November 3, 2005

The Honorable Tom Davis
Chairman
The Honorable Henry Waxman
Ranking Minority Member
Committee on Government Reform
House of Representatives

Subject: Anabolic Steroids Are Easily Purchased Without a Prescription and Present Significant Challenges to Law Enforcement Officials

This report responds to your request that we investigate whether anabolic steroids can be purchased without a prescription and test whether such purchases are easily made. You also asked us to identify common sources of illegal anabolic steroids, and significant challenges law enforcement officials encounter in investigating, prosecuting, and deterring criminal anabolic steroid traffickers.

To complete this work, we made purchases through the Internet of anabolic steroids commonly used by athletes and bodybuilders, and had tests performed on the products purchased by the National Medical Services, a commercial laboratory, and the Food and Drug Administration (FDA). To identify significant challenges law enforcement officials encounter in the investigation and prosecution of illegal anabolic steroid traffickers, we interviewed officials of federal agencies that have responsibility for enforcement of laws relating to anabolic steroids—FDA, the Drug Enforcement Administration (DEA), the Department of Justice (DOJ), and the U.S. Customs and Border Patrol Agency (CBP)—and we visited CBP international mail facilities at two airports that receive significant quantities of mail containing anabolic steroids, New York’s Kennedy Airport and at the Miami International Airport. Additionally, to obtain the perspective of state and local officials on enforcement issues, we interviewed officials of New York’s Office of the Special Narcotics Prosecutor, the only prosecutorial agency in the country that is exclusively dedicated to the investigation and prosecution of felony drug offenses. We also spoke with officials of the United States Sentencing Commission and researched current and proposed legislation relating to illegal anabolic steroid activity.

Summary

Our investigators easily obtained anabolic steroids without a prescription through the Internet. After conducting Internet searches, they found hundreds of Web sites offering anabolic steroids commonly used by athletes and bodybuilders for sale. The
investigators then used an e-mail account in a fictitious name to place 22 orders. From these orders, we received 10 shipments of anabolic steroids; all were shipped from foreign countries. We also received 4 shipments from within the United States but the substances they contained, though marketed as anabolic steroids or other “muscle building” products, were not anabolic steroids according to the FDA. We are referring the evidence concerning our purchases to DEA and to FDA for appropriate action.

The officials we spoke with told us that most anabolic steroids sold illegally in the United States come from abroad, and that the Internet is the most widely used means of buying and selling anabolic steroids illegally. They also reported that, because of the foreign origin of the steroids and the widespread use of the Internet in steroid trafficking, extensive time and resources are usually required to investigate and prosecute steroid cases. Further, the sheer volume of all types of imports from abroad presents significant challenges in efforts to prevent anabolic steroids from illegally entering the United States. Additionally, some officials noted the relatively low sentences that result from application of the federal sentencing guidelines to persons convicted of illegal steroid trafficking.

**Background**

Anabolic steroids are synthetic forms of the male sex hormone testosterone that can be taken orally, injected, or rubbed on the skin. Under U.S. law they cannot be sold without a prescription, and are dispensed to treat conditions associated with low testosterone levels, such as delayed puberty or body wasting associated with AIDS. When used in combination with exercise, training, and a high protein diet, anabolic steroids can improve endurance and promote increased muscle size and strength. Because of these effects, they are illicitly used as performance-enhancing drugs by some athletes, bodybuilders, and others to improve competitiveness or appearance.

However, steroid abuse can cause devastating side effects, including liver, kidney, and heart disease; cancer, stroke, and behavioral changes such as increased aggression and severe depression. The availability and use of anabolic steroids in sports, particularly among adolescents, is a growing concern. According to a National Institute of Health study, use of steroids by American young people underwent a period of sharp rise in the late 1990s, and continues to be at an all time high among 12th graders. Moreover, in a recent study performed by the University of Michigan, more than 42 percent of 12th graders reported that anabolic steroids are easy or fairly easy to obtain without a prescription.

In 1990, Congress passed the Anabolic Steroids Control Act of 1990 adding anabolic steroids to the federal schedule of controlled substances. The act placed anabolic steroids on Schedule III of the Controlled Substance Act and specifically identified

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1 Eight orders were never received.
3 Prior to 1990, anabolic steroids were not classified as a controlled substance under federal law, and their use was subject to regulation by the FDA.
27 anabolic steroids. The maximum term of imprisonment for a Schedule III controlled substance offense is 5 years, or 10 years if the person has a prior felony drug offense conviction. The Anabolic Steroid Control Act of 2004 added additional anabolic steroids to Schedule III of the Controlled Substance Act.

Purchases of Anabolic Steroids without a Prescription

Our investigators tested whether it would be easy for anyone who has access to a computer to locate and make purchases from dealers who sell anabolic steroids illegally.

To do this, they replicated what any athlete or bodybuilder of any age can do on a home computer. First, they conducted Internet searches using the words “anabolic steroids,” or the names of specific anabolic steroids that DEA identified for us as commonly used by athletes and bodybuilders. As a result, they found hundreds of Web sites offering anabolic steroids for sale.

The investigators placed a total of 22 orders for anabolic steroids through 22 of these Web sites that were selected randomly. Using an e-mail account that they established in a fictitious name, the investigators completed these orders and paid for them. As a result, we received 14 shipments. Of that number, 10 were anabolic steroids; the 4 additional shipments contained substances that were not anabolic steroids.

Steroids Received

The 10 orders of anabolic steroids we received were obtained through Web sites that openly and boldly offer anabolic steroids for sale. Some of the Web sites offer a variety of pharmaceutical drugs, while others sell anabolic steroids exclusively. They typically offer “private and confidential” sales of “discretely shipped” anabolic steroids that will “shape your body the way . . . you want it to look.” Many sites offer dozens of anabolic steroids for sale. They promote anabolic steroid use through claims that they have good affects on the body, touting, for example, that one product is a “growth-promoting agent.”

Other Web sites, including some of those from which we made purchases, offer packages of different steroids for those who “cycle” or “stack” their use of anabolic steroids. A cycle is a period of from 6 and 14 weeks of steroid use, followed by a period of abstinence or gradual reduction in use; stacking is using multiple anabolic steroids concurrently. The packages offered by the Web sites are designed for a variety of different users, from “beginning” muscle builders to advanced “mass” builders, to customers interested in the “ladies lean stack.”

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5 The National Medical Services laboratory tested the 10 products that were anabolic steroids to confirm that they were in fact anabolic steroids and to determine the type of anabolic steroid received; the FDA tested the 4 other products we received to determine their contents.
The Web sites do not indicate the country from which the steroids are shipped, but we later learned from return addresses and postmarks on the shipments that the anabolic steroids all came from outside the United States. Although we placed these 10 orders at 10 different Web sites, the shipments came from just three different countries: five were from Trieste, Italy; four from Shanghai, China; and one from Athens, Greece. The shipment from Athens, Greece came in a plain 5- by 6- inch envelope bearing a return address label with an individual’s name and address. It contained one bottle of the anabolic steroid Testosterone Propionate in liquid form. We paid $114.00 for the order using a credit card.

The five orders shipped from Trieste, Italy, came in plain 5 by 7 inch envelopes bearing one of three different return address labels with an individual’s name and address. From one address we received two orders, each containing 100 tablets of the anabolic steroid Methandrostenolone. Using a credit card, we paid $109.20 for one of these orders and $107.90 for the other.

From a different return address in Trieste we received two other packages, each containing one bottle of the anabolic steroid Testosterone Cypionate in liquid form. Using a credit card, we paid $120.90 for one of these orders. For the other, we followed instructions sent through e-mail communications from the dealer to wire $144.00 through Western Union to an individual in Vienna, Austria. From the third address in Trieste we received a package containing 100 tablets of Methandrostenolone. We paid $117.00 for the order and wired the money through Western Union to an individual in Salzburg, Austria, as instructed.

Each of the four shipments from Shanghai came in a plain 6 by 9 inch envelope. Each envelope had a return address label bearing a different individual’s name and address.

We paid for each of them by credit card. One package contained 150 yellow tablets of the anabolic steroid Stanozolol for which we paid $200.00. A second package containing 20 tablets of Stanozolol was also received, and we paid $97.00 for them. Additionally, we received a package containing crushed green tablets of the anabolic steroid Oxymetholone and paid $124.00 for them. The fourth package from Shanghai contained 40 green tablets of Oxymetholone and cost $323.00.

Other Products Received

We also received four shipments from dealers in the United States through Web sites that claimed to sell anabolic steroids or products that have the muscle-building effects of anabolic steroids. However, according to FDA, none of these shipments contained anabolic steroids. We have referred the results of our investigation concerning these products to the FDA.
Challenges Faced by Law Enforcement Officials When Investigating and Prosecuting Illegal Steroid Trafficking Cases

Law enforcement officials identified significant challenges in their efforts to investigate, prosecute, and deter criminal anabolic steroid traffickers. These challenges arise from the foreign origin of many illegally sold steroids, the widespread use of the Internet in steroid trafficking, the volume of mail CBP must screen in its efforts to prevent entry of anabolic steroids into the United States, and the relatively low sentences that result from application of the federal Sentencing Guidelines to illegal steroid offenders.

Most Illegally Sold Anabolic Steroids Come From Abroad

The law enforcement officials we spoke to reported that, in their experience, most anabolic steroids distributed illegally in the United States come from abroad. The results of our test purchases tend to confirm this. Larger illegal anabolic steroid dealers in the United States frequently have multiple overseas sources of steroids. Significant quantities of anabolic steroids come from Mexico, as well as other countries such as Russia, Romania, and Greece.

There is a readily available supply of steroids worldwide because, in most countries, anabolic steroids can be sold legally without a prescription. Thus, many foreign distributors do not violate the laws of their own country when they sell these substances to people in the United States. As a result, U.S. law enforcement agencies have difficulty in obtaining assistance from their foreign counterparts in investigations of such distributors.

Law enforcement officials also identified smuggling of anabolic steroids across international borders into the United States as an important part of the illegal distribution network and described how smugglers typically operate. A smuggler in the United States takes orders from steroid customers in person, over the phone, or via e-mail. After obtaining advance payment from customers, the smuggler will travel to the source country, usually Mexico, to purchase the steroids. Some smugglers pay someone else to perform this function or have a foreign source that will ship the steroids. Smugglers who travel either carry the steroids back or ship them to the United States. In Mexico and European countries, smugglers usually buy anabolic steroids from pharmacies.

In some cases, the smuggler may ship the steroids to a partner in the United States, known as a remailer, and provide the remailer with addresses of specific U.S. customers. The remailer repackages the steroids and sends them to the customers. According to

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An emerging issue identified by officials we spoke with is the illegal importation of anabolic steroids in bulk powder form. Large quantities of steroids can be smuggled in bulk powder form into the United States where injectible forms of steroids can be reconstituted from them. These shipments are more difficult to detect than steroids in tablet or liquid form.
law enforcement officials, the remailer normally performs this task in exchange for money or free steroids. The customer may then use the steroids or resell them to others in places such as gyms and at bodybuilding contests.\(^7\)

**The Internet Facilitates Illegal Anabolic Steroid Trafficking**

Law enforcement officials reported that the Internet is a primary vehicle for buying and selling anabolic steroids illegally. Internet Web sites, usually foreign based, advertise steroids for sale. Customers access these sites, inquire about purchases, and place orders. Sellers typically require advance payment through Western Union, PayPal, money orders, or credit cards. After receiving payment, sellers ship the steroids through international mail or an express carrier. A remailer may also be used to resend packages once they arrive in the United States.

The Internet also provides an easy means for sellers to market to young people. Moreover, according to some of the law enforcement officials we spoke to, sales of steroids and other synthetic drugs are used by some sellers as a “gateway” to sales of narcotics, such as cocaine. Typically, in such cases, the seller uses an initial series of steroid or designer drug transactions to gauge whether the buyer is a legitimate customer and is not an undercover law enforcement investigator. After the seller has gained assurances that the customer is legitimate through the initial steroid sales, narcotics are offered for sale.

To prosecute illegal steroid dealers, law enforcement officials must identify them and gather evidence of their trafficking activity. However, anabolic steroid dealers can capitalize on the anonymity afforded by the Internet to thwart efforts to identify them. Internet sites can be installed, moved, or removed easily and quickly, making it difficult for law enforcement agencies to identify, track, monitor, or shut them down. As a result, investigations of anabolic steroid dealers require substantial time and resources.

Further, dealers operating through the Internet typically communicate with individual customers through e-mail, and establish e-mail accounts using fictitious identifying information and mailing addresses with one of the free e-mail services.\(^8\) Some officials reported to us that the use of free e-mail accounts with fictitious account holder identity information is found frequently in investigations, and is many dealers’ preferred means of communication with customers. Such accounts add an additional layer of anonymity to the dealer and complexity to law enforcement efforts to track down and identify them.

Of particular concern to some officials are offshore providers of free e-mail services such as Hushmail,\(^8\) based in Ireland, and Operamail, based in the Netherlands. Officials at one

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\(^7\) You also specifically asked about the extent to which steroids are illegally diverted from pharmacies and synthesized in clandestine laboratories. The officials we spoke with indicated that, in their experience, the number of pharmacy diversion and clandestine laboratory cases is relatively small; the Internet, smuggling, and foreign source anabolic steroids are the most significant anabolic steroid trafficking issues.

\(^8\) Since there are no fees for these accounts, the service providers may have no reason to verify the account holder’s name, address, or other identifying information.
agency told us that they believe it is too risky to approach these providers with requests for voluntary cooperation because they can ignore nondisclosure requests with impunity, and may intentionally or unintentionally tip off the subjects of investigations.

Internet drug crime investigations are further complicated by service providers who strip e-mail messages of information about their point of origin. E-mail generally contains “header” information identifying various Internet Protocol (IP) addresses, including “routing” and “originating” IP addresses. IP addresses may prove useful in determining the identity of the user of a particular e-mail account. However, in some cases, investigators find that some service providers automatically eliminate origination and routing IP addresses from e-mail sent through their services. Hushmail, for example, strips origination IP addresses and substitutes the IP Address of Hushmail’s own computers on its customers’ communications. The result, for example, is that when a steroids dealer in Florida sends an e-mail to a customer in Virginia, the e-mail that arrives in Virginia has Hushmail’s originating IP Address in Ireland rather than the actual IP originating address of the dealer.

Challenges in Interdicting Entry of Steroids into the United States

All international mail entering the United States through the U.S. Postal Service and private carriers is subject to inspection by the CBP at the 14 international mail facilities and 29 express consignment carrier facilities located around the country. CBP inspects for illegally imported controlled substances, such as anabolic steroids, contraband, and other items that are inadmissible into the United States. Each year the international mail and carrier facilities process hundreds of millions of pieces of mail and packages. For example, the international mail facility at John F. Kennedy Airport in New York alone receives approximately 1.3 million pieces of mail each day. The volume of mail, together with the steps illegal steroid shippers use to disguise their product and the labor-intensive nature of the inspection process itself, present formidable challenges to the CBP in its efforts to interdict the entry of anabolic steroids into the United States.

The inspection process is very labor and time intensive, and can include visual examination, x-ray, and opening mail to physically inspect the contents. At the international mail facilities we visited in New York and Miami, mail goes through a series of processes before being released or detained by the CBP. It passes through a portal monitor designed to screen for nuclear and radiological materials, and is placed on a conveyor belt where officers screen individual pieces of mail. CBP officers target packages for inspection based on factors such as their knowledge, intuition, and experience; whether the mail originated in suspect countries; and intelligence gained from prior interceptions of controlled substances. Suspicious mail is separated, x-rayed, opened by individual inspectors, and searched.

The difficulty of detecting anabolic steroids is further increased because dealers conceal them in items such as books or small electrical equipment to avoid detection by CBP. Anabolic steroids are commonly secreted in small electronic equipment, such as

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9 Hushmail also offers free automatic encryption services.
speakers, blenders, or alarm clocks, or hidden in compact disk cases or in hollowed sections of books. We observed examples of such shipments that had been intercepted by CBP during our visits to U.S. Postal Service International Mail facilities in Miami and in New York. Figure 1 is a photograph of a book in which CBP in New York found a shipment of the anabolic steroid Testosterone Enanthate from India.

**Figure 1: Book From India Containing Anabolic Steroids Interdicted By CBP**

Source: GAO.
The left side of figure 2 is a photograph of a box and radio that were in a package shipped from Panama. CBP in Miami found that the radio had been used to hide a shipment of the anabolic steroid Testosterone Cypionate. The right side of figure 2 shows the opened radio with the steroid secreted inside.

**Figure 2: Radio From Panama Interdicted By CBP (left); Radio Opened To Disclose Anabolic Steroids (right)**

Source: GAO.
CBP officials noted that shippers and customers can also use an on-line tracking system made available by the Postal Service to track packages sent through express mail. This enables illegal traffickers in steroids to determine whether and where a shipment has been detained by the CBP. This is a disadvantage for law enforcement officials when they attempt to conduct an investigation through what is known as a controlled delivery. In a controlled delivery, a law enforcement employee poses as a Postal Service employee and delivers the package to the intended recipient. This may provide an opportunity to gather evidence or make an arrest. However, the value of a controlled delivery as an investigative tool may be compromised if the trafficker, through the tracking system, has notice that the shipment was detained by the CBP.

Federal Sentencing Guidelines for Steroids Offenses Do Not Provide a High Level of Deterrence

Law enforcement officials told us that although extensive time and resources are required to locate, charge, and convict criminal anabolic steroid dealers, the penalties under the Federal Sentencing Guidelines faced by persons convicted of such offenses do not reflect the seriousness of their crimes or provide adequate deterrence. Drug quantity is a principal factor in determining offense level and sentence for drug offenses under the sentencing guidelines. Quantity of anabolic steroids and other Schedule III controlled substances under the sentencing guidelines is based on a “unit” system. A unit of a Schedule III controlled substance, other than anabolic steroids, is “one pill, capsule, or tablet” or, if in liquid form, 0.5 grams. However, the sentencing guidelines treat anabolic steroids differently from all other Schedule III substances. One unit of an anabolic steroid is 50 pills, capsules, or tablets or, if in liquid form, one unit equals a 10 cc vial of injectable steroid.

As a result, an offender responsible for selling 40,000 pills of a Schedule III substance other than an anabolic steroid, such as ketamine, would face a sentence of 33 to 41 months under the drug quantity rules of the sentencing guidelines. On the other hand, an offender convicted of selling 40,000 pills of an anabolic steroid would face a sentence of 0 to 6 months under those rules. According to DOJ, DEA’s laboratory seizure analysis from 2003 suggests that anabolic steroid seizures in major cases consist of quantities in the order of magnitude of 20,000 to 40,000 tablets and 2,000 to 6,000 milliliters. Thus, in the case of DEA’s largest seizure in 2003, in which 44,000 tablets of the anabolic steroid Methandienone were seized, a defendant convicted of trafficking in those steroids would face a sentence of 0 to 6 months under the drug quantity rules of the current sentencing guidelines.

Section 3 of the Anabolic Steroid Control Act of 2004 directed the United States Sentencing Commission to review and consider amending the Federal Sentencing

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10 The state officials we spoke with informed us that penalties for illegal steroid trafficking under New York law similarly do not provide adequate deterrence.
11 U.S. Sentencing Guidelines Manual, § 2D1.1, Notes to Drug Quantity Table (G).
Guidelines with respect to steroids offenses.\textsuperscript{12} The Sentencing Commission began its review of anabolic steroids offenses during its 2004-2005 amendment cycle.\textsuperscript{13} In February 2005, the Commission issued a notice for public comment in the \textit{Federal Register} on whether the guidelines governing steroids offenses should be amended. The Sentencing Commission received public comment from various parties and in April, 2005, held a public hearing at which it received testimony from the Department of Justice, the Federal Public Defenders Service, the National Association of Criminal Defense Lawyers, and the Practitioners Advisory Group.\textsuperscript{14} After reviewing the information obtained, the Sentencing Commission deferred promulgation of steroids-related amendments to the federal sentencing guidelines because it concluded that it did not have sufficient information on offenses involving anabolic steroids, particularly anabolic steroids trafficking.

Instead, the Sentencing Commission decided to conduct further research and outreach in order to determine the most appropriate course of action.\textsuperscript{15} It also decided to seek “emergency amendment authority” from Congress that would give the Sentencing Commission the option of promulgating an amendment that would take effect immediately upon date of promulgation. The Sentencing Commission submitted its request to Congress on April 20, 2005.\textsuperscript{16} On September 29, 2005, the President signed a bill\textsuperscript{17} which provides that, if the Sentencing Commission determines that amending the federal sentencing guidelines for anabolic steroids offenses is appropriate, such amendments will take effect by March 29, 2006.

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This report will be available on GAO’s web page at \url{http://www.gao.gov}. If you have questions, please contact me at (202) 512-7227 or \texttt{cramerr@gao.gov}. Barry Shillito,


\textsuperscript{13} The Sentencing Commission operates under “amendment cycles” that culminate in the submission of proposed amendments to the federal sentencing guidelines to Congress on or before May 1 of each calendar year. The Sentencing Commission typically announces its list of final priorities for consideration in the summer; works on policy issues related to that list in the fall; publishes proposed amendments in the \textit{Federal Register} for public comment in the late winter; holds public hearings on proposed amendments in the early spring; and votes to promulgate amendments in April of every calendar year. Amendments are submitted to Congress by May 1 and Congress has 180 days to take affirmative action with regard to the proposed amendments. If Congress does not act, the amendments become effective no later than November 1. \textit{See} 28 U.S.C. § 994(p)(2004).

\textsuperscript{14} The Practitioners Advisory Group is a standing advisory group to the Sentencing Commission.

\textsuperscript{15} The Sentencing Commission prepared an extensive report on the use of steroids in 1991 and will update that report as part of its review of steroids penalties.

\textsuperscript{16} The Sentencing Commission also placed consideration of steroids offenses on its \textit{Federal Register} list of proposed priorities on which public comment was requested. Public comment was received in August 2005 from the Food and Drug Administration, the Federal Public Defenders Service, the DOJ, and the Practitioners Advisory Group.

Daniel Kaneshiro, Ramon Rodriguez, and Richard Egan made major contributions to this report.

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