Written Statement

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Hearing on
Major League Baseball and the Use of performance-Enhancing Drugs

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Dear Mr. Chairman and Members of the Committee:

I am honored to appear here today and I appreciate the opportunity to testify. My name is Dr. Gary I. Wadler, and I am an Associate Professor of Clinical Medicine at New York University School of Medicine, a Fellow and former Trustee of the largest sports medicine and exercise science organization in the world, the American College of Sports Medicine, where I had chaired its Health and Science Policy Committee. In addition, I am a member of the Board of Stewards and former Vice-President of Women's Sports Foundation. I have served as a member of the Technical Advisory Committee of the CASA National Commission on Sports and Substance Abuse. At the local level, I serve as Chairman and President of the Nassau County Sports Commission.

I am the lead author of the internationally acclaimed text, *Drugs and the Athlete,* and the recipient of the 1993 International Olympic Committee's President's Prize for my work in the field of doping.

I have served as an expert on anabolic steroids to the United States Department of Justice, and since 1999, I have advised the White House Office of National Drug Control Policy on matters of doping.

I was intimately involved in the formation of the World Anti-Doping Agency, served on a number of its committees, including its Health, Medicine and Research Committee, its Therapeutic Use Exemption Committee, and its Athlete's Passport Committee. Currently, I represent the United States as a member of the WADA's Prohibited List and Methods Committee where, on occasion, I have served as Acting Chair.

I have no vested interest in testifying today other than to share my views with the Committee about the complex issue of Major League Baseball and the use of performance-enhancing drugs.

Since appearing before the United States Senate Committee on Commerce, Science and transportation in 1999 to discuss the use of performance-enhancing drugs in Olympic competition, there has been a sea change on many fronts.

At the federal level, we have witnessed great strides both nationally and internationally in the fight against doping.

The President highlighted the issues in his 2004 State of the Union, the Department of Justice has pursued the BALCO investigation, and the FDA removed ephedra and androstenedione form the store shelf.

Just last month, the recently enacted Anabolic Steroid Control Act of 2004 became effective adding numerous so-called steroid precursors to the list of anabolic steroids controlled under the federal Controlled Substances Act. This Act increased the government's commitment to education regarding the dangers of anabolic strides while requiring a review of the federal sentencing guidelines for criminal offenses involving anabolic steroids.

The United States Government has also demonstrated its commitment through increased funding of several anti-doping initiatives. For example, just last year, $7.5 million was appropriated to support the United States Anti-Doping Agency's (USADA) testing research and education programs. It was USADA that played a critical role in the BALCO revelations and in unmasking the numerous issues associated with the designer steroid, THG.

Internationally, the United States, with the White House Office on National Drug Control Policy at the helm, has played a leadership role in both the formation of WADA and in its ongoing governance and funding.

Specifically, in 2004, the United States Government contributed a historic and unprecedented $1.45 million towards WADA's $23 million budget (60% to research, 15% to out-of-competition testing, 15% to education, 10% for contingency) and that unprecedented level of commitment continues as reflected in the President's fiscal year 2006 budget.

WADA was created in November 1999 to support and promote fundamental values in sport. WADA was set up as a foundation under the initiative of the IOC with the support and participation of intergovernmental organizations, governments, public authorities and other public and private bodies fighting against doping in sport. The agency has equal representation from the Olympic Movement and from public authorities.

The United States is one of only five nations serving on WADA's Executive Committee. It chaired WADA's Ethics and Education Committee, and most recently, the United States Government has assumed a strong leadership position during the drafting of the anti-doping convention under the auspices of UNESCO.

With this as a backdrop, one must ask the question where have we gone astray with Major League Baseball and why should we care?

These questions can be addressed from many perspectives.

Perhaps the seminal moment in surfacing the current issue of performance-enhancing drug use baseball was in 1998 with the revelation that Mark McGwire had used androstenedione during his record-breaking 70 home run season. At the time, McGwire's use did not violate the laws of the land, nor the laws of baseball – both were to change.

The 2002 assertions of Jose Conseco and the late Ken Caminiti that steroid abuse was rampant in organized baseball were dismissed by many in baseball as being hyperbolic. However, last week Mr. Selig acknowledged that in 2001, that in fact, 11 percent of Minor League players had tested positive, and baseball's own 2003 "Survey Testing" had revealed that even with a very porous testing program, as many as 5 to 7 percent of Major League players had tested positive – the equivalent of two major league rosters.

Two weeks ago, we learned that in 2004, though employing a porous testing program, 1% to 2% tested positive, which still translates to an unacceptable numbers of users - between 12 and 24 league wide, the equivalent of a team to a team roster. The incidence would likely have been higher if the testing had been performed, as it should have been - year round, in and out of competition, random, no notice basis.

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To put these figures in perspective, compare Major League Baseball's statistics with those of WADA, where ½ percent of the 150,000 tests rigorously administered worldwide in 2003 were positive for steroids.

One can only conclude that the prior assertions of rampant steroid abuse in baseball were likely not hyperbolic.

Why should we care?

We should care for many reasons, but perhaps most notable, is that baseball, our national pastime, for better or for worse is a role model sport and likely contributes to the alarming abuse of anabolic steroids by teenagers. Just reflect on the enormous increase in sales of androstenedione (andro), the year after Mark McGwire broke Roger Maris' long-standing home run record.

The most recent data from the annual National Institute of Drug Abuse's Monitoring the Future survey reveals that in 2004, 3.4% of 12th graders have used these drugs at some time in their lifetime and as many as 1.9% of 8th graders have used them – very disturbing statistics.

And even more alarming is the perception amongst high school students that they are harmful has dropped significantly from 71% in 1992 to 56% in 2004.

And let me assure you from a public health perspective the abuse of these drugs is harmful both physically and behaviorally. Their abuse can lead to an array of physical problems, even with therapeutically prescribed doses, some predictable, some not, some permanent and some not.

Some adverse effects are visible to the naked eye, while others are not. If anabolic steroids are injected, the transmission of HIV and hepatitis B through shared needles and vials use is a very real concern.

Additionally, unlike almost all other drugs, the adverse effects of steroid based hormones share a unique characteristic -- their dangers may not be manifest for months, years and even decades.

With regard to physical side effects in males, their use may result in feminization with symptoms such as breast development, high-pitched voice, testicular atrophy, and impotency. This is because anabolic steroids may be converted in the body to estrogens in a process known as aromatization. The abuse of these drugs by women may result in their masculinization.

Both sexes can experience the following effects, which range from the merely unsightly to the life endangering. They include severe acne, bloating and rapid weight gain, clotting disorders, liver damage, premature heart disease and stroke, elevated total cholesterol and LDL levels with depressed HDL levels and increased tendinous injuries.

In adolescents, anabolic steroids can result in the premature closure of the epiphyses (growth centers in bone), such that the adolescent will never reach their genetically determined height.

The abuse of anabolic steroids can cause severe mood swings with marked irritability, depression, and with feelings of invincibility. Antisocial behaviors may be manifest by bouts of outright aggression commonly referred to as "roid rage".

Regular use of anabolic steroids can result in a dependency syndrome, which can result in the development of a profound depression that can lead to suicide.

But baseball's problem is not limited to steroids.

One can only wonder why baseball's new drug policy does not explicitly ban amphetamines.

It was amphetamine abuse that gave rise to both the controlled substances act of 1970, and to the development of the Olympic banned substances list in 1968, following the first recorded fatalities from performance-enhancing drugs, namely, amphetamines.

Amphetamines, which are stimulants, have an array of adverse effects associated with their use and abuse.

Acute side effects include: increased heart rate, increased blood pressure, reduced appetite and weight loss, insomnia, headaches, convulsions, hallucinations and paranoia, and death may also occur due to cerebral hemorrhages, heart attacks, heart rhythm abnormalities and heatstroke. Chronic side effects include: uncontrollable and abnormal movements of the face and jaw muscles called dyskinesias, compulsive and repetitive behaviors, paranoid delusions, systemic vascular disorders and nerve damage.

While ephedra is now banned in baseball subsequent to the heatstroke death of Steven Bechler and its being banned by the FDA, one should not lose sight of the fact that ephedra is closely related to the stimulant, amphetamine.

Why ephedra is banned by MLB and amphetamine is not remains an enigma.

The position that the player's association has taken with respect to amphetamines certainly leads one to suspect that they too are endemic in baseball.

Finally, a few words about MLB's new drug testing policy.

In my judgment, the policy as best we know it, can best be described as one of incrementalism - one designed to silence its critics, but one not designed to seriously rid professional baseball of the abuse of all performance-enhancing drugs.

And to be sure the devil is in the details. For example, while human growth hormone is on baseball's banned list, baseball will not conduct blood testing which is the only way it can currently be detected.

Doping is an exquisitely complex subject involving the interplay of numerous disciplines – chemistry, physiology, pharmacology, laboratory science, therapeutics and therapeutic exemptions, results management including sanctions, law, and least but not least, athlete's rights.

The interplay of these disciplines, as detailed in the International Standards of the World Anti-Doping Agency, has been approved by sporting bodies and governments worldwide. These Standards provide the blueprints and guideposts that are essential to an effective, transparent, and accountable anti-doping program.

In my opinion, the complexity of anti-doping far exceeds the capacity of baseball to design, implement and monitor an effective, transparent and accountable program.

It is beyond the scope of two attorneys and two physicians, one each from MLB and from the MLB Player's Association as called for in the 2003 agreement between the two entities.

It is noteworthy that the gold standard for anti-doping already exists.

It is embodied in the World Anti-Doping Code and its International Standards and Major League Baseball should embrace them.

Major League Baseball should heed the experience of the Olympic Movement, which recognized that its credibility, its very essence, was cracking under the weight of doping and so it passed the anti-doping baton to WADA and to national anti-doping agencies, such as USADA.

I am pleased to note that baseball has taken one significant step in that direction by contracting out its anti-doping laboratory services to a WADA accredited laboratory.

At a minimum, and now I am being very specific, as a next step, Major League Baseball should adopt the WADA List of Prohibited Substance and Methods in its entirety, as well as its existing testing protocols.

The List of Prohibited Substances and Methods is a continuously evolving product of countless man-hours experts, scientists and physicians from around the world. It is endorsed by sporting bodies, world wide, as well as by the governments of the world, including the United States.

While the potential of a two-year sanction for steroid abuse, as called for in the World Anti-Doping Code, may make baseball hesitant to embrace the Code, Major League Baseball should be aware that the Code calls for sanctions to be reduced in "exceptional circumstances", and provides for the possible reduction or elimination of the period of ineligibility in the unique circumstances where the athlete can establish that he had no fault or negligence in connection with the violation.

By adopting the World Anti-Doping Code, Major League Baseball would not be alone in so doing as a high profile professional sport. For example, currently men's professional tennis (ATP), soccer (FIFA), and professional cycling (UCI) are signatories to the Code.

Furthermore, United States Anti-Doping Agency, USADA, is in the best position to implement the best practices of doping control in Major League Baseball in conformity with the requirements set forth in the World Anti-Doping Code.

Finally, only when baseball demonstrates its unabashed commitment to drug free sport will it fully regain the confidence of its fans and once again deservedly become America's favorite pastime.

Websites: www.wada-ama.org (World Anti-Doping Agency) (WADA)
www.wada-ama.org/rtecontent/document/list_book_2005_en.pdf
(The 2005 Prohibited List)
www.usantidoping.org (United States Anti-Doping Agency) (USADA)