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"You've Got Drugs!"
Prescription Drug Pushers on the Internet:
2006 Update

A CASA* White Paper

June 2006

Background research provided by:
Beau Dietl & Associates

*The National Center on Addiction and Substance Abuse at Columbia University is neither affiliated with, nor sponsored by, the National Court Appointed Special Advocate Association (also known as "CASA") or any of its member organizations, or any other organizations with the name of "CASA."

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“You’ve Got Drugs!”

Prescription Drug Pushers on the Internet: 2006 Update

Accompanying Statement of Joseph A. Califano, Jr.

For three years, The National Center on Addiction and Substance Abuse (CASA) at Columbia University and Beau Dietl & Associates (BDA) have been tracking the availability of controlled prescription drugs over the Internet. This work is designed to examine the availability of controlled, dangerous and addictive prescription drugs like Percodan, Vicodin, OxyContin, Valium, Xanax, Ritalin and Adderall on the Internet.

Our first report, *You’ve Got Drugs! Prescription Drug Pushers on the Internet* was released in February of 2004. This report documented that the Internet is a wide-open channel of distribution for dangerous and addictive prescription drugs. The second report was included in CASA’s landmark study *Under the Counter: The Diversion and Abuse of Controlled Prescription Drugs in the U.S.* This is the third report in that series. It includes data from our most recent analysis conducted in February of 2006 and compares these findings with those of our first two reports.

Our findings once again are alarming: despite CASA’s reports, Congressional hearings, and increased attention in the press to this issue, these drugs continue to be as easy to buy over the Internet as candy. Anyone—including children—can readily obtain *without a prescription* highly addictive controlled substances from Internet drug pushers. All they need is a credit card.

And, not surprisingly, controlled prescription drug abuse is on the rise. Today, more adults and teens report abusing these drugs than the number abusing all illicit drugs combined except marijuana.

Employing the same methodology used in previous years, BDA identified 344 sites either advertising or selling controlled prescription drugs during a one-week period in February of 2006. For the third year, we found that the total number of sites identified that are selling drugs has increased (157 in 2004 compared with 160 in 2005 and 185 in 2006).

A staggering 89 percent of sites selling controlled prescription drugs have no prescription requirements, down slightly from 94 percent in 2004. However, the total number of sites selling drugs that *do not* require a prescription has increased each year (147 in 2004 compared with 152 in 2005 and 165 in 2006).

Of the 11 percent (20) of sites stating that they require a prescription, 70 percent (14) only require that a prescription be faxed--allowing a customer easily to forge prescriptions or fax the same prescription to several Internet pharmacies.

An obvious trend in the past two years has been an increase in the number of Web sites using an "online consultation" in lieu of a prescription. In 2006, 99 sites selling drugs offered such consultations compared with 87 in 2005 and 77 in 2004. Such online consultations may be intended as a way to provide the appearance of medical involvement; however, the U.S. Drug Enforcement Agency and the medical profession agree that "online consultations" cannot take the place of a face-to-face physical examination with a legitimate physician.

The extensive availability of controlled prescription drugs online poses a silent menace to our nation's health and a challenge for law enforcement. Closing this channel of distribution will require concerted and coordinated action on the part of Congress, Internet search engines, the nation's financial institutions and shippers and law enforcement. This report makes specific recommendations toward this end.

I would like to thank Bo Dietl and his professional colleagues at Beau Dietl & Associates for donating their time and talent in

conducting this research. I also would like to thank them for remaining committed to their partnership with CASA as we continue to shine a spotlight on this serious public health problem.

This White Paper was prepared under the direction of Susan E. Foster, MSW, CASA's Vice President and Director of Policy Research and Analysis. She was assisted by Linda Richter, PhD, CASA's Senior Research Manager. Roger Vaughan, DrPH, head of CASA's Substance Abuse and Data Analysis Center (SADACSM), Associate Professor of Clinical Public Health, Department of Biostatistics, Mailman School of Public Health at Columbia University and associate editor for statistics and evaluation for the *American Journal of Public Health* reviewed the data analysis. Jane Carlson handled the administrative details.

“You’ve Got Drugs!”

Prescription Drug Pushers on the Internet: 2006 Update

In 2004, The National Center on Addiction and Substance Abuse (CASA) at Columbia University published the first report *You’ve Got Drugs! Prescription Drug Pushers on the Internet*. This report documented the easy availability of controlled prescriptions drugs-- pain relievers like Vicodin and OxyContin, depressants like Valium and Xanax, and stimulants like Ritalin and Adderall--online and without a prescription. Research for this report was contributed by Beau Deitl and Associates (BDA) and was inspired by findings during CASA’s research into the diversion and abuse of these drugs. CASA and BDA replicated the work in 2005; this report is the third in the series.

Over the three years of analyses, the availability of dangerous and addictive drugs online has not abated; to the contrary, more sites are selling these drugs online, in most cases (89 percent of sites) without requiring a prescription. And, there are no controls to limit the sale of these drugs to children.

The Internet: A Growing Source of Drugs

Consumers increasingly use the Internet for health information and to purchase medical products and prescription medications, including controlled drugs. Because the Internet offers a convenient and often more affordable means of purchasing their prescription drugs, online sales have grown rapidly since the first Internet pharmacies began in 1999.

Online pharmaceutical sales by state licensed, legitimate and reputable Internet pharmacies can provide significant benefits to consumers.¹ Legitimate online pharmacies operate much like traditional drugstores where drugs are dispensed only on receipt by the pharmacy of a valid prescription from the consumer or directly from the consumer’s physician.²

According to federal law, outlined in the Controlled Substances Act, “it shall be unlawful for any person knowingly or intentionally to possess a controlled substance unless such substance was obtained directly, or pursuant to a valid prescription or order, from a practitioner, while acting in the course of his professional practice...”³ Federal regulation further states, “a prescription for a controlled substance to be effective must be issued for a legitimate medical purpose by an individual practitioner acting in the usual course of his professional practice.”⁴ Although the exact meaning of “acting in the course of professional practice” is not explicitly defined by law or regulation, the Drug Enforcement Administration (DEA) indicates that “for a doctor to be acting in the usual course of professional practice, there must be a bona fide doctor-patient relationship. For purposes of state law, many state authorities, with the endorsement of medical societies, consider the existence of the following four elements as an indication that a legitimate doctor/patient relationship has been established:

- A patient has a medical complaint;
- A medical history has been taken;
- A physical examination has been performed; and,
- Some logical connection exists between the medical complaint, the medical history, the physical examination and the drug prescribed.⁵

Illegal Internet pharmacies have introduced a new avenue through which unscrupulous buyers and users can purchase controlled substances for unlawful purposes. These pharmacies--based both inside and outside the U.S.--sell a variety of prescription medications including controlled drugs. Many dispense controlled drugs advertising that no prescription is needed. Others dispense them after a patient completes an online questionnaire that may or may not be reviewed by a physician. In any event, such sales do not constitute a legitimate doctor-patient relationship as described above.⁶

Prescription Drug Abuse on the Rise

CASA’s landmark report, *Under the Counter: The Diversion and Abuse of Controlled Prescription Drugs in the U.S.*, documented the enormous increase in the manufacture and distribution of controlled prescription drugs. Between 1992 and 2002, while the U.S. population increased 13 percent, prescriptions filled for controlled drugs increased 154 percent. With increased availability has come increased abuse of these drugs.⁷

The number of people who admit abusing controlled prescription drugs increased from 7.8 million in 1992 to 15.1 million in 2003--by 94 percent--seven times faster than the increase in the U.S. population. * In 2003, 15.1 million people in the U.S. admitted abusing prescription drugs--more than the combined number who admit abusing cocaine (5.9 million), hallucinogens (4.0 million), inhalants (2.1 million) and heroin (.3 million) combined.⁸

Children are especially at risk. In 2003, 2.3 million teens between the ages of 12 and 17 (9.3 percent) admitted abusing a prescription drug in the past year; 83 percent of them admitted abusing opioids. Younger teens are likelier to abuse only prescription drugs and older teens are likelier also to abuse alcohol or illicit drugs, signaling a dangerous progression of use.⁹ A 2005 survey of teens found that nearly one in

* These data are from the National Survey on Drug Use and Health (NSDUH) which is known to provide conservative estimates of all forms of substance use in the U.S. Because it is administered in the home, respondents--particularly teens--tend to under-report their substance use. Moreover, the survey does not include high-risk institutionalized populations, such as prison inmates, hospital patients, nursing home residents, patients in drug abuse treatment and others who cannot be reached in a home (e.g., the homeless). While caution should be taken in interpreting trends based on NSDUH data because the methodology for the data collection was altered at several points during the course of the study, this data is the most conservative of national data sets in terms of reporting increases in prescription drug abuse.

five (19 percent, or 4.5 million) admit abusing prescription drugs in their lifetime. More teens have abused these drugs than many illegal drugs, including Ecstasy, cocaine, crack and methamphetamine. More than half (56 percent) believe that prescription drugs are easier to obtain than illicit drugs and 52 percent believe that prescription opioids are “available everywhere.” The easy availability of these drugs is attributed, at least in part, to teens’ easy access to the Internet and insufficient regulation of rogue Internet pharmacies.¹⁰

The BDA Analysis

For the past three years, BDA researchers have dedicated one week each year to documenting the number of Internet sites dispensing the following controlled substances:

- **Opioids:** Codeine (Schedule II or III versions), Diphenoxylate (Lomotil), Fentanyl (Duragesic), Hydrocodone (Vicodin), Hydromorphone (Dilaudid), Meperidine (Demerol), Oxycodone (OxyContin, Percocet) and Propoxyphene (Darvon)
- **CNS Depressants:** Benzodiazepines including Alprazolam (Xanax), Chlordiazepoxide hydrochloride (Librium), Diazepam (Valium), Estazolam (ProXom), Lorazepam (Ativan), and Triazolam (Halcion); and barbiturates including Mephobarbital (Mebaral), Pentobarbital sodium (Nembutal) and Secobarbital (Seconal)
- **Stimulants:** Amphetamine-dextroamphetamine (Adderall), Dextroamphetamine (Dexedrine), Dexmethylphenidate HCl (Focalin) and Methylphenidate (Ritalin)

For each site, dispensing patterns were identified including:

- Dispensing controlled substances without any consultation or prescription;

- Dispensing controlled substances with an “online consultation,” which typically involves completing a questionnaire; and,
- Dispensing controlled substances with a valid prescription.

BDA analysts also sought to document from where the site advertised that the drugs would be shipped, whether from the U.S or another country.

The Internet: A Wide-Open Channel of Distribution

While estimates of Internet pharmacies have reached as high as 1,400,¹¹ it is virtually impossible to identify the precise number selling prescription drugs--especially controlled substances--directly to consumers.¹² Web sites easily can be created or removed, or change their names or Web addresses; they also may offer no identifying information that can assist in tracking them to a particular location or source. Many large Internet pharmacies have multiple portal sites where numerous independent Web sites all connect to one online anchor pharmacy.¹³

This year BDA identified a total of 344 Web sites offering Schedules II-V* controlled prescription drugs. Of these sites:

* The Controlled Substance Act (CSA) assigns drugs with the potential for abuse to one of five categories or “schedules,” depending on the drug’s medical usefulness, its potential for abuse and the degree of dependence that may result from abuse. Schedule I substances have no currently accepted medical use in the U.S. and are not available by prescription, and include illicit drugs with a high potential for abuse such as heroin and marijuana. Schedule II through V substances have accepted medical use and varying potentials for abuse and dependency, with Schedule II drugs having the highest abuse potential and Schedule V the lowest abuse potential of the controlled substances. Schedule II includes drugs like OxyContin and Percodan; Schedule III includes drugs like Vicodin and Lortab; Schedule IV includes drugs like Xanax and Valium; and Schedule V includes drugs like codeine-containing analgesics.

- 159 (46 percent) were portal sites. Portal sites do not sell drugs; they simply act as a conduit to another Web site--an anchor site--that sells the drugs.
- 185 (54 percent) were anchor sites. At an anchor site, the customer places an order and pays; the online pharmacy fills the order and ships the drugs. The pharmacy itself may operate the Web site or the Web site may send the order to the pharmacy. Often, different Web sites use the same pharmacy to fill prescriptions. The operator of the anchor Web site may not be located in the same geographic region as the pharmacy.

Compared to earlier years, the number of anchor sites--those sites that actually sell the drugs--is increasing. Specifically, in 2005, BDA identified 402 Web sites advertising or selling controlled prescription drugs--242 (60 percent) portal sites and 160 (40 percent) anchor sites. In 2004, BDA identified 495 sites with 338 (68 percent) portal sites and 157 (32 percent) anchor sites. (Table 1)

Table 1
Internet Sites Advertising or Selling Controlled Prescription Drugs

	2004	2005	2006
Sites selling drugs (anchor sites)	157 (32%)	160 (40%)	185 (54%)
Sites advertising drugs (portal sites)	338 (68%)	242 (60%)	159 (46%)
Total sites	495	402	344

Benzodiazepines are the most frequently offered controlled prescription drugs; in 2006, 84 percent of the identified Web sites (155) sold these drugs (compared to 91 percent in 2005 and 92 percent in 2004). In all three years, the most frequently offered benzodiazepines were Xanax, alprazolam (generic), Valium and diazepam (generic).

The second most frequently offered class of controlled prescription drugs is the opioids. In 2006, 68 percent (126) of the sites sold these drugs (compared to 74 percent in 2005 and 66 percent in 2004). Opioid drugs include

hydrocodone (e.g., Vicodin, Lortab), oxycodone (e.g., OxyContin, Percocet) and propoxyphene (e.g., Darvocet, Darvon).

In 2006, eight percent (14) of the sites sold stimulants (compared to 21 percent in 2005 and 30 percent in 2004). Stimulants include methylphenidate (e.g., Ritalin, Concerta) and dextroamphetamine (e.g., Adderall, Dexedrine).

In 2006, two sites were identified that sold barbiturates (compared to four sites in 2005 and two sites in 2004).

Each of the three years of this study, the total number of identified sites selling opioids and benzodiazepines has increased while the number selling stimulants has declined. The number of sites selling benzodiazepines increased from 144 in 2004 to 155 in 2006 and the number selling opioids increased from 103 in 2004 to 126 in 2006. The number selling stimulants decreased from 47 in 2004 to 14 in 2006. (Table 2)

Table 2
Internet Availability of Controlled Prescription Drugs by Class

	2004	2005	2006
Benzodiazepines	144 (92%)	146 (91%)	155 (84%)
Opioids	103 (66%)	118 (74%)	126 (68%)
Stimulants	47 (30%)	34 (21%)	14 (8%)
Barbiturates	2 (1%)	4 (3%)	2 (1%)
Total sites	157	160	185

Prescriptions Not Needed

Of the 185 sites identified in 2006 that directly sell controlled prescription drugs on the Internet, 89 percent (165) did not require any prescription. Of those sites not requiring prescriptions:

- 30 percent (50) clearly stated that no prescription was needed;

- 60 percent (99) offered an “online consultation;” and,
- 10 percent (16) made no mention of a prescription.

Only 11 percent of the sites selling controlled prescription drugs required that a prescription be faxed or mailed or that the patient’s doctor be contacted for the prescription. Of those sites stating that some type of prescription was required:

- 70 percent (14) asked that a prescription be faxed (potentially allowing a customer to forge a prescription or to fax a single prescription to several Internet pharmacies);
- 15 percent (3) asked that a prescription be mailed; and,
- 15 percent (3) indicated that a doctor would be contacted prior to dispensing the drug.

The number of sites stating that a prescription is required represents an increase from previous years; five percent required a prescription in 2005 and six percent in 2004. Driving this increase, however, is the relatively greater proportion of sites requiring that the prescription be faxed. (Table 3)

Of the 20 Web sites stating that a prescription is required, only two are Verified Internet Pharmacy Practice Sites (VIPPS), certified by the National Association of Boards of Pharmacy. Both of these sites indicate that they require a prescription and that they will contact the patient’s doctor.

An Emerging Trend: The “Online Consultation”

Since 2004, BDA has identified an increase in the number of pharmacy Web sites that use an “online consultation” in lieu of a prescription from a patient’s physician to dispense drugs. In this case, the consumer fills out an online questionnaire that is reportedly evaluated by a

physician affiliated with the online pharmacy. Without ever meeting the patient face-to-face, the reported physician allegedly reviews the questionnaire and then authorizes the Internet pharmacy to send the drug to the patient.¹⁴ Tens of thousands of “prescriptions” are written each year for controlled and non-controlled prescription drugs through such Internet pharmacies, which do not require medical records, examinations, lab tests or follow-ups.¹⁵

Some of these rogue Internet pharmacies provide such “online consultations” free of charge; others refer customers to “script” doctors who are willing to write prescriptions for cash.¹⁶ Some sites claim that a physician will contact the patient via telephone or email. Others attempt to distance themselves from the consultation process by claiming that they are merely providing a referral service.

Table 3
Internet Pharmacy Prescription Requirements

	2004	2005	2006
<i>Sites not requiring prescription</i>	147 (94%)	152 (95%)	165 (89%)
No prescription needed	64 (44%)*	55 (36%)*	50 (30%)*
Online consultation	77 (52%)*	87 (57%)*	99 (60%)*
No mention of prescription	6 (4%)*	10 (7%)*	16 (10%)*
<i>Sites requiring prescription</i>	10 (6%)	8 (5%)	20 (11%)
Patient faxes	7 (70%)**	1 (12%)**	14 (70%)**
Patient mails	3 (30%)**	5 (63%)**	3 (15%)**
Doctor contacted	0	2 (25%)**	3 (15%)**

* of sites not requiring prescription

** of sites requiring prescription

Online consultations amount to a patient beginning and completing a transaction for controlled substances without any face-to-face contact with a doctor. The Federation of State Medical Boards of the United States, Inc., the American Medical Association, the National Association of Boards of Pharmacy and the Drug Enforcement Administration (DEA), all agree that online consultations cannot take the

place of a face-to-face physical examination with a legitimate physician.

This year BDA observed more Web sites stating that patients would be required to send medical records to the Internet pharmacy as part of the “online consultation,” although they found little evidence that a lack of these records would result in not receiving the requested drugs. BDA reports that its past experience has been that many Web sites send medication regardless of what is entered on the online questionnaire. Further, in previous investigations (not performed for CASA), BDA learned that it is often possible to order and receive prescription drugs using fictional information when answering these questionnaires; it was rare for an online pharmacy to reject an order or even follow through with a phone call.

No Controls Blocking Sale to Children

As in previous years, there is no evidence of any mechanisms in place to block children from purchasing addictive prescription drugs online. In fact, BDA in a previous analysis found that it was possible to order drugs by supplying true information that should have warned any legitimate provider against providing the requested drug. For example, a supervised 13-year old ordered and received Ritalin by using her own height, weight and even age when filling out the form.¹⁷ With access to a credit card, children can easily obtain dangerous, addictive and potentially lethal pharmaceuticals.

Substantial Shipments From Within the U.S.

The physical location of the anchor sites that sell controlled prescription drugs often is difficult to discern; however, of the 185 sites selling the drugs in 2006:

- 38 percent (70) indicated that the drugs would be shipped from a U.S. pharmacy;
- 31 percent (57) indicated that they would be coming from outside the U.S.; and,

- 31 percent (58) gave no indication of where the drugs would originate.

*Treatment, including issuing a prescription, based solely on an online questionnaire or consultation does not constitute an acceptable standard of care.*¹⁸

--Federation of State Medical Boards of the U.S.

*Physicians who prescribe medications via the Internet shall establish, or have established, a valid patient physician relationship...The physician shall...obtain a reliable medical history and perform a physical examination of the patient...*¹⁹

--American Medical Association

*Online pharmacies are suspect if they dispense prescription medications solely based upon the consumer completing an online questionnaire without the consumer having a pre-existing relationship with a prescriber and the benefit of an in-person physical examination.*²⁰

--National Association of Boards of Pharmacy

*A legitimate doctor-patient relationship includes a face-to-face consultation, where a licensed physician can examine the physical symptoms reported by a patient before making a diagnosis and authorizing the purchase of a prescription medicine. Filling out a questionnaire, no matter how detailed, is no substitute for this relationship.*²¹

--Joseph T. Rannazzisi

Acting Deputy Assistant Administrator

Office of Diversion Control

Deputy Chief, Office of Enforcement Operations

Drug Enforcement Administration

The 38 percent (70) of the selling sites which indicated they would be shipped from inside the U.S. is similar to 2005 (38 percent) and greater than 2004 (28 percent). The percentage of sites advertising that the drugs would be shipped from outside the U.S. (31 percent) is relatively lower than previous years (40 percent in 2005 and 47 percent in 2004). Proportionately more sites in 2006 compared to previous years did not indicate where the drugs would originate. (Table 4)

Table 4
Origin of Drug Shipment

	2004	2005	2006
Shipped from within the US	44 (28%)	59 (38%)	70 (38%)
Shipped from outside the US	73 (47%)	62 (40%)	57 (31%)
No indication of origin	40 (25%)	33 (22%)	58 (31%)
Total shipment	157	154	185

Next Steps

While legitimate online pharmacies can provide access to medications for patients who need them, this snapshot of the wide availability of controlled, dangerous, addictive drugs on the Internet reveals a wide-open channel of distribution. This easy availability has enormous implications for public health, particularly the health of our children, since research has documented the tight connection between availability of drugs to young people and substance abuse and addiction.²²

The extensive availability of controlled prescription drugs online poses a threat to our nation's health and a challenge for law enforcement.

To take steps to address the problem of illegal Internet access to controlled prescription drugs, CASA recommends that:

- Congress clarify federal law to prohibit sale or purchase of controlled prescription drugs on the Internet without an original copy of a prescription issued by a licensed, DEA-certified physician, licensed in the state of purchase, based on a physical examination and evaluation, and to impose higher penalties for illegal sale to minors.
- Internet search engines provide warnings that sale and purchase of controlled prescription drugs over the Internet from unlicensed pharmacies and physicians and without prescriptions are illegal and block sites that fail to require a legitimate

prescription for selling controlled prescription drugs.

- The Office of National Drug Control Policy (ONDCP), DEA and FDA develop public service announcements that appear automatically during Internet drug searching to alert consumers to the potential danger and illegality of making online purchases of controlled substances.
- The DEA and financial institutions (credit card and money order issuers) collaborate to restrict purchases of controlled prescription drugs from non-licensed and accredited providers.
- Postal and shipping services train counter and delivery personnel to recognize potential signs of pharmaceutical trafficking and know how to respond in the event of suspicious activity.
- The State Department encourage and assist foreign governments to crack down on Internet sites illegally selling controlled prescription drugs to U.S. citizens.
- The federal government, Internet search providers, shippers, financial institutions and non-profit organizations concerned with prescription drug abuse cooperate in creating a national non-profit clearinghouse to identify and shut down illegal Internet pharmacies.

Appendix A

Detailed Methodology

Beau Dietl & Associates (BDA) duplicated its methodology that was developed for its initial investigation in 2004. BDA reported the following methodology in conducting its research in 2006:

Database Information

The database created for this report contains detailed records for all Web sites uncovered during the week the research project was in motion. Each record contains the following information: distinction between anchor and portal sites and for each anchor site, dispensing information, advertised country of origin and the list of drugs offered by the Web site.

Customer Emulation

Throughout this investigation, BDA attempted to duplicate the approach that an individual seeking to order prescription drugs might use. At all times, BDA investigators asked themselves the following question: How would a typical individual, such as a senior citizen, approach the search to buy a controlled substance over the Internet? What would a customer think when viewing this Web page?

Target Drugs

CASA supplied a list of drugs they were interested in researching. The list included only controlled substances as defined by the DEA, Schedules II-V; primarily Schedules II and III. Each investigator was assigned several of these drugs to research.

Web Site Discovery

The goal of the investigation was to uncover as many Web sites as possible involved in the sale of the target drugs. To this end, BDA employed the following methods:

Method 1--Internet Search

BDA searched the Internet using several popular search engines such as *google.com* and “*meta*” search engines, i.e., engines that search several search engines at once, such as *dogpile.com*, *hotbot.com*, etc. Combining the word “buy” with the drug being investigated (e.g., “buy Valium”) narrowed the number of hits obtained and excluded potential informational pages.

The domain names from the resulting hits were added to the master database created for this purpose unless it was obvious they were of no interest to this investigation, such as news articles or technical or academic papers.

Method 2--Email Advertisements

Another method used was to pull Web sites from any email advertisements, a.k.a. spam, most of us receive on a daily basis. One investigator was assigned the task of researching the Web sites inferred by these emails.

Web Site Investigation

Once a Web site was identified as a seller of a drug, investigators looked for the following information important to the investigation:

Site Classification: Portal vs. Anchor Sites

Based on their experience with research previously undertaken, BDA investigators have realized that it is important to consider the relationship between what users see on the screen when a Web site is accessed and which Web servers are actually being accessed.

For example, net surfers may think they are visiting only one site when in fact they constantly keep being forwarded to a separate site. Or the page they are visiting may appear to be selling pharmaceuticals when actually it doesn't but is linked to other Web sites that do. Bearing those distinctions in mind, BDA categorize Web sites as either *anchor sites* or *portal sites*. An anchor site is one that sells drugs directly to the potential

buyer while a portal site only refers the potential buyer to the anchor site.

Site Classification: Advertised Country of Origin

Web sites exist in cyberspace and not in the real world. It is therefore important to define what is meant when discussing the “location” of a Web site selling drugs. First, one can mean the location the Web site advertises as to the origin of the drugs it sells; second, the physical location of the computers holding the Web site data; third, the location of the business or individual running the Web site; or fourth, the location from where the drugs are actually shipped.

The second definition provides little information because data in the Internet can be transmitted from anywhere in the world. The third presents a host of problems because registration information for a Web site can be intentionally or unintentionally inaccurate. And even if accurate, it does little to help us understand the origin of the drugs as the Web site operator can again exist anywhere in the world separate from the location the drugs are shipped from. The fourth definition would by far be the most accurate since the postage and return address would provide all the information one requires. However, that information is available only when drugs are ordered, something BDA investigators did not do.

The first option is the only remaining possibility. Thus, investigators relied on information provided by the Web site as to the country from which the drugs were to originate.

BDA investigators looked for:

- Text in the body of the Web page that outright stated the source of the drug(s);
- Graphics, such as a country's flag, that might lead a visitor to believe the drugs were from a certain location; or,
- The title of the site itself would lead a visitor to believe the same.

Site Classification: Dispensing Pattern

Given the information provided by each Web site, investigators were able to determine each site's prescription requirements. This was done by either browsing through each site looking for such sections such as "FAQs" or "How to Order" or by beginning the ordering process and noting if and when a prescription requirement was requested. The dispensing patterns of all the Web sites discovered fell into these categories:

- **Pre-written prescription.** Some Web sites required that the patient submit a prescription already written by a doctor. In most cases, this was to be done via fax (thus allowing an individual to use the same prescription at several sites). Occasionally, a site required the original prescription to be mailed. Both cases were noted in the master database.
- **Online consultation.** Other Web sites did not require a prescription. However, they required answers to a questionnaire that was often referred to as an "online consultation." These sites asked the patient to fill out some form of medical questionnaire. Occasionally, a consultation fee was charged for this service.
- **No prescription.** Several sites made no mention of any type of prescription requirements and neither did they include a medical questionnaire. Other sites advertise that no prior prescription was needed.

Site Classification: Drugs Available

Investigators noted any target drugs available at the Web site, even if a particular drug was not one assigned to them. If an investigator discovered a Web site selling their assigned drug and it was already entered into the database by another investigator, he/she checked to be sure the assigned drug was recorded.

Site Classification: Other Information

Investigators also noted any other information they thought might be of interest to the investigation such as if the site seemed to be a copy or similar to another site. Investigators also copied samples of text from the Web sites and took occasional screenshots.

Notes

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³ Controlled Substances Act, 21 U.S.C. § 829 (a) (2002).

⁴ 21 C.F.R. § 1306.04 (2005).

⁵ U.S. Drug Enforcement Administration. (2006). *Questions and answers: Dispensing and purchasing controlled substances over the Internet*. [On-line]. Retrieved May 31, 2006 from the World Wide Web: <http://www.deadiversion.usdoj.gov>.

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⁷ The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2005). *Under the counter: The diversion and abuse of controlled prescription drugs in the U.S.* New York: CASA.

⁸ The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2005). *Under the counter: The diversion and abuse of controlled prescription drugs in the U.S.* New York: CASA.

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¹³ U.S. General Accounting Office. (2000). *Internet pharmacies: Adding disclosure requirements would aid state and federal oversight* (GAO Report No. 01-69). Washington, DC: U.S. General Accounting Office.

¹⁴ U.S. General Accounting Office. (2000). *Internet pharmacies: Adding disclosure requirements would aid state and federal oversight* (GAO Report No. 01-69). Washington, DC: U.S. General Accounting Office.

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U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration,
Office of Applied Studies.