



Highlights of [GAO-08-15](#), a report to the Committee on Oversight and Government Reform, House of Representatives

Why GAO Did This Study

The abuse of anabolic steroids by teenagers—that is, their use without a prescription—is a health concern. Anabolic steroids are synthetic forms of the hormone testosterone that can be taken orally, injected, or rubbed on the skin. Although a 2006 survey funded by the National Institute on Drug Abuse (NIDA) found that less than 3 percent of 12th graders had abused anabolic steroids, it also found that about 40 percent of 12th graders described anabolic steroids as “fairly easy” or “very easy” to get. The abuse of anabolic steroids can cause serious health effects and behavioral changes in teenagers.

GAO was asked to examine federally funded efforts to address the abuse of anabolic steroids among teenagers and to review available research on this issue. This report describes (1) federally funded efforts that address teenage abuse of anabolic steroids, (2) available research on teenage abuse of anabolic steroids, and (3) gaps or areas in need of improvement that federal officials and other experts identify in research that addresses teenage anabolic steroid abuse. To do this work, GAO reviewed federal agency materials and published studies identified through a literature review and interviewed federal officials and other experts.

To view the full product, including the scope and methodology, click on [GAO-08-15](#). For more information, contact Laurie E. Ekstrand at (202) 512-7114 or ekstrand@gao.gov.

ANABOLIC STEROID ABUSE

Federal Efforts to Prevent and Reduce Anabolic Steroid Abuse among Teenagers

What GAO Found

There are two categories of federally funded efforts that address teenage abuse of anabolic steroids. Efforts are either designed to focus on preventing the abuse of anabolic steroids among teenagers or are broader and designed to prevent substance abuse in general—which can include abuse of anabolic steroids among teenagers. Two programs that received federal funding during their development and testing, Athletes Training and Learning to Avoid Steroids (ATLAS) and Athletes Targeting Healthy Exercise & Nutrition Alternatives (ATHENA), are designed to focus on preventing or reducing teen abuse of anabolic steroids through use of gender-specific student-led curricula. In addition, there are various research efforts and education and outreach activities that focus on this issue. Two federal grant programs—the Office of National Drug Control Policy’s Drug-Free Communities Support program and the Department of Education’s School-Based Student Drug Testing program—are designed to support state and local efforts to prevent substance abuse in general and may include anabolic steroid abuse among teenagers as part of the programs’ substance abuse prevention efforts. In 2007, about one-quarter of more than 700 Drug-Free Communities Support program grantees reported that they were addressing steroid abuse as one of their program’s objectives.

Almost half of the 16 studies GAO reviewed identified certain risk factors and behaviors linked to the abuse of anabolic steroids among teenagers. Several of these studies found connections between anabolic steroid abuse and risk factors such as use of other drugs, risky sexual behaviors, and aggressive behaviors. Most of the other studies were assessments of the ATLAS and ATHENA prevention programs and in general suggested that the programs may reduce abuse of anabolic steroids and other drugs among high school athletes immediately following participation in the programs.

Experts identified gaps in the research addressing teenage abuse of anabolic steroids. Experts identified a lack of conclusive evidence of the sustained effectiveness over time of available prevention programs, for example at 1 year following participants’ completion of the programs. Experts also identified gaps in the research on the long-term health effects of initiating anabolic steroid abuse as a teenager—including research on effects that may be particularly harmful in teens—and in research on psychological effects of anabolic steroid abuse.