Components of a Collegiate Sports Drug Testing Program

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The primary components of a drug-testing program include a detailed written policy, educational opportunities for student-athletes, drug-testing procedures and consequences for positive drug tests – including a consistent adjudication process and provisions for substance use and abuse treatment for student-athletes. The ultimate goal of any drug-testing program is to influence change in human behavior. To create change in behavior, all of the above components must be carefully observed and practiced.[7]

Policy

Before any type of drug testing can occur, a specific written policy must be developed, distributed to all participants and publicized. Sports drug-testing policies must include a clear explanation of the purposes for the drug-testing program, a description of who will be tested and by what methods, the banned drug list, a description of the types of testing student-athletes will be subjected to, the consequences for positive drug tests and a description of the appeal process. Athletic organizations should also include a process for addressing substance abuse by providing a systematic approach for student-athlete treatment and rehabilitation. All student-athletes must be provided with these policies in advance of implementing a drug-testing program. Student-athletes must provide written consent to the administering organization indicating that he/she has received, read and agrees to the policy as it applies to participation within the organization.[9] The very foundation of any drug-testing program is the document that states the program's goals, regulations and procedures. [7] Written drug-testing policies should be carefully developed, reviewed and, when necessary, edited on an annual basis.

Purpose

The purpose of drug testing must be clearly explained in the introduction of any adopted policy. These purposes are generally considered benefits. Opponents of drug testing will argue vehemently against these benefits, thus any individual or group appointed to the task of developing a drug testing program should consider opponents' views when tackling this issue. Opposing arguments include the idea that drug testing sends mixed messages, violates a person's rights, is viewed as a punitive measure, can be divisive and is costly.[12]

Drug testing in athletics is basically intended to check for substances that could either provide an unfair advantage over those not using them or contribute to problems in the individual's life, including impaired athletic performance.[12] The misuse of drugs and other substances in the world of sport has been recognized as a significant problem for over thirty years, with the two major concerns being ethics and health. These concerns are not independent of one

another. Misuse of performance-enhancing drugs in sport is a health risk given the types of drugs abused, the large doses usually taken and the stress that is already present in the body under competitive conditions. The all-encompassing purpose of drug testing in sport is to promote fair and equitable competition while protecting the health and safety of student-athletes. By subjecting student-athletes to drug testing, no one participant will have an artificially induced advantage, be pressured to use chemical substances in attempting to remain competitive or be exposed to the health risks associated with using potentially dangerous drugs and other substances.[8] The goals of all drug-testing programs should be to deter the use of banned substances, identify individuals who have substance abuse problems and provide access to treatment for such problems.[7]

Secondary to ethical and health reasons for drug testing, organizations may also use it to detect drug use, enforce banned drug lists, punish those found to be using banned substances and deter drug dependency. Other reasons include protecting student-athletes from injury, enhancing the role model perceptions of student-athletes and minimizing criminality. Properly conceived and implemented, a drug-testing program can also serve as an educational vehicle.[15]

Because student-athletes are usually healthy individuals, signs and symptoms of drug use may not be apparent upon observation, even to the trained eye. Drug testing provides a very definitive method of detecting use of controlled or illegal substances. In addition, the threat of a positive drug test and the resulting consequences may deter or prevent student-athletes from using these substances.[12] This deterrent effect has perhaps been the most important contribution of drug testing to societal well-being. Testing and fear of detection forces a person to make the affirmative decision not to use drugs in an uncontrolled or illegal manner.[13] Of course, the deterrent effect is only present if policies are consistently enforced. The only thing worse than not drug testing is having a drug testing program and not enforcing it.

Banned Substances

Any sports organization adopting a drug-testing program must develop a list of drugs for which student-athletes will be tested. In sport, there are two areas of drug use that must be deterred: performance-enhancing substances and other illicit drugs found to be detrimental to the health and well being of student-athletes. Performance-enhancing substances are banned because of their coercive nature and their potential adverse effects. Anabolic agents (e.g., anabolic steroids, testosterone, and growth hormone), stimulants, oxygenation enhancers and certain relaxants are considered to be types of performance enhancing substances and/or procedures that should be banned by any sports drug-testing program.[7] Timing and purpose of performance-enhancing substances should be considered to effectively deter use through drug testing. For example, drug testing during competition may not adequately

identify users of anabolic agents. These substances are more likely to be used during out-of-competition training for their long-term performance-enhancing goals, while stimulants are more likely to be used during competition to enhance performance on the day of an event. For this reason, student-athletes must be subjected to drug testing year-round for the total deterrent effect.

In addition to performance-enhancing substances, most athletic programs include testing for other drugs found to be potentially dangerous to a student-athlete's health. With national drug use studies indicating over 4.5 million people over the age of twelve needing drug treatment, organizational drug-testing programs would be negligent in the prevention of unacceptable drug use and addiction if they did not include testing for "drugs of abuse."[16] These drug categories include stimulants (e.g., cocaine, methamphetamines, Ecstasy), depressants (e.g., marijuana, alcohol, barbiturates), hallucinogens (e.g., LSD, psilocybin mushrooms) and opiates (e.g., morphine, codeine, heroin).[7] Most athletic organizations choose to adopt an all-inclusive banned drug list providing the ability to test for any drug deemed performance enhancing and/or dangerous to the health of its student-athletes. Banned drug lists should be included in any drug-testing policy, readily available to participants and updated regularly to adequately address drug use issues in sport. Banned drug lists are available from respective athletic organizations.

Testing Types and Methods

Organizations implementing drug-testing programs must consider a number of logistical and technical issues that will ultimately define the types of testing and the methods used. These types and methods must be described in the drug testing policy. There are several types of testing available for sports drug testing with distinct reasons for each. Random drug testing is the most popular type of testing used and is applied year-round to deter drug use and identify users.

Random drug testing involves maintaining a complete and accurate list of student-athletes and randomly selecting student-athletes for periodic drug testing. Effective random drug testing should be frequent, unpredictable and unannounced. The random selection process should be completely objective, assuring non-discriminatory identification of participating student-athletes to be tested. Student-athletes should be notified and required to report for testing at the designated collection site within pre-set parameters. Random testing is effective in deterring and identifying performance-enhancing drugs for training such as anabolic agents and "social/designer" drugs like marijuana or Ecstasy. The notification of the student-athlete should be as short as logistically possible. The maximum time should be 24 hours prior to test time and the ideal would be testing immediately after being notified. Testing student-athletes should not interfere with academic schedules or practices.

Reasonable suspicion testing provides organizations with another option for drug testing student-athletes. Organizations can selectively test a student-athlete based on specific objective facts and reasonable inferences drawn from those facts in light of documented experiences related to drug use. Reasonable suspicion testing must be based on physical symptoms or manifestations of being under the influence such as behavior or appearance consistent with prohibited use (e.g., odor of alcohol), direct observation of prohibited use, a report of prohibited use from a reliable source or evidence of use, possession and/or sale of prohibited drugs. A student-athlete notified of reasonable suspicion testing must immediately submit to a drug test.

Other types of drug testing to consider including in a sports drug testing program include: pre-participation testing to identify drug-induced at-risk student-athletes, follow-up testing on student-athletes with previous positive drug tests, monitoring of student-athletes following drug use interventions and pre-competition drug testing on student-athletes who have qualified for events where they will be subject to drug testing by other sports organizations. Sports organizations often perform event testing to ensure a level playing field for drugs taken on competition day. The NCAA performs event drug testing in an effort to deter performance-enhancing drug use and to identify users of such. Stimulants, relaxants, and oxygenation enhancers are classes of drugs that student-athletes are tempted to use in an effort to enhance performance during a specific competitive time period.

Testing methods and procedures should also be described in the written drug testing policy. Specifically the type(s) of specimens to be used for testing should be identified as well as the collection protocol that will be followed in collecting specimens from student-athletes. Chain of custody procedures, laboratory procedures and methods of specimen analysis must also be described in the policy.

Consequences

The drug-testing policy should specifically describe the procedures for reporting results including who receives results, who notifies the student-athletes, who the student-athlete is referred to for evaluation, who is granted knowledge of a positive drug test and what disciplinary action is imposed for a positive drug test. Confidentiality is of primary concern when communicating a positive drug test. Once positive drug test results are reported, these results must be reviewed to determine if there is an acceptable explanation for the test result. A medical review of these results is essential prior to labeling a student-athlete as testing positive under the program's policies. Once the result is deemed positive under the definition of the program policy, administrators must implement procedures for handling a positive drug test. Generally, the program director will meet with the student-athlete to discuss the nature and extent of drug use and to apply sanctions for policy violations as described. Sanctions for a positive drug test often include immediate

suspension from sport participation until the student-athlete can be evaluated by medical and substance abuse specialists to determine the risks associated with physical exercise and prohibited drug use and a treatment plan for the student-athlete is implemented. Other consequences such as refusal to comply with procedures or repeated positive drug test results must also be described in the written policy.

Appeal

All drug-testing programs must include an opportunity for the student-athlete to appeal the decision and subsequent consequences associated with a positive drug test or non-compliance to procedures. The appeal process should include having a designated committee made up of representatives from various relevant professions (e.g., medicine, athletics) meet to hear the student-athlete's reasons for testing positive. Technical experts, third party administrators and collectors may also serve as consultants to the committee when such matters are involved in the nature of the appeal. Unlike criminal litigation, civil cases require only that the preponderance of evidence support the finding of doping activity.[2] Following a hearing, the committee's decision will ultimately be accepted and any subsequent sanctions applied. The goal of effectively modifying behavior can only occur when the consequences are widely believed to impose accurate and even-handed results.[11]

Treatment

Following a positive drug test and subsequent evaluation by medical professionals to determine the nature and extent of drug use, an appropriate treatment plan must be implemented. At the very least, treatment should provide accurate and current information on the health hazards of drug abuse; help users overcome drug dependence; be directed based on age, interests and special problems of student-athletes; emphasize immediate negative effects from drug use; and hold the student-athlete accountable for his/her actions.[14] Most student-athletes' evaluations following a positive test show a drug use problem, not dependency. Drug use is a behavioral problem, not a disease. These individuals respond well to counseling on decision-making and instruction on the potential hazards of drug use. If dependency or repetitive drug use occurs, more intensive treatment is indicated.[7] Appropriate substance abuse professionals must supervise any treatment or rehabilitation program.

Participants

Developing, implementing and administering an effective drug-testing program involves a number of people with a variety of responsibilities. Early in the process when examining the need for program development, legal counsel should be recruited to review local, state and federal statutes that apply. The legal aspects involved with each organization should be clarified. The development process should also involve representatives from relevant academic departments and disciplines (e.g., pharmacology, chemistry and psychology), athletics administrators, student-athletes, athletic trainers and

medical doctors.[9] Ultimately, the administration of a comprehensive drug prevention program will involve a number of entities.

Donor (Student-athlete)

A donor is any person who is designated in the organization's drug-testing policies as subject to drug and/or alcohol testing. As applied to sports drug testing, the term includes any student-athlete who is currently listed as a participant in sport within the organization. The term "donor" is a drug testing industry standard identifying the individual subjected to drug testing who is required to provide a biological specimen for analysis of drugs.[18] The donors in an institutional athletic drug-testing program may include student-athletes, cheerleaders, managers, and athletic training students. The organization's drug-testing policies must identify and define all donors subject to drug testing. Provide drug testing policies to all donors. Administrators of the program should describe drug testing in detail, and once all donors have been provided accurate information about the program, each must read and sign a drug testing consent form and, if underage, parents of the donor must also sign the consent form prior to specimen collection and testing. Once a donor has consented to participating in the drug-testing program, he/she will be expected to follow policies and procedures accordingly. Failure to abide by the policies usually has consequences similar to that of a positive drug test. These consequences should also be included in the written policy.

Drug Testing Administrator

Each organization with a drug testing policy should have an individual responsible for administering the program. Often, many people are involved in program administration, but one individual is identified as the program administrator. It is the drug-testing administrator's responsibility to financially manage and oversee compliance with the entire program. Often this individual coordinates annual review and dissemination of policies to all participants, collects signed consent forms from donors, schedules required drug education programs and testing events for participants and coordinates other individuals or entities with responsibilities related to drug testing. The drug-testing administrator may or may not have additional duties associated with actual drug testing and results handling. Athletic trainers are often responsible for administering sports drug testing programs, but sometimes find these responsibilities place them in conflict with student-athlete relationships, especially if duties include specimen collection and results handling. The program administrator can effectively oversee the entire drug testing program and maintain strong, trustworthy relationships with student-athletes by delegating or outsourcing specific components of program administration including collections, results reporting and applying sanctions.

Third Party Administrators

Sports organizations have the option of contracting with outside agencies to provide or coordinate a variety of drug testing services. Third Party

Administrators (TPAs) offer organizations industry expertise and objectivity in administering drug-testing programs and allow athletic organization personnel the ability to focus on day-to-day responsibilities associated with athletics management. TPAs provide trained specimen collectors, laboratory discounts through consortium efforts, independently administered random selection services and Medical Review Officer (MRO) expertise. When determining cost factors for considering outside agencies, organizations must include the value of time expended by the internal staff to perform these duties. In addition, utilizing experts with extensive and detailed training further supports the effectiveness and ultimately the success of a drug-testing program.

Collectors

The collection of biological specimens from selected donors (student-athletes) is crucial to the effectiveness of any drug-testing program. The collector must be trusted to perform his/her job professionally and provide for privacy while ensuring integrity and security of the specimen throughout the entire collection process. Collectors must be knowledgeable in sports drug-testing issues and maintain the skills necessary to perform specimen collections in a consistent manner. Collectors should be adequately trained and required to maintain proficiency in collection services according to industry standards and organizational diversity. Trained collectors eliminate costly and legally challenging chain of custody errors with regard to specimen handling and transfer to appropriate laboratories. In addition, collectors deter specimen adulteration, substitution and manipulation attempts by donors at the collection site. Adulterated specimens significantly compromise drug-testing programs by causing false negative results. If a drug-testing program does not adequately deter specimen adulteration through on-site collection procedures, student-athletes will attempt to and successfully beat a drug test, ultimately creating a mockery of an organization's drug testing program.

Care should be taken when determining who will be responsible for the collection process if an organization elects to perform its own collections. For example, athletic trainers may be compromising their relationship with student-athletes by performing collections or other judicial processes in a drug-testing program. Student-athletes often approach athletic trainers in confidence when concerned about health issues, including drug use and may no longer trust or feel comfortable disclosing such issues if the athletic trainer performs these drug-testing duties. In addition, if an organization chooses to utilize its own personnel because of budgetary constraints, it is important to consider the time costs this task imposes on already taxed employees.

Pharmacists are excellent candidates for drug-testing collectors because they can develop and conduct drug-testing protocols; educate student-athletes, coaches and athletic trainers about drug use and abuse; and help ensure the safe and effective use of medications.[1] Other medical professionals such as nurses or medical technologists are also strong candidates. Third party

administrators and collection companies can also provide specimen collections. There are, however, unacceptable candidates for specimen collections. A student-athlete cannot serve as a collector for his or her own specimen; employees of any participating laboratory should not perform specimen collections and, obviously, collectors of the opposite gender cannot perform direct observation collections.

Laboratories

Credentialed laboratories are vital to the ultimate success of drug deterrence. Organizations must be confident that results generated by the laboratory are accurate and scientifically measured. There are a variety of credentialing entities responsible for certifying laboratories. Laboratory accreditation is an important criterion to consider when selecting a lab for specimen analysis. Accreditation and certification demonstrate reliability and quality assurance.[6] Before using a laboratory, the organization should request verification of the laboratory's standards of accreditation.

In 2004, the World Anti-Doping Agency (WADA) replaced the International Olympic Committee (IOC) as the official accrediting body for laboratories performing specimen analysis in sport. The World Anti-Doping Code International Standard for Laboratories outlines the specific requirements for WADA's accreditation process. Requirements include providing an official letter of support from the relevant national public authority responsible for the national anti-doping program, signing and complying with WADA's Code of Ethics, proficiency testing samples, sharing knowledge with other accredited laboratories and a strong commitment to research. Goals of the WADA accreditation program include promoting scientific excellence, harmonization of methodology, reliable scientific information and fostering good will and cooperation. WADA's Code of Ethics forbids testing samples unless they are from a bona fide sports program. Thus, WADA accredited laboratories are prohibited from testing to aid or abet athletes attempting to learn how to evade detection of drug use.[17]

Laboratories engaged in urine drug testing for federal agencies must be SAMHSA certified. This certification sets strict standards that laboratories must meet in order to conduct urine drug testing for federal agencies. To become certified, an applicant laboratory must undergo three rounds of performance testing plus on-site inspection. To maintain certification, a laboratory must participate in a quarterly performance testing program and periodic on-site inspections.[5]

Medical Review Officer (Results Recipient)

In workplace drug testing programs, a Medical Review Officer (MRO) is utilized to review positive drug test results to determine if there is a legitimate reason for the positive result. The MRO is defined in federal regulations as a licensed

physician with a working knowledge of substance abuse disorders who has appropriate medical training to interpret and evaluate positive drug test results.[13] In sports drug testing programs, the team physician is often designated to receive positive drug test results to review for possible legitimate medical reasons contributing to the confirmed positive result. Results should be handled as part of a student-athlete's medical record and protected from disclosure by the laws protecting medical document confidentiality. Regardless of the individual designated to receive results, the process must be administered with the utmost confidentiality. It is important for the laboratory to be "blind" to the donor's identity, thus laboratory personnel cannot serve as review officers for their own work.[3] Laboratories are capable of providing results to the designated individual via a number of secure methods. The results recipient must maintain these confidential records, assure adequate medical review of positive results and present verified positive results reports to the individual responsible for meeting with the student-athlete and other designated parties to disclose the results, apply consequences, facilitate the appeal process if requested and/or refer the athlete for necessary counseling and/or treatment.

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