The Drug Testing Project in International Sports: Dilemmas in an Expanding Regulatory Regime

James B. Jacobs
Bruce Samuels

Follow this and additional works at: https://repository.uchastings.edu/hastings_international_comparative_law_review

Part of the Comparative and Foreign Law Commons, and the International Law Commons

Recommended Citation
Available at: https://repository.uchastings.edu/hastings_international_comparative_law_review/vol18/iss3/4
The Drug Testing Project in International Sports: Dilemmas in an Expanding Regulatory Regime†

By JAMES B. JACOBS* and BRUCE SAMUELS**

Not only does the use of drugs put the individual's welfare at risk, but it also jeopardizes the whole future spirit of sport . . . . Once suspicion is aroused that a competitor, or group of competitors, is using artificial aid and achieving victories . . . then the defeated become dismayed and disillusioned. Unfair practices undermine the whole concept of competition. I see it as the tip of the iceberg leading to the destruction of competition as we know it unless attitudes change and the desire for victory is properly harnessed to the rules of the game.1

In its infancy, drug testing was established as a deterrent to athletes using drugs. Now it is supposed to be a world-wide police agency, ferreting out cheaters and insuring a "level playing field." And it is supposed to do this with the budget of a Third World country.2

I. INTRODUCTION

The sports establishment deems the use of performance enhancing drugs incompatible with the basic principles of athletic competition3 because it threatens the health of athletes4 and provides an

† The authors thank Cathy Adcock, Lynn Zimmer, and Jay Worthington for their comments on the manuscript and Jeremy Lewis for his research assistance. The research for this Article was conducted under a grant from the Center for Research in Crime and Justice, New York University School of Law.

* Professor of Law and Director, Center for Research in Crime and Justice, New York University School of Law.

** B.A., Occidental College, 1989; J.D., New York University School of Law, 1994, Judicial Clerk, Arizona Supreme Court.


3. See Thomas H. Murray, Drug Testing and Moral Responsibility, PHYSICIAN AND SPORTS MED., Nov. 1986, at 47 ("A fair and effective drug screening program, with sanctions for those who are caught, seems the only feasible way to discourage the use of performance-enhancers. Such screening must be done to protect the integrity of sport as well
unfair advantage, in effect allowing the drug user to "cheat" by surpassing her "natural" performance levels. The fear is that athletic

as to ensure that the athletes compete fairly—that is, against their opponents' talents rather than their pharmacies."); see also Charles E. Yesalis, Introduction to Anabolic Steroids in Sport and Exercise (1993) ("[T]he main effect of drug use in sport is to degrade athletic competition to a battle of biomechanical machines."); Wendy Long, Drug Testing for Clean Athletes, Says Medical Boss, Vancouver Sun, Oct. 2, 1993, at E5 (quoting Dr. Norgrove Perry, chief medical officer for 1994 Commonwealth Games, as saying, "The reason [drug testing] is there is that most of the athletes are clean and we must ensure their integrity."); John Goodbody, Princess Takes Hard Line over Use of Drugs, Times (London), Sept. 7, 1993, available in LEXIS, News Library, Times File (quoting British Princess Anne, an International Olympic Committee member, as saying, "Using drugs is the very antithesis of fair play and, because it is hidden, it is that much more pernicious.").

4. "Aside from the impact on sport, these drugs are wrong because they could potentially kill the user or cause serious long term side effects. We just don't yet know the complete extent of the damage these drugs can cause. The athletes don't either, but they may learn the hard way." Robert Voy & Kirk Deeter, Drugs, Sport, and Politics 167 (1991); see also Killanin, supra note 1, at 155.

5. Determining what constitutes unfair sporting advantage is very complex given an enterprise in which competitors are persistently searching for advantages over one another. This Article does not attempt to resolve the philosophical question of what constitutes fair and unfair athletic competition, but analyzes the implications of the current consensus that the use of performance enhancing drugs is unfair.

An athlete may... many drugs that he would not take... if he were not an athlete. And the rationale for much athletic drug use is unique, for the drugs are not taken either with the intention or effect of improving or maintaining health, or to achieve a pleasurable sensation, but rather because the athlete or those around him believe he will perform better drugged than undrugged.

Bill Gilbert, Drugs in Sport, in Drug Use and Social Policy 126-27 (J. Susman ed., 1972); see also Voy & Deeter, supra note 4, at 172 ("The only way to ensure a level playing field is through dope testing."). The goal of the Olympic Movement is "to contribute to building a peaceful and better world by educating youth through sport practiced without discrimination of any kind and in the Olympic spirit, which requires mutual understanding with a spirit of friendship, solidarity and fair play." OLYMPIC CHARTER, Fundamental Principle 6 (1991), quoted in James A.R. Nafziger, International Sports Law: A Replay of Characteristics and Trends, 86 Am. J. Int'l L. 489, 491 n.6 (1992) (emphasis added).


Cheating actions... are those rule violations by means of which a player tries to change and take control of the outcome of the game, or the structuring of factors that will lead to the outcome of the game being naturally in his or her favor in ways that are not permissible by the rules or conventions that govern the game.

See also Killanin, supra note 1, at 155; Charles L. Dubin, Commission of Inquiry into the Use of Drugs and Banned Practices Intended to Increase Athletic Performance xxii (1990).

7. See Eric D. Zemper, Drug Testing in Athletics, in Drug Testing: Issues and Options 113, 120 (Robert H. Coombs & Louis J. West eds., 1991) ("The competition should be decided on the basis of who has done the best job of perfecting and utilizing his or her natural abilities, not on the basis of who has the best pharmacist.").
competition will become a competition between pills, not skills, and that the sports champions of the future will be chemically created. In theory, the battle to purge performance enhancing drugs from sports is laudable. In practice, whether this goal can be achieved in a fair and efficient manner is questionable. The specter of a biomedical "arms race" between athletes, coaches, and some physicians on one side and the sporting organizations and their scientists on the other side now looms menacingly over the world of sports.

The International Olympic Committee (IOC), which sits at the top of the drug testing regime, has led the campaign for drug-free sport. In addition to the IOC, the Olympic sports regulating estab-

Drug testing in amateur athletics only tests for performance enhancing drugs; drugs which harm performance do not undermine fair competition. See id. at 113 ("While non-athletic drug testing has focused primarily on illegal drugs that hinder work performance, drug testing in athletics has focused on legal drugs that are taken to artificially enhance athletic performance.").

8. See, e.g., Doug Gillon, A Test for the Best, HERALD (Glasgow), Aug. 26, 1994, at 17 (stating that the international sports authorities, instead of creating an effective policing system, have "created a monster, one which costs millions of pounds to run, yet confounds medico-legal experts, and has spawned litigation and multi-million damages actions.").

9. KILLANIN, supra note 1, at 156. The IOC was established in 1894. Id. at 13. Lord Killanin, former president of the IOC, describes the IOC as "a self-electing, self perpetuating body . . . a club in which membership is by invitation, with the unusual exclusivity that there are only one or two people from any one country." Id. The IOC is "the final authority on all questions concerning the Olympic Games and the Olympic Movement." OLYMPIC CHARTER rule 23 (1980). In 1990 there were 92 members of the IOC, compared with 70 in 1954. ALLEN GUTTMAN, THE OLYMPICS: A HISTORY OF THE MODERN GAMES 91 (1992). See Ferstle, supra note 2, at 257; see also Nafziger, supra note 5, at 491 (The Olympic Movement "has played the dominant role in defining a broader framework of international sports law by helping to create and implement a customary or autonomous legal process.").

The rules and policies established by the IOC permeate sports beyond the Olympic Games. See generally id. at 492:

In today's high-technology world of sports, improved performance typically requires professional assistance and money. In response, grass-roots management and funding of training and competition are channeled to aspiring athletes through local and national sports associations. These associations operate at the base of a pyramid of authority with the [international federations] and the IOC at the top. This structure for transmitting the authority and legitimacy of the Olympic process influences even schoolyard and sandlot activities whenever participants receive support from sanctioned sports organizations . . . within the Olympic Movement.

However, as a nongovernmental organization with powers limited to organizing Olympic events, the IOC cannot require governments to abide by its rules. Marcia B. Nelson, Stuck Between Interlocking Rings: Efforts to Resolve the Conflicting Demands Placed on Olympic National Governing Bodies, 26 VAND. J. TRANSNAT'L L. 895, 900 n.26 (1993). Other international bodies, including UNESCO, are also involved in formulating international sports law. Nafziger, supra note 5, at 493, citing UNESCO Res. 1.19, The Fight Against Doping in Sport, 1 Records of the General Conference, 25th Sess., at 89.
Hastings Int'l & Comp. L. Rev. 560 [Vol. 18:557

lishment is comprised of 170 National Olympic Committees (NOCs),\textsuperscript{10} the international federations (IFs) for each Olympic sport, and the organizing committee of the host site of the quadrennial Olympic Games. Within each IF there are national federations, such as USA Track and Field, which govern the respective sports in each country. The IOC conducts drug tests only at the summer and winter Olympic Games. The IFs sanction competitions throughout the year and have the most influence on drug policy enforcement at the international level.\textsuperscript{11}

Over the past three decades the governing bodies of Olympic and international sport have stated, repeated, reinforced, and amplified their commitment to drug-free sport. The national and international governing bodies of Olympic sports have committed themselves to building a comprehensive system of rules, monitoring institutions, and sanctioning systems in an attempt to make drug-free sport a reality.\textsuperscript{12} To this end, over 3,000 substances have been banned.\textsuperscript{13} These governing bodies, however, have yet to establish internationally accepted uniform rules for enforcement and sanctions, as well as monitoring institutions.

The IOC and other national and international sports bodies test for performance enhancing substances, masking agents, and other methods, imposing suspensions and other punishments on those competitors who test positive. The governing bodies of international sports in charge of promulgating and enforcing the drug-free regime

\textsuperscript{10} Christopher R. Hill, \textit{The Politics of the Olympic Movement}, in \textit{THE CHANGING POLITICS OF SPORT} 84, 88 (Lincoln Allison ed., 1993). Every country competing in the games must have a NOC recognized by the IOC. \textit{Id}.

\textsuperscript{11} See \textit{KILLANIN, supra} note 1, at 160.

\textsuperscript{12} In 1961, the IOC established a medical commission to determine gender in athletes. \textit{KILLANIN, supra} note 1, at 156; see generally Pamela B. Fastiff, \textit{Gender Verification Testing: Balancing the Rights of Female Athletes with a Scandal Free Olympic Games}, 19 HASTINGS CONST. L.Q. 937 (1992). In 1962, the medical commission banned the practice of doping. \textit{KILLANIN, supra} note 1, at 156; see also MAURO G. DI PASQUALE, \textit{DRUG USE IN AMATEUR SPORTS} 15 (1984). Doping was defined as:

The administration of or use by a competing athlete of any substance foreign to the body or any physiological substance taken in abnormal quantities or taken by abnormal route of entry into the body with the sole intention of increasing in an artificial and unfair manner his/her performance in competition.


\textsuperscript{13} Christine Brennan, \textit{Dread Words: "You've Tested Positive"; Olympians Learn Too Late the Cost of Clenbuterol Use}, \textit{WASH. POST}, Mar. 5, 1993, at F1.
face mind-boggling problems in achieving their goals, and these problems have multiplied as the goals have become more ambitious. Problems which must be solved to make a fair and effective drug testing program a reality include the accuracy of tests for performance enhancing substances, the logistics of obtaining and transporting athletes' urine samples, the financial means to establish testing laboratories around the world, the enforceability of a system of sanctions, and the supplying of effective notice to athletes as to which substances are banned.

Section II of this Article examines the history and evolution of the goal of drug-free international sport. Section III addresses the technological, fiscal, political, logistical, rulemaking, enforcement, and legal barriers to fulfilling the evolving regulatory vision. Section IV examines whether, in light of the extreme difficulties of creating a viable drug-free sports regime, it makes sense for the international sports establishment to continue building an ever more ambitious drug testing project.

II. THE EVOLUTION AND DEVELOPMENT OF THE DRUG-FREE INTERNATIONAL SPORT GOAL

The use of performance enhancing substances in sport goes back decades, indeed centuries. There are reports of competitors in the third century B.C. ingesting mushrooms and herbs to aid their performance. In the late 1800s, some cyclists ingested an extract of coca leaf and wine before races. Thomas Hicks, the 1904 Olympic marathon champion, reportedly sought a competitive edge by drinking a cocktail of strychnine and brandy.

---

14. See Killanin, supra note 1, at 156 (the IOC "has an immense fight on its hands" in trying to eliminate drugs from sport).
15. In 1924, a German physician, Dr. Willner, stated,
   At competitions we want to measure physical performances, not test the effects of drugs . . . . In my view, there is nothing more reprehensible than using pharmacological substances in an attempt to improve one's performances in competition with others who bring to the sporting encounter only that fitness that they have achieved through training.
   Quoted in Yesalis, supra note 3, at xxvii.
16. Dubin, supra note 6, at 69-70.
18. Id.
By the 1950s, drug use in competitive sports had become more widespread and more visible. At the 1952 Olympic Winter Games, syringes and broken ampules were found in the speed skaters' locker-room.\textsuperscript{20} Rumors also began to surface about Soviet athletes taking the male hormone testosterone.\textsuperscript{21} Dr. John Ziegler, physician to the American weightlifting team, anxious that American athletes not fall behind, collaborated with a private firm in the development of the first commercial anabolic steroid.\textsuperscript{22} In the 1960 Olympics, cyclist Knut Enemark Jensen died after taking a mixture of nicotine acid and amphetamines.\textsuperscript{23}

In the 1960s, as evidence of increased drug use by athletes mounted, the sports establishment launched its anti-drug campaign. The sports governing bodies and many athletes\textsuperscript{24} excoriated pharmacologically-assisted training and performance in competition. In 1962, the IOC Medical Commission passed a resolution prohibiting "doping."\textsuperscript{25} Since then, high schools, high school athletic associations, colleges and universities, sporting leagues and conferences, amateur athletic associations, the NCAA, and professional leagues have all promulgated similar anti-drug policies. Drug testing has become the primary means of enforcing these policies.\textsuperscript{26}

In the Olympics, drug testing for performance enhancing drugs by means of urine analysis began in 1968,\textsuperscript{27} tests focused on drugs, such as stimulants, which competitors take shortly before an event.\textsuperscript{28} By 1976, the IOC listed thirty prohibited substances.\textsuperscript{29} Steroids were

\begin{thebibliography}{9}
\bibitem{20} Geoffrey Miller, Behind the Olympic Rings 98 (1979).
\bibitem{21} Marjorie Shuer, Steroids, in The Olympic Games in Transition 375, 375 (Jeffrey O. Seagrave & Donald Chu eds., 1988).
\bibitem{22} Mihir Bose et al., The Dark Shadow, the Indelible Stain, Sunday Times (London), Aug. 28, 1994, available in LEXIS, News Library, TimesFile.
\bibitem{23} Miller, supra note 20, at 99.
\bibitem{24} Virginia S. Cowart, Support Lags for Research on Steroid Effects, 262 J. Am. Med. Ass'n 2500 (1989) (stating that some athletes were adamant that the proper sanction for a positive test should be lifetime suspension from competition).
\bibitem{25} Killanin, supra note 1, at 159.
\bibitem{26} Ray Yasser et al., Sports Law 490 (1990). Due to the complexity of discussing each of these policies, this paper focuses on testing for athletes competing at the international level in sports included in the Olympics. As an example of the increase in testing, the IAAF announced that it hoped to increase the number of out-of-competition tests to 1,200 in 1995, up from 750 in 1994. Associated Press, More Drug Tests for Track, N.Y. Times, Nov. 26, 1994, at 32.
\bibitem{28} Baum, Drug Testing Is Integral Part of Winter Olympic Games, Chemistry & Engineering News, Feb. 22, 1988, at 23.
\bibitem{29} Miller, supra note 20, at 99.
\end{thebibliography}
The Drug Testing Project in International Sports

first tested for at the 1976 Summer Olympics. The urine testing technology, however, was unreliable until 1983, when the organizers of the 1983 Pan Am Games first utilized the gas chromatograph and mass spectrometer. These testing methods “dramatically changed the role drug testing played in the world of amateur sport.” The first use of this testing technology led to the forfeiture of twenty-one medals, including eleven golds. The number of athletes who have been caught in recent Olympics has ranged from nine in the 1988 summer games, to five in the 1992 summer games, to zero in the 1994 winter Olympics. However, the number of athletes caught does not indicate the number of athletes using banned substances; some experts believe that half of the 1988 Olympic athletes used steroids at some time during their training.

Since 1984, the United States Olympic Committee (USOC) has conducted 33,500 drug tests. In 1990, IOC accredited labs conducted 63,000 tests of athletes’ urine; in 1992, IOC accredited labs tested the urine of 87,800 athletes, with 993 showing positive. All athletes competing at international events are at risk of being tested. Some

30. Dubin, supra note 6, at 72.
31. Voy & Deeter, supra note 4, at 77.
33. Voy & Deeter, supra note 4, at 86.
34. Id.
35. Martin Nesirky, Olympics—Expelled Austrian Drugs Cheat Apologizes, Reuters, Feb. 15, 1994, available in LEXIS, News Library, Reuwid File (since Austria expelled an athlete before the Olympic games commenced it was not counted as an IOC expulsion).
38. Olympic Rev., July 1991, at 322, in Nafziger, supra note 5, at 504 (less than 1% tested positive).
39. Interview: Professor Arne Ljungovist, Keeping It Clean, IAAF Rep./Rev. 103 (1994).
40. Although almost all testing is done by analyzing urine, alternative technologies may someday provide accurate tests for currently undetectable substances. Sporting bodies have begun to implement blood tests on a limited basis. Paul Radford, Olympics-IOC Blood Doping Fight Runs into Setback, Reuters, Feb. 6, 1994, available in LEXIS, News Library Reuwid File (stating that 200 blood samples will be collected at the 1994 Winter Olympics for Nordic and Alpine skiers). However, citing legal and religious reasons, the IOC does not plan to implement uniform blood testing at the 1996 Summer Games, despite the fact that blood testing is considered more thorough than urinalysis. Mike Fish, Steroids: Riskier Than Ever, Atlanta J. & Const., Sept. 29, 1993, at E3.
competitors are randomly selected. Some sports test all medal winners, while others test only the gold medalists. The 1994 Winter Olympic Commission tested all medal winners plus two randomly chosen competitors in each event.

The IOC Medical Commission, in addition to prohibiting specific drugs, has banned classes of drugs, including stimulants, narcotics, anabolic steroids, beta blockers, peptide hormones and peptides, and diuretics. Restricted substances include alcohol, local anesthetics, corticosteroids, and human chorionic gonadotropin. The 1992 IOC list includes fifty-one stimulants, twenty-four narcotic analgesics and related compounds, twenty-two androgenic anabolic steroids and related compounds, eleven beta blockers (only illegal for five Winter Olympic sports and nine Summer Olympic sports), and fifteen diuretics. In total, the IOC has banned approximately 3,000 drugs.

The two major categories of performance enhancing drugs are those

Hair analysis is also an emerging means of detecting drug use, especially anabolic steroid use. The test was developed in the early 1980s by an American chemist, and is currently being used to monitor participants in drug treatment programs. The advantages include the ease with which the sample can be collected, and the history that the sample provides. There are also disadvantages: for example, shampooing may eliminate traces of some drugs. In addition, an athlete may be able to avoid detection by shaving all body hair, a practice common among swimmers. At present, hair analysis is not being used by sporting bodies.

41. See, e.g., INTERNATIONAL AMATEUR ATHLETIC FEDERATION, PROCEDURAL GUIDELINES FOR DOPING CONTROL 4 (1993) [hereinafter IAAF PROCEDURAL GUIDELINES]:

Rules
- 3.1 Selection of Athletes shall be on a final position basis and/or random basis.
- 3.2 In addition, selection of further athletes may be ordered at the discretion of the Doping Committee or Delegate by any method that it or he shall choose.
- 3.3 Doping control shall also be conducted on any athlete who is deemed to have broken or equalled an Area or World Record.

42. Ken Stephens, Norway Poll Shows Low Opinion of IOC Chief Samaranch, DALLAS MORNING NEWS, Feb. 7, 1994, at 2B. The system at the 1992 Summer Olympics involving women's swimming, where the 100 meter freestyle gold medalist was not tested, showed why the top finishers, at least, should always be tested. Swimmers' Drug Tests in Spotlight, WASH. POST, July 28, 1992, at D8.

43. Nafziger, supra note 5, at 503 n.62.

44. UNITED STATES OLYMPIC COMMITTEE, UNITED STATES OLYMPIC COMMITTEE DRUG EDUCATION AND DOPING CONTROL PROGRAM, GUIDE TO BANNED MEDICATIONS 2 (1992) [hereinafter USOC].

45. Id. at 4.
46. Id. at 5.
47. Id. at 6.
48. Id. at 7.
49. Brennan, supra note 13, at Fl.
used shortly before competition, such as stimulants, beta-blockers, and diuretics, and those used during training, such as anabolic steroids. The stimulant list names 164 pharmaceutical products which contain prohibited substances, including Vicks inhalers, Contac, and Dexatrim. There is also a catch-all warning: “CAUTION!! THIS IS NOT A COMPLETE LIST. THERE ARE NEW PRODUCTS ON THE MARKET ALMOST MONTHLY . . . .”

In addition, the IOC Medical Commission has banned the use of human hormones like testosterone and human growth hormone. It has also banned performance enhancing “methods,” which include blood doping, urine substitution, and packing and masking of urine content. The magnitude and complexity of the anti-performance enhancing drug project in sports continues to expand, with no end in sight. The more ambitious the goal, the more challenging it is to achieve.

III. CHALLENGES TO THE DRUG TESTING PROJECT

A. Out-of-Competition Testing

Drug testing is relatively easy to implement at competitions because urine samples can be readily collected. Athletes do not need to be tracked down; they are notified of their selection for testing immediately after the event and must report to the testing center within an hour.

Day-of-competition testing, however, cannot detect body building (training) drugs, such as steroids, if the athlete has stopped using them long enough before the event to eliminate traces of the substance in the urine. It takes as little as three weeks for the body to rid itself of some forms of water-soluble anabolic steroids. By discon-

50. Voy & Deeter, supra note 4, at 93.
51. In some sports, such as track and field, the sanction for a positive test depends on the type of drug: one year suspension for stimulants, four years for training drugs. See Krabbe's Last Chance in Drugs Battle, Agence France Presse, Nov. 19, 1993, available in LEXIS, News Library, Afp File.
52. USOC, supra note 44, at 2-3.
53. Masking agents are those that cover up traces of banned substances in the urine. Though they may not have any performance enhancing value, they are also banned.
54. At an April 1995 meeting of the USOC Board of Directors, a general consensus was reached that more comprehensive testing was necessary. New York Times, USOC May Step Up Tests to Catch Steroid Users, Ariz. Republic, Apr. 9, 1995, at C2.
tinuing use weeks before competition, the athlete can benefit from the substances without fear of detection.56 "Only a fraction of users, usually the ill-advised or careless, turn up positive."57 Because competition testing fails to identify sophisticated drug users, and drug use continues, sporting organizations have lost credibility in promoting drug-free sport.58

Even with recent advances in technology, drug testing still fails to detect sophisticated use of anabolic steroids and other training drugs.59 As Hans Skaset, president of Norway's Confederacy of Sport, stated "You can produce statistics showing that we have tested 35,000 persons in one year, as the [IOC] did in 1987, and only some eight or ten were caught. But that is, of course, because everybody knows the game."60

Support for Skaset's conclusion is provided by Ben Johnson, the Canadian sprinter who was stripped of his gold medal in the 1988 Olympics after testing positive for steroids. He admitted having taken steroids for eight years, successfully evading drug tests by carefully timing his cycles.61 In December 1991, twenty former East German swimming coaches admitted that East German swimmers had used anabolic steroids for many years. However, no elite East German swimmers tested positive for drugs until after the fall of the Berlin Wall.62

56. See Zemper, supra note 7, at 127.
58. Testing 1-2-3, SPORTING NEWS, Mar. 22, 1993, at 7 ("If the IAAF is to regain its lost credibility, it must become more dedicated to ferreting out drug users, not just those stupid enough to get caught at competition."). Ironically, increased out-of-competition testing may make competition appear more legitimate. But as athletes continue to find ways to beat the system, the sporting authorities will continue to face the credibility issue.
59. Charles E. Yesalis et al., Indications of Psychological Dependence Among Anabolic Androgenic Steroid Abusers, in ANABOLIC STEROID ABUSE, U.S. DEP'T OF HEALTH AND HUMAN SERVICES, Pub. No. (ADM)90-1720, at 209 (Geraline C. Lin & Lynda Erinoff eds. 1990); see also Vov & Deeter, supra note 4, at 176 ("Any athlete with a brain and a calendar can use anabolic-androgenic steroids to benefit today with little or no fear of detection.").
60. Quoted in Ferstle, supra note 2, at 266 (Charles E. Yesalis ed., 1993); see also Vov & Deeter, supra note 4, at 91 ("Perhaps the weakest link in the chain [is] the lengthy warnings athletes are given before some types of drug tests are actually administered.").
61. DUBIN, supra note 6, at 284; Phil Hersh, Drug Still Mystery Olympic Ingredient, Chi. TRIB., July 22, 1992, at C1. Although tested nineteen times between 1986 and 1988 at competitions, each drug test was negative. DUBIN, supra note 6, at 285.
62. Phil Hersh, China's Swimming Success Raises Specter of East Germany, Chi. TRIB., Nov. 16, 1993, at 1.
While female East German swimmers won ten gold medals at the 1989 European Championships, they won only one gold at the 1992 European Championships after the unification of Germany (and the merger of East and West German sports federations).

Despite suspicion of drug use, top female Chinese runners and swimmers, who shattered records in 1993 and 1994, came up clean in drug tests. The success of the Chinese women led others to call for more drug testing, including eighteen western swimming coaches. In November 1994, the suspicions were confirmed: eleven Chinese athletes, all medalists, tested positive for a drug similar to testosterone. In the wake of the Chinese scandal, the New York Times editorialized, "The testing must become far more comprehensive and hard to evade in all affected sports, with random tests administered virtually anywhere at any time, without advance warning."

In some events so many athletes have tested positive that all medalists are suspect. For example, in the 1993 World Championships in Stuttgart, Germany, all three medalists in the shot put had previously been suspended for drug use. The bronze medalist, Mike Stulce, won

---


64. See Zeigler, supra note 55, at D1; Hersh, supra note 61, at 3 (pointing out that although only one world record was set in the five years after the 1988 Olympics in women's track and field, four records were set in six days by two women distance runners from China, and five Chinese beat the previous world record in one heat); Patrick E. Tyler, Chinese Runners Excel on Work and Worms, N.Y. TIMES, Sept. 12, 1993, at 11; Brian MacQuarrie, Performance of Chinese Renews Running Debate, BOSTON GLOBE, Aug. 23, 1993, at 42 (noting the suspicion that Chinese women bypassed competitions in Europe in the summer to avoid drug testing); Wire-to-Wire, RUNNER'S WORLD, July 1994, at 20 (pointing out that in mid-April the top Chinese runners suddenly pulled out of two races, sparking a round of drug rumors); Editorial, Drug-Assisted Stardom, N.Y. TIMES, Dec. 19, 1994, at A18 (In 1988, Chinese women swimmers won four Olympic silver medals. In 1992, Chinese swimmers took home four gold and five silver medals. In 1994, the Chinese females won twelve of sixteen gold medals.); Arnold Beckett, Need for Top-Level Inquiry into Drug-Testing, TIMES (London), Jan. 6, 1994, available in LEXIS, News Library, Times File (stating that twenty-five Chinese athletes, including the world's top female distance runners, passed unannounced drug tests by the IAAF. It was the third time the IAAF had tested Chinese runners that year.); Doping Official Blasts Rumors, N.Y. TIMES, Sept. 15, 1993, at B20.


67. Chinese in Asian Games Dope Scandal, AGENCE FRANCE PRESSE, Nov. 23, 1994, available in LEXIS, Nexis Library, News File. A week earlier, the international swimming federation banned the world 400 meter swimming champion from China following a positive drug test. Id.

68. Editorial, supra note 64, at A18.
the gold at the 1992 Olympics four months after completing a two year ban. After testing positive at the Stuttgart games, he was sus-
pended for life. The 1992 Olympic discus gold medalist also tested positive at the Stuttgart games. One leading commentator wrote, "The mere existence of steroids has helped create a climate of hysteria in sports like track and field. Whoever crosses the finish line first is promptly suspected of being artificially aided."

The inability of competition testing to detect training substances effectively has led to a major escalation in the scope of drug testing. The sports establishment has begun seeking ways to test top athletes year-round, in and out of competition. The USOC and some national governing bodies, including USA Track and Field, have implemented short-notice testing, whereby some athletes are instructed to show up at a nearby testing center within a day or two. If the athlete does not appear, she is deemed to have evaded the test due to drug use and treated as if she had tested positive. Although the USOC has conducted approximately 1400 out-of-competition tests since 1992, in April 1995 USOC medical experts called the drug testing procedure a failure. These tests produced only one positive result.

The International Amateur Athletics Federation (IAAF) has experimented with "target testing," whereby athletes suspected of using drugs are targeted for testing during training or at competitions. This plan triggered complaints from athletes who objected to being placed on the suspicion list.

The IAAF has also implemented a system of "roving drug testing," whereby IAAF officials make unannounced visits to an athlete's training site or home and demand a urine sample on the spot. In 1993, the IAAF tested 476 athletes representing 25 countries; in 1994, the organization's goal was to test approximately 750 athletes from 50

69. Phil Hersh, Shot-putter Stuce Says He'll Appeal Drug Test, CEI. TRIB., Sept. 22, 1993, at 3.
70. Id.
71. Id.
72. Fish, supra note 57, at A1.
73. See Dubin, supra note 6, at 394-97.
75. N.Y. TIMES, supra note 54.
76. Id.
countries. The IAAF also has a "Flying Squad Programme" whereby the top 20 athletes in the world in each event can be tested anywhere at any time without notice.

Implementing comprehensive out-of-competition testing poses many tough logistical questions. Who should be tested? Should every athlete of "international caliber" have to register to be tested, with or without notice, at any time? How can monitors find athletes who frequently travel from competition to competition? Should athletes have to provide notice of their whereabouts?

One proposal would require athletes to register with the sponsoring agency twelve weeks before a competition, and provide a urine sample at least once before competition. This proposal would be difficult to implement because the agency would then have to figure out a way to obtain a urine sample from every athlete during that twelve week period. In addition, as athletes compete in numerous competitions every year, the organizing bodies would be duplicating their efforts, and some athletes would be subject to duplicative testing.

Another proposal, put to the IAAF by USA Track & Field, is a system of "challenge testing" whereby each nation would choose a number of athletes from another country who would be subjected to an unannounced test. Here, too, the logistics are daunting. Would all nations be "paired?" If not, some nation's athletes would be disproportionately targeted while others' would not be targeted at all. Furthermore, putting the responsibility for choosing the athletes to be tested in the hands of competitors rather than "neutral monitors" could generate bad feeling or even deal making.

The challenges for developing a comprehensive and uniform out-of-competition testing scheme are formidable. The former chief medical officer of the United States Olympic Committee, Robert Voy, notes that a system of short-notice, random, out-of-competition test-

78. Staffan Salstrom, Out-of-Competition Testing: "The IAAF and Your Athlete" 2 (1994); Fish, supra note 40, at E3.

For the rules of out-of-competition testing, see IAAF Procedural Guidelines, supra note 41, at 12-15; see also, e.g., Discus Champion Is Suspended for Life, N.Y. Times, Mar. 20, 1993, at 32 (discus thrower Kamy Kashmiri was suspended for life after testing positive for steroids in an IAAF out-of-competition test).


80. Voy & Deeter, supra note 4, at 81.

81. Ferstle, supra note 2, at 258.
ing "would ultimately be doomed to failure under the incredible weight of inherent logistical and financial problems."\^{82} Furthermore, according to Voy, such a system "leaves too much opportunity for manipulation. [Athletes] already have sources within the testing system who are willing to tell them exactly when the drug test will be and who will be tested."\^{83}

Any scheme of comprehensive out-of-competition testing has to cope with the complexities of monitoring elite, international-caliber athletes during their training. What is to be done about competitors who cannot be found? Who should be responsible for collecting urine samples? Who should pay the collectors? How should their integrity be assured? (Any system would also be susceptible to corruption and incompetence.)\^{84}

The IOC has rejected the idea of forming a team of globe-hopping urine sample collectors.\^{85} One commentator remarked that "one has to wonder what Olympic sport has come to when a group of people may soon have full time jobs that consist of travelling around the world collecting pee in bottles from the world's top athletes."\^{86} The answer is that it is precisely this kind of regime that the commitment to drug-free sport, enforced through comprehensive drug testing, requires. Are there any alternatives more modest than a continually expanding drug testing project?

One possibility would be to draw the line at testing at major competitions. Though a return to the status quo of a few years ago, this is logistically and economically feasible and maintains the appearance of legitimacy of the Olympic games and other high visibility events. Athletes would not be permitted to compete while under the influence of amphetamine, beta blockers, and other substances used shortly before competition. Moreover, they would also be disqualified if they tested positive for any trace of anabolic steroids or other long-term body building or performance enhancing drug.

Under this proposal, however, athletes would not be investigated for drug use during their out-of-competition training. That might give athletes with the inclination and skill to successfully cycle training

---

\^{82} Voy & Deeter, supra note 4, at 177.
\^{83} Id.
\^{86} Id.
drugs an advantage. Though there are all sorts of advantages that athletes have over one another—sponsorships, diet, coaching, facilities, and medical care—something about pharmacological aid to performance seems much more unfair, perhaps because drugs seems more “unnatural.”

Perhaps the most politically realistic proposal is to monitor out-of-competition drug use of only the top thirty ranked athletes in each event. No world records could be set by those outside of the monitored group. Once an athlete makes it into the top rankings, she would be subject to testing at any time and at any place. By focusing on the top athletes for out-of-competition testing, the number of athletes monitored by international sports agencies would be greatly reduced and the logistics simplified.87

B. Can the Drug Testing Establishment Keep Pace with the Technology of Avoidance?

The sports drug testing project faces constant challenge from manufacturers striving to invent new performance enhancing substances and masking agents that thwart the tests.88 The governing bodies must continually ferret out new drugs, add them to the banned list, and come up with technologies and tests to detect these substances.89

Research on testing for new drugs is conducted in a piecemeal fashion. Officials from any national or international sports governing body may hear a rumor or be given a tip about a new drug. If they are able to obtain a sample, they turn it over to a laboratory to identify and evaluate. It is often difficult to determine whether a substance actually enhances athletic performance. Indeed, a particular substance may enhance performance for some athletes, but not others, or be useful in some sports but not others. Some athletes may believe a substance to be performance enhancing, but scientific confirmation

88. “The science of avoiding drug detection is probably as sophisticated today as the science of drug testing itself . . . . The resources and effort poured into the study of avoiding detection can, at times, be almost unbelievable.” voy & deeter, supra note 4, at 93.
89. One proposal to discover new substances and techniques is to offer the athlete who comes forward with such information clemency and anonymity. Voy & Deeter, supra note 4, at 173. But this opportunity could also be manipulated by athletes who are caught using banned substances.
may be lacking. When a drug is found to enhance performance or mask the use of performance enhancing drugs, the IOC Medical Commission and the governing sports bodies add it to the prohibited list. Once a drug is on the prohibited list, an effort must be made to develop a reliable test to detect its use; this can require considerable research and development and may ultimately be unsuccessful.

The absence of reliable tests for key performance enhancing substances already undermines the efficacy of the drug testing project. For example, hormones naturally produced in the body, but injected or ingested at increased levels, are very difficult to detect. The testers have established presumptions that above certain levels, the hormones could not have been naturally produced. Testosterone used to be banned above a ratio of 6 to 1 (testosterone to epitestosterone). The difficulty is determining the maximum that a human being can produce naturally. Previously the IOC considered lowering the ratio to 4 to 1, yet the ratio was instead raised to 10 to 1. The head of one IOC lab stated that there was insufficient knowledge to substantiate the basis of the 6 to 1 ratio. He explained, “it’s an analytical emergency in its 10th year.” Oddly, the testosterone ratio is set the same for men and women, despite the fact that men naturally produce more testosterone than women. A female athlete can greatly benefit from a small dose of testosterone, whereas a male athlete must take greater doses to enhance performance since his natural production is hindered by taking steroids. The use of testosterone can be masked by epitestosterone, another substance naturally produced by the body. In fact, there are no known cases of positive testosterone tests when used in conjunction with epitestosterone. Athletes may also benefit from testosterone without increasing the level above 10 to 1 by controlled release, for example, through a skin patch. Thus, the accuracy of testosterone testing is at best questionable.

Likewise, injecting blood plasma to increase the red blood cell count (blood doping) is impossible to detect if an athlete uses his or

90. Canadian Sprinter Ben Johnson was suspended for life after testing revealed a 10.3 to 1 ratio of testosterone to epitestosterone. Roger Cohen, Johnson Is Banned for Life after Testing Positive for Drugs a 2d Time, N.Y. TIMES, Mar. 6, 1993, at 32.
91. Ferstle, supra note 2, at 271.
92. Downes, supra note 77.
93. Id.
96. Id.
her own plasma rather than another person’s blood. Another substance for which there is no test is erythropoietin (EPO) and synthetically produced rEPO, substances that increase the red blood cell count, producing the same advantages as blood doping without the risk of blood transfusions. Prince Alexandre de Merode, Chief Medical Officer of the IOC, commenting on the possibility of testing for EPO, stated, “It’s too early. The more we test, the more complicated we see it is.” Yet another substance that can only be detected by a blood test is human growth hormone (HGH), a synthetic compound similar to steroids. It is used in training to achieve extra muscul arity. Still other drugs for which tests currently do not exist include human chorionic gonadotropin, gonadotropin-releasing hormone, and orotic acid. “Designer drugs,” mainly stimulants and amphetamine, whose chemical make-ups are altered just enough to avoid detection, are extremely difficult to detect.

Assuming reliable tests can be scientifically developed, there must also be a network of laboratories capable of accurately testing urine or blood. Currently there are twenty-three IOC accredited lab-

97. See Stephens, supra note 42, at 2B. Blood doping has pushed the limits of the usual distinction between ethically and philosophically acceptable and unacceptable means of enhancing athletic performance. The traditional definition of “unacceptable means” has centered on use of any substance foreign to the body with the sole intention of increasing athletic performance in an artificial manner. The revised definition now includes any physiological substance taken in an abnormal quantity or taken by an abnormal route of entry into the body. Zemper, supra note 7, at 136-37. Note that training at a high altitude, which also increases the red blood cell count, is a common and legal practice for competitors in endurance events.

98. Ferstle, supra note 2, at 260.
99. For example, controlling the use of synthetic rEPO is difficult because it is immunologically and biologically identical to naturally produced EPO, almost identical structurally, and the effects wear off in days. Sarah L. Gall, Deterring rEPO Use in Athletes, PHYSICIAN & SPORTS MED., Aug. 1991, at 17.
100. Radford, supra note 40 (quoting the medical chief of the IOC as stating that a reliable test may be years away).
101. See Zemper, supra note 7, at 137 (EPO “has the potential to provide the same effects in an athlete as blood doping, without the risks involved in transfusing blood.”). The IOC banned EPO in 1986, despite the inability to test for it. Goodbody, supra note 3.
102. Radford, supra note 40. It is estimated that 10,000 experimental tests are needed to determine the accuracy in detecting EPO, but only 1,500 have been conducted. Id.
103. Mike Towle, Rx for Victory, Doctors Still Haven’t Found a Foolproof Method to Catch the Cheaters Who Often Tarnish the Olympic Gold, SPORTING NEWS, July 27, 1992, at 47; Human growth hormone is used medically for children facing dwarfism. Fish, supra note 57, at A1. Many athletes may be deterred by its cost, approximately $1,200 for a month’s supply, whereas steroids cost about 1/10 that amount. Id.
105. Hersh, supra note 61.
106. Testing errors have occurred. See infra note 117 and accompanying text.
oratories in the world; the only two in North America are in Los Angeles and Montreal. Although these labs have set the standards for drug testing in sport, they have also been criticized. Drug expert and former member of the IOC medical commission, Arnold Beckett, recently wrote, "The IOC medical commission is failing to ensure that its accreditation of laboratories is in accord with international scientific standards of analytical validation and good laboratory practices or ethics." In 1989, the chairman of the IOC's medical commission announced that about twenty-five percent of the certified laboratories did not pass a routine proficiency test. The IOC and IAAF accredited laboratories have been criticized for creating their own method of "adjusting" negative results to produce a declared positive and for inventing their own banned class of drugs. Not surprisingly, the operation of IOC accredited labs in different countries may vary due to financial, technological, political, and other conditions.

An IAAF spokesman acknowledged that the testing infrastructure

107. Long, supra note 3, at E5. These laboratories only test urine samples. A laboratory must go through a pre-accreditation period for six to twelve months, during which it is asked to analyze ten control samples, under the observation of the sub-commission on doping and biochemistry of the IOC medical commission. Manfred Donike, Accreditation and Reaccreditation of Laboratories by the IOC Medical Commission, in First International Symposium on Current Issues of Drug Abuse Testing 227-28 (Jordi Segura & Rafael de la Torre eds., 1992). The Medical Commission then challenges each lab annually with up to ten samples, in addition to a proficiency testing program with four samples every four months. Id. If a false positive occurs, the accreditation is not granted. Id. In addition, letters of support must be received from the national governing sport authority. Id. at 232. The decision also takes into account continuity, volume of workload, financial support, administrative commitment of host institution, and research activities and accomplishments of senior staff. Id. For Olympic Games, the laboratory must demonstrate capacity to conduct 2000 samples per day. Id. at 228.


109. But see Longmore, infra note 117 (explaining how IOC experts can differ in their interpretations of the rules).

110. Beckett, supra note 64.


112. Beckett, supra note 64.


115. Ferstle, supra note 2, at 258.
had not kept pace with the worldwide proliferation of testing.\footnote{116}{Mike Rowbottom, *Athletics: Drugs Cast Shadow over British Athletics; Nation's Reputation Under Threat as Women Face Ban*, **Independent** (London), Aug. 26, 1994, at 48, available in LEXIS, Busfin Library, Indpnt File.} However, if the accredited laboratories do not adhere to identical testing procedures, the system will be challenged for lack of uniformity and the entire drug testing project will be undermined.\footnote{117}{A problem with accuracy was brought to light recently when, after a competition, a British motorcycle rider tested positive for too much caffeine. It was later determined that his sample was not only mistakenly coded, but also that the amount of caffeine was calculated incorrectly by one of the most prominent IOC drug technicians in the world. Andrew Longmore, *Mud Flies over Drug-Testing Fiasco*, **Times** (London), Dec. 23, 1993, available in LEXIS, News Library, Times file.}

Increasing both the frequency of testing and the substances tested for will require more laboratories. Indeed, if the vision of comprehensive drug testing is to be realized, reliable laboratories will be needed all over the world (the USOC's and IOC's plans to develop flying laboratories were scrapped because of the expense and other logistical problems).\footnote{118}{Every attempted suspension requires the observation of procedural niceties so complex that it is almost impossible not to infringe them, while the loss of earnings implied by a ban can be so immense that no top athlete will accept suspension without contesting it to the limits of the law.}

Moreover, out-of-competition testing requires transportation of urine samples to far away laboratories. There must be a reliable means of transporting the sample from one place to another.\footnote{119}{A problem with accuracy was brought to light recently when, after a competition, a British motorcycle rider tested positive for too much caffeine. It was later determined that his sample was not only mistakenly coded, but also that the amount of caffeine was calculated incorrectly by one of the most prominent IOC drug technicians in the world. Andrew Longmore, *Mud Flies over Drug-Testing Fiasco*, **Times** (London), Dec. 23, 1993, available in LEXIS, News Library, Times file.} Athletes who test positive routinely claim that their urine sample had been contaminated or switched. Ben Johnson made such a claim after testing positive at the 1988 Olympic Games.\footnote{120}{As one observer noted:}

> Every attempted suspension requires the observation of procedural niceties so complex that it is almost impossible not to infringe them, while the loss of earnings implied by a ban can be so immense that no top athlete will accept suspension without contesting it to the limits of the law.\footnote{121}{As one observer noted:}
Many suspensions have been overturned over minor procedural violations of the testing protocols.\(^\text{122}\)

**C. How Will the Expanding Drug Testing Project Be Financed?**

For the drug testing project to be successful, there will need to be a stable funding source for ongoing research, investigations, and comprehensive testing. It cost $1.9 million to establish the temporary IOC lab in Calgary for the 1988 Olympics.\(^\text{123}\) At the 1994 Winter Olympics, drug testing cost an estimated $2.5 million.\(^\text{124}\) From 1989 to 1992, the USOC spent $3,761,000 on drug testing.\(^\text{125}\) Testing for all banned substances costs $200 per test.\(^\text{126}\) As the drug testing project becomes increasingly complex, it will become more expensive.\(^\text{127}\) Although some old tests may become cheaper, research and development costs for new tests will be high.\(^\text{128}\)

Who will pay the bill? Must every nation pay for testing its own athletes or will some international body pay? The IOC has pledged financial assistance to countries which lack the resources to implement an out-of-competition testing system,\(^\text{129}\) but whether adequate aid will be forthcoming remains to be seen. In 1993, the IAAF spent a modest $500,000 of its $40 million dollar annual budget on random drug testing.\(^\text{130}\) In 1994, the expenditure increased to $2 million.\(^\text{131}\) The IAAF predicts that by 1995 its revenues will approximate $180 million.\(^\text{132}\) In Canada, the federal government has supported the Canadian Centre for Drug-Free Sport, an organization which carries out drug tests for fifty-two amateur sports. However, the funding has not been stable:

\[\text{\textsuperscript{122}}\text{Julie Cart, With All the Overturned Suspensions, Drug Testing Losing Credibility, L.A. TIMES, Apr. 14, 1992, at C8; DUBIN, supra note 6, at 162.}\]
\[\text{\textsuperscript{123}}\text{Long, supra note 3.}\]
\[\text{\textsuperscript{124}}\text{Winter Olympic Notebook, AGENCE FRANCE PRESSE, Feb. 6, 1994, available in LEXIS, News Library, Afp File.}\]
\[\text{\textsuperscript{125}}\text{Walker, supra note 37.}\]
\[\text{\textsuperscript{126}}\text{Burge, supra note 36, at 223.}\]
\[\text{\textsuperscript{127}}\text{Equipment is costly. For example, a gas chromatograph costs $30,000 and a mass spectrometer costs $200,000. VOY & DEETER, supra note 4, at 80; see also Zimmer & Jacobs, supra note 32, at 5 (estimating cost of machines between $350,000 and $500,000).}\]
\[\text{\textsuperscript{128}}\text{Thomas H. Murray, The Ethics of Drugs in Sport, in DRUGS \& PERFORMANCE IN SPORTS 19 (Richard H. Strauss ed., 1987).}\]
\[\text{\textsuperscript{129}}\text{Bert Roughton Jr., Officials Seek Accord on Drug-Testing Issue, ATLANTA J. \& CONSTR., June 21, 1993, at D2.}\]
\[\text{\textsuperscript{130}}\text{Testing 1-2-3, supra note 58; B.J. Del Conte, No-Shows, Steroids and Money Squabbles Eclipse Indoor Track Meet, UPI, Mar. 11, 1993, available in LEXIS, News Library, UPI File.}\]
\[\text{\textsuperscript{131}}\text{New YORK TIMES, supra note 54, at C2.}\]
\[\text{\textsuperscript{132}}\text{Nelson, supra note 9, at 923 n.204.}\]
in 1993 the government reduced its contribution by nine percent and in 1994 the budget was cut by an additional sixteen percent.\textsuperscript{133} The money to conduct an expanded drug testing project seems to exist within some national and international federations, but the overall expenditure for drug testing, as a percentage of the budget, remains small. This causes some critics to question the true level of commitment the organizations have to drug-free sport.

If a viable sports drug testing project ultimately requires the creation of an independent international regulatory body,\textsuperscript{134} there will be additional funding needs. Each national sports federation could be required to fund the international agency through proportional contributions based on the number of athletes competing in major tournaments or on the relative budgets of the national sports organizations. Any system of allocating costs, however, will undoubtedly generate dispute and controversy and raise the problem of collecting money from recalcitrant countries or IFs.\textsuperscript{135} If a country refused or failed to pay its prescribed share, other issues would arise, for example, whether its athletes should be disqualified from international competition.

D. Who Will Collect the Urine Samples?

A comprehensive out-of-competition drug testing program requires a cadre of inspectors to collect athletes' urine samples. The program probably could not rely on each country to test its own athletes because of obvious concerns about cheating. At the Olympics, urine samples have been collected by volunteers, some with little training and supervision.\textsuperscript{136} In the future, to avoid challenges, the job will probably have to be done by trained personnel skilled in the methods athletes use to avoid detection. It is imperative that such personnel be perceived as professional, unbiased, and incorruptible. The IAAF's current out-of-competition testing program provides for the appointment of "international sampling officers,"\textsuperscript{137} but does not set out the qualifications for such personnel or explain how they will

\textsuperscript{133} Steve Buffery, \textit{Drug Testing Hit by Cutbacks}, \textit{Fin. Post} (Toronto), Nov. 1, 1994, at 48.

\textsuperscript{134} See, e.g., Voy & Deeter, \textit{supra} note 4, at 172-73 (suggesting involving athletes and journalists on an international regulatory board).


\textsuperscript{136} Ferstle, \textit{supra} note 2, at 275.

\textsuperscript{137} IAAF \textit{Procedural Guidelines}, \textit{supra} note 41, at 12.
be selected, deployed, compensated, and provided for over the long term.

E. The Political Obstacles

The current system, which leaves much of the enforcement to national sports bodies, generates suspicions about cheating and incompetency. Consider the doubts that were raised with respect to the meteoric rise of Chinese female swimmers and female long distance runners. Although many of these athletes have subsequently tested positive for banned substances, until those athletes failed the tests, the legitimacy of their performances was questioned. Meanwhile, the international bodies had to acknowledge publicly that the athletes' performances were legitimate, despite much suspicion.

One can easily see the "prisoner's dilemma": the pressure to not test one's own athletes is great if there is suspicion that other countries are not testing their athletes. Voy and Deeter conclude that "[a]llowing the national governing bodies, international federations, and national Olympic committees... to govern the testing process... is terribly ineffective. In a sense, it is like having the fox guard the hen house." Canada has proposed that the IOC require each nation to have an independent drug testing body separate from the National Federations and National Organizing Committees. However, the creation of independent national bodies may not overcome credibility concerns as long as the members of the bodies are drawn from their own nations' citizenries. One journalist concluded, "Many countries will only pay lip service to random testing..."

It will be difficult to create a system agreeable to all nations. Some nations will undoubtedly object to international drug monitors hunting down their elite athletes. Others will object to the sanctions.
tions meted out by an international body. For example, when the IAAF suspended world champion runner John Ngugi for four years for refusing to submit to an out-of-competition drug test, the Kenyan federation “revoked” the four-year ban.\textsuperscript{143}

Under an international system, officials would have to allow international testing agents to enter the country upon short notice and cooperate in locating and contacting athletes.\textsuperscript{144} Of course, athletes could be banned from competition if their countries’ cooperation was not forthcoming,\textsuperscript{145} but would it be fair to punish athletes for the recalcitrance of their national sports associations? Moreover, charging and disciplining a country for “lack of cooperation” might turn out to be difficult. For example, the USOC fears that the Chinese may boycott the 1996 Olympics because all Chinese swimmers are prohibited from participating in an important meet in August 1995 due to seven positive test results in 1994 and 1995.\textsuperscript{146}

\section*{F. Informational Obstacles}

If athletes are not fully informed about which substances are banned, deterrence will be ineffective, and athletes may be punished for taking banned substances inadvertently.\textsuperscript{147} Athletes have to be kept informed about a constantly growing list of banned substances (already numbering 3,000 substances), and the common pharmaceutical items (and possibly foods and beverages) in which those substances are found.\textsuperscript{148} The complexity of tracking all the banned substances requires athletes and coaches to be amateur pharmacologists. Four time Tour de France winner Miguel Indurian expressed frustration in 1994 because organizations governing sport had not uni-

\begin{footnotes}
\item[143.] Fanfare—Olympics, WASH. POST, May 25, 1993, at E2.
\item[144.] Jere Longman, U.S.O.C. Is Making a Move to Let China Know It Is Still Welcome at the ’96 Games, N.Y. TIMES, Apr. 10, 1995, at C4 (noting that Chinese officials were reluctant to allow Americans to enter China for short-notice testing of Chinese athletes).
\item[145.] For example, the IOC has threatened countries that have boycotted the Olympic Games with exclusion from future Games, but has not carried through with the punishment. WALLACE IRWIN, JR., THE POLITICS OF INTERNATIONAL SPORT—GAMES OF POWER 51 (1988).
\item[146.] Longman, supra note 144, at C4.
\item[147.] One study concluded, “[I]t is inconceivable that effective deterrence can be accomplished when a substantial portion of the prospective subjects have an inaccurate perception of the testing to which they will be held accountable.” Richard R. Albrecht et al., NCAA Institutionally Based Drug Testing: Do Our Athletes Know the Rules of This Game?, 24 MED. & SCI. IN SPORTS AND EXERCISE 242, 246 (1992).
\item[148.] See supra text accompanying notes 43-52.
\end{footnotes}
fied their banned drug lists "so we know what products are forbidden."¹⁴⁹

To assist American athletes, the USOC has established a toll-free phone number which provides information on banned substances and the food, beverage, and pharmaceutical products in which they are found. Athletes are told to ask questions before ingesting any food, drink, or medication which may contain banned substances. Even so, with such an extensive list of banned substances, it is not surprising that athletes sometimes make mistakes.¹⁵⁰ In March 1995, a Canadian rowing team was stripped of its gold medal in the Pan American Games because one of the team members had taken over-the-counter Benadryl-D, a nasal decongestant. Benadryl-D contains pseudoephedrine, a banned substance, though Benadryl does not.¹⁵¹

Very few NOCs have the money to pay for or the expertise to operate a hotline like the USOC's. Indeed, in some countries access to telephones is likely to pose a problem for some elite athletes. Moreover, Olympic athletes come from 180 countries and speak dozens of languages. Banned substances and pharmaceutical products have different names in different languages and in different countries.

G. The Need for Supra-National Rules and Institutions

For the drug testing project to be successful, there must be international uniformity in rules, policies, enforcement, and adjudication.¹⁵² There must be an organization to classify drugs, set rules, and monitor all national and international competitions and out-of-compe-

¹⁴⁹. Roscoe Nance, Positive Tests Destroyed at '84 Olympic Games, USA TODAY, Aug. 30, 1994, at 7C.

¹⁵⁰. For example, in 1992 elite distance runner Gordon Bakoulis was prescribed probenecid along with antibiotics to combat Lyme disease. She did not think of calling the USOC drug hotline to check whether the medications contained banned substances. Three months after being cured of the disease and finishing her last cycle of probenecid, she placed sixth in the NYC Marathon, and was chosen randomly for drug testing. She tested positive for a masking agent, probenecid, and was suspended from competition for four years. After failing to be reinstated through the appeal system established by USA Track & Field, she was about to bring the matter before the American Arbitration Association, as provided for in the USOC Constitution. Two days before the hearing, the original panel amended its decision and recommended a reinstatement, which was subsequently granted by the Executive Committee of USA Track & Field. Bakoulis, supra note 74.


¹⁵². Prince Alexander de Merode, a member of the IOC Medical Commission, stated, "It is totally unacceptable that in one country you can take this drug and in another country you cannot . . . . We need common legislation." Quoted in Ferstle, supra note 2, at 258-59.
The Drug Testing Project in International Sports

Currently, the international federations have inconsistent standards and enforcement procedures, and IOC supervision is lax. The IOC may be the only organization with the power and prestige to create uniformity. Nevertheless, the IOC has failed to create such a body. As the drug testing project becomes ever more ambitious, an international law of sports becomes a necessity.

The IOC and other international sporting bodies are concerned about the ability of athletes to challenge drug testing procedures, results, and sanctions in national courts. The intervention of national courts could wreak havoc on the whole idea of an international regime prohibiting performance enhancing drugs. If a suspended athlete can obtain a court order reversing an IOC decision or injunction allowing her to continue competing while more procedures are exhausted, the whole enforcement system will collapse. Even if the athlete is ultimately unsuccessful, the delay may have in effect negated the sanction. Moreover, the costs to the sports governing body of defending such suits may be prohibitive and therefore a major impediment to realizing the goals of the drug testing project.

In an attempt to avoid the expense of litigation, sports organizations, like the IAAF, are using administrative tribunals and arbitration panels to hear appeals and resolve disputes. For example, the

---

153. Consider a recent dispute between two leading experts about whether Clenbuterol is a stimulant or an anabolic steroid. The classification determines the length of suspension in track and field: a stimulant carries a one year ban, but an anabolic steroid carries a four year ban. See Krabbe's Last Chance in Drugs Battle, supra note 51; Rowbottom, supra note 111.


155. Nafziger, supra note 5, at 503-504.


157. Roughton, supra note 129.

158. International sports law is defined as "a more or less distinctive body of rules, principles and procedures that govern the political and social consequences of transnational sports activity." Nafziger, supra note 5, at 489 n.1.

159. See Nelson, supra note 9, at 926 ("[U]ntil a system is created that is respected by athletes, courts, and nations, organizations like the IOC are at risk, not only of losing respect, but of losing control.").

160. Litigation does not just come from athletes. In 1992, the German swimming federation threatened suit against the international federation for imposing an 18-month ban on a German swimmer accused of doping. Germans Threaten Suit, N.Y. TIMES, Dec. 29, 1992.

161. Nafziger, supra note 5, at 506. For discussion on the specifics of international arbitration, see W. Michael Reisman, Systems of Control in International Adjudication and Arbitration (1992).
IOC created the Court of Arbitration for Sport (CAS) in 1983.\textsuperscript{162} The CAS is made up of sixty members, each serving a four-year term.\textsuperscript{163} It has jurisdiction to resolve issues regarding suspension from competition due to a positive drug test. It also can give advisory opinions.\textsuperscript{164} However, the impact of the CAS has been limited because parties must agree in writing to submit to its authority.\textsuperscript{165} As a result, the CAS has handled only a small number of cases, mostly from Europe.\textsuperscript{166}

The IOC and IAAF have already expressed concern about the possibility of competitors at the 1996 Summer Olympics in Atlanta going to American courts to challenge drug testing suspensions.\textsuperscript{167} To prevent such suits, the IOC has created an independent Supreme Council of International Sport Arbitration, headed by twenty international jurists who will designate arbitrators to hear individual cases.\textsuperscript{168} The athletes, the federations, the NOCs, and the IOC will each select four jurists, who will then select four others.\textsuperscript{169} In order to compete at the Olympic Games, athletes will be required to agree to resolve any disputes through arbitration, except that they may go to court in cases of "gross violation of due process, fundamental rights or public order."\textsuperscript{170}

There needs to be a way to discourage national courts and legislatures from interfering with the drug testing project.\textsuperscript{171} Although national courts have generally deferred to the law of international sports
federations, international sporting organizations are particularly concerned about litigation in American courts.

In a highly publicized case, Butch Reynolds, the world record holder in the 400 meters, sued the IAAF in a United States federal district court after a positive drug test in Monte Carlo resulted in a two year suspension. The IAAF refused to appear in court, claiming that national courts have no jurisdiction over the IAAF. The vice president of the IAAF was quoted as saying, "civil courts create a lot of problems for our anti-doping work, but we said we don't care in the least what they say. We have our rules, and they are supreme..." The district court held that it had jurisdiction and ruled that the IAAF failed to follow its own guidelines. After finding that the IAAF "acted with ill will and a spirit of revenge towards Mr. Reynolds," it awarded $27 million to Reynolds. The IAAF refused to pay, and moved its headquarters from London to Monte Carlo to prevent collection of damages. In May 1994, a federal cir-

172. Nafziger, supra note 5, at 492. "Olympic rules and decisions normally constitute either an autonomous regime to which governments defer or international custom practiced by them." Id. at 493. See Barnes v. International Amateur Athletic Fed'n, 862 F. Supp. 1537 (S.D. W. Va. 1993) (federal judge ruled that banned shot putter Randy Barnes was not entitled to damages because Barnes had not exhausted his administrative remedies); Nelson, supra note 9, at 898.

173. For a more detailed explanation of events, see Hatch, supra note 167.


It is simply an unacceptable position that the courts of this country cannot protect the individual rights of United States citizens where those rights are threatened by an association which has significant control over both athletes and athletic events in this country, which acts through an agent organization in this country, and which gains significant revenue from its contracts with United States companies.

Id. at 1452; see also Filip Bondy, A Monetary Ruling in Reynolds's Favor, N.Y. TIMES, Dec. 4, 1992, at B13.

175. Reynolds, 841 F. Supp. at 1452. The president of the IAAF, in a letter to the president of the American national track and field organization, acknowledged:

I realize that you have always honored our rules and statutes and that sometimes, as with the Reynolds case, you find yourself in a dilemma when the American guarantee of individual rights overlaps with your duty, as an IAAF member, to follow our rules....

Id.


178. Filip Bondy, Settlement on Reynolds Seems Near, N.Y. TIMES, Mar. 18, 1993, at B17; see also Reynolds Wins Again in Court, N.Y. TIMES, Aug. 28, 1993, §1, at 30 (noting that a federal magistrate awarded Reynolds almost $700,000 from Mobil Corporation, the IAAF's primary United States sponsor); I.A.A.F. Calls Reynolds Ruling Worthless, N.Y.
cuit court agreed with the IAAF and held that the district court had no personal jurisdiction over the IAAF.\footnote{Reynolds v. International Amateur Athletic Fed'n, 23 F.3d 1110, 1114 (6th Cir.), cert. denied, 115 S. Ct. 423 (1994).}

Every nation has its own view of due process and of athletes' substantive rights; inevitably, there will be conflict between one or more nation's laws and IAAF and IOC rules.\footnote{Hatch, supra note 167, at text accompanying note 138; Comment- Sympathy for the IAAF, supra note 121; see also Athletics—Ngugi to Fight IAAF Doping Ban, supra note 142.} Ultimately, an international Performance Enhancing Drug Elimination Treaty signed by all nations may be necessary to keep drug testing cases out of national courts. Such an agreement will need to establish a single dispute resolution mechanism. Optimally, the appeal of sanctions would be to a body independent of the organization imposing sanctions.\footnote{Hatch, supra note 167, at text accompanying notes 18 and 174.}

H. The Need for a New International Agreement on Sanctions

The whole regulatory effort will be for naught if an international agreement on sanctions for athletes who test positive for performance enhancing substances is not reached. If, for example, a positive drug test was punished by a warning in Sweden but by a lifetime ban in Canada, the whole sports drug testing project would be branded unfair. One member of the IOC, Prince Albert of Monaco, has urged a life-time ban from the Olympics for use of performance enhancing drugs.\footnote{Drug-Assisted Stardom, N.Y. Times, Dec. 19, 1994, at A18.} Britain has been pushing for an international agreement on a four-year ban for the first positive test, but Germany prefers a one-year ban.\footnote{Highfield & MaCleod, supra note 141.}

There are also wide disparities in the severity of sanctions between sports.\footnote{Fanfare—Olympics, supra note 143, at G2.} For example, a Chinese swimmer received a two-year suspension for steroid use while a Russian hurdler received a four-year suspension and a German sprinter's suspension for steroid use was reduced to one-year.\footnote{Joe Drape, Olympic Watch: IOC Urged to Step up Drug Fight, Reforms Lagging, Critics Contend, ATLANTA J. & CONST., Apr. 4, 1993, at E14.} In an effort to achieve uniformity, the IOC and the Council of the Association of Summer Olympic International Federations asked all international sports federations that par-
ticipate in the summer Olympics to impose a minimum two-year ban on steroid users.186

There also needs to be uniformity in enforcement. National and international sporting organizations have not had a very impressive record in implementing sanctions.187 For example, the IAAF has been accused of covering up positive tests at the 1983 World Track and Field Championships in Helsinki,188 and the USOC apparently approved unofficial testing of some athletes in advance of the 1984 Summer Olympics,189 thereby giving them warning of positive tests and the opportunity to withdraw from competition. Some critics charged that at the 1984 United States Olympic trials, some athletes who tested positive were not disqualified.190 Some positive tests were destroyed at the 1984 summer Olympic Games.191

International sanctions have been undermined by some national sporting organizations. After being banned from international competition by an international federation, some athletes have persuaded a national organizing committee to allow them to compete in national events.192 The banned athlete is thereby able to continue improving her performance in national competitions, while waiting out the international suspension. If an athlete tests positive at an IAAF sponsored event, an IAAF recommended suspension can be rejected by the athlete's national federation; however, the IAAF can reimpose the sanction.193 Of course, all these decisions take time. This unwieldy situation led the IOC and the Association of Summer Olympic Inter-

187. Fish, supra note 40 (quoting Dr. Craig Kammerer, associate director of the drug testing lab at the 1984 Los Angeles Olympics, as saying, “I don't know if [sports officials] feel they'll lose commercial accounts, or give the Olympics a bad name.”).
188. Voy & Deeter, supra note 4, at 86.
189. Id. at 89; Dubin supra note 6, at 340.
190. Voy & Deeter, supra note 4, at 90; Fish, supra note 40 (quoting Dr. Craig Kammerer, associate director of drug testing at the 1984 summer Olympics, as saying that the IOC never made public “five or six” positive test results).
191. Nance, supra note 149, at 7C.
national Federations to recommend that a sanction imposed by one organization should be given reciprocity by all other organizations.\textsuperscript{194}

IV. IS DRUG TESTING WORTH THE EFFORT?

Sports organizations and the public should recognize the inherent limitations to achieving drug-free sport competition through an expanded out-of-competition drug testing program.\textsuperscript{195} There is an assumption in the present project that sport must and can be made free of performance enhancing drugs through comprehensive drug testing coupled with long suspensions from competition for those who test positive. There is reason to doubt this assumption given the incredibly strong motivation athletes have to get to the top. An athlete who is fiftieth or twenty-fifth in the world may feel it is worth the risk of suspension to seize an advantage that might vault him into the top ten or even to a gold medal and, with it, to fame and fortune.

If the sports drug testing project is to have any chance of success, it will have to achieve a level of international cooperation and institution-building far beyond that which has so far been accomplished.\textsuperscript{196} But can the world of sport create the kinds of institutions that are necessary to establish and maintain the kind of drug testing project that proponents of zero-tolerance envision? At a minimum there would need to be year-round out-of-competition testing, continual research and development on drugs and testing, reliable and ample funding, effective uniform enforcement, and enforceable and uniform sanctions.

The obstacles discussed in this paper will be difficult to overcome because of expense, logistics, legal impediments, and other complications. Furthermore, even if the entire regulatory apparatus could be put into place, it would still not guarantee drug-free sport. As we have seen, there are a number of ways to enhance performance which, although prohibited, cannot be detected by current testing technology.

Despite the rules and the threat of suspension, the motivation to win will lead some athletes to continue to seek advantage by whatever

\textsuperscript{194} Fanfare—Olympic Sports Set to Unify Doping Rules, Penalties, supra note 168.
\textsuperscript{195} See Connolly, supra note 55 ("In [track and field], extensive and costly drug testing for more than 15 years has failed to stop motivated drug users. Drug testing has been a deterrent to some athletes, certainly, but it has mainly created enormous legal and public relations problems for track and field.").
\textsuperscript{196} "As a mechanism of social control, the emerging international sports law provides insights into opportunities for, as well as limitations of, international cooperation and collective action." Nafziger, supra note 5, at 489.
means possible. In a survey of 198 athletes, asking whether they would take a drug that would guarantee them a gold medal, knowing they would die within five years, fifty-two percent said they would. The motivation to win is so strong that there will always be individuals who will attempt to beat the drug testing system. Dr. Robert Voy concluded, "If we can't do it right, we ought to drop back and figure a better way."

Recognizing the limitations of regulation does not mean that the drug testing project should be abandoned. Perhaps limited success in reducing use of performance enhancing substances is worth the cost, even if some athletes continue to get an advantage by using banned

---

197. Bob Goldman, Death in the Locker Room 32 (1984). See Wertz, supra note 6, at 91:

Americans are driven by the desire to be the best. And "the best" is measured by how much money one can make . . . . When this is coupled with such intensity of competition, we have potential situations for corruption because value is placed squarely on the success of winning. And that means winning at all costs.

This emphasis on winning has grown as both fame and money for successful athletes have increased. See Frank Litsky, Discus Star Banned, N.Y. Times, Aug. 17, 1993, at B13 (world record holder in the 1,500 meters, Nouredine Morcelli, had pledged not to run in the World Championships unless he received appearance or prize money, but then relented). For example, Olympic speed skating champion Dan Jansen was estimated to reap approximately $2 million in endorsements after his victory in the 1994 Olympics. Robert M. Thomas Jr., Jansen at Starting Line in Corporate Arena, N.Y. Times, Mar. 2, 1994, at B16. For a discussion of bonuses given by the USOC to top finishers, see Filip Bondy, Bonuses Planned for U.S. Medalists, N.Y. Times, May 12, 1993, at B13. Track superstars Carl Lewis and Dan O'Brien are routinely paid $30,000 just for showing up at a meet. Joe Drape, Sprinting for the Fast Money of Track Critics: Nebiolo Mismanaging IAAF, Living High at the Expense of Athletes, ATLANTA J. & CONST., Mar. 14, 1993, at E14. Carl Lewis and Linford Christie were each paid $150,000 for agreeing to participate in a 1993 meet.


198. D.R. Mottram, Future Trends for Drugs in Sport, in Drugs in Sport 159 (D.R. Mottram ed., 1988) ("It must be accepted that a certain percentage of athletes will always be tempted by the promise of drug-induced enhancement of athletic performance."); Goodbody, supra note 3 (quoting a member of the IOC as saying, "There will always be some who think they can break the rules and get away with it."); see also Maryann Hudson, Steroid Research Coming up Short, L.A. Times, June 11, 1992, at C1 (quoting Dr. Mouro DiPasquale, an expert in drug testing, as saying that it is very simple to beat drug tests).

199. Hersh, supra note 61, at C1.
drugs to improve their performance. However, as this Article has suggested, the sporting world needs to rethink whether the drug testing project should continue to expand, with the associated escalation of cost and complexity, even while its legitimacy is undermined by athletes who continue to surreptitiously ingest and inject banned substances to improve performance and by athletes who continue to challenge test results before courts and administrative bodies.

Only a short generation ago there seemed to be a consensus that "professional" athletes had an unfair (unnatural?) advantage over amateurs and consequently ought not to be allowed to compete. Now the consensus seems otherwise. Perfect competition is not an option. It might just be a concession to realism to forego the temptation of trying to enforce an omnibus anti-drug policy that requires monitoring thousands of athletes around the clock all over the world.200

V. CONCLUSION

The use of performance enhancing drugs has been called "the greatest problem facing sports today."201 Some athletes and commentators argue that drug-tainted records need to be erased so that drug-free athletes will not have to strive unrealistically to achieve these chemically-enhanced levels of performance.202 Indeed, the German Track and Field Federation has nullified all record performances in all events and the International Weightlifting Federation changed its weight classes to start anew.203

Drug testing has become central to the legitimacy of sport. Testing has become such a routine part of international competition that it is hard to imagine sports without it. Many fans and athletes support comprehensive testing as the only way to maintain the legitimacy of sports competition.204

200. Norman Fox, A Sport Running Scared; Scandalized by Drugs, and Riven by Suspicion and Fear, Can British Athletics Survive These Latest Blows to Its Public Image?, INDEPENDENT (London), Aug. 28, 1994, at 12, available in LEXIS, Busfin Library, Indpnt File ("[W]ill the avowed determination to clean up athletics result in the eventual destruction of the sport?").

201. Yesalis, supra note 3, at xvi; see also KILLANNIN, supra note 1, at 155 ("The most obnoxious aspect of sport, and specifically that of international competition, is the abuse of drugs to aid performance.").


203. Id.

204. See KILLANNIN, supra note 1, at 155 ("Unfair practices undermine the whole concept of competition.").
What will the drug testing system look like in the 21st century? As athletes continue to find more performance enhancing substances or masking agents, the list of banned substances will grow. If present trends continue, new tests and testing protocols will be developed. Competitive athletes will be monitored year round and subjected to more complicated and invasive procedures. Despite greater investments in drug testing, cheating will continue as competitors come up with new drugs, masking agents, and strategies for beating the system. Even the president of the IOC Medical Commission acknowledges that “[c]heating will go on to the end of the world.”

205. Blood testing was conducted for the first time at the 1994 winter Olympic Games. Radford, supra note 40.

206. DONOHOE & JOHNSON, supra note 84, at 144.