



The National Center on  
Addiction and Substance Abuse  
at Columbia University

633 Third Avenue  
New York, NY 10017-6706

phone 212 841 5200  
fax 212 956 8020  
www.casacolumbia.org

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

## A CASA\* White Paper

### July 2008

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\*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!” V: Prescription Drug Pushers on the Internet

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

For five 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 have updated the analysis each year. This report is the fifth in our series and is a snapshot of Internet access to these drugs. 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 five years of trend data which are included in this report.

CASA’s reports illustrate the extensive level of Internet activity related to controlled prescription drugs. This year the number of sites that advertise and offer controlled prescription drugs for sale declined from 2007. This decline may be a function of efforts on the part of federal agencies, state governments and financial institutions to crack down on Internet trafficking. However, widespread availability continues. This year CASA identified a total of 365 sites, including 206 advertising sites and 159 sites offering these drugs for sale. Only two of the selling sites were certified by the National Association of Boards of Pharmacy as legitimate Internet pharmacy practice sites; the other 157 were rogue sites.

Eighty-five percent of the sites selling controlled prescription drugs do not require a physician's prescription from the patient. Of those sites that require prescriptions, half permit the prescription to be faxed allowing significant opportunity for fraud. Most disturbing, there are no controls on any of these sites blocking access by children.

This report offers a range of recommendations and calls on the Congress to enact legislation closing this illicit channel of distribution. In 2007, the Senate Judiciary Committee, chaired by Senator Patrick Leahy (D-VT), held hearings on this topic. In April of this year, the Senate passed a bill introduced by Senators Dianne Feinstein (D-CA) and Jeff Sessions (R-AL) to prohibit delivery, distribution or dispensing of controlled substances over the Internet without a prescription issued by a practitioner who has conducted at least one in-person medical evaluation, and to require federal certification of online pharmacies. The Senate bill has been referred to the House Committees on Energy and Commerce and Judiciary, and the House Judiciary Committee, Subcommittee on Crime, Terrorism and Homeland Security, held a hearing in June of 2008. It is now time for Congress to act.

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 Stephen Heskett, an independent contractor, formerly with Beau Deitl Associates who conducted the analysis for CASA in the first three years. Roger Vaughan, DrPH, head of CASA's Substance Abuse and Data Analysis Center (SADAC<sup>SM</sup>), Professor of Clinical Biostatistics, 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<sup>SM</sup>. Jane Carlson and Jennie Hauser handled the administrative details.

We wish to thank MasterCard, Visa, American Express and PayPal who, for the first time this year, collaborated with us to explore the extent

to which their payment processes can be used to purchase controlled drugs online without a prescription.

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

## “You’ve Got Drugs!” V: 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 its 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 Percocet, depressants like Valium and Xanax, and stimulants like Ritalin and Adderall--online and without a prescription.

This report was inspired by early findings from CASA’s study of the diversion and abuse of these drugs, published in 2005--*Under the Counter: The Diversion and Abuse of Controlled Prescription Drugs in the U.S.* Each year since 2004, CASA has replicated the analysis. Research for the 2004-2006 reports was contributed by Beau Dietl & Associates (BDA). This report is the fifth in the series.

Between 2004 and 2007, the number of Web sites identified that offer controlled prescription drugs for sale increased.\* This year, the number of such sites that CASA identified declined. It is possible that this decline is linked to growing efforts to reduce online access to controlled prescription drugs, but impossible to say with certainty. In spite of this decline, widespread availability continues and troubling facts remain in 2008:

- CASA identified a total of 365 Web sites either advertising or offering controlled prescription drugs for sale on-line; only two of those sites were registered Internet pharmacy practice sites.
- 85 percent of sites offering drugs for sale required no prescription from a patient’s physician--the same as 2007 (84 percent).

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

- Of the 15 percent of sites offering drugs for sale that do indicate that a prescription is required, half simply ask that the prescription be faxed--increasing the risk of multiple use of one prescription or other fraud.
- There are no controls to block the sale of these drugs to children.

## **The Internet: A Pharmaceutical Candy Store**

Today an estimated 200 million people in the U.S. are Internet users; 125 million access the World Wide Web at least weekly. While 63 percent of adults have access to the Internet, Internet users are disproportionately young, including nearly 100 percent of college students and 78 percent of 12- to 17-year olds. The fact that 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>

Not surprisingly, online trafficking of controlled prescription drugs grew rapidly since the first Internet pharmacies began in 1999.<sup>2</sup> With cash, wire transfer or access to a credit card and the click of a mouse, the Internet has offered a convenient and private means of purchasing controlled prescription drugs--completely lacking in scrutiny from parents, other family members, and frequently hidden from law enforcement.

## **Prescription Drug Abuse**

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>3</sup> With increased availability has come increased abuse of these drugs.

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. By 2006, 15.8 million people reported abusing controlled prescription drugs, more than the combined number who reported abusing cocaine (6.1 million), hallucinogens (4.0 million), inhalants (2.2 million) and heroin (.5 million).<sup>4</sup>

Children are especially at risk. In 2006, 2.2 million teens between the ages of 12 and 17 (8.5 percent) admitted abusing a prescription drug in the past year.<sup>5</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 pain relievers are "available everywhere."<sup>6</sup>

## **The Regulatory Framework**

Online pharmaceutical sales by state licensed, legitimate and reputable Internet pharmacies can provide significant benefits to consumers.<sup>7</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>8</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>9</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>10</sup> Under the law, 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:

1. A patient has a medical complaint;
2. A medical history has been taken;
3. A physical examination has been performed; and,
4. Some logical connection exists between the medical complaint, the medical history, the physical examination and the drug prescribed.”<sup>11</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.

## Online Consultations

Many Internet pharmacies offer controlled drugs by 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>12</sup> In any event, such sales do not constitute a legitimate doctor-patient relationship as described above.<sup>13</sup>

The Federation of State Medical Boards of the United States, Inc., the American Medical Association, the National Association of Boards of Pharmacy and the DEA, all agree that online consultations cannot take the place of a face-to-face physical examination with a legitimate

*Treatment, including issuing a prescription, based solely on an online questionnaire or consultation does not constitute an acceptable standard of care.*<sup>14</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>15</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>16</sup>

--National Association of  
Pharmacy Regulatory Authorities

*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>17</sup>

--Joseph T. Rannazzisi  
Deputy Assistant Administrator  
Office of Diversion Control  
Deputy Chief, Office of Enforcement Operations  
Drug Enforcement Administration

physician. For example, 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>18</sup>

In the case of online consultations, 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>19</sup>

Tens of thousands of “prescriptions” are written each year for controlled substances through such Internet pharmacies, which do not require medical records, examinations, lab tests or follow-ups.<sup>20</sup> The DEA reports that a maximum of about 11 percent of prescriptions filled by traditional (brick and mortar) pharmacies are for controlled substances. In contrast, 95 percent of prescriptions filled by Internet (cyber) pharmacies in 2006 were for controlled substances. One of the ways the DEA identifies rogue pharmacies is by their large percentage of prescriptions for controlled substances. The DEA reports that in response to detection and enforcement efforts, the percentage of prescriptions filled by cyber pharmacies for controlled substances dropped to 80 percent in 2007, and the number of such prescriptions fell significantly.<sup>21</sup> (Figure A)

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>22</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.

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

In an attempt to 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 VIPPS® 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; fees range from \$5,000 to \$8,000 for initial certification and a minimum of \$1,000 to \$4,000 in yearly participation fees.<sup>23</sup> There are currently 15 such sites.<sup>24</sup> (Table 1)

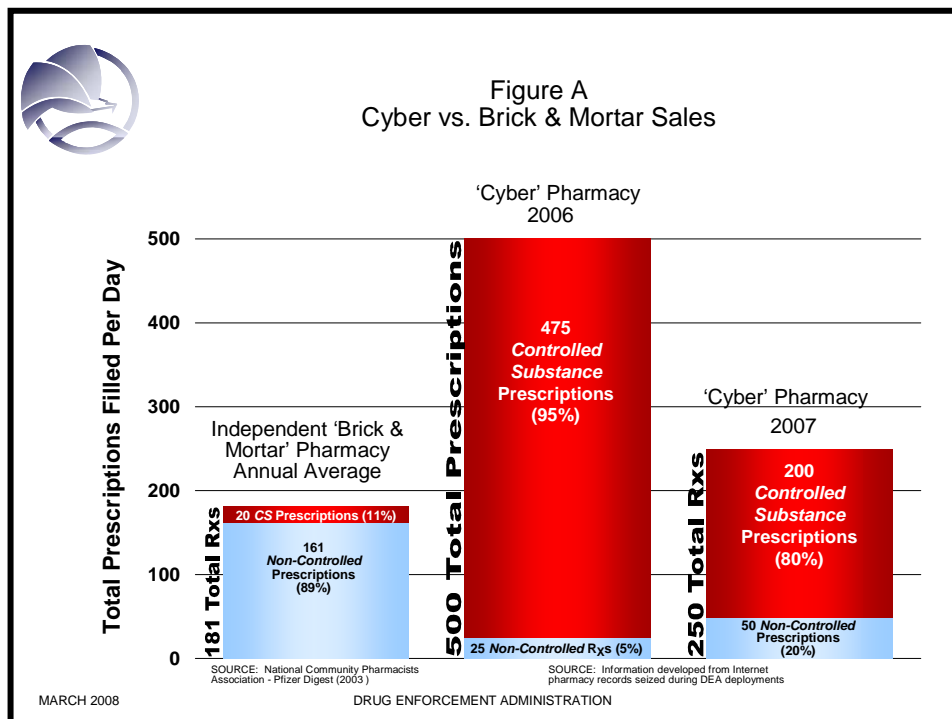


Table 1  
**Verified Internet Pharmacy Practice Sites™  
 (VIPPS®)**

| Web Business Name                     | Web Site Address          |
|---------------------------------------|---------------------------|
| Caremark.com                          | www.caremark.com          |
| DrugSource, Inc                       | www.drugsourceinc.com     |
| drugstore.com                         | www.drugstore.com         |
| Familymeds.com                        | www.Familymeds.com        |
| HOOK SUPERX, Inc, dba<br>CVS/pharmacy | www.cvs.com               |
| Liberty Medical Supply, Inc           | www.libertymedical.com    |
| Medco Health Solutions, Inc           | www.medco.com             |
| Prescription Solutions                | www.rxsolutions.com       |
| Prime Therapeutics, LLC               | www.primetherapeutics.com |
| Rx Direct, Inc                        | www.rxdirect.com          |
| Savon.com                             | www.savon.com             |
| Tel-Drug, Inc/CIGNA                   | www.teldrug.com           |
| Walgreen Co                           | www.walgreens.com         |
| WellDyneRx                            | www.welldynernx.com       |
| WellPoint NextRx                      | www.wellpointnextrx.com   |

## The CASA Analysis

As in previous years, CASA devoted a total of 210 hours to documenting the number of Internet sites dispensing the following controlled substances: (See Appendix A, Detailed Methodology)

- **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.

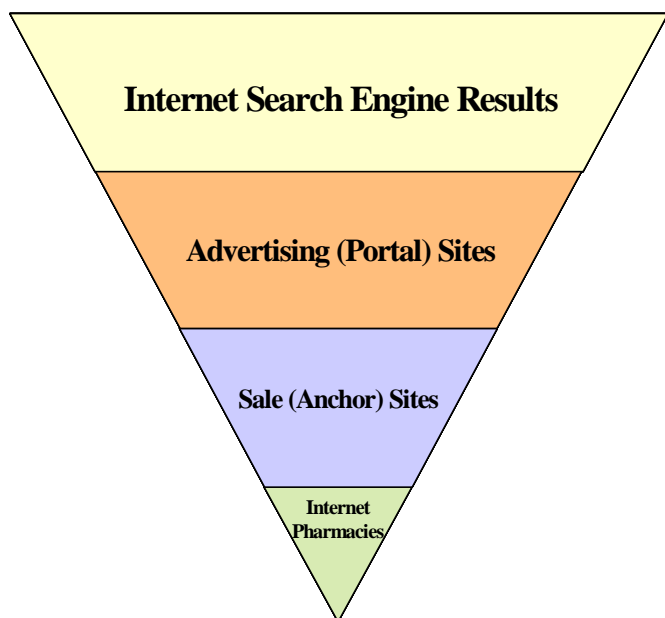
CASA also sought to document from where the site advertised that the drugs would be shipped, whether from the U.S or another country, and any controls blocking the sale of these drugs to children.

To conduct this analysis, CASA began the same way a purchaser would if he or she were seeking any other product--with search engines such as Google, Yahoo and MSN. Typing in “buy oxycodone without prescription,” for example, first yields thousands of results for sites containing the search terms. Many of these results, however, would not lead to a purchase. For example, they may contain sites providing information on the drugs themselves, press releases or articles about the topic of online trafficking or even cautions against purchasing drugs online without a prescription. (See the first level of Figure B.)

But many sites do remain that would lead to such purchases by pointing either to sites advertising these drugs or offering them for sale.

Sites that advertise controlled prescription drugs are called portal sites. These sites do not themselves sell a product on the Internet; rather they point toward sites that do. These portal sites are represented by the second tier in Figure B.

Figure B  
**Chain of Web Sites in Internet Searches  
 for Controlled Prescription Drugs**



The sites that directly sell to consumers are called anchor sites--the third tier in Figure B. A single portal site can point to several separate anchor Web sites that actually sell the drugs, or a single anchor site may have multiple portal sites pointing to it. Each year, our analysis has shown there are more portal than anchor sites.

An online pharmacy fills the order and ships the drugs. These pharmacies are represented in the bottom tier in Figure B. The operator of the pharmacy may not be located in the same geographic region as the anchor site that handles the sale. The pharmacy itself may operate the anchor site or the anchor site may send the order to the pharmacy. Different anchor sites may use the same pharmacy to fill prescriptions.

Consumers see larger numbers at the top of the pyramid that become smaller as they move down through the chain of sites. A large number of search results on the first level is not an indication of the number of sites actually

\* Adapted from documentation provided by financial industry investigations.

offering drugs for sale; a look deeper down the pyramid is required.

From our research, it is not possible to know if the supplier of the drug is the same entity that operates the anchor site, whether the anchor site hosts multiple portals, or whether the supplier is a third party serving multiple anchor sites. Further, one party may operate dozens of portal sites but may never interact with anyone lower in the inverted pyramid except to receive commissions for pointing consumers to anchor sites.

CASA's analysis begins at the top and ends at the level of anchor sites since we do not actually attempt purchases of the drugs. This is a legal limitation of our research.

## 2008 Findings

This year CASA identified a total of 365<sup>†</sup> Web sites offering Schedules II through V<sup>‡</sup> controlled prescription drugs for sale--down from 581 in 2007. (Table 2)

<sup>†</sup> 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.

<sup>‡</sup> 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.

Table 2  
**Internet Sites Advertising or Selling Controlled Prescription Drugs\***

|  | 2004         | 2005         | 2006         | 2007         | 2008         |
|--|--------------|--------------|--------------|--------------|--------------|
| Sites selling drugs (anchor sites)     | 154<br>(31%) | 154<br>(39%) | 174<br>(51%) | 187<br>(32%) | 159<br>(44%) |
| Sites advertising drugs (portal sites) | 338<br>(69%) | 242<br>(61%) | 168<br>(49%) | 394<br>(68%) | 206<br>(56%) |
| Total sites                            | 492          | 396          | 342          | 581          | 365          |

Of these sites:

- 206 (56 percent) were portal sites--that advertise drugs and act as a conduit to another Web site that handles the sale.
- 159 (44 percent) were anchor sites--where the customer places an order and pays to purchase the drugs.

This year marked a decline in both the number of portal and anchor sites that were identified; however the proportion of total sites that offer the drugs for sale increased from 32 percent of total sites in 2007 to 44 percent in 2008.

As in previous years, benzodiazepines are the controlled prescription drugs most frequently offered for sale; in 2008, 90 percent (143) of the anchor sites offered these drugs for sale. (Table 3) The most frequently offered benzodiazepines were alprazolam (Xanax) and diazepam (Valium).

The second most frequently offered class of controlled prescription drugs is the opioids. In 2008, 57 percent (91) of the anchor sites offered these drugs for sale. This year marked the lowest number and percent of anchor sites offering opioids since CASA began its analysis. The most frequently offered opioid drugs were hydrocodone (e.g., Vicodin, Lortab), codeine, oxycodone (e.g., Percocet) and propoxyphene (e.g., Darvocet, Darvon).

In 2008, 27 percent (43) of the anchor sites offered stimulants for sale. This year marked an increase in the number of anchor sites offering to sell stimulants, back up to the level we first found in 2004. The most frequently offered

stimulant is methylphenidate (e.g., Ritalin, Concerta) followed by dextroamphetamine (e.g., Adderall, Dexedrine).

Two percent (3) of the anchor sites offered barbiturates, like mebaral and secondal, for sale in 2008.

*"When you pay for your order using Western Union, you will receive a bonus of 20 X Diazepam 10 mg absolutely free!"*

--Internet Trafficking Web site

Table 3  
**Internet Availability of Controlled Prescription Drugs by Class**

|                    | 2004         | 2005         | 2006         | 2007         | 2008         |
|--------------------|--------------|--------------|--------------|--------------|--------------|
| Benzodiazepines    | 143<br>(93%) | 143<br>(93%) | 154<br>(89%) | 147<br>(79%) | 143<br>(90%) |
| Opioids            | 101<br>(66%) | 115<br>(75%) | 125<br>(72%) | 120<br>(64%) | 91<br>(57%)  |
| Stimulants         | 42<br>(27%)  | 34<br>(22%)  | 14<br>(8%)   | 21<br>(11%)  | 43<br>(27%)  |
| Barbiturates       | 2<br>(1%)    | 15<br>(10%)  | 2<br>(1%)    | 4<br>(2%)    | 3<br>(2%)    |
| Total anchor sites | 154          | 154          | 174          | 187          | 159          |

## Prescriptions Not Needed

Eighty-five percent of anchor sites (135) do not require a prescription in order to purchase controlled prescription drugs online. (Table 4)

Of those sites not requiring prescriptions:

- 42 percent (57) explicitly stated that no prescription was needed;
- 45 percent (61) offered an “online consultation;” and,
- 13 percent (17) made no mention of a prescription.

Only 15 percent (24) of all the sites offering controlled prescription drugs for sale required that a prescription be faxed or mailed or that the patient’s doctor be contacted for the prescription. (Table 5)

Of those sites that reported some type of prescription requirement:

- 50 percent (12) 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);
- 29 percent (7 including 1 VIPPS® site\*) asked that a prescription be mailed; and,
- 21 percent (5 including 1 VIPPS® site) indicated that a doctor would be contacted prior to dispensing the drug.

\* Verified Internet Pharmacy Practice Sites™ certified by the National Association of Boards of Pharmacy.

Table 4  
Internet Pharmacy Anchor Sites Not Requiring Prescriptions

|                                   | 2004          | 2005          | 2006          | 2007          | 2008          |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|
| Sites not requiring prescriptions | 144<br>(93%)* | 147<br>(95%)* | 155<br>(89%)* | 157<br>(84%)* | 135<br>(85%)* |
| No prescription needed            | 63<br>(44%)   | 53<br>(36%)   | 49<br>(32%)   | 52<br>(33%)   | 57<br>(42%)   |
| Online consultation               | 76<br>(53%)   | 84<br>(57%)   | 90<br>(58%)   | 83<br>(53%)   | 61<br>(45%)   |
| No mention of prescription        | 5<br>(3%)     | 10<br>(7%)    | 16<br>(10%)   | 22<br>(14%)   | 17<br>(13%)   |
| Total anchor sites                | 154           | 154           | 174           | 187           | 159           |

\* of total anchor sites

Table 5  
Internet Pharmacy Anchor Sites Requiring Prescriptions

|                               | 2004        | 2005       | 2006         | 2007         | 2008         |
|-------------------------------|-------------|------------|--------------|--------------|--------------|
| Sites requiring prescriptions | 10<br>(7%)* | 7<br>(5%)* | 19<br>(11%)* | 30<br>(16%)* | 24<br>(15%)* |
| Patient faxes                 | 7<br>(70%)  | 1<br>(14%) | 14<br>(74%)  | 17<br>(57%)  | 12<br>(50%)  |
| Patient mails                 | 3<br>(30%)  | 4<br>(57%) | 3<br>(16%)   | 4<br>(13%)   | 7<br>(29%)   |
| Doctor contacted              | 0<br>(0%)   | 2<br>(29%) | 2<br>(11%)   | 9<br>(30%)   | 5<br>(21%)   |
| Total anchor sites            | 154         | 154        | 174          | 187          | 159          |

\* of total anchor sites

In 2007, Web sites were more likely to advertise some type of prescription requirement for opioids than for benzodiazepines. This year, the tendency of a drug to be offered without a prescription did not vary significantly with the class of drug.

## Advertised Source of Drug Shipments

The entire process of advertising, sale, supply and shipping of controlled prescription drugs online can be a global one. The physical location of the anchor sites from which controlled prescription drugs are sold is difficult to discern. The location of the computers serving the portal and anchor Web pages on the Internet may be separate from the location of the operators of these sites. The ‘doctor’ issuing the prescription may be at a different site altogether and, as noted previously, the pharmacy that

actually ships the drugs may be located in yet another location. All of these could be in the back yard or around the world from the person purchasing the drugs. (Figure C)

While many anchor sites advertise a country from which the drug will be shipped, it is not always possible to know the origin of the drugs, even after the drugs have been shipped. Of the 159 identified Web sites offering controlled prescription drugs for sale in 2008:

- 24 percent (38) indicated that the drugs would be shipped from a U.S. pharmacy;
- 40 percent (63) indicated that they would be coming from outside the U.S.; and,
- 36 percent (58) gave no indication of the geographic source of the drug. (Table 6)

### 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>25</sup> While several Web sites required that purchasers identify their age, CASA’s analysis found that access to the site was gained easily by typing in a fake age.

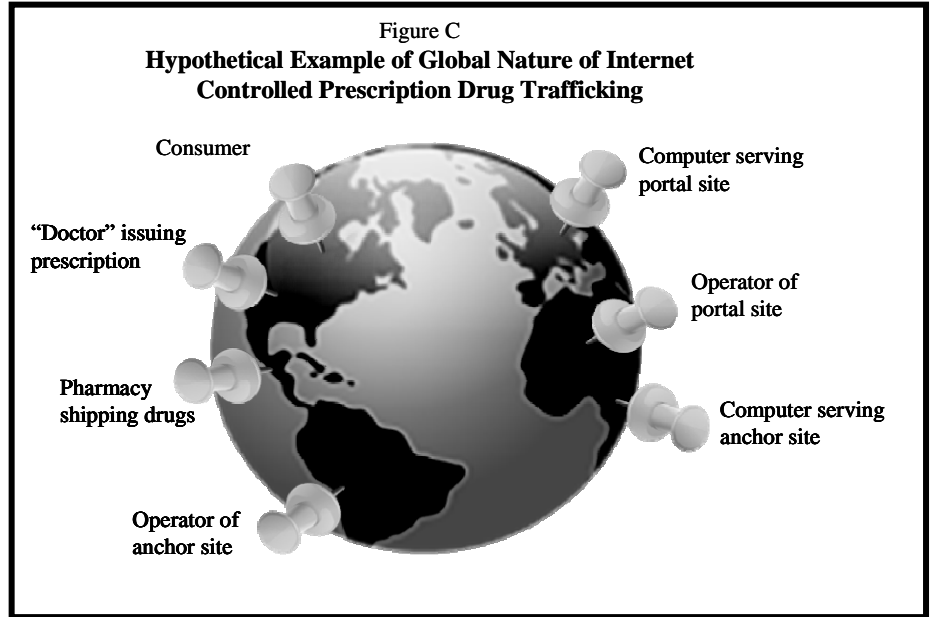


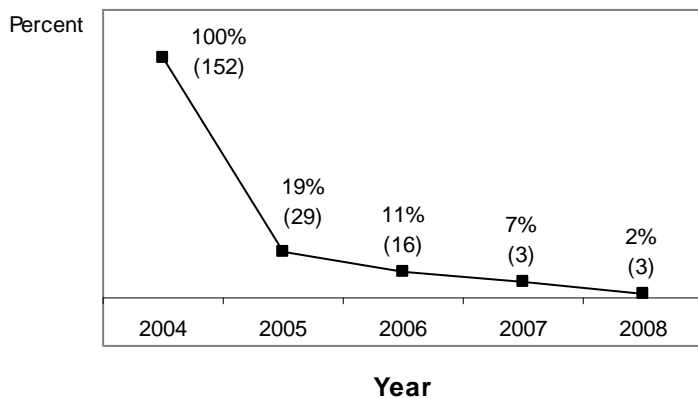
Table 6  
Origin of Drug Shipment

|                 | 2004        | 2005        | 2006        | 2007        | 2008        |
|-----------------|-------------|-------------|-------------|-------------|-------------|
| U.S.            | 43<br>(28%) | 57<br>(37%) | 62<br>(36%) | 48<br>(26%) | 38<br>(24%) |
| Non-U.S.        | 71<br>(46%) | 61<br>(40%) | 57<br>(33%) | 91<br>(48%) | 63<br>(40%) |
| Unknown         | 40<br>(26%) | 36<br>(23%) | 55<br>(31%) | 48<br>(26%) | 58<br>(36%) |
| Total Web sites | 154         | 154         | 174         | 187         | 159         |

### 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 two percent (3 sites) were still operating when CASA conducted this year’s study. (Figure D)

Figure D  
**The Persistence of Non-VIPPS Anchor Sites Found in 2004**



Further, it is 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.

### Efforts of Trafficking Sites to Appear Legitimate

Web sites selling controlled substances without a prescription use various tactics to give the appearance of legitimacy. One such tactic is to post logos for various professional and governmental agencies on their Web sites. An example can be seen in Figure E where logos give the appearance that the activities of the online pharmacy are approved by the Food and Drug Administration (FDA) and the American Drug Administration. CASA was unable to determine the existence of any organization called the American Drug Administration. (Figure E)

Another method of attempting to appear legitimate is to display the logos of major credit cards (e.g., MasterCard, Visa, American Express, Discover) or payment mechanisms (e.g., PayPal, Western Union) on the Web site. Although sites may display these logos, they do

\* Sites with multiple names were counted as one site in CASA's analysis.

not necessarily permit their use at the time of purchase.

These efforts to provide the appearance of legitimacy exist alongside obvious efforts to help consumers avoid detection including providing fake statements on credit card purchases.

*“Credit card statement will show payment to Global Research.”*

*“Our organization name is not indicated on any package and shipments are made from various shipping points in Europe and other parts of the world to ensure maximum discretion and highest probability of successful delivery.”*

--Assurances on a Web sites selling controlled drugs without a prescription

Figure E  
**Examples of Logos Posted on Internet Trafficking Sites**



### Efforts to Restrict Internet Prescription Drug Trafficking

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>26</sup> In recent years, a range of responses has emerged:

## ***Federal Action***

In 2007, the Senate Judiciary Committee, chaired by Senator Patrick Leahy (D-VT), held hearings on Internet trafficking of controlled prescription drugs. Senators Dianne Feinstein (D-CA) and Jeff Sessions (R-AL), both members of the Judiciary Committee, introduced *The Ryan Haight Online Pharmacy Consumer Protection Act of 2008* which was passed by the Senate in April of 2008. The bill was named after a California high school honors student and athlete who had purchased hydrocodone over the Internet through an online consultation and died after an overdose of the drug.<sup>27</sup> The bill would amend the *Controlled Substances Act* to prohibit the delivery, distribution or dispensing of controlled substances over the Internet without a prescription that is issued by a practitioner who has conducted at least one in-person medical evaluation of the patient, thus banning online consultations, and would require certification of online pharmacies.<sup>28</sup> The bill was referred to the House Committees on Energy and Commerce and Judiciary; the House Judiciary Committee, Subcommittee on Crime, Terrorism and Homeland Security, held a hearing on the topic June 24, 2008.<sup>29</sup>

In September of 2007, the FDA in partnership with the Ad Council launched an online campaign aimed at consumers who are considering buying medicines online. The program includes placement of public service banner advertisements, which caution consumers about the dangers of buying drugs online. The program gives information on how to recognize fraud, and outlines principles for safely purchasing medications online. The banner ads have hyperlinks to an FDA page for additional information.<sup>30</sup>

## ***State Action***

In response to the problem of Internet trafficking and the lack of federal action, several states have proposed legislation to regulate electronic prescribing or Internet sale of drugs. In 2006 and 2007, eight states passed laws specifically

regarding the sale of prescription drugs on the Internet:

- **Arkansas** prohibits Internet sales of prescription drugs into Arkansas without a valid patient-practitioner relationship where the physician has conducted a medical history and a physical examination to establish a diagnosis. Prescriptions on the basis of an Internet questionnaire or consultation or phone consultation are prohibited.<sup>31</sup>
- **Idaho** states that a prescription is not valid if based solely on an online questionnaire or consultation outside of an ongoing clinical relationship.<sup>32</sup>
- **Indiana** requires nonresident pharmacies doing 25 percent or more of their business over the Internet to obtain certification from VIPPS® or any other substantially similar program approved by the state Board of Pharmacy.<sup>33</sup>
- **Kentucky** requires all pharmacies doing business in Kentucky and conducting 25 percent or more of their business over the Internet to obtain certification from VIPPS® or any other substantially similar program approved by the State Board of Pharmacy. Kentucky also prohibits obtaining a prescription without at least one in-person medical examination, thus banning online consultations.<sup>34</sup>
- **Louisiana** states that a prescription issued solely upon the results of answers to an electronic questionnaire is not valid.<sup>35</sup>
- **North Carolina** requires that any Internet pharmacy in the state obtain certification from the VIPPS® program.<sup>36</sup>
- **Texas** requires the Texas Attorney General to develop a public awareness campaign to educate consumers about solicitations by email or Internet, including information on distinguishing reputable pharmacies from unlicensed or fraudulent sellers.<sup>37</sup>

- **Wisconsin** explicitly prohibits a pharmacy outside of the State from routinely shipping or delivering a prescription drug to individuals within the State unless the pharmacy is licensed by the State Pharmacy Examining Board.<sup>38</sup>

Ten additional states proposed legislation addressing Internet sales of prescription drugs in 2006 and 2007, but these laws were not passed.<sup>39</sup> Some of the Web sites CASA identified this year list states where online sellers will NOT ship drugs. These practices may be in response to the emergence of state laws against online trafficking.

### ***LegitScript***

A new non-profit corporation, LegitScript, has been created to establish standards for and to certify Internet pharmacies. The organization is identifying and approving without cost Internet pharmacy Web sites that comply with its standards, which are recognized by the National Association of Boards of Pharmacy (see text box with standards). While VIPPS® accreditation is a more rigorous program with fewer approved pharmacies, LegitScript intends to provide a complete listing of all Internet pharmacy Web sites that meet core standards for safety and legitimacy. LegitScript, which initiated operations in May of 2008, allows online pharmacies compliant with its standards to display the LegitScript seal of approval. It plans to actively monitor participating pharmacies and currently allows consumers to submit reports about suspicious online pharmacies.<sup>40</sup>

### ***Financial Institutions***

Leading payment system providers including MasterCard, Visa, American Express and PayPal report taking a number of steps to prevent Internet pharmacies from accepting their respective brands for illegal sales/purchases of controlled substances, including:

- Working with customer financial institutions or individual customers to shut off Web sites from accepting their payment brands in

### **LegitScript Certification Standards<sup>41</sup>**

The pharmacy is licensed or registered in good standing in the states where the pharmacy delivers or dispenses, or offers to deliver or dispense, prescription drugs.

The Pharmacist-In-Charge is licensed or registered in good standing in all applicable jurisdictions where the pharmacy delivers or dispenses, or offers to deliver or dispense, prescription drugs.

The pharmacy is physically located within the United States and adheres to the FDA's drug approval process.

The pharmacy Web site provides accurate physical location and contact information including a phone number and the name of the pharmacist-in-charge, on its Web site for the brick-and-mortar pharmacy or other approved and licensed facility that dispenses prescription drugs.

If the pharmacy delivers controlled substances, the pharmacy has a valid DEA registration and state controlled substance license, as applicable.

The pharmacy is HIPPA-compliant and uses SSL or equivalent technology to secure transaction information and protect consumer privacy.

The pharmacy requires an original prescription provided by a person authorized under state law and, as applicable, federal law, to provide a prescription.

The pharmacy does not encourage, facilitate, or dispense prescriptions that have been issued based upon an invalid patient-prescriber relationship that has not included an in-person examination. Pharmacies that distribute prescription drugs solely on the basis of an online questionnaire or consultation will not be considered for inclusion on this site.

The pharmacy and pharmacist-in-charge have not been subject to significant recent and/or repeated disciplinary sanctions.

The pharmacy dispenses drugs in compliance with the Food, Drug, and Cosmetic Act, the *Controlled Substances Act*, and other applicable federal and state laws.

connection with the illegal sale of pharmaceuticals over the Internet;

- Publicizing to their customers worldwide information reminding them of obligations to ensure that their systems are not used for illegal pharmaceutical sales; and,

- Collaborating with the DEA and the FDA to address the issue and take action when necessary.

The payment system providers report scanning the Internet themselves and with the help of third party Web crawling services in order to identify potentially illegal activities and take action to shut off Web sites from accepting their brand if it appears that the site is engaged in illegal sales of controlled substances.

Each payment system has its own internal policies regarding illegal pharmaceutical sales. PayPal prohibits the use of its payment system for the sale or purchase of controlled prescription drugs unless the merchant receives prior approval from PayPal (four such merchants have been approved worldwide). MasterCard, Visa and American Express have express rules against illegal activity on their systems, and require all customers to conduct their programs and activities in accordance with all applicable laws.<sup>42</sup>

## Findings from Financial Institution Analysis

To better understand the extent to which credit cards and other payment mechanisms can be used to purchase drugs online without a prescription, CASA collaborated for purposes of our 2008 analysis with MasterCard, Visa, American Express and PayPal.

CASA provided this group of financial institutions with a random sample of 45 anchor sites from this year's analysis that offered to sell controlled prescription drugs and indicated that they accepted payment from one or more of the participating financial service providers. The group responded with their own analysis of those sites and the results of audits and attempted test transactions at those sites, permitting a deeper look into the actual sale process than CASA was able to perform.

Their findings were:

- Of the 45 sites, four were found to be membership sites selling lists of online pharmacies, two were no longer advertising controlled substances, and four were found to be consultation sites that sell a consult with a physician that may result in a prescription rather than selling the drugs themselves.
- Of the remaining 35 sites, 15 were malfunctioning, inactive or requiring purchase through off-line means and five were no longer offering any of these four payment methods--although they were offering alternatives including echecks, Discover, Western Union, MoneyGram, Diner's Club, bank checks and cash on delivery. No test transactions were conducted to determine if these five sites would attempt to process purchases made using these alternative payment mechanisms.
- The remaining 15 sites which offered controlled substances and indicated that they would accept one or more of the four participating financial providers were tested. *Only four* of these sites attempted to make the payment transaction. The reason for this is unclear, but could be the result of efforts made by these financial service providers to shut down use of their systems of payment for Internet trafficking.<sup>43</sup>

## The Role of Internet Search Engines

As of March 2008, approximately 90 percent of Internet searches were conducted using three search engines: Google, Yahoo and MSN/Windows Live Search.<sup>44</sup> All three search engines dynamically generate a list of advertisements based on the content of a user's search. A consumer searching for "Valium," for example, will not only receive the normal search engine results (see the first tier of Figure A), but also a list of "sponsored" results or ads from Internet pharmacies selling Valium. Advertisers

bid for placement in these sponsored results based on what words were searched.

The three primary search engines at least partly depend on a verification program called PharmacyChecker to screen out rogue pharmacies.\*<sup>45</sup> This verification process is far from perfect. For example, CASA was able to find prominent displays of ads for rogue Internet pharmacies on both Google and Yahoo in a search for a subset of controlled drugs included in CASA's analysis. This suggests that these search engines are profiting from advertisements for illegal sales of controlled prescription drugs online.

## Emerging Issue

This year in consultation with federal law enforcement agencies, CASA identified an emerging practice of Internet trafficking in prescriptions for controlled drugs through "medical consultation" Web sites. Instead of selling controlled prescription drugs online, Web sites are offering to sell consultations with a doctor that result in prescriptions for controlled drugs. These prescriptions are either sent to local pharmacies where customers can purchase the drugs or to customers who can take them to a local pharmacy to be filled. In either case, the client is charged for a phone consultation.

These sites advertise that such consultations are with licensed physicians; however, the process appears to be the Internet version of the "script mill" where doctors see many patients a day seemingly to fill or refill prescriptions for addictive drugs without regard to the standards of medical practice.

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\* Pharmacy Checker states that the purpose of its verification program is to help consumers find qualified online pharmacies and that its seal of approval indicates that "a web site markets prescription drugs from a pharmacy in good standing."

## Next Steps

The availability of controlled prescription drugs online poses a threat to our nation's health and a challenge for law enforcement. While legitimate online pharmacies can provide access to medications for patients who need them, this snapshot of the availability of dangerous and addictive drugs on the Internet reveals an open channel of distribution. This line of illegal access to controlled prescription drugs 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>46</sup>

Although Congress has held hearings on the subject and legislation has been introduced to help curb availability, no federal legislation has been enacted to date. Because of the high stakes and lack of federal action, states are weighing in and the leading financial institutions report taking steps to reduce access as well. Whether these steps account for the decline in advertising and sale sites identified this year remains to be seen. Regardless, because Internet access to controlled prescription drugs continues and transcends state lines, federal action is essential.

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. Such certification would identify legitimate online pharmacy practice sites, and by default 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.

- Internet search engines should block all advertisements for controlled prescription drugs that do not come from licensed and certified online pharmacies; screen such sites from Internet searches; and provide warnings that sale and purchase of controlled prescription drugs over the Internet from unlicensed pharmacies and physicians and without valid prescriptions are illegal.
- The Office of National Drug Control Policy (ONDCP), DEA and the FDA should expand 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 should continue their efforts 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 negotiate treaties with foreign governments to help shut down Internet trafficking of controlled prescription drugs.



# 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 offer to 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 advertising or offering a controlled prescription drug for sale, 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 offers to sell 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 by far would 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 anchor 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 anchor 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 nor did they include a medical questionnaire. Other sites advertised that no prior prescription was needed.

### ***Site Classification: Drugs Available***

Investigators noted the full range of target drugs available at the anchor Web site, even if a particular drug were 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, and any controls blocking access to children.

### **Notes on Analysis**

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

## Notes

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