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# "You've Got Drugs!" IV: Prescription Drug Pushers on the Internet

## A CASA\* White Paper

May 2007

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# “You’ve Got Drugs!” IV: Prescription Drug Pushers on the Internet

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## **Accompanying Statement of Joseph A. Califano, Jr.**

For four years, The National Center on Addiction and Substance Abuse (CASA) at Columbia University has been tracking the availability of controlled prescription drugs over the Internet. This work is designed to examine the online availability of dangerous and addictive prescription opioids like OxyContin and Vicodin, depressants like Valium and Xanax, and stimulants like Ritalin and Adderall.

Our first report, *You’ve Got Drugs! Prescription Drug Pushers on the Internet*, was released in February of 2004. We updated the analysis in 2005 and 2006. This report is the fourth in our series. Each analysis was conducted in the first quarter of the year and involved 210 hours of staff time devoted to searching the Web for sites that advertise or offer for sale controlled prescription drugs. As a result, CASA now has four years of trend data which are included in this report.

Despite CASA’s previous reports, other research, Congressional testimony, DEA investigations, press attention and even fatalities, access to controlled prescription drugs online continues unabated. Our findings this year show a 70 percent increase over 2006 in the number of Web sites identified that advertise or sell controlled prescription drugs. There was a 135 percent increase in Web sites advertising these drugs and a seven percent increase in sites offering to sell them. Eighty-four percent of sites offering controlled prescription drugs do not require that the patient provide a prescription from his or her doctor. Of those sites that do require prescriptions, 57 percent only require that the prescription be faxed allowing significant opportunity for multiple use and other types of fraud.

Most disturbing, there are no controls limiting access to children and of the 187 sites offering controlled prescription drugs for sale, only two are certified by the National Association of Boards of Pharmacy as Verified Internet Pharmacy Practice Sites<sup>TM</sup>, meaning that they are legitimately operating over the Internet.

In 2005, the latest data available, 15.2 million people age 12 and over (6.2 percent) report abusing\* controlled prescription drugs in the past year. Today, more adults and teens report abusing these drugs than the number abusing all illicit drugs combined except marijuana.

This report lays out, for the fourth time, the nature of this growing threat to the public health, and recommendations that can and should be implemented to address this problem. Leadership from the federal government is required; further delays cannot be justified.

In previous years, Beau Dietl & Associates (BDA) conducted this analysis for CASA. This year CASA staff conducted the analysis working with Stephen Heskett of BDA to assure methodological consistency with previous years. I would like to thank Bo Dietl and Stephen Heskett 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 Harold Wenglinsky, PhD, a CASA Research Associate. Roger Vaughan, DrPH, head of CASA's Substance Abuse and Data Analysis Center (SADAC<sup>SM</sup>), 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*, conducted the data analysis with Elizabeth Peters, Senior Data Analyst at

SADAC. Jane Carlson and Jennie Hauser handled the administrative details.

While many people and organizations were involved in this effort, the findings and opinions expressed herein are solely the responsibility of CASA.

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\* The definition of abuse provided in the *National Survey on Drug Use and Health* is using a drug not prescribed for you or taken only for the experience or feeling it caused.

## “You’ve Got Drugs!” IV: Prescription Drug Pushers on the Internet

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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 widespread advertising and offers of sale for controlled prescription drugs--pain relievers like OxyContin and Vicodin, depressants like Valium and Xanax, and stimulants like Ritalin and Adderall--online and without a prescription. Research for the 2004 report was contributed by Beau Dietl & Associates (BDA) and was inspired by findings from CASA’s research into the diversion and abuse of these drugs. CASA and BDA replicated the work in 2005 and 2006; this report is the fourth in the series.

Over the four years of analyses, the number of Web sites identified that offer controlled prescription drugs for sale has increased.\* Eighty-four percent of these sites do not require prescriptions from a patient’s physician; of those that do indicate that a prescription is required, 57 percent simply ask that the prescription be faxed--increasing the risk of multiple use of one prescription or other fraud. Over the four year period of CASA’s analysis, the total number of sites requiring no prescription has increased. And, there are no controls to limit the sale of these drugs to children.

### **The Internet: A Growing Source of Drugs**

Today an estimated 200 million people in the U.S. are Internet users; 125 million access the World Wide Web at least weekly. Internet users are disproportionately young, including nearly 100 percent of college students and 78 percent of 12- to 17-year olds. Sixty-three percent of adults have access to the Internet. The fact that

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\* CASA did not attempt to purchase any controlled prescription drugs online. This report identifies those sites that advertise and offer to sell the drugs.

children, teens and college students are likelier to be online than adults makes online access to controlled prescription drugs even more troubling.<sup>1</sup>

With the click of a mouse, the Internet offers a convenient and private means of purchasing controlled prescription drugs. Not surprisingly, online access has grown rapidly since the first Internet pharmacies began in 1999.<sup>2</sup>

### **“freedom-pharmacy.com”**

This Web site offers controlled prescription drugs “prescription free...at the freedom of your finger tips.” The site offers over a thousand different drugs, and advertises its location as Nicosia, Cyprus. Drugs are shipped in “unmarked packaging: orders arrive within 10-14 days in discrete unmarked parcels via registered international air mail.”<sup>3</sup>

With increased availability has come increased abuse of these drugs. CASA’s landmark 2005 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.<sup>4</sup>

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, the number of people abusing prescription drugs exceeded the combined number who were abusing cocaine (5.9 million), hallucinogens (4.0 million), inhalants (2.1 million) and heroin (.3 million).<sup>5</sup> By 2005, 15.2 million people were abusing these drugs.<sup>6</sup>

Children are especially at risk. In 2005, 2.1 million teens between the ages of 12 and 17 (8.2 percent) admitted abusing a prescription drug in the past year.<sup>7</sup> A 2005 survey of teens found that nearly one in 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.”<sup>8</sup>

With access to a credit card, an easy form of prescription drug access--completely lacking in scrutiny from parents, other family members, and law enforcement--is over the Internet. Teens’ easy access to the Internet and insufficient regulation of rogue Internet pharmacies contribute to the easy availability of these drugs to teens.<sup>9</sup>

## **The Regulatory Framework**

Online pharmaceutical sales by state licensed, legitimate and reputable Internet pharmacies can provide significant benefits to consumers.<sup>10</sup> 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.<sup>11</sup> But many pharmacies, so-called rogue pharmacies, do not obey the laws.

According to federal law outlined in the Controlled Substances Act (CSA), “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....”<sup>12</sup>

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.”<sup>13</sup> 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.”<sup>14</sup>

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 or a “script doctor” whose job is to write hundreds of prescriptions a day without ever seeing a patient.<sup>15</sup> In any event, such sales do not constitute a legitimate doctor-patient relationship as described above.<sup>16</sup>

The Federation of State Medical Boards states that “electronic technology should supplement and enhance, but not replace, crucial interpersonal interactions that create the very basis of the physician-patient relationship.”<sup>17</sup> Thus online prescriptions, generated without a physical examination of the patient by the doctor, are not considered legitimate.

Not all state laws, however, reflect these conclusions. Because of the lack of clarity in federal and state law over what constitutes a legitimate prescription, attempts on the part of law enforcement to bring rogue sites or “script

doctors” working with them to justice are hampered.<sup>18</sup>

## Verified Internet Pharmacy Practice Sites™ (VIPPS®)

In an attempt to address the issue of online access to controlled prescription drugs and provide some assurance to consumers of legitimate online pharmacy practice sites, the National Association of Boards of Pharmacy established a process for certifying sites as legitimate. This process is known as becoming a Verified Internet Pharmacy Practice Site™ (VIPPS®). The program “identifies to the public those online pharmacy practice sites that are appropriately licensed, are legitimately operating via the Internet, and that have completed successfully a rigorous criteria review and inspection.” Certification is voluntary. To date there are 13 such sites. This year, CASA’s analysis included two of these sites.

### Verified Internet Pharmacy Practice Sites™ (VIPPS®)

Web Business Name	Web Site Address
Anthem Prescription	www.anthemprescription.com
Caremark.com	www.caremark.com
DrugSource, Inc.	www.drugsourceinc.com
drugstore.com	www.drugstore.com
Familymeds.com	www.Familymeds.com
HOOK SUPERX, Inc., dba CVS/pharmacy	www.cvs.com
Liberty Medical Supply, Inc.	www.libertymedical.com
Medco Health Solutions, Inc.	www.medco.com
Omnicare, Inc. dba Care for Life	www.careforlife.com
Prescription Solutions	www.rxsolutions.com
Tel-Drug, Inc./CIGNA	www.teldrug.com
Walgreen Co.	www.walgreens.com
WellDyneRx	www.welldynernx.com

## The CASA Analysis

This year CASA conducted the analysis of Internet sites advertising and selling controlled prescription drugs online. In previous years BDA had conducted the analysis for CASA. To assure conformance with methods and procedures, BDA staff responsible for

conducting the analysis in previous years worked with CASA. (See Appendix A, Detailed Methodology) As in previous years, a total of 210 hours was devoted 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.

CASA also sought to document from where the site advertised that the drugs would be shipped, whether from the U.S or another country, and any controls blocking the sale of these drugs to children.

## The Internet: A Wide-Open Channel of Distribution

While estimates of Internet pharmacies have reached as high as 1,400,<sup>19</sup> it is virtually impossible to identify the precise number offering prescription drugs for sale--especially controlled substances--directly to consumers.<sup>20</sup> 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, seemingly independent, advertising sites that all connect to one online pharmacy.<sup>21</sup>

This year CASA identified a total of 581\* Web sites offering Schedules II through V<sup>†</sup> controlled prescription drugs--up 70 percent from 342 in 2006. (Table 1) Of these sites:

- 394 (68 percent) were portal sites. Portal sites do not offer drugs for actual sale; they simply act as a conduit to another Web site--an anchor site--that does make the sale possible.

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\* This number represents the sites that could be identified in a similar period of time each year; it does not represent the total number of sites advertising or selling controlled prescription drugs online.

† 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.

- 187 (32 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.

these drugs for sale compared with 66 percent (101 sites) in 2004, 75 percent (115 sites) in 2005 and 72 percent (125 sites) in 2006. The most frequently offered opioid drugs include hydrocodone (e.g., Vicodin, Lortab) and propoxyphene (e.g., Darvocet, Darvon).

Table 1  
**Internet Sites Advertising or Selling Controlled Prescription Drugs\***

	2004	2005	2006	2007
Sites selling drugs (anchor sites)	154 (31%)	154 (39%)	174 (51%)	187 (32%)
Sites advertising drugs (portal sites)	338 (69%)	242 (61%)	168 (49%)	394 (68%)
Total sites	492	396	342	581

From 2006 to 2007, the number of portal sites found--sites that advertise the drugs--increased by 135 percent, while the number of anchor sites found--sites that actually sell the drugs--increased by seven percent. Over the four years that CASA has tracked online access to these drugs, the number of anchor sites found has increased by 21 percent.

As in previous years, benzodiazepines are the controlled prescription drugs most frequently offered for sale; in 2007, 79 percent of the anchor sites (147) offered these drugs. (Table 2) The percentage of sites offering to sell benzodiazepines has declined from 93 percent in 2004; the total number of sites offering benzodiazepines has ranged from a low of 143 in 2004 and 2005 to a high of 154 in 2006. In all 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 2007, 64 percent (120) of anchor sites offered

Table 2  
**Internet Availability of Controlled Prescription Drugs by Class**

	2004	2005	2006	2007
Benzodiazepines	143 (93%)	143 (93%)	154 (89%)	147 (79%)
Opioids	101 (66%)	115 (75%)	125 (72%)	120 (64%)
Stimulants	42 (27%)	34 (22%)	14 (8%)	21 (11%)
Barbiturates	2 (1%)	15 (10%)	2 (1%)	4 (2%)
Total anchor sites	154	154	174	187

In 2007, 11 percent of sites (21) offered stimulants, up from eight percent in 2006 (14 sites), but down from the high of 27 percent (42 sites) in 2004. The most frequently offered stimulant is methylphenidate (e.g., Ritalin, Concerta) followed by dextroamphetamine (e.g., Adderall, Dexedrine).

In 2007, two percent (4) were identified that offered barbiturates. From 2004 through 2006, these drugs were offered for sale at one percent (2), 10 percent (15) and one percent (2) of sites respectively.

\* Several adjustments were made in classification of data from previous years to assure consistency of reporting.

## Prescriptions Not Needed

Of the 187 sites identified in 2007 that offer to sell controlled prescription drugs on the Internet, 84 percent (157) did not require any prescription. (Table 3) Of those sites not requiring prescriptions:

- 33 percent (52) clearly stated that no prescription was needed;
- 53 percent (83) offered an “online consultation;” and,
- 14 percent (22) made no mention of a prescription.

Only 16 percent (30) of all the sites offering controlled prescription drugs required that a prescription be faxed or mailed or that the patient’s doctor be contacted for the prescription. (Table 4) Of those sites stating that some type of prescription was required:

- 57 percent (17) asked that a prescription be faxed (potentially allowing a customer to tamper with a prescription or to fax a single prescription to several Internet pharmacies);
- 13 percent (4 including 1 VIPPS® site) asked that a prescription be mailed; and,
- 30 percent (9 including 1 VIPPS® site) indicated that a doctor would be contacted prior to dispensing the drug.

## Trends in Prescription Requirements

The percentage and number of sites clearly stating that no prescription was required have decreased from 41 percent of *all sites* (63) in 2004 to 28 percent of *all sites* (52) in 2007 while the percentage and number making no mention

Table 3  
Internet Pharmacy Anchor Sites Not Requiring Prescriptions

	2004	2005	2006	2007
<b>Sites not requiring prescriptions</b>	144 (93%)*	147 (95%)*	155 (89%)*	157 (84%)*
No prescription needed	63 (44%)	53 (36%)	49 (32%)	52 (33%)
Online consultation	76 (53%)	84 (57%)	90 (58%)	83 (53%)
No mention of prescription	5 (3%)	10 (7%)	16 (10%)	22 (14%)
Total anchor sites	154	154	174	187

\* of total anchor sites

Table 4  
Internet Pharmacy Anchor Sites Requiring Prescriptions

	2004	2005	2006	2007
<b>Sites requiring prescriptions</b>	10 (7%)*	7 (5%)*	19 (11%)*	30 (16%)*
Patient faxes	7 (70%)	1 (14%)	14 (74%)	17 (57%)
Patient mails	3 (30%)	4 (57%)	3 (16%)	4 (13%)
Doctor contacted	0 (0%)	2 (29%)	2 (11%)	9 (30%)
Total anchor sites	154	154	174	187

\* of total anchor sites

of prescription requirements have increased from three percent of all sites (5) in 2004 to 12 percent (22) in 2007.

The tendency of a drug to be offered without a prescription varies with the class of drug. Web sites are more likely to advertise some type of prescription requirement for opioids than for benzodiazepines. The numbers were too small to draw meaningful conclusions for stimulants or barbiturates.

Between 2004 and 2006, there was an increase in the number of Web sites that offered an “online consultation” in lieu of a prescription from a patient’s physician--from 76 sites in 2004 to 90 sites in 2006. In 2007, 83 sites were found offering online consultations. 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, allegedly a physician reviews the questionnaire and then authorizes the Internet pharmacy to send the drug to the patient.<sup>22</sup> 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.<sup>23</sup> Online consultation is the primary method for obtaining prescription drugs over the Internet.

Some rogue Internet pharmacies provide online consultations free of charge; others refer customers to “script doctors” who are willing to write prescriptions for a fee.<sup>28</sup> CASA’s analysis identified fees ranging from \$10 to \$180. 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 merely are providing a referral service.

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.

## **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, in a previous analysis BDA found that it was possible to order drugs by providing true information that should have warned any legitimate provider against supplying 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.<sup>30</sup> While several Web sites required that purchasers identify their age, access to the site was easily gained by typing in a fake age.

*Treatment, including issuing a prescription, based solely on an online questionnaire or consultation does not constitute an acceptable standard of care.*<sup>24</sup>

--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...*<sup>25</sup>

--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.*<sup>26</sup>

--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.*<sup>27</sup>

--Joseph T. Rannazzisi

Deputy Assistant Administrator  
Office of Diversion Control

Deputy Chief, Office of Enforcement Operations  
Drug Enforcement Administration

## **Congress & Ryan Haight**

Ryan Haight died in 2001 from an overdose of hydrocodone. He had been a California high school honors student and athlete. He had purchased the drug over the Internet with an online consultation. In memory of Ryan Haight, Senators Dianne Feinstein and Jeff Sessions are proposing legislation to limit the sale of controlled substances over the Internet. Feinstein stated the rationale of the Act: “Ready access to controlled substances over the Internet is helping to fuel addictions.”<sup>29</sup>

## Advertised Source of Drug Shipments

The physical location of the anchor sites from which controlled prescription drugs are sold often is difficult to discern; however, of the 187 sites selling the drugs in 2007:

- 26 percent (48) indicated that the drugs would be shipped from a U.S. pharmacy;
- 48 percent (91) indicated that they would be coming from outside the U.S.; and,
- 26 percent (48) gave no indication of the geographic source of the drug. (Table 5)

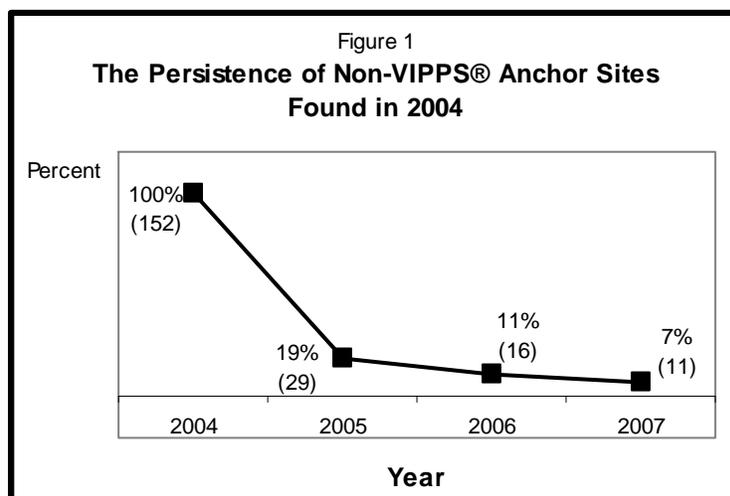
Table 5  
Origin of Drug Shipment

	2004	2005	2006	2007
U.S.	43 (28%)	57 (37%)	62 (36%)	48 (26%)
Non-U.S.	71 (46%)	61 (40%)	57 (33%)	91 (48%)
Unknown	40 (26%)	36 (23%)	55 (31%)	48 (26%)
Total Web sites	154	154	174	187

## Lifecycle of Web Sites Selling Controlled Prescription Drugs

Web sites that sell controlled prescription drugs have an extremely high turnover and may attempt to avoid detection by changing their Web names and addresses. Of the non-VIPPS® anchor sites identified in 2004 (152), only 19 percent (29 sites) remained in business one year later. Only seven percent (11 sites) were still operating when CASA conducted this year's study--four years later. (Figure 1) CASA and BDA also found that it was not unusual for sites to have multiple names\* or to disappear entirely even within the period of analysis. This fluidity in Web sites increases the difficulty of tracking and closing down rogue sites.

\* Sites with multiple names were counted as one site.



## Next Steps

While legitimate online pharmacies can provide access to medications for patients who need them, this snapshot of the wide availability of dangerous and 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.<sup>31</sup>

Although Congress has held hearings on the subject and legislation has been introduced to help curb availability, no action has been taken to date. Because Internet access to controlled prescription drugs transcends state lines, federal action is key. The extensive availability of controlled prescription drugs online poses a threat to our nation's health and a challenge for law enforcement. To address these concerns, CASA recommends the following key actions:

- Congress should 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 DEA-certified physician, licensed in the state of purchase and based on a physical examination and evaluation. Congress also should impose higher penalties for illegal sale to minors.

- Congress should require that in order to advertise or sell controlled prescription drugs online, an offerer must be certified as an Internet pharmacy practice site. Such certification would identify legitimate online pharmacy practice sites, and clearly identify non-certified sites as illegal. Such sites could obtain a special Web domain name so that users can know immediately whether the site is legitimate. One mechanism might be certification by the National Association of Boards of Pharmacy as a VIPPS® site.
- Internet search engines should provide warnings that sale and purchase of controlled prescription drugs over the Internet from unlicensed pharmacies and physicians and without valid prescriptions are illegal and block sites that are not certified.
- The Office of National Drug Control Policy (ONDCP), DEA and Food and Drug Administration (FDA) should 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 prescription drugs from non-certified sites.
- The DEA and financial institutions (credit card and money order issuers) should collaborate to restrict purchases of controlled prescription drugs from non-licensed and accredited providers.
- Postal and shipping services should 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 should 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 controlled prescription drug abuse should cooperate in creating a national non-profit clearinghouse to identify and shut down illegal Internet pharmacies.



# Appendix A

## Detailed Methodology

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The National Center on Addiction and Substance Abuse (CASA) at Columbia University replicated Beau Dietl & Associates (BDA) methodology that was developed for its initial investigation in 2004. This methodology was as follows:

### **Time Devoted to Project**

This analysis is conducted in the first quarter of each year. Total staff time devoted to documenting online sites that advertise or sell controlled prescription drugs is approximately 210 hours.

### **Database Information**

The database created for this report contains detailed records for all Web sites uncovered during the 210 hours devoted to the analysis. 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, CASA attempted to duplicate the approach that an individual seeking to order controlled prescription drugs might use. At all times, CASA investigators asked themselves the following question: How would a typical individual approach the search to buy a controlled substance over the Internet? What would a customer think when viewing this Web page?

### **Target Drugs**

CASA worked from a list of drugs which included only controlled substances as defined by the DEA, Schedules II through 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, CASA employed the following methods:

### *Method 1--Internet Search*

CASA 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 e-mail advertisements, a.k.a. spam, that many people receive on a daily basis. One investigator was assigned the task of researching the Web sites advertised in these emails.

## Web Site Investigation

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

### *Site Classification: Portal vs. Anchor Sites*

It is important to consider the relationship between what customers see on the screen when a Web site is accessed and which Web servers actually are being accessed.

For example, Internet surfers might think they are visiting only one site when in fact they might be forwarded multiple times to separate sites. Or the page they are visiting might appear to be selling

pharmaceuticals when in fact it does not but rather is linked to other Web sites that do. Bearing those distinctions in mind, CASA categorized 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. One can mean the location the Web site advertises as to the origin of the drugs it sells; the physical location of the computers holding the Web site data; the location of the business or individual running the Web site; or the location from where the drugs actually are 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 intentionally or unintentionally be inaccurate. And even if accurate, it does little to help us understand the origin of the drugs as the Web site operator can exist anywhere in the world separate from the location from where the drugs are shipped. 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 CASA 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.

CASA investigators looked for:

- Text in the body of the Web page that 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 which would lead a visitor to believe the drugs were from a certain location.

### ***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 either by 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 (potentially allowing an individual to use the same prescription at several sites). Occasionally, a site required the original prescription to be mailed or advised that the prescribing doctor would be contacted prior to dispensing the drug. These 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 often was referred to as an "online consultation." These sites asked the patient to fill out some form of medical questionnaire. Frequently 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 already was 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 that might be of interest to the investigation such as if the site seemed to be a copy or similar to another site.

### **Notes on Analysis**

Several adjustments were made in classification of data from previous years to assure consistency of reporting.



## Notes

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