMENT

The consensus panel agreed that a range of 'modifying' factors may influence the investigation and management of concussion and in some cases may predict the potential for prolonged or persistent symptoms. These modifiers would also be important to consider in a detailed concussion history and are outlined in Table 2.

In this setting, there may be additional management considerations beyond simple RTP advice. There may be a more important role for additional investigations including formal NP testing, balance assessment, and neuroimaging. It is envisioned that athletes with such modifying features would be managed in a multidisciplinary manner coordinated by a physician with specific expertise in the management of concussive injury.

The role of female gender as a possible modifier in the management of concussion was discussed at length by the panel. There was not unanimous agreement that the current published research evidence is conclusive that this should be included as a modifying factor, although it was accepted that gender may be a risk factor for injury and/or influence injury severity.[76–78]

5.1 The Significance of Loss of Consciousness (LOC)

In the overall management of moderate to severe traumatic brain injury, duration of LOC is an acknowledged

TABLE 2. Concussion Modifiers

Factors	Modifier
Symptoms	Number
	Duration (>10 days)
	Severity
Signs	Prolonged LOC (>1 min), amnesia
Sequelae	Concussive convulsions
Temporal	Frequency - repeated concussions over time
	Timing - injuries close together in time
	"Recency" - recent concussion or TBI
Threshold	Repeated concussions occurring with progressively less impact force or slower recovery after each successive concussion
Age	Child and adolescent (<18 years old)
Co- and Pre-morbidities	Migraine, depression or other mental health disorders, attention deficit hyperactivity disorder (ADHD), learning disabilities (LD), sleep disorders
Medication	Psychoactive drugs, anticoagulants
Behaviour	Dangerous style of play
Sport	High-risk activity, contact and collision sport, high sporting level

predictor of outcome.[79] Whilst published findings in concussion describe LOC associated with specific early cognitive deficits, it has not been noted as a measure of injury severity.[80,81] Consensus discussion determined that prolonged (>1 minute duration) LOC would be considered as a factor that may modify management.

5.2 The Significance of Amnesia and Other Symptoms

There is renewed interest in the role of post-traumatic amnesia and its role as a surrogate measure of injury severity.[67,82,83] Published evidence suggests that the nature, burden and duration of the clinical post-concussive symptoms may be more important than the presence or duration of amnesia alone.[80,84,85] Further, it must be noted that retrograde amnesia varies with the time of measurement post-injury and hence is poorly reflective of injury severity.[86,87]

5.3 Motor and Convulsive Phenomena

A variety of immediate motor phenomena (eg, tonic posturing) or convulsive movements may accompany a concussion. Although dramatic, these clinical features are generally benign and require no specific management beyond the standard treatment of the underlying concussive injury.[88,89]

5.4 Depression

Mental health issues (such as depression) have been reported as a long-term consequence of traumatic brain injury including sports related concussion. Neuroimaging studies using fMRI suggest that a depressed mood following concussion may reflect an underlying pathophysiological abnormality consistent with a limbic-frontal model of depression.[52,90–100]

6. SPECIAL POPULATIONS

6.1 The Child and Adolescent Athlete

There was unanimous agreement by the panel that the evaluation and management recommendations contained herein could be applied to children and adolescents down to the age of 10 years. Below that age children report concussion symptoms different from adults and would require age-appropriate symptom checklists as a component of assessment. An additional consideration in assessing the child or adolescent athlete with a concussion is that in the clinical evaluation by the healthcare professional there may be the need to include both patient and parent input, as well as teacher and school input when appropriate.[101–107]

The decision to use NP testing is broadly the same as the adult assessment paradigm. However, timing of testing may differ in order to assist planning in school and home management (and may be performed while the patient is still symptomatic). If cognitive testing is performed then it must be developmentally sensitive until late teen years due to the ongoing cognitive maturation that occurs during this period which, in turn, makes the utility of comparison to either the person's own baseline performance or to population norms limited.[20] In this age group it is more important to consider the use of trained neuropsychologists to interpret assessment data, particularly in children with learning disorders and/or ADHD who may need more sophisticated assessment strategies.[31,32,101]

The panel strongly endorsed the view that children should not be returned to practice or play until clinically completely symptom free, which may require a longer time frame than for adults. In addition, the concept of 'cognitive rest' was highlighted with special reference to a child's need to limit exertion with activities of daily living and to limit scholastic and other cognitive stressors (eg, text messaging, videogames, etc.) while symptomatic. School attendance and activities may also need to be modified to avoid provocation of symptoms.

Because of the different physiological responses and longer recovery after concussion and specific risks (eg, diffuse cerebral swelling) related to head impact during childhood and adolescence, a more conservative return to play approach is recommended. It is appropriate to extend the amount of time of asymptomatic rest and/or the length of the graded exertion in children and adolescents. It is not appropriate for a child or adolescent athlete with concussion to RTP on the same day as the injury regardless of the level of athletic performance. Concussion modifiers apply even more to this population than adults and may mandate more cautious RTP advice.

6.2 Elite vs. Non-Elite Athletes

The panel unanimously agreed that all athletes, regardless of level of participation, should be managed using the same treatment and return to play paradigm. A more useful construct was agreed whereby the available resources and expertise in concussion evaluation were of more importance in determining management than a separation between elite and non-elite athlete management. Although formal baseline NP screening may be beyond the resources of many sports or individuals, it is recommended that in all organized high-risk sports consideration be given to having this cognitive evaluation regardless of the age or level of performance.

6.3 Chronic Traumatic Brain Injury

Epidemiological studies have suggested an association between repeated sports concussions during a career and late life cognitive impairment. Similarly, case reports have noted anecdotal cases where neuro-pathological evidence of chronic traumatic encephalopathy was observed in retired football players.[108–112] Panel discussion was held, and no consensus was reached on the significance of such observations at this stage. Clinicians need to be mindful of the potential for long-term problems in the management of all athletes.

7. INJURY PREVENTION

7.1 Protective Equipment – Mouthguards and Helmets

There is no good clinical evidence that currently available protective equipment will prevent concussion, although mouthguards have a definite role in preventing dental and oro-facial injury. Biomechanical studies have shown a reduction in impact forces to the brain with the use of head gear and helmets, but these findings have not been translated to show a reduction in concussion incidence. For

skiing and snowboarding, there are a number of studies to suggest that helmets provide protection against head and facial injury and hence should be recommended for participants in alpine sports.[113–116] In specific sports such as cycling, motor and equestrian sports, protective helmets may prevent other forms of head injury (eg, skull fracture) that are related to falling on hard road surfaces, and these may be an important injury prevention issue for those sports.[116–128]

7.2 Rule Change

Consideration of rule changes to reduce head injury incidence or severity may be appropriate where a clear-cut mechanism is implicated in a particular sport. An example of this is in football (soccer) where research studies demonstrated that upper limb to head contact in heading contests accounted for approximately 50% of concussions.[129] As noted earlier, rule changes also may be needed in some sports to allow an effective off-field medical assessment to occur without compromising the athlete's welfare, affecting the flow of the game or unduly penalizing the player's team. It is important to note that rule enforcement may be a critical aspect of modifying injury risk in these settings, and referees play an important role in this regard.

7.3 Risk Compensation

An important consideration in the use of protective equipment is the concept of risk compensation.[130] This is where the use of protective equipment results in behavioral change such as the adoption of more dangerous playing techniques, which can result in a paradoxical increase in injury rates. This may be a particular concern in child and adolescent athletes where head injury rates are often higher than in adult athletes.[131–133]

7.4 Aggression vs. Violence in Sport

The competitive/aggressive nature of sport which makes it fun to play and watch should not be discouraged. However, sporting organizations should be encouraged to address violence that may increase concussion risk.[134,135] Fair play and respect should be supported as key elements of sport.

8. KNOWLEDGE TRANSFER

As the ability to treat or reduce the effects of concussive injury after the event is minimal, education of athletes, colleagues and the general public is a mainstay of progress in this field. Athletes, referees, administrators, parents, coaches and health care providers must be educated regarding the detection of concussion, its clinical features, assessment techniques and principles of safe return to play. Methods to improve education including web-based resources, educational videos and international outreach programs are important in delivering the message. In addition, concussion working groups, plus the support and endorsement of enlightened sport groups such as Fédération Internationale de Football Association (FIFA), International Olympic Commission (IOC), International Rugby Board (IRB) and International Ice Hockey Federation (IIHF) who initiated this endeavor, have enormous value and must be pursued vigorously. Fair play and respect for opponents are ethical values that should be encouraged in all sports and sporting associations. Similarly, coaches, parents and managers play an important part in ensuring these values are implemented on the field of play.[57,136–148]

9. FUTURE DIRECTIONS

The consensus panelists recognize that research is needed across a range of areas in order to answer some critical research questions. The key areas for research identified include:

- Validation of the SCAT2
- Gender effects on injury risk, severity and outcome
- Paediatric injury and management paradigms
- Virtual reality tools in the assessment of injury
- Rehabilitation strategies (eg, exercise therapy)
- Novel imaging modalities and their role in clinical assessment
- Concussion surveillance using consistent definitions and outcome measures
- Clinical assessment where no baseline assessment has been performed
- 'Best-practice' neuropsychological testing
- Long-term outcomes
- On-field injury severity predictors

10. MEDICAL LEGAL CONSIDERATIONS

This consensus document reflects the current state of knowledge and will need to be modified according to the development of new knowledge. It provides an overview of issues that may be of importance to healthcare providers involved in the management of sports related concussion. It is not intended as a standard of care and should not be interpreted as such. This document is only a guide and is of a general nature consistent with the reasonable practice of a healthcare professional. Individual treatment will depend on the facts and circumstances specific to each individual case.

It is intended that this document will be formally reviewed and updated prior to 1 December 2012.

11. STATEMENT ON BACKGROUND TO CONSENSUS PROCESS

In November 2001, the 1st International Conference on Concussion in Sport was held in Vienna, Austria. This meeting was organized by the IIHF in partnership with FIFA and the Medical Commission of the IOC. As part of the resulting mandate for the future, the need for leadership and future updates were identified. The 2nd International Conference on Concussion in Sport was organized by the same group with the additional involvement of the IRB and was held in Prague, Czech Republic, in November 2004. The original aims of the symposia were to provide recommendations for the improvement of safety and health of athletes who suffer concussive injuries in ice hockey, rugby, football (soccer) as well as other sports. To this end, a range of experts were invited to both meetings to address specific issues of epidemiology, basic and clinical science, injury grading systems, cognitive assessment, new research methods, protective equipment, management, prevention and long-term outcome.[1,2]

The 3rd International Conference on Concussion in Sport was held in Zurich, Switzerland, on 29/30 October 2008 and was designed as a formal consensus meeting following the organizational guidelines set forth by the US National

Institutes of Health. (Details of the consensus methodology can be obtained at http://consensus.nih.gov/ABOUTCDP.htm.) The basic principles governing the conduct of a consensus development conference are summarized below:

1. A broad based non-government, non-advocacy panel was assembled to give balanced, objective and knowledgeable attention to the topic. Panel members excluded anyone with scientific or commercial conflicts of interest and included researchers in clinical medicine, sports medicine, neuroscience, neuroimaging, athletic training and sports science.
2. These experts presented data in a public session, followed by inquiry and discussion. The panel then met in an executive session to prepare the consensus statement.
3. A number of specific questions were prepared and posed in advance to define the scope and guide the direction of the conference. The principle task of the panel was to elucidate responses to these questions. These questions are outlined above.
4. A systematic literature review was prepared and circulated in advance for use by the panel in addressing the conference questions.
5. The consensus statement is intended to serve as the scientific record of the conference.
6. The consensus statement will be widely disseminated to achieve maximum impact on both current health care practice and future medical research.

The panel chairperson (WM) did not identify with any advocacy position. The chairperson was responsible for directing the consensus session and guiding the panel's deliberations. Panelists were drawn from clinical practice, academic and research in the field of sports related concussion. They do not represent organisations per se but were selected for their expertise, experience and understanding of this field.

APPENDICES

Sport Concussion Assessment Tool 2 (SCAT2)
Pocket SCAT2

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Sport Concussion Assessment Tool 2 (SCAT2)

SCAT2

Sport Concussion Assessment Tool 2

Name

Sport/team

Date/time of injury

Date/time of assessment

Age Gender M F

Years of education completed

Examiner

What is the SCAT2?[1]

This tool represents a standardized method of evaluating injured athletes for concussion and can be used in athletes aged from 10 years and older. It supersedes the original SCAT published in 2005[2]. This tool also enables the calculation of the Standardized Assessment of Concussion (SAC)[3,4] score and the Maddocks questions[5] for sideline concussion assessment.

Instructions for using the SCAT2

The SCAT2 is designed for the use of medical and health professionals. Preseason baseline testing with the SCAT2 can be helpful for interpreting post-injury test scores. Words in *Italics* throughout the SCAT2 are the instructions given to the athlete by the tester.

What is a concussion?

A concussion is a disturbance in brain function caused by a direct or indirect force to the head. It results in a variety of non-specific symptoms (like those listed below) and often does not involve loss of consciousness. Concussion should be suspected in the presence of **any one or more** of the following:

- Symptoms (such as headache), or
- Physical signs (such as unsteadiness), or
- Impaired brain function (e.g. confusion) or
- Abnormal behaviour.

Any athlete with a suspected concussion should be REMOVED FROM PLAY, medically assessed, monitored for deterioration (i.e., should not be left alone) and should not drive a motor vehicle.

Symptom Evaluation

How do you feel?

You should score yourself on the following symptoms, based on how you feel now.

	none		mild		moderate		severe
Headache	0	1	2	3	4	5	6
"Pressure in head"	0	1	2	3	4	5	6
Neck Pain	0	1	2	3	4	5	6
Nausea or vomiting	0	1	2	3	4	5	6
Dizziness	0	1	2	3	4	5	6
Blurred vision	0	1	2	3	4	5	6
Balance problems	0	1	2	3	4	5	6
Sensitivity to light	0	1	2	3	4	5	6
Sensitivity to noise	0	1	2	3	4	5	6
Feeling slowed down	0	1	2	3	4	5	6
Feeling like "in a fog"	0	1	2	3	4	5	6
"Don't feel right"	0	1	2	3	4	5	6
Difficulty concentrating	0	1	2	3	4	5	6
Difficulty remembering	0	1	2	3	4	5	6
Fatigue or low energy	0	1	2	3	4	5	6
Confusion	0	1	2	3	4	5	6
Drowsiness	0	1	2	3	4	5	6
Trouble falling asleep (if applicable)	0	1	2	3	4	5	6
More emotional	0	1	2	3	4	5	6
Irritability	0	1	2	3	4	5	6
Sadness	0	1	2	3	4	5	6
Nervous or Anxious	0	1	2	3	4	5	6

Total number of symptoms (Maximum possible 22)

Symptom severity score
(Add all scores in table, maximum possible: 22 x 6 = 132)

Do the symptoms get worse with physical activity? Y N

Do the symptoms get worse with mental activity? Y N

Overall rating

If you know the athlete well prior to the injury, how different is the athlete acting compared to his / her usual self? Please circle one response

no different very different unsure

Sport Concussion Assessment Tool 2 (SCAT2)

Cognitive & Physical Evaluation

1 Symptom score (from page 1)

22 **minus** number of symptoms ____ of 22

2 Physical signs score

Was there loss of consciousness or unresponsiveness? Y N
If yes, how long? ____ minutes
Was there a balance problem/unsteadiness? Y N

Physical signs score (1 point for each negative response) ____ of 2

3 Glasgow coma scale (GCS)

Best eye response (E)	
No eye opening	1
Eye opening in response to pain	2
Eye opening to speech	3
Eyes opening spontaneously	4
Best verbal response (V)	
No verbal response	1
Incomprehensible sounds	2
Inappropriate words	3
Confused	4
Oriented	5
Best motor response (M)	
No motor response	1
Extension to pain	2
Abnormal flexion to pain	3
Flexion/Withdrawal to pain	4
Localizes to pain	5
Obeys commands	6

Glasgow Coma score (E + V + M) ____ of 15

GCS should be recorded for all athletes in case of subsequent deterioration.

4 Sideline Assessment – Maddocks Score

"I am going to ask you a few questions, please listen carefully and give your best effort."

Modified Maddocks questions (1 point for each correct answer)

At what venue are we at today?	0 1
Which half is it now?	0 1
Who scored last in this match?	0 1
What team did you play last week/game?	0 1
Did your team win the last game?	0 1

Maddocks score ____ of 5

Maddocks score is validated for sideline diagnosis of concussion only and is not included in SCAT 2 summary score for serial testing.

5 Cognitive assessment

Standardized Assessment of Concussion (SAC)

Orientation (1 point for each correct answer)

What month is it?	0 1
What is the date today?	0 1
What is the day of the week?	0 1
What year is it?	0 1
What time is it right now? (within 1 hour)	0 1

Orientation score ____ of 5

Immediate memory

"I am going to test your memory. I will read you a list of words and when I am done, repeat back as many words as you can remember, in any order."

Trials 2 & 3:

"I am going to repeat the same list again. Repeat back as many words as you can remember in any order, even if you said the word before."

Complete all 3 trials regardless of score on trial 1 & 2. Read the words at a rate of one per second. Score 1 pt. for each correct response. Total score equals sum across all 3 trials. Do not inform the athlete that delayed recall will be tested.

List:	Trial 1	Trial 2	Trial 3	Alternative word list		
elbow	0 1	0 1	0 1	candle	baby	finger
apple	0 1	0 1	0 1	paper	monkey	penny
carpet	0 1	0 1	0 1	sugar	perfume	blanket
saddle	0 1	0 1	0 1	sandwich	sunset	lemon
bubble	0 1	0 1	0 1	wagon	iron	insect
Total						

Immediate memory score ____ of 15

Concentration

Digits Backward:

"I am going to read you a string of numbers and when I am done, you repeat them back to me backwards, in reverse order of how I read them to you. For example, if I say 7-1-9, you would say 9-1-7."

If correct, go to next string length. If incorrect, read trial 2. One point possible for each string length. Stop after incorrect on both trials. The digits should be read at the rate of one per second.

		Alternative digit lists		
4-9-3	0 1	6-2-9	5-2-6	4-1-5
3-8-1-4	0 1	3-2-7-9	1-7-9-5	4-9-6-8
6-2-9-7-1	0 1	1-5-2-8-6	3-8-5-2-7	6-1-8-4-3
7-1-8-4-6-2	0 1	5-3-9-1-4-8	8-3-1-9-6-4	7-2-4-8-5-6

Months in Reverse Order:

"Now tell me the months of the year in reverse order. Start with the last month and go backward. So you'll say December, November ... Go ahead"

1 pt. for entire sequence correct

Dec-Nov-Oct-Sept-Aug-Jul-Jun-May-Apr-Mar-Feb-Jan 0 1

Concentration score ____ of 5

[1] This tool has been developed by a group of international experts at the 3rd International Conference meeting on Concussion in Sport held in Zurich, Switzerland in November 2008. The full details of the conference outcomes and the authors of the tool are published in British Journal of Sports Medicine, 2009, volume 43, supplement 1.
The outcome paper will also be simultaneously co-published in the May 2009 issues of Clinical Journal of Sports Medicine, Physical Medicine & Rehabilitation, Journal of Athletic Training, Journal of Clinical Neuroscience, Journal of Science & Medicine in Sport, Neurosurgery, Scandinavian Journal of Science & Medicine in Sport and the Journal of Clinical Sports Medicine.

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[3] McCrea M. Standardized mental status testing of acute concussion. Clinical Journal of Sports Medicine. 2001; 11: 176-181

[4] McCrea M, Randolph C, Kelly J. Standardized Assessment of Concussion: Manual for administration, scoring and interpretation. Waukesha, Wisconsin, USA.

[5] Maddocks, DL, Dicker, GD, Saling, MM. The assessment of orientation following concussion in athletes. Clin J Sport Med. 1995;5(1):32–3

[6] Guskiewicz KM. Assessment of postural stability following sport-related concussion. Current Sports Medicine Reports. 2003; 2: 24-30

Sport Concussion Assessment Tool 2 (SCAT2)

6 Balance examination

This balance testing is based on a modified version of the Balance Error Scoring System (BESS)*. A stopwatch or watch with a second hand is required for this testing.

Balance testing

"I am now going to test your balance. Please take your shoes off, roll up your pant legs above ankle (if applicable), and remove any ankle taping (if applicable). This test will consist of three twenty second tests with different stances."

(a) Double leg stance:

"The first stance is standing with your feet together with your hands on your hips and with your eyes closed. You should try to maintain stability in that position for 20 seconds. I will be counting the number of times you move out of this position. I will start timing when you are set and have closed your eyes."

(b) Single leg stance:

"If you were to kick a ball, which foot would you use? [This will be the dominant foot] *Now stand on your non-dominant foot. The dominant leg should be held in approximately 30 degrees of hip flexion and 45 degrees of knee flexion. Again, you should try to maintain stability for 20 seconds with your hands on your hips and your eyes closed. I will be counting the number of times you move out of this position. If you stumble out of this position, open your eyes and return to the start position and continue balancing. I will start timing when you are set and have closed your eyes."*

(c) Tandem stance:

"Now stand heel-to-toe with your non-dominant foot in back. Your weight should be evenly distributed across both feet. Again, you should try to maintain stability for 20 seconds with your hands on your hips and your eyes closed. I will be counting the number of times you move out of this position. If you stumble out of this position, open your eyes and return to the start position and continue balancing. I will start timing when you are set and have closed your eyes."

Balance testing – types of errors

1. Hands lifted off iliac crest
2. Opening eyes
3. Step, stumble, or fall
4. Moving hip into > 30 degrees abduction
5. Lifting forefoot or heel
6. Remaining out of test position > 5 sec

Each of the 20-second trials is scored by counting the errors, or deviations from the proper stance, accumulated by the athlete. The examiner will begin counting errors only after the individual has assumed the proper start position. **The modified BESS is calculated by adding one error point for each error during the three 20-second tests. The maximum total number of errors for any single condition is 10.** If a athlete commits multiple errors simultaneously, only one error is recorded but the athlete should quickly return to the testing position, and counting should resume once subject is set. Subjects that are unable to maintain the testing procedure for a minimum of **five seconds** at the start are assigned the highest possible score, ten, for that testing condition.

Which foot was tested: Left Right
(i.e. which is the **non-dominant** foot)

Condition	Total errors
Double Leg Stance (feet together)	of 10
Single leg stance (non-dominant foot)	of 10
Tandem stance (non-dominant foot at back)	of 10
Balance examination score (30 **minus** total errors)	of 30

7 Coordination examination

Upper limb coordination

Finger-to-nose (FTN) task: *"I am going to test your coordination now. Please sit comfortably on the chair with your eyes open and your arm (either right or left) outstretched (shoulder flexed to 90 degrees and elbow and fingers extended). When I give a start signal, I would like you to perform five successive finger to nose repetitions using your index finger to touch the tip of the nose as quickly and as accurately as possible."*

Which arm was tested: Left Right

Scoring: 5 correct repetitions in < 4 seconds = 1

Note for testers: Athletes fail the test if they do not touch their nose, do not fully extend their elbow or do not perform five repetitions. Failure should be scored as 0.

Coordination score of 1

8 Cognitive assessment

Standardized Assessment of Concussion (SAC)

Delayed recall

"Do you remember that list of words I read a few times earlier? Tell me as many words from the list as you can remember in any order."

Circle each word correctly recalled. Total score equals number of words recalled.

List	Alternative word list		
elbow	candle	baby	finger
apple	paper	monkey	penny
carpet	sugar	perfume	blanket
saddle	sandwich	sunset	lemon
bubble	wagon	iron	insect

Delayed recall score of 5

Overall score

Test domain	Score
Symptom score	of 22
Physical signs score	of 2
Glasgow Coma score (E + V + M)	of 15
Balance examination score	of 30
Coordination score	of 1
Subtotal	**of 70**
Orientation score	of 5
Immediate memory score	of 5
Concentration score	of 15
Delayed recall score	of 5
SAC subtotal	**of 30**
SCAT2 total	**of 100**
Maddocks Score	**of 5**

Definitive normative data for a SCAT2 "cut-off" score is not available at this time and will be developed in prospective studies. Embedded within the SCAT2 is the SAC score that can be utilized separately in concussion management. The scoring system also takes on particular clinical significance during serial assessment where it can be used to document either a decline or an improvement in neurological functioning.

Scoring data from the SCAT2 or SAC should not be used as a stand alone method to diagnose concussion, measure recovery or make decisions about an athlete's readiness to return to competition after concussion.

Sport Concussion Assessment Tool 2 (SCAT2)

Athlete Information

Any athlete suspected of having a concussion should be removed from play, and then seek medical evaluation.

Signs to watch for

Problems could arise over the first 24-48 hours. You should not be left alone and must go to a hospital at once if you:

- Have a headache that gets worse
- Are very drowsy or can't be awakened (woken up)
- Can't recognize people or places
- Have repeated vomiting
- Behave unusually or seem confused, are very irritable
- Have seizures (arms and legs jerk uncontrollably)
- Have weak or numb arms or legs
- Are unsteady on your feet; have slurred speech

Remember, it is better to be safe.
Consult your doctor after a suspected concussion.

Return to play

Athletes should not be returned to play the same day of injury. When returning athletes to play, they should follow a stepwise symptom-limited program, with stages of progression. For example:

1. rest until asymptomatic (physical and mental rest)
2. light aerobic exercise (e.g. stationary cycle)
3. sport-specific exercise
4. non-contact training drills (start light resistance training)
5. full contact training after medical clearance
6. return to competition (game play)

There should be approximately 24 hours (or longer) for each stage and the athlete should return to stage 1 if symptoms recur. Resistance training should only be added in the later stages.
Medical clearance should be given before return to play.

Tool	Test domain	Time	Score							
		Date tested								
		Days post injury								
	Symptom score									
	Physical signs score									
	Glasgow Coma score (E + V + M)									
SCAT2	Balance examination score									
	Coordination score									
	Orientation score									
	Immediate memory score									
SAC	Concentration score									
	Delayed recall score									
	SAC Score									
Total	**SCAT2**									
Symptom severity score (max possible 132)										
Return to play			Y	N	Y	N	Y	N	Y	N

Additional comments

Concussion injury advice (To be given to concussed athlete)

This patient has received an injury to the head. A careful medical examination has been carried out and no sign of any serious complications has been found. It is expected that recovery will be rapid, but the patient will need monitoring for a further period by a responsible adult. Your treating physician will provide guidance as to this timeframe.

If you notice any change in behaviour, vomiting, dizziness, worsening headache, double vision or excessive drowsiness, please telephone the clinic or the nearest hospital emergency department immediately.

Other important points:

- **Rest and avoid strenuous activity for at least 24 hours**
- **No alcohol**
- **No sleeping tablets**
- **Use paracetamol or codeine for headache. Do not use aspirin or anti-inflammatory medication**
- **Do not drive until medically cleared**
- **Do not train or play sport until medically cleared**

Clinic phone number

Patient's name

Date/time of injury

Date/time of medical review

Treating physician

Contact details or stamp

Pocket SCAT2

Concussion should be suspected in the presence of **any one or more** of the following: symptoms (such as headache), or physical signs (such as unsteadiness), or impaired brain function (e.g. confusion) or abnormal behaviour.

1. Symptoms

Presence of any of the following signs & symptoms may suggest a concussion.

- Loss of consciousness
- Seizure or convulsion
- Amnesia
- Headache
- "Pressure in head"
- Neck Pain
- Nausea or vomiting
- Dizziness
- Blurred vision
- Balance problems
- Sensitivity to light
- Sensitivity to noise
- Feeling slowed down
- Feeling like "in a fog"
- "Don't feel right"
- Difficulty concentrating
- Difficulty remembering
- Fatigue or low energy
- Confusion
- Drowsiness
- More emotional
- Irritability
- Sadness
- Nervous or anxious

2. Memory function

Failure to answer all questions correctly may suggest a concussion.

"At what venue are we at today?"
"Which half is it now?"
"Who scored last in this game?"
"What team did you play last week/game?"
"Did your team win the last game?"

3. Balance testing

Instructions for tandem stance

*"Now stand heel-to-toe with your **non-dominant** foot in back. Your weight should be evenly distributed across both feet. You should try to maintain stability for 20 seconds with your hands on your hips and your eyes closed. I will be counting the number of times you move out of this position. If you stumble out of this position, open your eyes and return to the start position and continue balancing. I will start timing when you are set and have closed your eyes."*

Observe the athlete for 20 seconds. If they make more than 5 errors (such as lift their hands off their hips; open their eyes; lift their forefoot or heel; step, stumble, or fall; or remain out of the start position for more that 5 seconds) then this may suggest a concussion.

Any athlete with a suspected concussion should be IMMEDIATELY REMOVED FROM PLAY, urgently assessed medically, should not be left alone and should not drive a motor vehicle.