

Oregon Health Sciences University, Portland, OR Report of research on student drug-testing programs

1. 1999: Acceptability and potential deterrent effects of drug testing.

Results of the survey were presented at an American College of Sports Medicine (ACSM) 1999 meeting in Seattle. Research conducted by L. Goldberg, MD, FACSM; D. Elliot, MD, FACSM, E. Moe; K. Kuchl; G. Clarke. The full study report was published in 'Medicine and Science in Sports and Exercise', 1999:31(5)S123 and was supported by the National Institutes of Health, Drug Abuse.(NIH & NIDA)

Abstract:

Data from numerous studies have shown that high school athletes initiate hazardous drug use behaviors at rates similar to non-athletic peers, with the added risk of anabolic steroids and other ergogenic drugs. Some investigators have found higher use of alcohol and other high risk behaviors among those engaged in aggressive contact sports. Currently, schools from many states have initiated drug testing adolescent athletes by urinalysis. This drug surveillance "deterrent" has been upheld by the U.S. Supreme Court in 1995 and 1998. However, the acceptability and future drug use by adolescents in a drug surveillance program is unknown, as its effects have never been studied.

To assess the use of alcohol and other drugs in athletes, we surveyed male (n=1506) high school football players and adolescent females (n=2085). Results included lifetime use of alcohol (76.2% male, 65.3% female), marijuana (29.4% male, 14.8% female) and amphetamines (8.4% male, 7.8% female). We also surveyed by confidential questionnaire 1299 students from 28 high schools to determine potential deterrent effects and acceptability of drug testing. Of those surveyed, only a small minority (<9%) said they would use drugs and just 12% claimed they would continue to use alcohol if random drug testing were school policy.

Importantly, drug testing received broad support. Although drug surveillance is being used, there are no empirical trials to suggest efficacy. This preliminary data suggests high acceptability and potential benefit by such a program. Drug testing should be assessed as a potential deterrent to drug use among adolescent athletes.

2. 1999-2000: Pilot study of two public high schools comparing a school with a student random drug-testing program to a school without a student random drug-testing program.

Structure of study: Student athletes at Wahtonka high school were subject to random drug testing, while student athletes at Warrenton high school were not subject to random drug testing; approximately 276 student athletes participated (drug tested=135, not drug tested=141). [Note: These two schools continue to be studied as a part of the current SATURN Study summarized below.]

Preliminary findings reported:

- Wahtonka reported a drug use rate one-quarter that of Warrenton;
- 5.3% of Wahtonka students said they were using illegal drugs as compared to 19.4% of Warrenton students; and
- Wahtonka student athletes were less than one-third as likely to use performance-enhancing substances as athletes at Warrenton.

3. 2000-01: Student Athlete Testing Using Random Notification Study (SATURN Study)

Report on preliminary results of a three-year pilot study begun in the 2000-01 school year. Reported by its coordinator, Linn Goldberg, MD, FACSM of the Oregon Health Sciences University, during the U. S. Department of Education, Office of Safe and Drug-Free Schools Annual Conference, October 2003, Washington, D.C.. The SATURN Study is being conducted with support from NIH and NIDA.

Structure of the study: 13 schools participating; 7 conduct random testing of athletes at a 50% random-test rate; 5 of the 7 schools conduct testing during the entire school year, 2 schools random test during the athletic season only; student surveys have been conducted for two years; 6 schools do not randomly drug test athletes.

Preliminary findings:

- there were no decreases in sport-activity participation by students when subjected to a random drug-testing program, in fact, an 11% increase in participation was found;
- a 50% random test rate appears to be an adequate level to deter drug use, since students believed that there was a strong likelihood they would be tested;
- heavier alcohol users may decrease their use when subject to random drug testing;
- heavier marijuana users may be deterred when subject to testing; and
- drug testing appears to deter frequent drug users rather than the 'experimenters'.

[It should be noted that the studies shown above were designed and implemented prior to a 2002 Supreme Court ruling that expanded student drug testing to include not only athletes, but students in extra-curricular activities. More complete data analysis of the two-year randomized trial is being performed.]