



*Effective Substance Abuse and  
Mental Health Programs  
for Every Community*

## **ATLAS (Athletes Training and Learning to Avoid Steroids)**

ATLAS—Athletes Training and Learning to Avoid Steroids—is a multicomponent school-based program for male high school athletes, 13 to 19 years old. It capitalizes on team-centered dynamics and uses positive peer pressure and role modeling to reduce the use of—

- Anabolic steroids
- Alcohol and other drugs
- Performance-enhancing supplements

Delivered to a school sports team, with instruction led by student athlete peers and facilitated by coaches, ATLAS promotes healthy nutrition and exercise behaviors as alternatives to substance use. The 10-session curriculum is highly scripted and contains interactive and entertaining activities that make it easy and desirable to deliver, enhancing the fidelity of the intervention. The product of 10 years of research and field testing, ATLAS focuses specifically on adolescent male athletes' risk and protective factors.

### **INTENDED POPULATION**

ATLAS is designed for male student athletes in grades 9 through 12, although it has been used with younger athletes. The program has been successfully implemented in urban and rural schools with participants from diverse racial, ethnic, and socioeconomic backgrounds.

### **Proven Results**

- New substance use decreased 50%
- New anabolic steroid use decreased 50%
- Occurrences of drinking and driving declined 24%
- Lower index of alcohol and drug use
- Reduced use of performance-enhancing supplements
- Improved nutrition and exercise behaviors

### **INTERVENTION**

Universal

Selective

Indicated

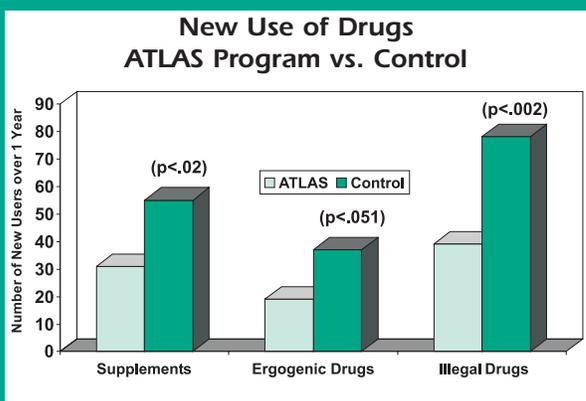


**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**  
Substance Abuse and Mental Health Services Administration  
Center for Substance Abuse Prevention  
[www.samhsa.gov](http://www.samhsa.gov)

## OUTCOMES

One year after the intervention, compared to the control groups, students who participated in ATLAS showed:

- Reduced intent to use anabolic steroids
- Greater substance use resistance skills
- Reduced substance abuse risk factors (e.g., less belief in media advertisements)
- Improved substance abuse protective factors (e.g., better nutrition behaviors, improved perception of athletic competence)
- Increased number of reasons not to use anabolic steroids
- Greater perception of the team and peers as an information source
- Improved knowledge of alcohol, marijuana, and anabolic steroids



## BENEFITS

ATLAS-trained students demonstrate:

- Improved substance use resistance skills
- Higher perceived personal susceptibility to the harmful effects of drugs
- Increased belief that their coach will not tolerate steroid use
- Improved perception of their personal athletic competence
- Reduced drinking and driving occurrences

## HOW IT WORKS

ATLAS is delivered in a classroom to an entire sports team. Students are divided into small social learning groups with a peer (squad) leader for each group. ATLAS' team-centered approach works to exert positive peer pressure and promote positive role modeling. It is easy to implement, because it is highly scripted with explicit instructions.

Each of the program's ten 45-minute sessions consists of interactive activities including:

- Educational games
- Role-playing exercises
- The creation of mock public service campaigns
- Friendly competition between squads

Because of their significance for adolescents, the program focuses on potential *immediate consequences*, rather than the future adverse effect of substance use. Athletes learn how to achieve their athletic goals using state-of-the-art sports nutrition and strength training and to avoid harmful substance use that will impair their physical and athletic abilities. Team workbooks, sports menus, and training guides complement the instructional materials.

## IMPLEMENTATION ESSENTIALS

A 1-day training program, offered by the program developer, is not required but is recommended for school districts with multiple teams and coaches. Training will enhance the fidelity of the curriculum delivery. Successful replication of ATLAS also requires:

- A highly committed coach-facilitator

- A coach “Instructor Package” which includes:
  - Program background information
  - *Squad Leader Training Guide* (explains how to train effective squad leaders)
  - *Ten-Session Curriculum Guide*
  - Overhead slides
- Use of student materials (workbook, sports menu, and *Training Guide* booklets)
- Team-based presentation of the program with one peer leader in each small group (i.e., squad) of six to eight students
- *Ten-Session Curriculum Guide* for each peer leader (this may be photocopied)

## PROGRAM BACKGROUND

ATLAS was initiated in 1993 with funding from the National Institute on Drug Abuse (NIDA). NIDA wanted a program designed to reduce or stop adolescent male athletes’ use of anabolic steroids, sport supplements, alcohol, and illegal drugs, while improving healthy nutrition and exercise practices. The program was tested in randomized controlled settings at 31 schools, in 12 cities and 2 States (Oregon and Washington) with more than 3,200 participants. The NIDA randomized study was based on 4 years of prior research among more than 1,500 male athletes in 16 high schools in smaller, yearly randomized controlled trials.

## EVALUATION DESIGN

In a randomized control design, three sequential cohorts were assessed before and after each athletic season (1994, 1995, 1996) and were combined for analysis. At followup, 1 year later, program effects were available for the 1994 and 1995 cohorts and combined. Fifteen high schools used the ATLAS program; 16 schools served as controls. In addition to confidential survey results, objective measures (i.e., body composition, body weight, muscle strength) were evaluated to assess the health promotion aspects of the trial.

## PROGRAM DEVELOPERS

### **Linn Goldberg, M.D.**

### **Diane Elliot, M.D.**

Dr. Linn Goldberg and Dr. Diane Elliot, professors of Medicine at the Oregon Health & Science University, have collaborated on clinical and scientific studies that have resulted in more than 150 publications and 3 books. They direct the University's Division of Health Promotion & Sports Medicine and the Human Performance Laboratory. For more than 12 years, they have focused on substance abuse prevention among adolescents. In addition, Drs. Goldberg and Elliot have been crew chiefs for the United States Olympic Committee, physicians for professional sports teams, and are principal and co-principal investigators on other National Institutes of Health research studies. They also have designed ATHENA (Athletes Targeting Healthy Exercise and Nutrition Alternatives), with a format similar to ATLAS. It is a NIDA-funded eating disorder and substance abuse prevention program for adolescent female athletes.

## CONTACT INFORMATION

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## RECOGNITION

Model Program—Substance Abuse and Mental  
Health Services Administration, U.S.

Department of Health and Human Services

Exemplary Program—U.S. Department of  
Education

Effective Program—National Institute on Drug  
Abuse, National Institutes of Health, U.S.

Department of Health and Human Services