

# An Analysis of Terrorist Threats to the American Medicine Supply

By GlobalOptions Inc.

Signature Book Printing  
Gaithersburg, Maryland

Copyright © 2003, GlobalOptions Inc.

All Rights Reserved, including the right of reproduction in whole or in part in any form.

Printed in the U.S. by  
Signature Book Printing, Inc.  
[www.sbpbooks.com](http://www.sbpbooks.com)

# Table of Contents

|  |           |
|--|-----------|
| <b>I. Executive Summary .....</b>                          | <b>5</b>  |
| <b>II. Introduction .....</b>                              | <b>9</b>  |
| <b>III. Terrorist Threats to the Medicine Supply .....</b> | <b>11</b> |
| A. Growing Terrorist focus On The Medicine Supply.....     | 11        |
| B. Main Terrorist Threats .....                            | 17        |
| <b>IV. Pharmaceutical Industry .....</b>                   | <b>19</b> |
| A. How Drugs Are Made .....                                | 19        |
| B. Packaging.....  | 20        |
| C. The U.S. Drug Distribution Network.....                 | 21        |
| D. U.S. Laws Regulating Drug Quality and Safety .....      | 22        |
| E. Counterfeit Pharmaceuticals.....                        | 25        |
| F. Counterfeit Drugs Entering the U.S. ....                | 33        |
| G. Counterfeit Bulk Drugs .....                            | 39        |
| H. U.S. Wholesale Drug Distributors .....                  | 41        |
| <b>V. Threat of Terrorism To The Medicine Supply .....</b> | <b>45</b> |
| A. Funding Terrorist Operations .....                      | 45        |
| B. Growing Chemical/ Biological Terrorist Threat .....     | 51        |
| C. Terrorist Threats to the Food Supply .....              | 59        |
| D. Terrorist Threats To Pharmaceuticals .....              | 65        |
| <b>VI. Canadian Pharmaceutical Market.....</b>             | <b>79</b> |
| A. Pharmaceutical Industry.....                            | 79        |
| B. Regulatory Framework.....                               | 80        |
| C. Terrorism Groups Operating in Canada.....               | 84        |
| D. Border Security .....                                   | 88        |
| E. Terrorist Threat from Drug Importation.....             | 92        |

|   |            |
|---|------------|
| <b>VII. Mexican Pharmaceutical Market.....</b>          | <b>97</b>  |
| A. Regulatory Framework.....                            | 97         |
| B. Pharmaceuticals Entering the United States.....      | 101        |
| C. Counterfeit Pharmaceuticals.....                     | 105        |
| D. Terrorist Groups Operating in Mexico.....            | 108        |
| <b>VIII. Internet Pharmacies .....</b>                  | <b>111</b> |
| A. The Internet Pharmaceutical Market.....              | 111        |
| 1. Internet Prescription Pharmacies.....                | 112        |
| 2. Internet Resident Physician Pharmacies.....          | 114        |
| 3. Internet Non-Prescription Pharmacies.....            | 115        |
| 4. Regulatory Framework in the U.S. ....                | 117        |
| 5. Proliferating Websites .....                         | 118        |
| 6. Affiliate Pharmaceutical Networks.....               | 120        |
| 7. Online Consultations.....                            | 123        |
| 8. Drugs Sold by Internet Pharmacies.....               | 127        |
| 9. Canadian Online Pharmacies.....                      | 129        |
| B. Fraud and Counterfeiting by Internet Pharmacies..... | 133        |
| C. Policing Fraudulent Drug Websites.....               | 135        |
| 1. Canadian Actions .....                               | 135        |
| 2. United States Actions .....                          | 136        |
| D. Case Studies.....                                    | 143        |
| 1. Misleading “Canadian” Internet Pharmacies .....      | 145        |
| 2. 1-Buy-Viagra.com.....                                | 148        |
| 3. USA-Pharmacy-Online.com .....                        | 149        |
| 4. 247-Pharmacy.com .....                               | 151        |
| 5. Pharmical.Com .....                                  | 152        |
| E. Terrorist Use of the Internet .....                  | 154        |

|   |            |
|---|------------|
| <b>IX. Main Terrorist Threats to the Medicine Supply .....</b>  | <b>159</b> |
| A. Terrorists Producing and Selling Harmful<br>Pharmaceuticals .....                                  | 159        |
| B. Terrorists Raising Funds from Pharmaceuticals<br>For Attacks .....                                 | 159        |
| C. Terrorists Launching An Attack Using The<br>Medicine Supply .....                                  | 161        |
| 1. Attack from Canada .....   | 162        |
| 2. Attack from Mexico .....   | 164        |
| 3. Attack from the Internet .....   | 165        |
| <b>X. Conclusion.....</b>   | <b>167</b> |
| <b>Appendix A – Counterfeit Pharmaceutical Incidences .....</b>                                       | <b>167</b> |
| <b>Appendix B – Attacks on Food Products.....</b>   | <b>175</b> |
| <b>Appendix C – Countries with Terrorist Activity and<br/>        Counterfeit Drug Activity .....</b> | <b>177</b> |
| <b>Appendix D – Internet Pharmacies .....</b>   | <b>183</b> |
| A. List of Reviewed Internet Pharmacies .....   | 183        |
| B. List of Internet Pharmacies Purportedly from Canada.....   | 218        |



# **I. EXECUTIVE SUMMARY**

While a terrorist strike with a chemical or biological agent has long been a concern of government authorities and terrorism experts, the threat of an attack that exploits vulnerabilities in the medicine supply system has only recently gained attention.

International legal and diplomatic pressure on state sponsors of terrorism has led to a decline in funding for terrorist organizations. To replace these lost funds, terror groups are seeking alternative sources of revenue, including the production and sale of counterfeit goods, including pharmaceuticals.

Contrary to conventional wisdom, many terrorist organizations have extensive knowledge in medicine and biology. As terrorists plot novel and more deadly strikes, officials fear they may mount an attack against the United States using pharmaceuticals laced with poisons or pathogens.

Three main terrorist threats to medicine supplies are identified in the report. The mere infiltration of terrorists in the counterfeit drug market poses a threat to the public. Terrorist organizations, because of their violent nature, are likely to produce counterfeit drugs that are substandard, contain harmful ingredients, or no ingredients at all. Their presence in the marketplace creates dangers to public health and causes uncertainty in the quality and purity of drugs taken by millions of Americans.

A second threat is from terror groups raising funds from the sale of counterfeit and diverted pharmaceuticals to purchase arms and mount attacks. The use of fake drugs as a source of revenue is nothing new to terrorists. In the early 1990s, the Irish Republican Army set up a laboratory in Florida to produce phony vials of an anti-parasite drug for livestock. Labels for the fake pharmaceutical were printed on a Northern Ireland farm. Proceeds from the operation were sent to the IRA to purchase arms.

Hezbollah has engaged in pseudophedrine smuggling through Canada to finance some of its operations. Purchased legally in Canada, the drugs were then brought illegally into the United States to produce methamphetamine, or “speed.” A two-year federal investigation led to the arrest of 136 people in ten states, including California, Ohio, Illinois, Michigan, and Arizona. The illegal drug ring was led by a group of mostly Middle Eastern operatives calling themselves “The Commission.”

The third and most frightening threat is a terrorist attack using drugs adulterated with poisons or pathogens. While explosives are the weapon of choice for terrorists in the current climate, terror organizations are turning increasingly to chemical weapon attacks. Terrorists have already attempted several strikes with cyanide and ricin, ingredients likely to be combined with drugs in a terrorist attack. Hezbollah and al Qaeda are reportedly cooperating to build a joint chemical weapons lab. Terrorists have allegedly produced a cream with cyanide that kills on contact. In Israel, to increase the lethality of suicide attacks, terrorists are packing explosives with nuts and bolts that have been tainted with rat poison, an anti-coagulant that can cause victims to bleed uncontrollably from their wounds. As chemical attacks become more frequent, the threat of a terrorist strike using adulterated medicines increases.

In assessing potential threats to the medicine supply and the public, GlobalOptions examined the regulatory systems and terrorist activity in Canada and Mexico – two key points of entry for drugs coming into the U.S.

Canada’s refugee and immigration laws are among the most generous in the world, providing an open door for terrorists to operate in the country. As many as 50 terror groups operate on Canadian soil, according to the Canadian Security Intelligence Service. Terrorists have smuggled pharmaceuticals from Canada into the U.S., and they could mount an attack using similar distribution methods.

Current legislative proposals to allow the importation of drugs from Canada would create new, lucrative opportunities for terrorists in



Canada seeking to generate funds from drug counterfeiting. Legalizing the importation of drugs would also facilitate a terrorist attack on the medicine supply. Instead of smuggling drugs across the border, a strike could be launched by sending tainted drugs through the mail system or by adulterating drugs bound for the U.S.

Looking southward, millions of Americans annually flood across the border to Mexico to purchase pharmaceuticals. The number of pharmacies catering to U.S. visitors in Tijuana, Mexico, alone has doubled in the last two years. This, combined with Mexico's largely unregulated pharmaceutical industry, creates a vulnerability that terrorists could exploit to mount an attack. Terror groups could insert poisoned drugs into the retail markets frequented by Americans. If a popular drug were laced with a poison, hundreds or even thousands of people could be killed.

In the report, GlobalOptions also examined how the Internet could be manipulated by terrorists to launch an attack against the U.S. Such a strike presents the lowest risk to terror groups, but could be the most devastating to American consumers.

A terrorist organization, with limited technical skills, could set up an online pharmacy, generate a customer base, and then deliver tainted goods to unwitting consumers from virtually anywhere in the world. Terrorists could employ the same tactics used today by fraudulent Internet pharmacies. In a sampling of 45 drug websites that appear to originate in Canada, roughly one third seem to be located in other countries. Three sites were registered in Barbados, one was in Mexico, and five were in the U.S. An additional five were of unknown origin.

Although incidents of pharmaceutical product tampering in the past have been devastating, a terrorist attack could have far worse consequences. Terrorists want to maximize panic and fear in attacks. Each bottle of a poison-tainted counterfeit drug can become a ticking time bomb. For a large-scale attack, terrorists can readily purchase machines to produce thousands of tainted pills. The same packaging equipment that is available for legitimate pharmaceutical manufacturers can also be obtained by terrorists. A

silent terrorist attack using pharmaceuticals could be launched against the U.S. and there would be no notice until the first injury or death occurred.

The damage of such an attack would not only be felt by the public, but the marketplace as well: in 1982, after bottles of Tylenol tainted with cyanide were sold in Illinois, killing seven people, Johnson & Johnson recalled 22 million bottles at a cost of more than \$100 million.

While the threat to the medicine supply system is currently low, the consequences of such an attack could be deadly. Step by step terror groups are gaining expertise to produce and distribute fake drugs. Sales of counterfeit drugs have been used to purchase arms and launch attacks. Terror groups are now poised to launch an attack lacing drugs with poisons and pathogens. Terrorism involving the medicine supply is a growing threat to the United States that requires immediate attention.

## II. INTRODUCTION

This report by GlobalOptions, Inc. responds to a request by Reconnaissance International (RI) to conduct an analysis of terrorism threats to America's medicine supply system. The report evaluates growing links between terrorism and counterfeit pharmaceuticals, patterns of terrorist funding, and terrorist threats to the pharmaceutical sector. Particular attention is given to Internet websites as a potential vector for terrorist attacks.

The report provides a comprehensive overview of the pharmaceutical sectors in the United States, Canada, and Mexico, including laws and regulations, methods of manufacture and distribution, and issues of counterfeit production.

The information in the report was gathered from public and proprietary databases, interviews with public officials, and confidential sources.

Reconnaissance is an international publishing and consulting firm specializing in the anticounterfeiting and antidiversion arena. It has particular expertise in the pharmaceutical area. It is the publisher of Protecting Medicines and Pharmaceuticals: A Manual of Anticountefeiting Solutions, and the organizer of the 2002 Global Forum on Pharmaceutical Anticounterfeiting, with the participation of the World Health Organization. Reconnaissance is also the principal pharmaceutical investigator on the FDA's Product Surety project, which is designed to bring industry, FDA, medical delivery organizations, law enforcement, and other key players together to identify areas of counterfeiting and terrorist risks to the U.S. drug supply.

GlobalOptions, headquartered in Washington, D.C., is a multi-disciplinary risk management company that provides security, investigations, and business intelligence services to government, corporate, and individual clients worldwide. The Chairman and CEO of GlobalOptions is Dr. Neil C. Livingstone, author of nine books on terrorism and security. GlobalOptions' Advisory Board is chaired by a former Chairman of the Joint Chiefs of Staff, Admiral William J. Crowe, and includes a two former CIA Directors and other distinguished members.



### **III. TERRORIST THREATS TO THE MEDICINE SUPPLY**

Terrorist attacks involving the drug supply, a growing threat to the United States, have received only minimal attention. This chapter presents an overview of the information on the threat, including statements by law enforcement, government officials, terrorist experts, and pharmaceutical executives.

The second section briefly identifies three terrorist threats related to the pharmaceutical industry.

#### **A. GROWING TERRORIST FOCUS ON THE MEDICINE SUPPLY**

While the possibility of a terrorist attack using chemical or biological agents has been a concern for many years, government agencies and terrorism experts have not analyzed in detail the threat of an attack using pharmaceuticals laced with poisons or pathogens.

The Food and Drug Administration (FDA), the lead agency for ensuring the safety of fresh food and drugs in America, has assessed the terrorist threat to America's food products. But the agency has not similarly evaluated threats to the nation's pharmaceuticals.

Despite the lack of attention, there are a growing number of law enforcement officials and terrorism experts voicing concern about links between terror organizations and pharmaceuticals. Terrorists are increasingly seeking to mount attacks with cyanide and ricin. As the terrorist groups plot novel and deadly strikes, officials fear they could attack America by adulterating pharmaceuticals.

Already, terrorist groups are linked to the sale of pharmaceuticals in the U.S. In the early 1990s, the Irish Republican Army set up a laboratory in Florida to produce phony vials of an anti-parasite drug for livestock. Labels for the fake pharmaceutical were printed on a Northern Ireland farm. Proceeds from the operation were sent to the IRA to purchase arms. Some of the profits were also diverted to purchase cattle growth hormones, which were smuggled into the United Kingdom and sold on the black market. Growth hormones, although legal in the U.S., are banned in the U.K.

In another incident, federal agents uncovered an international drug ring that raised millions of dollars for Hezbollah, a radical Shiite terror network founded in 1982 by Lebanese clerics. Hezbollah is responsible for numerous attacks against the United States, including, the suicide truck bombing of the U.S. Embassy in Beirut in April 1983 and the U.S. Marine barracks in Beirut in October 1983. The organization, which is backed by Iran and Syria, has also conducted suicide bombings in Israel and South America.

More recently, Hezbollah has joined forces with al Qaeda to provide logistics and training.<sup>1</sup> Al Qaeda is believed to have used contacts provided by Hezbollah to gain access to SAM-7 missiles, which were fired at the El Al passenger jet near the Mombasa airport in Kenya in November 2002.<sup>2</sup> The FBI states that Hezbollah has many “subjects based in the United States,” has “the capacity to attempt terrorist attacks here,” and has been “tasked with surveillance of potential targets in the United States.”<sup>3</sup>

To generate funds for its operations, Hezbollah operatives legitimately purchased large quantities of pseudoephedrine in Canada and smuggled the drug into the United States, where it was used to produce methamphetamine or “speed.” The dragnet led to the arrest of 136 people in ten states, including California, Ohio, Illinois, Michigan, and Arizona. The illegal drug ring was led by a

---

<sup>1</sup> “Al Qaeda, Hezbollah Team Up.” *Ottawa Citizen*. June 30, 2002.

<sup>2</sup> “Beware of Unholy Terror Alliance.” *Daily News*. February 11, 2003.

<sup>3</sup> “Hezbollah Set to Hit U.S.” *Daily News*. November 2, 2002.

group of mostly Middle Eastern operatives calling themselves, “The Commission.”

Asa Hutchinson, the head of the Drug Enforcement Agency (DEA), which participated in the probe that uncovered the smuggling operation, said it was the first time the agency had found a “direct connection between drug activity, street sales in the United States, [and] funding terrorists overseas.”<sup>4</sup> Authorities estimated total sales from the drug ring were in the millions of dollars. “Some of those funds,” Hutchinson explained, “went into the hands of terrorist organizations, such as Hezbollah.”<sup>5</sup>

To raise money, terrorist organizations have become expert counterfeiters, selling fake videos, software, and clothing. “There is direct evidence that some counterfeit products are being imported from overseas and sold directly in the U.S., with the proceeds from Americans going back to terror groups,” a government official said.<sup>6</sup>

Terrorists “have found counterfeiting to be a lucrative means of raising funds for their much more sinister activities,” said Terry Anslow, Chief Investigator of the Crime Unit for the European Leisure Software Publishers Association (ELSPA).<sup>7</sup>

Terrorist groups are also believed to be involved in the sale of counterfeit drugs sold on the Internet. Alan Slobobin, the Senior Counsel for the House Energy and Commerce Subcommittee on Oversight and Investigations, said there is strong evidence linking the sale of counterfeit drugs on the Internet to terrorist groups in the Middle East.<sup>8</sup>

---

<sup>4</sup> “DEA Investigates Terrorist Connection to Drug Trafficking in U.S.” *CNN*. September 2, 2002.

<sup>5</sup> “U.S.-Mexico Anti-Drug Efforts Praised.” *The Miami Herald*. January 9, 2003.

<sup>6</sup> “U.S. Tracking Counterfeit Goods Sales, Money To Terror Groups.” *Dow Jones International News*. October 24, 2002.

<sup>7</sup> “Paramilitaries Hold Irish Police at Gunpoint to Seize Back Counterfeits.” Presswire. December 19, 2000.

<sup>8</sup> “Cyber Letters to Web-Based Pharmacies Not Seen Halting Counterfeiting, Illegal Rx’s.” *Warning Letter Bulletin*. October 22, 2001.

The threat of terrorists using adulterated pharmaceuticals to attack the U.S. was raised at a hearing of the House Committee on Energy and Commerce. Congresswoman Diana DeGette (D-CO) asked Tommy Thompson, Secretary of the Department of Health and Human Services (HHS) if he was “concerned that terrorists might use the Internet to advertise cheap Cipro and then try to poison Americans by importing substances that really were not Cipro.” Secretary Thompson replied, “We are.”<sup>9</sup>

At the hearing, Congresswoman DeGette said subcommittee staff had traveled to Dulles Airport to investigate “large piles of substances that the FDA would not even identify.”<sup>10</sup> She expressed concern that “if terrorist groups from Iraq or Russia or other countries wanted to send in these shipments under the guise that they were legitimate medications, that this could be a real threat to the health of our American citizens.” Secretary Thompson agreed with her analysis.<sup>11</sup>

In the aftermath of the September 2001 terrorist attacks in New York and Washington, D.C., the FDA’s Counterfeit Drug Working Group met to examine potential threats to the United States. The discussion, according to news accounts, quickly turned to drug counterfeiting and terrorism. At the meeting, Benjamin L. England, counsel to the Associate Commissioner for Regulatory Affairs, warned, “Terrorists could tamper with drugs in several ways.”<sup>12</sup> Among the methods of attack, he said there is a threat that terrorists could “infiltrate the manufacturing facility, tamper with the product while it is in commerce, or knock it off and introduce it downstream.”<sup>13</sup>

---

<sup>9</sup> “Bioterrorism.” Hearing of the House Committee on Energy and Commerce. November 15, 2001.

<sup>10</sup> “Bioterrorism.” Hearing of the House Committee on Energy and Commerce. November 15, 2001.

<sup>11</sup> Ibid.

<sup>12</sup> “Price Differentiation Can Encourage Counterfeiting: FDA Reevaluating Approach To Fake Drugs.” *Drug Utilization Review*. May 1, 2002.

<sup>13</sup> Ibid.



Interpol, the largest international police organization in the world, has uncovered a connection between terrorist groups and pharmaceuticals. Based on evidence gathered by police in North America and Western Europe, Interpol believes the profits from counterfeit drug trafficking are, in part, financing international terrorism.<sup>14</sup>

Numerous government officials have discussed ties between terrorist organizations and the sale of drugs. “Drugs are the currency of terrorists,” said U.S. Attorney Michael Shelby of Houston. “This is the medium of terrorism in the 21<sup>st</sup> Century.”<sup>15</sup> U.S. Attorney General John Ashcroft noted the existence of a “deadly nexus between terrorism and drug trafficking.”<sup>16</sup>

A majority of Americans are worried about a possible terrorist attack involving pharmaceuticals. “More than 75 percent of voters polled said that imported or reimported drugs pose a potential target for terrorist attacks by enabling terrorists to tamper with drugs headed for the U.S.,” *Chemical News & Intelligence* reported.<sup>17</sup>

Pharmaceutical companies have voiced concern about terrorist links to their industry. In the article, “Combating Counterfeits,” authors Mark Rush, Lucas Paglia, and Lourdes Villarnovo urge pharmaceutical companies to aggressively involve law enforcement when counterfeiting is suspected because of the threat of a terrorist attack. The authors state:

Given the increasing link between counterfeiting and organized crime, the tendency of terrorist networks to fund themselves through illegitimate businesses such as counterfeiting and the ever-present threat of bioterrorism and medical contamination, pharma companies would do well to take advantage of the

---

<sup>14</sup> “Pill Pirates Put UN and Insurance Industry on a Full Medical Alert.” *Insurance Day*. July 22, 1998.

<sup>15</sup> “U.S. Foils Swaps of Drugs for Weapons; Ashcroft Announces Arrests in Two Cases.” *The Washington Post*. November 7, 2002.

<sup>16</sup> *Ibid.*

<sup>17</sup> “U.S. Voters More Concerned About Rx Safety Than Prices.” *Chemical News & Intelligence*. July 9, 2002.

Patriot Act and involve law enforcement resources in the inspection of suspected incidents of counterfeiting as soon as they are detected.<sup>18</sup>

William Rastetter, Chairman, CEO, and President of IDEC Pharmaceuticals, a San Diego-based biotech company, wrote,

It's no longer inconceivable that a terrorist ... could introduce toxins or bio-organisms into counterfeit pharmaceuticals, such as an antibiotic, which is a common medication bought by Americans from Mexico. Thousands, possibly tens of thousands, could die.<sup>19</sup>

A connection between pharmaceuticals and terrorism was raised in Congressional debates on the importation of drugs. Senator Orrin Hatch (R-UT) warned if the importation of drugs were made lawful, America would be placed "in the hands of foreign terrorists who could easily get hold of various prescription drug products and spread desolation and disease."<sup>20</sup>

The U.S. Senate Republican Policy Committee analyzed the consequences of allowing the importation of pharmaceuticals. It stated:

A new reason that the United States may be targeted is to cause terror – groups and nations hostile to the United States may try attacking it with counterfeit drugs containing deadly contagions. Such groups and nations would certainly notice if the United States were to open up a new, less regulated entry point into its pharmaceutical market.<sup>21</sup>

---

<sup>18</sup> "Combating Counterfeits." *Pharmaceutical Executive*. June 1, 2002.

<sup>19</sup> "Pharmaceuticals From Abroad; A Looming Threat to U.S. Consumers." *The San Diego Union-Tribune*. January 2, 2002.

<sup>20</sup> "Senate Votes to Allow Easier Import of Prescription Drugs." *The New York Times*. July 17, 2002.

<sup>21</sup> "Drug Patents/Safety and Savings Certification for Canadian Drug Imports." *U.S. Senate Record Vote Analysis*. July 17, 2002.

Jessica Stern, an author and Harvard scholar, speculated in 1998 that terrorists could launch an attack against the U.S. using tainted pharmaceuticals. “Some terrorists might try carrying out low-technology attacks, like disseminating pathogens in enclosed spaces, or *poisoning pharmaceuticals*, prepared foods, livestock, or crops,” she warned. “Attacks of this kind would not kill millions, but their effects could still be devastating”<sup>22</sup> (emphasis added).

## **B. MAIN TERRORIST THREATS**

GlobalOptions has identified three main terrorist threats to the pharmaceutical industry. The threats are:

- 1) **Terrorists producing and selling harmful pharmaceuticals** – There is a threat to the public from terrorist organizations producing, distributing, and selling adulterated or harmful pharmaceuticals. Terrorist groups are already linked to narcotics trafficking and there is a threat the terror organizations will infiltrate the counterfeit drug market and produce adulterated drugs.
- 2) **Terrorists raising funds from pharmaceuticals for attacks** – Terrorists have been involved in the production and sale of counterfeit goods to raise funds for operations. There is a threat to the public from terrorists generating funds from counterfeit pharmaceuticals and using the profits to launch attacks.
- 3) **Terrorists mounting an attack using drugs laced with poisons or pathogens** – An attack by terrorists using contaminated pharmaceuticals poses the most alarming threat. Drugs could be laced with a poison or pathogen and distributed to the public or sold via the Internet.

The above threats are addressed in detail in later chapters. To understand the vulnerabilities in the drug distribution system, it is necessary to have a basic knowledge of the industry. Below is an overview of the pharmaceutical and drug wholesaler industries.

---

<sup>22</sup> “Taking the Terror Out of Bioterrorism.” Op-ed by Jessica Stern. *The New York Times*. April 8, 1998.



## **IV. PHARMACEUTICAL INDUSTRY**

A detailed overview of the pharmaceutical industry is provided in this chapter for readers who are unfamiliar with its operations and vulnerabilities.

The section begins with a description of how drugs are manufactured and distributed. The overview next examines the regulatory framework established by the U.S. government to ensure the safety of pharmaceuticals and protect against counterfeits.

The chapter describes weaknesses in protecting the drug supply system. The final section examines the U.S. wholesale industry and inadequate state regulations that allow fake and diverted drugs to enter the supply system.

### **A. HOW DRUGS ARE MADE**

A typical tablet or drug has two basic elements: active pharmaceutical ingredients (APIs) and excipients. APIs include any substance or mixture of substances that are intended to provide pharmacological effect. Excipients, on the other hand, are inactive ingredients and can include fillers, bulking agents, binders, disintegrants, coatings, colorants, slip agents, etc.

A pill can contain just one, or more than 20, active ingredients (APIs) and inactive ingredients. Pharmaceuticals that are inhaled can be even more complicated to produce.

Drug manufacturers in the United States import about 80 percent of the bulk APIs used to make drugs.<sup>23</sup> APIs generally are “made by chemical synthesis, by recombinant DNA technology, fermentation,

---

<sup>23</sup> “Counterfeit Bulk Drugs.” Hearing Report by the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

enzymatic reactions, recovery from natural materials, or combinations of these processes.”<sup>24</sup> China and India are the largest producers of bulk pharmaceutical chemicals.

Pharmaceutical manufacturers worldwide produce more than 14,000 different prescription drugs. An increasing number of drug products are being produced abroad for the U.S. market.<sup>25</sup>

## **B. PACKAGING**

Every country has unique requirements for manufacturing, packaging, and selling pharmaceuticals. For example, drugs manufactured for the U.S. market must meet FDA standards. As a result, manufacturing plants often produce a number of variations of a drug to meet the requirements of different countries. To differentiate the packaging for separate drugs, manufacturers use the following methods:

- **Labeling** – Labels provide information such as the contents, directions for use, safety warnings, and bar codes for inventory control.
- **Packaging Design** – Packages vary in size, shape, and color. Countries may also require safety packaging, such as child-resistant containers.
- **Dosage Form** – Tablets and capsules are made in different sizes, shapes, and colors, and with different imprints. A pill’s design is registered at poison control centers in the United States to quickly identify products.

---

<sup>24</sup> “Guide to Inspections of Bulk Pharmaceutical Chemicals.” Food and Drug Administration. [www.fda.gov/ora/inspect\\_ref/igs/bulk.html](http://www.fda.gov/ora/inspect_ref/igs/bulk.html).

<sup>25</sup> “Counterfeit Bulk Drugs.” Hearing Report by the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

It is the responsibility of drug manufacturers to ensure the safety, purity, and consistency of the APIs used to manufacture drugs. Manufacturers assign expiration dates because the molecular structure of a drug can change with time. Drugs must also be properly stored. Heat, humidity, and sunlight can alter the chemical properties of pharmaceuticals.

While most drugs are relatively stable and are tolerant of temperature and humidity, some drugs require strict conditions and can even be affected by excessive shaking.

### **C. THE U.S. DRUG DISTRIBUTION NETWORK**

The United States is considered the largest pharmaceutical market in the world.<sup>26</sup> U.S. pharmaceutical manufacturers produced and distributed \$172 billion of finished drug products in 2002 for the American market.<sup>27</sup>

Of the pharmaceuticals manufactured by American companies for the U.S. market, 46 percent were distributed directly to “dispensers,” such as pharmacies, hospitals, and nursing homes. The remaining amount, 54 percent, was shipped to wholesalers.

The pharmaceutical wholesaler industry in the United States is divided into three tiers. The top tier includes three large wholesalers, which distribute about 90 percent of the pharmaceuticals produced in the U.S. The second tier consists of 12 to 15 wholesalers, and the third tier has several thousand small wholesalers. Together, the second and third tiers distribute the remaining ten percent of the drugs manufactured in the U.S.

In addition to selling drugs to dispensers, pharmaceutical wholesalers sell drugs to other wholesalers. A drug can exchange

---

<sup>26</sup> The U.S. pharmaceutical market represents a little over half of the entire world market, which totaled \$480 billion in 2002.

<sup>27</sup> “First Interim Report of the Seventeenth Statewide Grand Jury.” Case No: SC02-2645. Supreme Court of the State of Florida.

hands multiple times before finally ending up on the shelf of a pharmacy.

## **D. U.S. LAWS REGULATING DRUG QUALITY AND SAFETY**

The federal government and state agencies are responsible for jointly ensuring the safety and efficacy of pharmaceutical drugs. Federal laws regulate the production and distribution of pharmaceuticals; state governments are responsible for regulating the practice of medicine and for licensing and policing pharmacies and drug wholesalers.

It is a monumental task to ensure pharmaceuticals are safely manufactured and distributed. In the United States there are about 115,000 drug companies, including manufacturers, repackers, labelers, etc. The FDA compiled a list of 169,000 foreign drug companies, 6,000 of which are targets of inspection.<sup>28</sup>

The FDA sets standards for manufacturing prescription and over-the-counter drugs. The agency is also responsible for enforcing U.S. laws to prevent the “importation of adulterated, misbranded, and counterfeit pharmaceutical products.”<sup>29</sup> Among its tasks, the FDA:

- Regulates the testing of potential new drugs;
- Evaluates drug applications to market new and generic drugs;

---

<sup>28</sup> Bliley, Tom, Congressman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>29</sup> “Counterfeit Bulk Drugs.” Hearing Report by the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

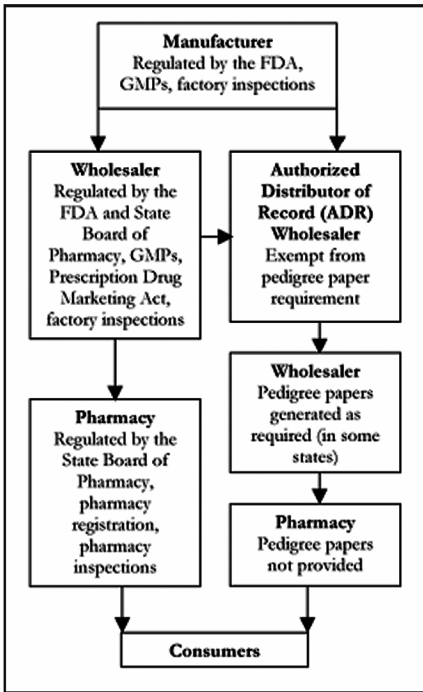


- Monitors and inspects the quality of APIs and the manufacturing of finished drug products in the U.S. and drugs imported into the U.S;
- Collects and evaluates data on adverse effects connected with the use of pharmaceuticals;
- Regulates advertising and the promotion of pharmaceuticals;
- Establishes and monitors standards for the use and labeling of pharmaceuticals and over-the-counter drugs;
- Inspects manufacturers to ensure products are safe and meet standards;
- Evaluates drug manufacturing methods, including packaging, testing, and storage;
- Distributes product information to the public and medical community;
- Samples and analyzes drugs.<sup>30</sup>

The legal authority and obligation of the Agency to regulate the manufacture, packaging, testing, and storing of drugs for the U.S. market are contained in the Federal Food, Drug, and Cosmetic Act. The Act requires manufacturers to use Good Manufacturing Practices (GMPs) in the production of drugs to ensure quality, identity, and purity. GMPs were formally introduced by the FDA in 1963 and have evolved as technology and practices have improved (see figure 1 for a flowchart depicting the chain of distribution and the corresponding government regulations).

---

<sup>30</sup> Baker, Dennis E., FDA Associate Commissioner for Regulatory Affairs. "Counterfeit Bulk Drugs." Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.



**Figure 1**

“Every quality control unit at a pharmaceutical manufacturer determines their own internal standards, writes their own policy and procedures, determines what specifications they want to use, which will be higher and tighter than those required by the law,” explains Nikki Mehringer, a pharmacist and quality control professional.<sup>31</sup>

The requirements governing the distribution of pharmaceuticals are contained in the Prescription Drug Marketing Act (PDMA) of 1987. A major provision of the Act requires wholesalers to provide information on each drug purchase, creating a paper trail

so a drug can be traced to the manufacturer. The documentation, which has come to be known as “pedigree papers,” is designed to establish a chain of custody to deter the introduction of diverted or counterfeit drugs into the distribution system.

In 1994, seven years after the PDMA was enacted into law, FDA proposed regulations to implement the pedigree papers requirement. The new regulations were supposed to take effect in 1999, but have yet to be implemented. In the meantime, individual states, such as Florida, have passed their own laws to require the use of pedigree papers.

<sup>31</sup> Mehringer, Nikki. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

Federal law, however, does not require pedigree papers if a wholesaler is an Authorized Distributor of Record (ADR). An ADR is defined as a regular purchaser of prescription drugs from a manufacturer. The law exempts ADRs from providing documentation when they sell drugs purchased from a manufacturer to another wholesaler. Lawmakers presumed there would still be sufficient controls throughout the process because of the pedigree paper requirement. But, as mentioned, this provision has yet to be implemented at the federal level.

## **E. COUNTERFEIT PHARMACEUTICALS**

Counterfeit pharmaceuticals are unapproved, look-alike drugs that are often substandard and can contain harmful ingredients or no active ingredients at all.<sup>32</sup> News reports often suggest that five to eight percent of all pharmaceuticals are counterfeit.

According to Ben England, Chief Regulatory Counsel for the FDA Office of Regulatory Affairs, “It is important to remember that no counterfeit is ‘safe’ because we don’t know its composition or the conditions of its manufacture.”<sup>33</sup>

Counterfeit drugs can be improperly manufactured in a variety of ways. In some cases, the correct ingredients are used, but the dosage is incorrect. Counterfeits also include drugs made with no active ingredients or with the wrong ingredients. The ingredients

---

<sup>32</sup> A counterfeit drug, as defined by the FDA is: “A drug which, or the container or labeling of which, without authorization, bears the trademark, trade name, or other identifying mark, imprint, or device, or any likeness thereof, of a drug manufacturer, processor, packer, or distributor other than the person or persons who in fact manufactured, processed, packed, or distributed such drug and which thereby falsely purports or is represented to be the product of, or to have been packed or distributed by, such other drug manufacturer, processor, packer, or distributor.”

<sup>33</sup> Ben England, Chief Regulatory Counsel, US FDA Office of Regulatory Affairs, speaking at the Global Forum on Pharmaceutical Anti-Counterfeiting, Sept. 23, 2002 in Geneva, Switzerland.

may be too potent or too weak. The drugs may also pose a health problem due to contamination as a result of unsanitary conditions.

The different ways drug formulas and packaging can be manipulated are limited only by one's imagination. For example,

- Counterfeiters could purchase generic drugs and re-label them as brand-name products.
- Ingredients could be diluted to boost inventories.
- Low-cost drugs, such as aspirin, could be substituted for expensive drugs or made with different chemicals designed to treat other symptoms.
- Expired drugs could be re-labeled.
- Used containers could be filled with tablets or liquid and resold.
- Lower-cost, low-potency pharmaceuticals could be labeled as high-potency pharmaceuticals, which are more expensive.
- Fakes containing no active ingredients could be distributed with labels and packaging materials identical to the originals.

Counterfeiters often produce pills using starch or sugar, and then sell them as regular pharmaceuticals. Lethal substances are also substituted for the originally intended ingredients. Counterfeit drugs have been produced with floor wax, lead paint, and boric acid, among other toxins.

Virtually any pharmaceutical can be counterfeited, including tablets, capsules, injectable products, and aerosols (inhalers). Fakes are often exact-appearing replicas of patented drugs and indistinguishable from authentic pharmaceuticals (see figure 2 for

an example of counterfeit pills; see figure 3 for an example of a counterfeit vaccine).

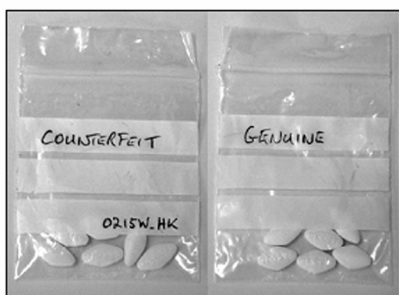


Figure 2

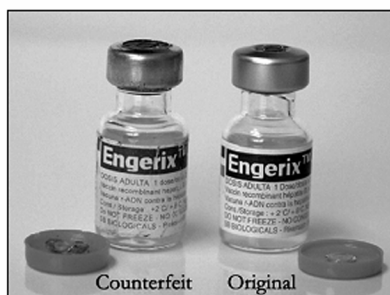


Figure 3

The *Washington Times* reported that “Counterfeits manufactured at laboratories in China, Thailand, and other Asian nations are so good, in fact, that they appear to be identical with popular American drugs such as Nupogen, a cancer medicine and Viagra – right down to the bar codes and inventory numbers on the packaging.”<sup>34</sup>

The antibiotic, Amoxicillin, is the most counterfeited medicine in the world, according to the European Federation of Pharmaceutical Industries and Associations.<sup>35</sup>

In addition to drugs, counterfeiters also have forged nearly every type of documentation related to the manufacturing and distribution of drugs. Counterfeiters create false labels and packaging that often cannot be distinguished from originals. Fake seals and certificates are forged for bulk drugs.

Most counterfeit drugs are produced and consumed in developing countries, where government resources and controls are severely

---

<sup>34</sup> “Attack of the [Medicine] Clones.” Op-ed by Anthony E. Daniels. The *Washington Times*. July 16, 2002.

<sup>35</sup> European Federation of Pharmaceutical Industries and Associations. [www.efpia.org/5\\_conf/Globalhealthcare040602.doc](http://www.efpia.org/5_conf/Globalhealthcare040602.doc).

limited. In these regions, authorities estimate the quantity of counterfeit drugs can run as high as 70 percent.<sup>36</sup>

Studies have only been conducted to measure problems in limited areas. For example, in the Philippines, an industry study estimated ten percent of the drugs sold in pharmacies were fake.<sup>37</sup>

“Little information on the prevalence of counterfeit pharmaceuticals is available for various reasons, such as lack of sufficient attention to the problem, inadequate drug regulatory systems and inadequate inspection and quality control as well as the widespread availability of poor quality or spurious pharmaceuticals,” explained Philippe Stroot, a WHO specialist in Geneva.<sup>38</sup>

Determining the level of drug counterfeiting is also problematic because incidents are often undetected. “Few cases are reported because people usually don’t have a clue they’ve even taken counterfeit medicine,” explained health reporters Trish Saywell and Joanne McManus. “And in the developing world, where the problem is the most severe, illness and death caused by fakes usually will be attributed to drug resistance or overwhelming infection.”<sup>39</sup>

One study supported by the World Health Organization found a 33 percent counterfeiting rate of malarial medicines in Southeast Asia, based on several hundred samples.<sup>40</sup> A companion study in Africa examining several different drugs found that 48 percent of the 451 samples were defective or counterfeit.<sup>41</sup>

---

<sup>36</sup> “Pill Pirates Put UN and Insurance Industry on a Full Medical Alert.” *Insurance Day*. July 22, 1998.

<sup>37</sup> “Gangsters Move In On Deadly Counterfeit Drug Trade.” *Straits Times*. April 28, 2002.

<sup>38</sup> “Pill Pirates Put UN and Insurance Industry on a Full Medical Alert.” *Insurance Day*. July 22, 1998.

<sup>39</sup> “What’s in That Pill.” *Far Eastern Review*. February 21, 2002.

<sup>40</sup> “In Some Nations, 80% of Drugs “Are Counterfeit.” *Marketletter* Publications. October 7, 2002.

<sup>41</sup> *Ibid.*

Counterfeiters have access to the latest technology and buy packaging equipment from the same equipment producers as legitimate pharmaceutical manufacturers. Counterfeiters can make nearly identical drugs that can be identified only with chemical analysis (note: pharmaceutical manufacturing and labeling equipment is often available on the Internet. See figures 4 and 5 for an example of a pill press on sale on eBay).

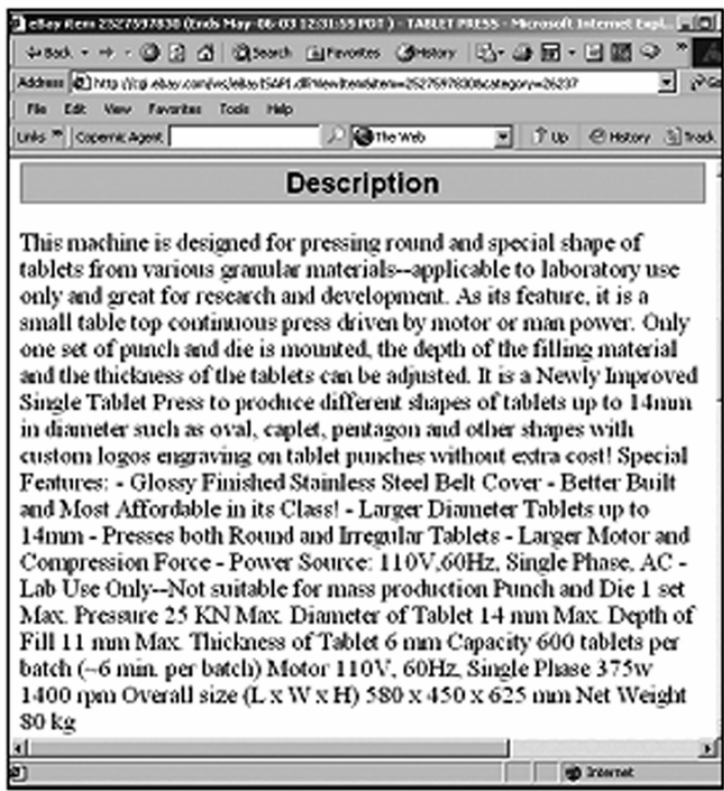
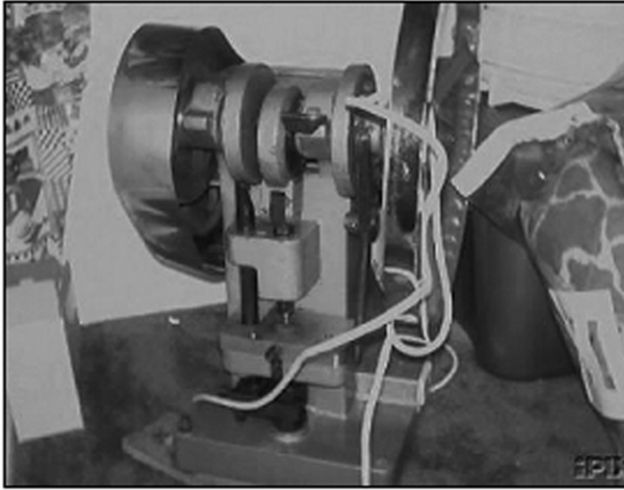


Figure 4



**Figure 5**

“Much like the global narcotics trade, counterfeit pharmaceuticals are manufactured in one country, reduced to tablets or capsules in another, packaged in a third country, then shipped to various territories before reaching a final destination for sale,” according to Mark Rush, Lucas Paglia, and Lourdes Villarnovo, partners and associates at Kirkpatrick & Lockhart, a law firm experienced in intellectual property enforcement.<sup>42</sup> “In addition, the raw materials used to make counterfeits often are diverted to separate countries for packaging. And the different sets of packaged product are diverted to various territories for distribution and sale ... Ultimately, one batch of fakes may serve as the foundation for a counterfeiting network that ultimately reaches 20 separate markets worldwide.”<sup>43</sup>

Central databases of incidents of counterfeiting worldwide do not exist. In 2000, the FDA acknowledged it does “not collect data to assess the amount of unacceptable or adulterated active pharmaceutical ingredients shipped to the U.S. from foreign

---

<sup>42</sup> “Companies Must Take an Aggressive Approach That Includes Investigation and Punishment.” *Pharmaceutical Executive*. Volume 22, Issue 6. June 2002.

<sup>43</sup> *Ibid.*



sources” nor does it “collect data that would allow it to track trends or catalog the quality of products coming from abroad.”<sup>44</sup>

The Pharmaceutical Research and Manufacturers of America (PhRMA) and the FDA announced a voluntary program in May 2003 under which PhRMA members agreed to report counterfeits discovered in the U.S. within five business days as well as counterfeits found overseas if they appear bound for the U.S. market.

While much is unknown about counterfeit drugs, it is clear they have killed “many thousands” of people.<sup>45</sup> Counterfeit pharmaceuticals pose a serious safety hazard because there is no assurance they contain safe or effective active ingredients or that they have been manufactured using GMP. Without knowing the ingredients or the manufacturer, the product history of a drug cannot be ascertained and, as a result, its safety and efficacy are suspect. APIs in counterfeit drugs are often impure and inconsistent, the drugs may be subpotent or superpotent, or the expiration date may have expired or storage conditions may be inadequate.

“A sophisticated counterfeiter with a prescription drug can make sure that you, as a patient, will never know it,” explained Ron Streck, of the Healthcare Distribution Management Association. “You’ll take it and you’ll just not get well or you might get worse and perhaps nobody will ever know.”<sup>46</sup>

Counterfeit pharmaceuticals are also a safety hazard because they cannot be recalled. Legitimate drugs are marked with “lot numbers” to allow for easy retrieval. The information allows

---

<sup>44</sup> Upton, Fred, Chairman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>45</sup> “Gangsters Move In On Deadly Counterfeit Drug Trade.” *Straits Times*. April 28, 2002.

<sup>46</sup> “Analysis: Prescription Drug Counterfeiting and Tampering in the U.S.” *NPR Morning News*. August 12, 2002.

manufacturers to determine where drugs have been stored and distributed.

Once drugs have been transferred to a wholesaler, inventory data provides a means to track the drugs to their final destination. When a counterfeit drug is discovered, by contrast, officials have no way to identify where it was distributed or the quantity of drugs distributed (see figure 6 to see how counterfeit drugs could enter the chain of distribution).

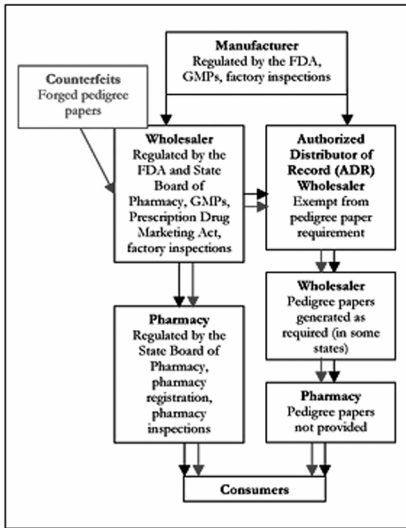


Figure 6

Although tablets and capsules are most often counterfeited, an increasing number of incidents involve the production of inhalers and vials for injection.<sup>49</sup>

In many countries, penalties for counterfeiting are minimal. Drug counterfeiting “is a golden business for criminal ... elements,”

Pharmaceutical counterfeiting can yield huge profits. The potential revenue has been compared in size to narcotics trafficking.<sup>47</sup> As an example, a counterfeiter made \$28 million in profits by merely changing the labels of 11,000 boxes of drugs.<sup>48</sup>

China and India are often described as the primary sources of counterfeit drugs. Most likely to be counterfeited are expensive pharmaceuticals and less-expensive drug products purchased in large

<sup>47</sup> “First Interim Report of the Seventeenth Statewide Grand Jury.” Case No: SCO2-2645, Supreme Court of the State of Florida.

<sup>48</sup> “Grand Jury Urges Stricter Control of Drug Wholesalers.” *St. Petersburg Times*. February 28, 2003.

<sup>49</sup> “Spurious Drugs Market Growing.” *Financial Times Information*. April 7, 2003.

explained Harvey E. Bale Jr., Director General of the International Federation of Pharmaceutical Manufacturers Associations in Geneva. “If you’re in the business of selling heroin or cocaine, the police are on your tail. If you’re selling fake meningitis vaccine, they don’t even know you’re there. We’re sitting here on an unrecognized plague that afflicts the world.”<sup>50</sup>

## **F. COUNTERFEIT DRUGS ENTERING THE U.S.**

The production and distribution of counterfeit pharmaceuticals was once a problem mainly in developing countries. But increasingly it is an issue in the United States and other developed countries. The rise in counterfeit drugs is attributed to expanding trade among nations, the lack of intellectual property protection, and the Internet. Additionally, “The prevailing high prices and potential profits from prescription drugs provide a strong incentive for counterfeiters to enter the U.S. market,” explained Congressman Tom Bliley.<sup>51</sup>

Counterfeit drugs originate from just about anywhere, according to the Food and Drug Administration. The agency has investigated counterfeit cases in Spain, England, China, France, Germany, Bahamas, and Mexico.<sup>52</sup> “In underdeveloped countries such as Argentina, Mexico, and Colombia, up to 40 percent of manufactured pharmaceuticals are believed to be counterfeit,” according to *Pharmaceutical Executive*.<sup>53</sup>

---

<sup>50</sup> “China’s Killer Headache: Fake Pharmaceuticals.” *The Washington Post*. August 30, 2002.

<sup>51</sup> Bliley, Tom, Congressman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>52</sup> “Buyer Beware: Public Health Concerns of Counterfeit Medicine.” U.S. Senate Hearing by the Senate Special Committee on Aging. *Federal News Service*. July 9, 2002.

<sup>53</sup> “Combating Counterfeits.” *Pharmaceutical Executive*. June 1, 2002.

The quantity of counterfeit drugs flowing into the U.S. market is unknown. Individuals are purchasing on the Internet an increasing number of bogus drugs, which are then shipped by mail services to the U.S. Counterfeit drugs are also imported to the U.S. from unscrupulous foreign drug producers.

Michigan Congressman Fred Upton (R-MI), who conducted hearings on the counterfeit drug market, stated the FDA is largely unable to detect counterfeit drugs or to control the importation of counterfeit drugs coming into the United States.<sup>54</sup>

The FDA's problem is made more difficult due to the lack of an agreement between countries to fight drug counterfeiting. "There is no specific multilateral treaty imposing obligations to criminalize, report, or cooperate in the suppression of [counterfeit drugs], nor any international staff to collect, analyze, and disseminate information," said Gene Haislip, a retired DEA Deputy Assistant Administrator.<sup>55</sup>

Congressman Tom Bliley, then-Chairman of the House Commerce Committee, warned in 2000, "There is substantial evidence of imported counterfeit or substandard bulk drugs silently infiltrating the U.S. health delivery system and harming the American people." In addition, he stated, "The FDA's regulatory system used to protect Americans from counterfeit or substandard drug ingredients has significant holes."<sup>56</sup>

The FDA is responsible for evaluating foreign drug manufacturers to ensure they use GMP before approving the importation of drug products. However, there are so many drug manufacturers

---

<sup>54</sup> Upton, Fred, Chairman. "Counterfeit Bulk Drugs." Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>55</sup> "Pharmaceuticals From Aboard: A Looming Threat to U.S. Consumers." *The San Diego Union-Tribune*. January 2, 2002.

<sup>56</sup> Bliley, Tom, Congressman. "Counterfeit Bulk Drugs." Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

worldwide, it would take an army of regulators to inspect each and every drug manufacturing facility.

The FDA acknowledged in 2000 it did not even have a complete list of foreign facilities manufacturing drug products for the U.S. market.<sup>57</sup>

The FDA recorded 1,974 adverse reactions, including 49 deaths, 251 hospitalizations, and 96 disabilities from gentamicin sulfate, an antibiotic produced by Long March Pharmaceutical in China. Subsequent inspections by the FDA revealed the company and other drug manufacturers that helped supply the product had “serious deficiencies.” Still, the drug was able to enter the U.S. without detection.<sup>58</sup>

Charged with the responsibility, the FDA is supposed to regularly inspect foreign drug manufacturing facilities. But many manufacturers that export pharmaceuticals to the U.S. have never been inspected by the FDA.

“The number of foreign drug manufacturers that have shipped to the U.S. but have never been inspected by the FDA is approximately 4,600,” Dennis Baker, FDA Associate Commissioner for Regulatory Affairs acknowledged. “Of this total, 623 were located in China and 409 in India.”<sup>59</sup>

---

<sup>57</sup> Baker, Dennis, FDA Associate Commissioner for Regulatory Affairs. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>58</sup> Upton, Fred, Chairman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>59</sup> Baker, Dennis, FDA Associate Commissioner for Regulatory Affairs. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

In 2000, the FDA said it had only enough resources to conduct about 300 foreign drug inspections, the majority of which were related to pre-approval for companies seeking to export drugs to the U.S.

Members of Congress asked the FDA how many foreign drug makers had not been inspected the previous seven years. The agency said it did not know.<sup>60</sup>

When the FDA was asked which countries are the worst offenders for selling substandard or counterfeit finished products, the agency responded in a memo that it was “not aware of such an assessment regarding countries, which are the most problematic for selling substandard or counterfeit bulk ingredients or finished products.”<sup>61</sup>

Foreign and domestic bulk drug manufacturers must register their products and manufacturing processes with the FDA. However, counterfeiters gain access to non-FDA approved material, and then forge the labels of products of FDA-approved and registered foreign manufacturers. The counterfeit materials are then shipped to the U.S. as an “approved” product.

The FDA’s ability to detect counterfeit bulk drugs and to ensure that only approved manufacturers are shipping products has been very limited. There are about 310 points of entry to the United States, but only the equivalent of 68 full-time workers from the FDA were available to inspect drugs in 2000.<sup>62</sup> In 2002, approximately 800 agents were added to the FDA primarily for inspections.

---

<sup>60</sup> Upton, Fred, Chairman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>61</sup> “Counterfeit Bulk Drugs.” Hearing Report by the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>62</sup> Bryant, Ed, Congressman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

According to Congressman Upton, tons of pharmaceuticals are imported into the United States that are not inspected. The FDA, he said, doesn't even know if the goods are going to a pharmaceutical company or a warehouse.<sup>63</sup>

Only anecdotal information is available on the extent of counterfeit drugs shipped into the U.S. A German drug counterfeiter estimated at least 35 percent of the bulk antibiotics entering the United States are bogus.<sup>64</sup>

Elizabeth Durant, Executive Director of Trade Programs at the U.S. Customs Service, stated the detection of prohibited pharmaceuticals amongst the millions of daily shipments is a "massive challenge."<sup>65</sup>

The Carson mail facility in Los Angeles, for example, receives approximately 800 packages of drugs daily. With two FDA inspectors detailed to this facility, it is able to inspect only 5 percent of the packages, many of which contain clumsy fakes or unlabeled, unknown compounds. The other 95 percent of each days shipment is delivered because the FDA does not have impoundment authority.

The United States Customs Service has 14 mail facilities in the United States to oversee shipments. Customs officers are also present at or near 29 strategically located express courier facilities around the U.S.

Express packages are supposed to provide advance manifests, but many express packages "containing pharmaceuticals are manifested

---

<sup>63</sup> "Counterfeit Bulk Drugs." Hearing Report by the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>64</sup> Ibid.

<sup>65</sup> Testimony of Elizabeth Durant, Executive Director, Trade Programs, US Customs Service, Committee on Aging. U.S. Government Printing Office. July 9, 2002.

as documents.”<sup>66</sup> Moreover, express mail offers little or no advance information on mail shipments, “making it impossible to target shipments for closer inspection or referral to another agency,” Durant said.<sup>67</sup>

Instead, Customs officers rely on ad-hoc inspections. “Our limited resources require a risk management approach, with which we utilize advance intelligence, records of past seizures, and other factors to locate packages that present the most significant threat,” Durant said.<sup>68</sup>

Between September and October 2000, U.S. Customs conducted ‘Operation Safeguard’, an interdiction program at the International Mail Branches at Dulles Airport and Oakland, California to provide a “snapshot” of drugs entering the U.S.

“The snapshot revealed that a vast percentage, perhaps as much as eighty to ninety percent, of the pharmaceuticals that enter the U.S. via the mail do so in a manner that violates present FDA or other requirements,” Durant revealed.<sup>69</sup>

Violations included expired or unapproved pharmaceutical products, improperly labeled drugs, and products produced at unapproved facilities. One seizure included 3,000 tablets of a counterfeit drug with an expiration date of 1980.

Durant further revealed in Congressional testimony that Customs officers seized 31 parcels containing 52 types of suspicious pharmaceuticals during one phase of Operation Safeguard. “The analyses of these products showed that 8 of the so-called pharmaceuticals or 15 percent contained no identifiable active ingredient and 18 contained a substance that is regulated under the Federal Controlled Substance Act. Additionally, during this phase of the operation it was found that large parcels of questionable or

---

<sup>66</sup> Ibid.

<sup>67</sup> Ibid.

<sup>68</sup> Ibid.

<sup>69</sup> Ibid.



illegal pharmaceuticals are being split into different mail shipments but arrive at the same address.”<sup>70</sup>

As drug sales from the Internet increase, authorities fear the packages of questionable pharmaceuticals entering the United States will continue to overwhelm U.S. Customs’ ability to safeguard the American public.

## **G. COUNTERFEIT BULK DRUGS**

Bulk drugs are Active Pharmaceutical Ingredients (APIs) that are purchased by manufacturers to produce pharmaceuticals. Counterfeit bulk drugs include mislabeled or misbranded APIs or bulk products that are adulterated or do not meet standards for purity, strength, or quality.

After investigating the counterfeit bulk drug market, Congressman Fred Upton concluded that the FDA was “largely unable to detect or control imported counterfeit bulk drugs from entering the U.S.”<sup>71</sup> As of 2000, there were 1,234 foreign bulk drug producers, based on FDA data.<sup>72</sup>

The FDA stated in 1999 it did “not collect data to assess the amount of unacceptable or adulterated active pharmaceutical ingredients shipped to the U.S. from foreign sources.”<sup>73</sup>

---

<sup>70</sup> Ibid.

<sup>71</sup> Upton, Fred, Chairman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>72</sup> “Counterfeit Bulk Drugs.” Hearing Report by the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>73</sup> Upton, Fred, Chairman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

It is extremely difficult to detect adulterated bulk drugs because a single chemical test does not exist to identify all potential impurities a product might contain. To determine the quality of a product, it is necessary to know the “storage conditions, packaging components, and inherent nature of the molecule,” according to Nikki Mehringer, a Ph.D. and Quality Control Leader at Eli Lilly & Company. “Final product testing is not recognized by the law or by the industry as sufficient to guarantee safety or quality.”<sup>74</sup>

“Counterfeit bulk drugs can represent a serious threat to the public health,” Congressman Upton said. “A bulk quantity of as little as 50 kilograms can be used in the production of millions of tablets or capsules. Therefore, only one counterfeit bulk that contains an impurity or is synthesized improperly could cause immediate death or injury to numerous people.”<sup>75</sup>

To sell bulk drugs in the United States, suppliers must submit a Drug Master File (DMF) that is referenced in an approved drug application. To qualify for a DMF, the supplier must comply with GMP. It is also incumbent upon the FDA to inspect the supplier to verify it is meeting GMP standards. Drug suppliers then reference the DMF when they submit information to the FDA for exports. The FDA assesses the information and determines if the supplier can import a product.

Authorities can only estimate the size of the global counterfeit market for bulk drugs. The FDA said in 2000 it was “not aware of any estimates of the amount of substandard or adulterated bulk raw material used worldwide.”<sup>76</sup>

---

<sup>74</sup> Mehringer, Nikki. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>75</sup> Upton, Fred, Chairman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>76</sup> “Counterfeit Bulk Drugs.” Hearing Report by the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug

## H. U.S. WHOLESALE DRUG DISTRIBUTORS

About half of the drugs manufactured in the United States for the U.S. market are directly distributed to pharmacy chains and other dispensers, such as hospitals. The other half are sent to wholesale distributors, who sell the drugs to retailers and other wholesalers.

Federal laws were enacted in 1988 to tighten regulations controlling the drug wholesale industry. Each state is also responsible for licensing and inspecting wholesale companies that conduct business in their jurisdiction. As a result, the laws regulating the drug wholesalers vary from state to state.

Authorities in Florida conducted an investigation of the state's drug wholesale market, and the results provided a disturbing picture of the industry. "Current state law does not provide adequate controls over wholesale drug market practices, and current administrative and criminal penalties fail to provide an adequate deterrent," the legislative Office of Program Policy Analysis and Government Accountability stated.<sup>77</sup>

In recent years, there has been a "sharp increase" in the number of small wholesalers in the United States.<sup>78</sup> In Florida, for example, there are 422 in-state licensed wholesalers and 977 out-of-state wholesalers approved to conduct business in Florida.

Once a drug wholesaler receives a license, it can buy and sell pharmaceuticals. Corrupt wholesalers provide an open door to introduce counterfeit pharmaceuticals into the wholesale market.

Tainted drugs, once inside the wholesale drug market, can travel easily through the system. Often counterfeit drugs are mixed with

---

Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

<sup>77</sup> "Counterfeit and Diverted Drugs Threaten Public Health and Waste State Dollars." *OPPAGA*. February 2003.

<sup>78</sup> "First Interim Report of the Seventeenth Statewide Grand Jury." Case No: SCO2-2645. Supreme Court of the State of Florida.

legitimate pharmaceuticals. “Since counterfeits can easily be commingled with authentic product, either by case, bottle, or pill, there is no sampling or testing protocol sufficient to protect against the grave public harm they pose,” said Dr. Lester Crawford, Deputy Commissioner of the FDA.<sup>79</sup>

The investigators in Florida uncovered cases in which a drug shipment was bought and sold, as many as ten times, among wholesalers. The only way this makes sense, according to a grand jury report based on the investigation, is if the drugs were originally purchased for a minimal amount, then resold repeatedly, with each wholesaler making a profit.

“The true reason for much of the lower prices found in the secondary market,” the report explained, “is that a significant amount of the drugs being traded among the smaller wholesalers are diverted drugs.”<sup>80</sup> In one case, investigators in Florida traced a drug shipment to “one of the major wholesalers then back to three prior secondary wholesalers. The last wholesaler in the chain did not have a valid license, but because it claimed to be an ADR the pedigree paper trail stopped there.”<sup>81</sup>

A main source of cheaper drugs is stolen or fraudulently obtained Medicaid pharmaceuticals that are mixed together with counterfeit pharmaceuticals during storage or transit. Many drug manufacturers sell pharmaceuticals at a discount to nursing homes or “closed-door pharmacies.” It is illegal under the Prescription Drug Marketing Act of 1987 for health care entities such as nursing homes to resell drugs into the wholesale market, but “closed-door pharmacies” can lawfully resell the products to wholesalers so long as the transaction is not fraudulent.

---

<sup>79</sup> “Trying to Keep US Borders Closed: the Second Attempt to Allow Reimportation of Pharmaceuticals in the United States in Being Challenged With Even More Opposition Than the First.” *Med Ad News*. October 1, 2002.

<sup>80</sup> “First Interim Report of the Seventeenth Statewide Grand Jury.” Case No: SCO2-2645. Supreme Court of the State of Florida.

<sup>81</sup> *Ibid*.

Diverted drugs are also obtained through scams. Authorities have uncovered Medicaid recipients who sell discounted drugs to corrupt wholesalers. Although diverted drugs may have been manufactured under GMP, these drugs can be compromised through improper handling. State inspectors in Florida, for example, discovered sensitive drugs that were stored in hot, non air-conditioned warehouses.<sup>82</sup>

Counterfeit drugs, which can include adulterated pharmaceuticals or illegally re-imported drugs from foreign manufacturers, also can enter the wholesale market through unscrupulous wholesalers. “The fake pills and liquid medications so closely resemble the real items that physicians and their patients would find it impossible to detect the difference”, said Marvin Shepherd, PhD, professor of pharmacy at the University of Texas at Austin.<sup>83</sup>

Problems in the drug wholesale market have also been investigated by the state of Nevada. As a result of a new law, drug wholesalers in the state are allowed to sell only ten percent of their inventory to other wholesalers. The law was passed in late 2001 to reduce drug shortages and limit the diversion of drugs into the “gray market.”

According to the *Las Vegas Sun*, “50 to 80 percent of the nation’s closed-door pharmacies are actually fronts for the resale of discounted drugs.”<sup>84</sup> Often the drugs are never delivered to their intended destination, according to the National Association of Boards of Pharmacy. In the scams, unscrupulous wholesalers obtain licenses for closed-door pharmacies, and then purchase large quantities of drugs at a discount, which are later resold to wholesalers.

---

<sup>82</sup> Ibid.

<sup>83</sup> “Pharmaceutical Fakes, Knockoffs a Growing Problem.” *AMNews*. November 26, 2001.

<sup>84</sup> “Medicine Meant For Nursing Homes Diverted.” *Las Vegas Sun*. October 16, 2001.



## **V. THREAT OF TERRORISM TO THE MEDICINE SUPPLY**

This chapter discusses the fraudulent schemes used by terrorist organizations in the U.S. to generate funds to support their operations. The illegal activities range from pharmaceutical smuggling to videotape piracy, counterfeit T-shirts, and coupon scams.

The chapter next discusses the growing threat of a chemical and biological attack by terrorists. Al Qaeda and other terror groups have attempted attacks with cyanide and ricin. These poisons would most likely be mixed with counterfeit pharmaceuticals in a terrorist attack on the medicine supply.

The section describes the senior leadership of terrorist groups, which includes physicians and biologists. They have the expertise, and understand the potential impact, of launching an attack with drugs laced with poisons and pathogens.

The final sections analyze previous attacks to food products and pharmaceuticals. Both industries are highly vulnerable to terrorist strikes. By contaminating just a handful of fruit, terrorists have been able to cause widespread panic. An attack using adulterated pharmaceuticals would be as easy to mount and could be far more deadly.

### **A. FUNDING TERRORIST OPERATIONS**

Organized crime has long been associated with the sale of counterfeit goods and other fraudulent scams. These same illegal methods and business activities, according to authorities, are increasingly being adopted by terrorist organizations to raise funds to support their operations. "Piracy represents one of the highest parts of terrorists' income," explained Reg Dixon, Director General

of Britain's Federation Against Copyright Theft. "Terrorists have to get their money somewhere and piracy is a relatively risk-free way of doing it."<sup>85</sup>

The police in Northern Ireland, as an example, seized thousands of counterfeit videocassettes and audiotapes produced by terrorists. The illegal activity generated \$2.3 million a year for Northern Ireland's terrorists, said Derek Waites, Chief Superintendent with the Royal Ulster Constabulary.<sup>86</sup> "It is common-sense for terrorists to use counterfeiting," explained a spokesman for the Royal Ulster Constabulary. "[The terrorists] would get a couple of years for that [counterfeiting] against life imprisonment for armed robbery."<sup>87</sup>

To cut off the sources of funding for terror organizations, authorities in the United States are investigating a broad range of scams and counterfeiting rackets, including "skimming the profits of drug sales, stealing and reselling baby formula, illegally redeeming huge quantities of grocery coupons, collecting fraudulent welfare payments, swiping credit card numbers, and hawking unlicensed T-shirts."<sup>88</sup>

"Terrorist financing methods range from the highly sophisticated to the most basic," said Dennis Lormel, FBI Chief of the Financial Crimes Section. "There is virtually no financing method that has not at some level been utilized by terrorists and terrorist groups."<sup>89</sup> One of the first terrorist scams uncovered by authorities in the United States dates back to the late 1980s. Florida law enforcement officers investigating a national coupon clearinghouse discovered a

---

<sup>85</sup> "Catching Up With The Counterfeiters." *Managing Intellectual Property*. March 1996.

<sup>86</sup> Ibid.

<sup>87</sup> Ibid.

<sup>88</sup> "Government Investigating Small Businesses of Arabs." *Arab American Watch*. August 23, 2002.

<sup>89</sup> Lormel, Dennis M., Chief, Financial Crimes Section, FBI. "Statement for the Record." Testimony before the House Subcommittee on Oversight and Investigations. *Federal Document Clearing House Congressional Testimony*. February 12, 2002.



fraudulent network connected to Adnaud Bahour, the nephew of George Habash, leader of the Palestinian Liberation Front.<sup>90</sup>

Nationwide, about 3.5 billion coupons are redeemed annually through clearinghouses. Grocery stores and other retail outlets receive reimbursement for coupons submitted by customers. In the fraudulent schemes, however, criminals purchase coupons from recyclers, newspaper distributors, and newspaper stands. They search trash bins and recycling centers for bundles of newspapers that contain retail coupons. The coupons are clipped, artificially aged, and then funneled to clearinghouses through storeowners participating in the scam for reimbursement.

Bahour was laundering coupons from a network of stores throughout the United States, involving more than 72 people. The authorities closed down the operation and made dozens of arrests.

Another terrorist scam discovered after the bombing of the World Trade Center in 1993 involved the counterfeiting of T-shirts. The FBI seized 100,000 counterfeit T-shirts and other items that had been produced for the Olympic Games in Atlanta. "There were three floors' worth of merchandise, already in pallets and stacked about seven feet high," explained Dempster Leech, an investigator who participated in the raid.<sup>91</sup> Officials said some of the profits from a counterfeit operation were being funneled to Sheik Omar Abdel-Rahman, the Muslim cleric who was convicted of helping plan the WTC bombing. "A lot of the money from that large and sophisticated ring was going to the blind sheik," declared an official who cited telephone records and intelligence information.<sup>92</sup>

---

<sup>90</sup> "Foreign Terrorists in America." Testimony by the U.S. Senate Judiciary Subcommittee on Technology, Terrorism, and Government Information. *Federal Document Clearing House Congressional Testimony*. February 24, 1998.

<sup>91</sup> "Government Investigating Small Businesses of Arabs." *Arab American News*. August 23, 2002.

<sup>92</sup> "Small Scams Probed for Terror Ties." *The Washington Post*. August 12, 2002.

Sheik Rahman was also involved in an illegal grocery coupon scheme. A group of stores in the New York area, including an outlet “underneath and next to the mosque where Sheik Rahman was identified,” were illegally laundering coupons. The conspirators in the scam regularly met at Hamada Video, according to Benjamin Jacobson, a former New York City Police Department detective and coupon investigator.<sup>93</sup> One of the employees at the store, Mahmud Abouhalima, “resided in the upstairs portion of the building above Hamada Video and regularly conducted business in the store itself,” he said.<sup>94</sup> In addition to participating in the coupon scheme, witnesses said Mahmud helped mix the ingredients for the WTC bomb. For his involvement in the WTC attack, Mahmud was sentenced to 240 years in prison.

Terrorists in the U.S. have also operated a cigarette smuggling ring. In 1995, Mohamed and Chawki Hammoud were convicted in federal court of illegally transporting cigarettes from North Carolina to Michigan, making a profit of 70 cents per pack. The crime ring also was convicted of defrauding credit card companies. According to conversations recorded by the Canadian Security Intelligence Service, the funds from the operation were sent to Hezbollah agents in a Canadian cell located in Vancouver. Some of this money was traced to the purchase of military equipment, including mine detection technology and night-vision goggles, which was sent to Lebanon by courier.<sup>95</sup>

Mohamed Hammoud, according to Ken Bell, U.S. Attorney in Charlotte, had a close relationship with Sheik Mohammed Hussein Fadlallah, the spiritual leader of Hezbollah. Officials estimate Mohamed and Chawki smuggled \$7.5 million of cigarettes before the illegal ring was shut down. After authorities apprehended Mohamed, he “ordered the assassination of the U.S. prosecutor

---

<sup>93</sup> “Foreign Terrorists in America.” Testimony by the U.S. Senate Judiciary Subcommittee on Technology, Terrorism, and Government Information. *Federal Document Clearing House Congressional Testimony*. February 24, 1998.

<sup>94</sup> Ibid.

<sup>95</sup> “Hezbollah Backer Jailed for 155 Years: Belonged to a Cell that Funneled Cash to Canada.” *National Post*. March 1, 2003.

who convicted him and plotted an explosion to destroy the evidence against him,” the *National Post* reported.<sup>96</sup> In early 2003, Mohamed was sentenced to 155 years in prison for his role in the crime syndicate and ordering the assassination.

After the September 11 terrorist attacks, law enforcement agencies substantially boosted resources to uncover the sources of funding for terrorist groups, including counterfeit goods. At the U.S. Customs Service, a supercomputer used to track drug trafficking was converted to analyze patterns in terror funding. U.S. Customs and other government agencies also created an interagency task force, called Operation Green Quest, to “identify, disrupt, and dismantle” sources of terrorist funding.<sup>97</sup> To date, the task force has uncovered numerous “systems that fund terrorist activity, including charities and nongovernmental organizations, money service businesses, and bulk cash smuggling.”<sup>98</sup>

John Forbes, Director of a task force in New York, confessed, “It wasn’t until after September 11<sup>th</sup> that we understood the magnitude of the terrorist fundraising from our own shores.”<sup>99</sup> Authorities estimate as much as \$20 to \$30 million was being raised annually through the fraudulent schemes in the U.S., of which a sizable portion – hundred of millions of dollars – flowed to terror groups.

In addition to seeking out the sources of funding for terrorism in the U.S., authorities have investigated fraudulent schemes overseas. An area of particular concern to law enforcement is the “tri-border” region in South America where the borders of Paraguay, Brazil, and Argentina come together. Officials describe the region as a nest of terrorists, drug traffickers, and organized crime members. It is also a major center for counterfeit products.

---

<sup>96</sup> Ibid.

<sup>97</sup> “Anti-Terrorism Financing.” Testimony by the House Subcommittee on Oversight and Investigations. *Federal Document Clearing House Congressional Testimony*. March 11, 2003.

<sup>98</sup> Ibid.

<sup>99</sup> “Government Investigating Small Businesses of Arabs.” *Arab American Watch*. August 23, 2002.

Ambassador Francis X. Taylor, Coordinator for Counterterrorism at the U.S. State Department, said “Islamic extremist organizations such as [Hezbollah], Hamas, al Gamaat al Islamiyya, and others are using this vibrant area as a base from which to support terrorism.”<sup>100</sup> Hezbollah are suspected in the bombings of the Israeli Embassy in Buenos Aires in 1992 and the Argentine Israel Mutual Association in 1994.

The terrorists easily blend into the local population, which is a melting pot of ethnic groups and nationalities, including Japanese, Chinese, Koreans, Italians, Portuguese, Germans and an estimated 15,000 Arab immigrants.

Larry Johnson, former Deputy Director of the Office of Counterterrorism for the U.S. State Department testified on Capitol Hill that he was involved in an investigation that uncovered product counterfeiting by radical Palestinian groups in Ciudad del Este, near the tri-border area.<sup>101</sup>

Argentina’s Secretariat of State Intelligence revealed that members of al Qaeda in 1999 sought to use the tri-border area to coordinate training and plan attacks with Hezbollah.<sup>102</sup> The operatives are alleged to have met in a camp near Ciudad del Este.

Khalid Shaikh Mohammed, bin Laden’s top lieutenant and mastermind of the September terrorist attacks, also traveled to South America in the late 1990s, Brazilian authorities confirmed. An America official involved in the search of Mohammed said, “We are fairly convinced ... he was there [tri-border region].”<sup>103</sup>

---

<sup>100</sup> Taylor, Ambassador Francis X. “Seminar on Preventing Terrorism and Organized Crime in the Tri-Border Area.” December 19, 2001. <http://www.state.gov/s/ct/rls/rm/2001/7012.htm>.

<sup>101</sup> “Global Reach of Al Qaeda.” U.S. Senate Foreign Relations Committee. *Federal Document Clearing House Congressional Testimony*. December 18, 2001.

<sup>102</sup> “Terror Cell on Rise in South America.” *The Washington Times*. December 18, 2002.

<sup>103</sup> “Captured al Qaeda Member Spent Time in Brazil, Police Say.” *Philadelphia Inquirer*. March 16, 2003.

According to confidential sources, an intelligence officer in the region who spent two years in the tri-border area believes there are ties between the manufacturing of counterfeit drugs and Hezbollah and Hamas. The groups may not be directly involved in the industry, the intelligence officer said, but money is likely be siphoned from illegal operations and sent to Lebanon.

Authorities uncovered a major software counterfeiting operation in Ciudad del Este. Information provided by U.S. authorities led to the arrest of two men of Lebanese origin who allegedly were producing and selling counterfeit music, movies, and software to raise money for Hezbollah.

Rich LaMagna, director of investigations for Microsoft Corporation, said the operators were using sophisticated equipment costing more than \$1 million. The facility was protected with guards armed with automatic weapons and video monitors. Profits from the operation, according to news accounts, were allegedly sent to Hezbollah.<sup>104</sup>

## **B. GROWING CHEMICAL/ BIOLOGICAL TERRORIST THREAT**

Historically, most terrorist attacks have involved conventional explosives, which are relatively easy to obtain and use. Bombs can be easily hidden or camouflaged, and when detonated can cause widespread damage and panic.

In Israel, nearly all of the recent terrorist attacks have been suicide bombings and car bombs. In Russia, during the 1990s, terrorists detonated package bombs in retail outlets, transportation systems, apartment buildings, and markets. Until recently, the attacks mounted by al Qaeda members have been large bombs.

---

<sup>104</sup> "Feds Track Sales of Counterfeit Goods, Money to Terror Groups." *The Associated Press*. October 25, 2002.

While explosives are likely to be the weapon of choice for terrorists in the foreseeable future, terror organizations are increasingly turning to biochemical weapons to mount attacks.

“The threat of a terrorist group using a nuclear, biological or chemical weapon of mass destruction in the United States is real,” An investigation for the U.S. Senate Permanent Subcommittee on Investigations said in 1996, “It is not a matter of ‘if’ but rather ‘when’ such an event will occur.”<sup>105</sup>

It is well known that al Qaeda has sought to develop chemical and biological weapons. In a 1998 interview, Osama bin Laden was asked if he was developing weapons of mass destruction. “If I seek to acquire such weapons, this is a religious duty,” he told an ABC correspondent. “How we use them is up to us.”<sup>106</sup>

Weaponizing chemical and biological agents requires considerable knowledge and skill. To develop the expertise, al Qaeda assembled a library of research materials on chemical and biological agents and conducted rudimentary tests. Based on an examination of the captured textbooks and papers, it is believed the expertise of the militants reached the equivalent level of a college undergraduate.<sup>107</sup>

Near Kandahar, U.S. forces discovered a laboratory still under construction. While the site contained no equipment, chemical agents, or pathogens, the U.S. Central Command believes it was being constructed to produce anthrax.<sup>108</sup>

---

<sup>105</sup> Cardin, Benjamin L., Congressman. “Hearings on Global Proliferation of Weapons of Mass Destruction: Response to Domestic Terrorism.” Hearing by the U.S. Senate Permanent Subcommittee on Investigations. March 27, 1996.

<sup>106</sup> “U.S. Opens Fronts to Sway Public Opinion.” *Chicago Tribune*. November 7, 2001.

<sup>107</sup> “U.S. Concludes al Qaeda Lacked a Chemical or Biological Stockpile.” *The New York Times*. March 20, 2002.

<sup>108</sup> “U.S. Says it Found al Qaeda Lab Being Built to Produce Anthrax.” *The New York Times*. March 20, 2002.

Al Qaeda militants received instruction in the training camps on how to manufacture and use “major poisons and poison gasses,” including ricin, botulism, and cyanide.<sup>109</sup> Ricin is derived from the seeds of the castor bean and is fairly easy to obtain and produce. The bean is widely cultivated to produce castor oil, an industrial lubricant and laxative. It is twice as deadly as VX nerve agent and, through processing, can be made 200 times more deadly than cyanide. Ricin is most lethal when inhaled and can cause respiratory failure in 36-72 hours.

Botulinum toxin A is the most toxic substance known. While highly lethal toxins are not readily available or easy to process, other strains can be easily acquired and produced. Cyanide is considered to be low to moderate lethality and is used in many commercial applications, from electroplating to the mining industry and jewelry. In some countries, such as Italy, cyanide is easy to buy and is used by farmers to kill rodents.<sup>110</sup>

As further evidence of al Qaeda’s intentions to use chemical and biological weapons, in November 2001, U.S. forces in Kabul discovered plans for producing ricin in a safe house. Al Qaeda militants also conducted elementary experiments using chemical agents at the Abu Ahabab training camp in Derunts, Afghanistan.

Evidence of chemical testing was confirmed when authorities in August 2002 made a videotape public that showed a dog being killed by what authorities believe to be a chemical agent. Ahmed Ressem, the Millennium Bomber who planned to attack the Los Angeles airport, testified that the dogs at the training camp were used to test a crude mixture of cyanide and sulfuric acid.<sup>111</sup>

Since the attacks on September 11, al Qaeda militants and other terrorist groups increasingly have sought to launch attacks with biochemical weapons.

---

<sup>109</sup> “A Nation Challenged.” *The New York Times*. March 17, 2002.

<sup>110</sup> “4 Terror Suspects Arrested in Italy.” *Los Angeles Times*. February 21, 2002.

<sup>111</sup> “Qaeda Videos Seem to Show Chemical Tests.” *The New York Times*. September 19, 2002.

In Israel, suicide bombers often pack explosives with nuts and bolts to enhance the lethality of an attack. To increase the level of violence, terrorists have laced the nuts and bolts with rat poison, an anti-coagulant that can cause survivors to bleed uncontrollably from their wounds. Adi Hudja was injured in such an attack while at a pedestrian mall in Jerusalem. According to Dr. Avi Rivkind, who treated Hudja after the attack, he “bled like hell.”<sup>112</sup>

In March 2002, a suicide bomber from the military wing of Hamas detonated a ten-kilogram bomb in the Park Hotel in Netanya, killing 29 people and wounding 160 others. The head of the Israeli military intelligence said Hamas had planned to lace the bomb with rat poison.

Rat poison also reportedly was combined with explosives in the suicide bombing at a bus stop in a Jerusalem neighborhood on June 17, 2002.<sup>113</sup>

To increase the lethality of an attack, Palestinian terrorists have also laced bombs with pesticides. There have been four such attacks since 1995, according to the Israeli Health ministry. A spokesman for the agency said the pesticides were destroyed by the blasts and no victims suffered any contamination.<sup>114</sup>

The first attempted al Qaeda attack using cyanide was uncovered by Italian authorities through phone taps and other eavesdropping techniques in early 2001. The target of the surveillance was Essid Sami Ben Khemais, a 33-year-old Tunisian living in Milan, Italy. Code-named “Saber,” Khemais graduated from the al Qaeda camps, and then became a trainer and recruiter. In recorded conversations, Khemais urged a member of a German terrorist cell to talk with bin Laden to gain permission to use chemical weapons in an attack. “Talk to the sheik,” he urged. Khemais said he only needed two people who he already had identified – a “Libyan and

---

<sup>112</sup> “Lives Forever Scarred After Suicide Attack.” *Los Angeles Times*. July 21, 2002.

<sup>113</sup> “Bombs and Bioterror.” *ABCNews.com*. August 6, 2002.

<sup>114</sup> *Ibid.*



the Kurd from London” – to mount an attack. “I don’t need an army,” he said, “just two people with brains, training, and nothing to lose. They spread the gas and say goodbye.”<sup>115</sup>

In another recorded conversation, Khemais expressed interest in gaining access to ten liters of poison. Talking in code, he told another militant, “I’d like to learn how to use the medicine [chemical]. I’d like to see what effect it has when someone breathes it.”<sup>116</sup>

In yet another taped conversation, an al Qaeda operative explained to a militant, “You are putting down you guns and taking up industrial products.” He explains, “There’s a liquid which is extremely efficient because it suffocates people.”<sup>117</sup>

The al Qaeda members discussed placing a chemical agent in tomato cans that, when opened, would cause the victim to suffocate.

Months later, al Qaeda attempted its first attack with a chemical agent. In February 2002, the police arrested four Moroccans for plotting to attack the U.S. embassy in Rome. Law enforcement officers raided an apartment where the militants were staying and discovered four kilograms (8.8 pounds) of potassium ferrocyanide and 22 pounds of firecrackers.<sup>118</sup>

The authorities originally suspected the militants were going to contaminate the embassy’s water system. But soon after the arrests, the police discovered an underground tunnel leading to the embassy and nearby buildings. A three-foot-thick wall protecting the tunnel had a hole big enough to allow someone to crawl through. Authorities speculated the attackers were planning to combine the potassium ferrocyanide with the firecracker powder to create hydrocyanide acid, a toxic gas. If ignited underneath the

---

<sup>115</sup> “Case Shows Difficulty of Terror War.” *Chicago Times*. January 20, 2002.

<sup>116</sup> “Tapes Reveal Poison Plan.” *Sunday Times* (London). October 10, 2001.

<sup>117</sup> Ibid.

<sup>118</sup> “Italian Court Convicts Tunisian Suspected of Heading bin Laden’s European Arm.” *The Associated Press*. February 22, 2002.

embassy, an official said the gas could have wafted into the building. Another expert said the gas could have spewed into the air conditioning system.

In the autumn of 2002, French intelligence (DST) uncovered information about al Qaeda leaders in the Caucasus planning a series of chemical and biological attacks. “Two toxins were of particular concern to the French: ricin and potassium cyanide,” reported the *Sunday Times*. “The [intelligence] agency believed that terrorists possessing both substances, some hidden inside soap and toothpaste, were being smuggled into Europe.”<sup>119</sup>

The information was relayed to other intelligence agencies. Soon thereafter, authorities in London intercepted details of a planned attack in London’s subway system using pressurized canisters of cyanide. For six months, al Qaeda militants had been surveiled in the subway, which has 275 stations and more than 500 trains. The police arrested the attackers. In their apartment, authorities found “laboratory equipment, chemistry manuals detailing the manufacture of nerve agents, protective laboratory clothing, forged passports, identity cards, and driving licenses.”<sup>120</sup>

In January 2003, members of the Scotland Yard’s anti-terrorism branch and MI5 conducted raids at apartments in North London and East London, making several arrests. The authorities discovered a makeshift laboratory to produce ricin. Because one of the terrorists worked at a military base, experts speculated they may have been planning to poison its food supply with ricin or cyanide.

In February 2003, the threat of a chemical attack shifted to the United States. Authorities elevated the terrorism threat level to yellow in response, in part, to intelligence gathered from interrogations that al Qaeda was planning an attack using ricin or cyanide.

---

<sup>119</sup> “How Poison Trail Spread to Britain.” *Sunday Times* (London). January 19, 2003.

<sup>120</sup> “Terror on the Underground: They Spent Six Months Picking 4 Tube Targets.” *The Mirror*. November 18, 2002.

The following month, French officials discovered traces of ricin in the Gare de Lyon railway station in Paris. The police searched a locker and found “two vials with powder, a bottle filled with a liquid and two smaller bottles also containing a liquid,” which contained “traces of ricin in a mixture that turned out to be a very toxic poison.”<sup>121</sup>

In what may be the most alarming discovery to date, authorities believe al Qaeda and Iraq have apparently collaborated to weaponize poisons. According to William Safire, at a facility in northern Iraq a cream was produced with cyanide that kills on contact. “A shipment of this rudimentary panic-spreader ... was recently intercepted in Turkey on its way to terror cells in the West,” Safire revealed.<sup>122</sup>

Hezbollah and al Qaeda also are reportedly cooperating on a “joint chemical weapons lab in one of al Qaeda’s safe houses, possibly in Somalia,” the *Daily News* stated. “The plan calls for the transfer of precursor chemicals and such agents as cyanide and nerve gas to the safe house” to produce terrorist weapons.<sup>123</sup>

Step by step, the terrorists are gaining the necessary background and experience to mount a chemical or biological attack. As the Senate Permanent Subcommittee on Investigations warned, it is only a matter of when before terrorists will attack using chemical and biological weapons.

### **Terrorists Educated in Medicine and Biology**

Contrary to conventional wisdom, many terrorist organizations have expertise in medicine and biology, enabling them to develop biochemical weapons. Some of the leaders of the most feared terrorist organizations have attended medical schools.

Dr. George Habash, founder of the PFLP, graduated with a medical degree from the Faculty of Medicine at ABU in 1951. Ayman Al-

---

<sup>121</sup> “Poison Found in Paris Train Station Locker.” *The New York Times*. March 21, 2003.

<sup>122</sup> “Saddam and Terror.” *The New York Times*. August 22, 2002.

<sup>123</sup> “Beware of Unholy Terror Alliance.” *Daily News*. February 11, 2003.

Zawahiri is a physician and the founder of the Egyptian Islamic Jihad.

Dr. Zawahiri, on the Federal Bureau of Investigation's Most Wanted Terrorists list, reportedly travels with bin Laden as his advisor and personal doctor. He has been named as a likely successor if bin Laden were incapacitated.

Hezbollah also has numerous scientists and physicians among its ranks. One of them, Hussein Haijj Hassan, is a "biochemical scientist, university professor and ... one of the party's federal deputies."<sup>124</sup>

Hezbollah operates its own hospital, according to *The Toronto Star*. "In Lebanon's eastern Bekaa Valley, its initial stronghold, Hezbollah runs a several-hundred-bed hospital that treats as many as 25,000 patients a month."<sup>125</sup>

Aum Shinrikyo, founded in the late 1980s by Shoko Asahara, built a sophisticated laboratory to develop chemical and biological weapons. The laboratory was run by Seichi Endo, who had graduate education in chemistry and microbiology.

The group's medical division, also known as the "Treatment Ministry," was led by Ikuo Hayashi, nicknamed "Dr. Death." He was a prominent surgeon who had practiced in the United States before joining Aum Shinrikyo.

The sect carried out a series of chemical attacks from 1990-1995. In one test, Aum Shinrikyo attempted to spray sarin gas from a moving van, but the sprayer malfunctioned. In a second test, the sect's security chief was exposed to the toxic nerve agent.

In 1993, Aum Shinrikyo attempted to spray a weak strain of anthrax from the top of an eight-story building in Tokyo. Vernon Loeb of

---

<sup>124</sup> "The Many Faces of Hezbollah." *The Vancouver Sun*. January 23, 2002.

<sup>125</sup> "Hezbollah goes Lebanon's once Clandestine Terror Group is Running Hospital and Political Campaigns." *The Toronto Star*. August 17, 1994.

*The Washington Post* writes that people reported seeing “clots of jellyfish-like material in the street, a sign of clogging problems during the spraying of a slurry.” Anthrax spores were also allegedly dispersed in the Imperial Palace, the Tokyo Parliament, and into the U.S. Navy bases in Yokohama and Yokosuka. In 1994, Aum Shinrikyo conducted tests using a botulinum toxin, which was dispersed from the back of a truck in downtown Tokyo and at the Narita airport. The same year, Aum Shinrikyo initiated its first sarin gas attack in Matsumoto, killing seven people.

When Aum Shinrikyo attacked the Tokyo subway, it did not use any sophisticated technology, but merely poked holes in plastic bags containing sarin with sharpened umbrella points. The noxious fumes then spread from the bags into the subway cars, killing 12 people. Loeb wrote, “Rescue crews found pandemonium, with scores of commuters stumbling about, vision-impaired and struggling to breathe ... Casualties littered the sidewalks and subway station exits. Some foaming at the mouth, some vomiting and others prone and convulsing.”<sup>126</sup>

The fact that the sect failed to effectively develop and disperse various biological agents reflects the difficulty in producing and dispersing such materials. Seichi Endo cultured the botulinum from soil samples. He also failed to gain access to a virulent strain of anthrax and developed a weak strain from an animal vaccine.

Nevertheless, the medical and scientific expertise of the terrorist organizations and their efforts to produce chemical and biological weapons for attacks foreshadow an increasingly dangerous future.

## **C. TERRORIST THREATS TO THE FOOD SUPPLY**

Although food products are highly vulnerable to sabotage, terrorists have mounted few attacks. A majority of the incidents instead involve extortion, copycat attacks, and pranks. Most attacks have

---

<sup>126</sup> “Making Chemical Weapons Is No Easy Task,” *The Washington Post*, February 5, 2001.

occurred against processed foods, such as ice cream, cookies, soup, chocolate, and baby food, rather than fresh fruits and vegetables. In addition to lacing food products with poisons, including mercury, cyanide, and rat poison, the attackers have used salmonella, glass shards, pins, staples, and pieces of razors.

One of the first terrorist attacks involving food occurred in 1975, when Palestinian militants based in Europe threatened to contaminate fresh fruit exported from Israel. Authorities searched for adulterated produce but did not find any, according to a report in *Maaviv*, a Tel Aviv newspaper.

Three years later, a terrorist threat proved real. A Palestinian group called the Arab Revolutionary Army Palestinian Commando injected Israeli fruit exported to Europe with mercury. Five children in the Netherlands were rushed to a hospital, where they had their stomachs pumped after eating tainted oranges.

The terrorist group forwarded letters to the Dutch and West German governments, announcing, "It is not our aim to kill the population, but to sabotage the Israeli economy which is based on suppression, racial discrimination, and colonial occupation."<sup>127</sup> Israeli Prime Minister Menachem Begin described the attack as an act of "barbarism of a sort we have never witnessed in human history."<sup>128</sup>

Alerted to the threat, shipments of fresh fruit from Israel were intercepted in Greenland, Britain, Belgium, Switzerland, Norway, and Finland. West German health officials discovered an orange containing mercury in the industrial city of Darmstadt. In the days that followed, health officials located additional contaminated oranges. Belgium authorities discovered a lemon injected with mercury and health officials in Milan and Gergamo banned the sale of grapefruit from Israel after finding a grapefruit with mercury. A 12-year-old girl from Bremen who ate an orange was hospitalized, as well as two school children in Rotterdam.

---

<sup>127</sup> *The Associated Press*. February 1, 1978.

<sup>128</sup> *The Associated Press*. February 2, 1978.

Authorities traced some of the tainted fruit from Israel to the Belgian port of Antwerp. But it appears the terrorists also contaminated oranges in Stockholm at a wholesale store where the produce was sold.

A decade later, in 1988, Israeli officials feared terrorists had again targeted its fresh fruit industry. A group sympathetic to the Palestinians, calling themselves the Organization of Metropolitan Proletarians and Oppressed People (OMPOP), claimed it had poisoned grapefruit in Milan. When authorities checked local stores, tainted fruit could not be located.

The following week, a newspaper in Rome received a call from the OMPPOP. The caller warned, "In the supermarket on Via Donati there are poisoned grapefruits."<sup>129</sup> Days earlier, youths outside the market had distributed pamphlets urging customers to boycott Israeli produce. A poster on a wall nearby proclaimed, "Don't buy Jaffa grapefruit. Boycott Israel."

Health officials rushed to the store and confiscated six grapefruit imported from Israel. Each had a "blue-green center" and appeared to be poisoned. Authorities conducted tests and it was widely reported by the media that the fruit was tainted with a poison "so powerful that it killed laboratory mice instantly."<sup>130</sup> One news story said tests were conducted using "guinea pigs in a state-run laboratory [and] the animals died 'instantly.'"<sup>131</sup>

Italy's Health Minister ordered the removal of all grapefruit from stores and warehouses throughout the country. Residents were told to destroy any grapefruit they had at home, and the Economic Union issued an alert to other countries to initiate their own investigations.

---

<sup>129</sup> "Italian Officials Find Poison in Grapefruits From Israel." *Chicago Tribune*. April 27, 1988.

<sup>130</sup> "Poison-Laced Grapefruit Spurs Nationwide Seizure." *The Associated Press*. April 26, 1988.

<sup>131</sup> "Italian Authorities Seize Poisoned Grapefruit." *United Press International*. April 26, 1988.

Two days after the apparent attack, the Health Minister retracted its initial findings. He announced the blue-green substance in the grapefruit was a harmless dye known as methylene blue, used as an antidote for cyanide poisoning. The animals in the tests, authorities explained with a red face, had not died from poison but from an excessive “fibrous diet.” Officials in Italy lifted the ban on the sale of grapefruit.

The most recent threat to Israel’s food supply occurred in 1991. Paulo Jose de A Santos, who met bin Laden several times and was arrested in 1991 for attempting to assassinate Afghanistan’s former ruler, Zahir Shah, said he had discussed plans with al Qaeda operatives to poison Israel’s irrigation system. “We were planning to poison the waters of Israel with mercury and destroy their harvests and crops,” he said.<sup>132</sup>

These incidents reveal both the vulnerability of fresh fruits and vegetables to a terrorist attack and the level of panic that would ensue if even a small incident were to occur.

While Israel has experienced multiple threats and terrorist attacks on its food industry, which spilled into Europe, similar incidents have yet to occur in other areas. There have been, however, numerous non-terrorism incidents that have killed or injured many people.

For example, in Tangshan, China, 42 people died and more than 300 fell ill in September 2002 from rat poison that was deliberately placed into food at the Heshenyuan Soy Milk restaurant. Victims collapsed, while others coughed up blood, “just minutes after eating at the restaurant,” news reports said.<sup>133</sup> One eyewitness described an elderly man after eating at the diner. “One minute he was sitting there eating and the next he stood up and kneeled over. We all thought he was choking; we had no idea what was

---

<sup>132</sup> “Zahir Shah’s Attacker Organized Kashmiri Terrorist Camps.” *The Press Trust of India*. April 19, 2002.

<sup>133</sup> “China Deaths Blamed on Rat Poison.” *CNN.com*. September 15, 2002.



wrong.”<sup>134</sup> In an investigation, authorities determined Chen Zhengping, the owner of a rival restaurant, was responsible for the contamination. He was sentenced to death.

The year earlier, more than 120 people became ill after eating noodles laced with rat poison at restaurants in central China. Two brothers who were leasing the factory adulterated the noodles after a contract dispute erupted with the owners.

Although terrorists have not targeted the food supply in the United States, there have been numerous incidents, ranging from pranks to serious attacks.

In September 2002, two seventh-graders in a Jacksonville, Florida school mixed rat poison with salsa. Students soon began to complain of headaches, stomach pains, and nausea. Thirty-four students fell ill, 15 were rushed to emergency rooms. The source of the toxin was a packet of rat poison that had been placed on the school grounds to control rodents. The students ingested only a small amount of the poison and were released from the hospital.

One of the most notorious attacks occurred in 1984. Members of the Rajneeshee religious cult in Oregon contaminated salad bars, fruits, coffee creamers, and blue cheese in local restaurants with salmonella bacteria, infecting 751 people. The cult hoped to influence the outcome of a local election by making people sick.

Criminals have attempted “to extort money from a grocery store and a restaurant by threatening to poison food products,” *The Dallas Morning News* reported.<sup>135</sup>

It is not necessary to be in the United States to contaminate food. In 1989, two grapes from Chile, purchased in a Philadelphia supermarket, were found by health officials to be laced with cyanide. The discovery triggered a ban on all imports from Chile.

---

<sup>134</sup> Ibid.

<sup>135</sup> “Pepsi-Cola Facing a Crisis Over Cans Found With Syringes.” *The Dallas Morning News*. June 16, 1993.

The above events demonstrate how easy it would be for terrorists to adulterate a food product. The Chilean grape incident was viewed in the media as a wake-up call for America. The prospect of a terrorist attack against food products had seemed a remote possibility, the *Los Angeles Times* explained. “But the Chilean fruit scare, while short-lived, demonstrated the susceptibility of the nation’s food chain, supermarkets and drugstores to acts of sabotage, even when they may originate in places thousands of miles away.”<sup>136</sup>

Despite the early warning, few actions were undertaken by U.S. government officials and the food industry to protect food products against a terrorist attack. In an examination of food-processing security, the General Accounting Office said the protection of the “food supply from intentional contamination has not been a major focus of federal agencies.” Only after September 11, 2001, did the issue come to the attention of senior policy makers. Since then, government agencies have conducted threat assessments and are taking steps to enhance security, including the distribution of voluntary security guidelines to mitigate the risk of an attack.

Recognition of a terrorism threat to food products extends beyond the U.S. and Europe. The report, “Terrorist Threats to Food,” by the World Health Organization, describes the threat to food supplies and offers guidance to establish and strengthen prevention and response systems. “Threats from terrorists, criminals, and other anti-social groups who target the safety of the food supply are already a reality,” the report states. “Deliberate contamination of food by chemical, biological, or radionuclear agents can occur at any vulnerable point along the food chain, from farm to table, depending on both the food and the agent.”<sup>137</sup>

---

<sup>136</sup> “Sabotage in the Food Chain.” *Los Angeles Times*. March 21, 1989.

<sup>137</sup> “Terrorist Threats to Food: Guidance for Establishing and Strengthening Prevention and Response Systems.” The World Health Organization. January 31, 2003. [www.chpr.szu.cz/bioterror/Final\\_En\\_Terrorism%20and%20food.pdf](http://www.chpr.szu.cz/bioterror/Final_En_Terrorism%20and%20food.pdf).

In the above attacks against food products, the terrorists purposely limited the level of harm. In the 1978 event, the Palestinian group identified as the Arab Revolutionary Army Palestinian Commando announced its aim was not “to kill the population, but to sabotage the Israeli economy.” It sought to frighten the public, not to achieve a large body count.

Since the attack, the public has grown increasingly immune to images of violence. Bombings that once produced horror and revulsion have become commonplace. Regularly on the evening news are pictures of bloodied bodies being rushed to hospitals after a suicide bombing. To grab the attention of the public, terrorists now must mount more horrific attacks.

Terrorists are now lacing shrapnel used in suicide bombs with rat poison so victims will bleed uncontrollably. Al Qaeda has started to mount attacks using cyanide and ricin. Instead of just scaring the public as in the past, the militants are seeking to kill as many people as possible.

The potential for harm in a terrorist attack against a food product could involve hundreds or even thousands of people. In 1981, 800 people died in Spain from contaminated cooking oil. Had the grapefruit been injected with ricin instead of mercury, many people would have instantly died, creating a wave of panic. Had multiple fresh foods been targeted, the entire industry would have been brought to a standstill.

See Appendix B for a partial list of attacks on food products.

## **D. TERRORIST THREATS TO PHARMACEUTICALS**

While a terrorist attack with a chemical or biological agent has long been a concern of government authorities and terrorism experts, the threat of an attack that exploits vulnerabilities in the medicine supply has only recently gained attention.

Terrorist organizations, such as the Irish Republican Army, have already produced counterfeit pharmaceuticals to generate funds to purchase arms. Around 1990, two IRA members, Brian Ruddy and his cousin Paeder Hamill, provided \$60,000 to set up a drug laboratory in Florida to produce fake Ivomec, a livestock anti-parasite drug manufactured by Merck Corporation.

The laboratory was operated by GM&S Chemicals, located in Hialeah Gardens, a town about 20 miles west of Miami. According to news reports, the laboratory was an “assembly line” operation with thousands of bottles and “chemistry notes.”

The mastermind of the operation was allegedly Edward Davidson, an IRA member who managed a cabinetry company called Cedarean in Hallandale, a community north of Miami. The counterfeit Ivomec was stored in the company’s warehouse. Davidson is also linked to the robbery in May 1990 of \$630 million in British bonds, which the IRA attempted to sell.<sup>138</sup>

Davidson worked with James “Seamus” Costello, who purchased bottles, stoppers, and caps from a firm in Atlanta to hold the counterfeit Ivomec. Costello allegedly explained the materials were to be used for military medical supplies for Operation Desert Storm.

The labels for the fake Ivomec were produced on a farm in Northern Ireland, owned by Patrick Brady, Hamill’s uncle. In March 1991, law enforcement officials raided the property and discovered 30,000 labels for Ivomec and Cemovi (Ivomec spelled backwards), and growth hormones.

The counterfeit Ivomec was distributed to feedlot operators, veterinarians, and retail outlets in the U.S. by Life Services Inc., owned by Lextron, a major drug distribution company. Life Services, located in Ocala, Florida was managed by Harold Harring. When investigators attempted to purchase fake Ivomec, they were told to talk with Harold Harring.

---

<sup>138</sup> “Trial Brings IRA Cash Plot to Light.” *Hamilton (Ontario) Spectator*. May, 1993

The authentic Ivomec manufactured by Merck was distributed in a 100-milliliters bottle that sold for \$125 (a bottle will treat 20 cattle). The fake drug, which was primarily water without any active ingredients, was packaged in 500 milliliter bottles.

“To the untrained or hurried eye, the fake Ivomec looked like the real thing in terms of the boxes, bottles, and labels,” The *Denver Post* reported.<sup>139</sup>

More than 700,000 cattle were injected with the counterfeit drug, which led to weight loss and depressed world market sales because unprotected cattle placed on the market could be infected.

Profits from the counterfeit scheme were forwarded to bank accounts in Ireland. Money was also used to purchase cattle growth hormones, which were smuggled into Great Britain and sold on the black market. Growth hormones, although legal in the U.S., are banned in the U.K. The hormones cause cattle to quickly put on weight, boosting their value when sold for slaughter.

The counterfeit drug operation was discovered by Merck, which noticed a decline in sales to Lextron while the trend was the opposite with other distributors. The company launched an investigation that uncovered the drug ring. Merck sued Lextron, its subsidiaries, Davidson, and other members of the operation in Florida District Court in February 1992. The company won varying undisclosed amounts from the plaintiffs. Davidson was prohibited from selling, manufacturing, or in any way representing any product as Ivomec. Brian Ruddy was ordered to pay Merck \$6 million in penalties.

The civil suit against Paeder Hamill was dismissed. In January 2001, Hamill pleaded guilty to 12 counts of possessing and supplying other animal hormones. The 53-year-old father of five was given a six-year suspended sentence and fined 21,000 pounds for storage of enough hormones to inject 1,600 cattle.

---

<sup>139</sup> “Cattle-drug Scam Funded IRA.” *Denver Post*, July 26, 1992.

Hezbollah has also used the pharmaceutical market to raise funds to carry out deadly attacks. The terror network generated millions of dollars from a drug smuggling ring involving pseudoephedrine, an active ingredient in some cold and allergy medicines. Large quantities of the drug were purchased in Canada and smuggled into the United States to clandestine labs to produce methamphetamine, an illicit drug also known as crystal meth and ice. Pseudoephedrine is available over-the-counter in Canada for about \$200 a case.

“A significant portion of some of the sales [from the operation were] sent to the Middle East to benefit terrorist organizations,” DEA Administrator Asa Hutchinson said.<sup>140</sup> The smuggling ring is the first case in which authorities found a connection between pharmaceuticals, street sales in the U.S., and a terrorist organization.

Federal officials broke up the drug ring following a two-year investigation, dubbed Operation Mountain Express.

In addition to pharmaceuticals, Hezbollah has generated money from a cigarette smuggling ring in North Carolina. The operation illegally transported \$7.5 million of cigarettes to Michigan, where they were sold tax-free for a profit of 70 cents per pack. Money from the ring was forwarded to Hezbollah as well as used to purchase military equipment, including mine detection technology and night-vision goggles.

Terrorists have been linked to the sale of counterfeit drugs via the Internet. According to Alan Slobodin, senior oversight counsel for the Energy and Commerce Subcommittee on Oversight and Investigations, the Internet is a major source of sales of counterfeit drugs with the profits going into the pockets of terrorist groups in the Middle East. Slobodin said, “there is strong evidence that profits from some Rx drug counterfeiting, and even cosmetics counterfeiting, is supporting terrorist groups.”<sup>141</sup>

---

<sup>140</sup> “Drug Money For Hezbollah?” *CBSNews.com*. September 1, 2002.

<sup>141</sup> “Cyber Letters to Web-Based Pharmacies Not Seen Halting Counterfeiting, Illegal Rx’s.” *Warning Letter Bulletin*. October 22, 2001.

In the investigation of the pseudoephedrine smuggling ring operated by Hezbollah, U.S. authorities uncovered close ties between Mexican drug-trafficking organizations and Arab-American organized crime groups in New York, Michigan, and Canada.<sup>142</sup> It is no coincidence that terrorist organizations are increasingly cooperating with organized crime groups and drug traffickers, officials point out. Much can be gained by a sharing of resources and expertise.

“Links between terrorist organizations and drug traffickers take many forms, ranging from facilitation – protection, transportation, and taxation – to direct trafficking by the terrorist organization itself in order to finance its activities,” said Rand Beers, Assistant Secretary for International Narcotics and Law Enforcement and Francis X. Taylor, Ambassador At Large for Counterterrorism. “Traffickers and terrorists have similar logistical needs in terms of material and the covert movement of goods, people, and money.”<sup>143</sup>

Drug traffickers benefit from the terrorists’ military and clandestine skills, while terrorists gain expertise on drug trafficking and the illicit transfer and laundering of profits. “The methods used for moving and laundering money for general criminal purposes are similar to those used to move money to support terrorist activities,” Beers and Taylor explained.<sup>144</sup>

Interpol has closely monitored the growth of counterfeit pharmaceuticals and believes “on the basis of evidence uncovered by police in North America and Western Europe, that this aspect of the drugs trade is closely connected with the narcotics cartels and that the profits generated by it are in part used to finance international terrorism.”<sup>145</sup>

---

<sup>142</sup> “Small Scams Probed for Terror Ties; Muslim, Arab Stores Monitored as Part of Post-Sept. 11 Inquiry.” *The Washington Post*. August 12, 2002.

<sup>143</sup> Beers Rand, Assistant Secretary for International Narcotics and Law Enforcement Affairs, and Francis X. Taylor, Ambassador At Large for Counterterrorism. “Narco-Terror: The Worldwide Connection Between Drugs and Terror.” Joint Testimony before The Senate Committee on the Judiciary, Subcommittee on Technology, Terrorism and Government Information. *Federal News Service*. March 13, 2002.

<sup>144</sup> Ibid.

<sup>145</sup> “Pill Pirates Put UN and Insurance Industry on a Full Market Alert.” *Insurance Day*. July 22, 1998.

U.S. Deputy Attorney General Michael Chertoff believes it no longer makes sense to “differentiate between terrorism and organized crime and drug dealing. These groups do not hold themselves independent. They work with one another. Terrorists get engaged in drug activity. They have relationships with organized crime.”<sup>146</sup>

Terrorists are looking to align themselves with organized crime networks as a result of growing legal and diplomatic pressure on state sponsors of terrorism. As rogue governments curtail funding to the terror groups, they are seeking alternative sources of support.

At the same time, organized crime syndicates are infiltrating counterfeit drug markets. According to *The Straits Times* in Singapore, “organized crime groups have muscled into the production and trafficking of counterfeit drugs and medicines that kill thousands of people a year in Asian, African, and Latin American countries.”<sup>147</sup> This assessment is shared by Erik Madsen, an Interpol criminal intelligence officer. He said counterfeit drugs are “one of the most lucrative, low-risk and high profit businesses for organized crime.”<sup>148</sup>

While evidence has not been uncovered that directly links terrorists to the manufacturing of counterfeit drugs, it may not be long before such activity is discovered. The counterfeit market operates in the shadows. Small, unregistered manufacturing plants are present around the world that are manufacturing counterfeit pharmaceuticals.

India and China produce the majority of bulk pharmaceuticals in the world and also are major sources of counterfeit drugs. In India there are an estimated 25,000 manufacturers.

---

<sup>146</sup> “Drugs and Terrorist Groups Go Together.” October 22, 2001.  
<http://www.inq7.net>.

<sup>147</sup> “Gangsters Move In On Deadly Counterfeit Drug Trade.” *The Straits Times*. April 28, 2002.

<sup>148</sup> Ibid.



Many of the illegal drugs produced in China are from individual households. They manufacture quantities below the threshold of criminal prosecution. If caught by authorities, the drug producers are only liable for civil fines. “These are not companies. They are not factories. They are just ordinary households,” explained Liu Dianlin, general manager of Smiling Wolf Consultative, a Guangzhou-based investigative company. “You close one, they move to another. It’s really basically impossible to eradicate this problem.”<sup>149</sup>

Pakistan has more than 30,000 licensed druggists and chemists, more per capita than any other developing country. Of this total, 25,000 allegedly do not maintain proper cooling systems. In addition to selling drugs, “These outlets are ... brokers of substandard and fake medicines being produced in the country and [which are] being openly sold in the wholesale markets of Lahore and Karachi,” reported *The Nation* (Pakistan).<sup>150</sup>

Any of a number of manufacturers and outlets in Pakistan, China, India, as well as in scores of other countries, could be tied to a terrorist network. In 2002, it came to light that a pharmaceutical warehouse in Karachi was used by a terrorist organization allied with al Qaeda. On December 19, an explosion in the warehouse killed five people, including Asif Ramzi, the leader of the banned extremists terrorist group, Lashkar-e-Jhangvi.

Ramzi was wanted by authorities for the murder of *Wall Street Journal* Reporter Daniel Pearl, as well as a church bombing in Bahawalpur that killed 16 Pakistanis, and a suicide bombing at the Sheraton Hotel in Karachi, in which 11 French engineers were killed. Ramzi also was linked to 35 mail bombs delivered to the police and government offices in October 2002.

It is believed that Asif Ramzi “adopted the name ‘Ramzi’ to demonstrate his admiration of Ramzi Yousef, who was arrested in

---

<sup>149</sup> “China’s Killer Headache: Fake Pharmaceuticals.” *The Washington Post*. August 30, 2002.

<sup>150</sup> “Sick Health Policy.” *Global News Wire*. July 15, 2002.

Pakistan in 1995 and later convicted of leading the 1993 World Trade Center bombing.”<sup>151</sup>

The group of terrorists had rented the single-story warehouse in August from Khalid Anees, the owner of Eros Pharmaceutical, a major company in the Korangi Industrial Area. The Chief Executive was Iqbal Memon. The facility, according to news accounts, was rented through an estate agent, who allegedly was informed the space would be used to store leather goods.

Authorities described the single-story warehouse as a “hideout of terrorists” where bombs were manufactured.<sup>152</sup> In the debris, the police found 11 pounds of explosives, a 107mm rocket, detonators, and various chemicals, including zinc striate, ammonium oxide, ammonium nitrate, and liquid menthol. The police also recovered 60 sacks of an “unidentified white powder” that was sent to a laboratory for analysis.

Inspector-General of Police Sindh Syed Kamal Shah said, “The building was constructed on two plots of 90 yards each and is owned by [the] owner of a pharmaceutical company, which was using it as [a] warehouse while the other portion was rented to some people.”<sup>153</sup>

Additional information is unavailable from public sources on the potential relationship between Ramzi and Khalid Anees. The incident, however, offers an example of how terrorists and a rogue pharmaceutical company could collaborate, sharing facilities, using the proceeds from counterfeit drugs to fund their operations.

As in the case of food products, the main attacks to the pharmaceutical industry have involved extortion, copycats, pranks, and scams. The vulnerability of the pharmaceutical industry to an

---

<sup>151</sup> “Samples of Explosives Used in Attack Sent for Tests Amid Speculation Bomber Wanted to Copy 1993 World Trade Center Blast,” *Associated Press Worldstream*. May 16, 2002.

<sup>152</sup> “Pakistan Police Establishing Identities in Karachi Blast.” *Global News Wire – Asia Africa Intelligence Wire*. December 20, 2002.

<sup>153</sup> *Ibid.*

attack was demonstrated to the world in 1982, when seven people were killed in the Chicago area after digesting Tylenol capsules with cyanide poisoning.

The perpetrator placed bottles of tainted Tylenol on the shelves of retail stores in Cook and DuPage counties. Thereafter, three people died in a single family, providing health officials with a critical clue to the cause of the deaths. They all had taken Tylenol. After a toxicology report confirmed the capsules were contaminated with cyanide, Johnson & Johnson issued a nationwide recall. Twenty-two million bottles of Tylenol were pulled from the shelves, costing more than \$100 million.

Police officers and firefighters walked door-to-door to collect bottles of Tylenol and announced by loudspeaker for residents to not take any Tylenol. Authorities eventually located two more bottles of cyanide-laced capsules. Although not involved in the attack, James E. Lewis attempted to extort money from Johnson & Johnson. He contacted the company and said he would stop the killings if paid \$1 million. Lewis was apprehended by authorities and later sentenced to ten years in prison.

The Tylenol murders received more news coverage than any incident since the assassination of President Kennedy, nearly two decades earlier.<sup>154</sup> After the attack, “every food or medical product seemed vulnerable to tampering,” the *Chicago Daily Herald* said. “Even trusted products, like aspirin or Halloween candy, were ... viewed as potentially deadly.”<sup>155</sup>

Although the crime was never solved, it revolutionized how pharmaceuticals are packaged. New anti-tampering laws were passed to safeguard drugs. Manufacturers adopted multiple seals to protect pharmaceuticals, including gluing the outer box and flaps, sealing the mouth of a bottle with foil, and placing a plastic band around the neck.

---

<sup>154</sup> “The Pain That Just Will Not Go Away.” *The Sunday Telegraph*. June 18, 2000.

<sup>155</sup> “Why Cyanide Deaths Might Go Unsolved.” *Chicago Daily Herald*. September 29, 2002.

Despite the successful protections, attackers have continued to adulterate pharmaceuticals with poisons. In 1986, Edward Arlen Marks, a 25-year-old unemployed stockbroker living in California, placed rat poison in capsules of Contac, Dietac, and Teldrin, all manufactured by SmithKline Beckman Corporation, in an attempt to manipulate the stock market. Marks purchased stock options issued by the company, expecting the price to drop. He placed the contaminated drugs on pharmacy shelves in Houston and Orlando, then called news agencies to warn the products were contaminated with cyanide. Law enforcement officials discovered the scam and Marks was arrested as he returned to California. He was sentenced to 27 years in prison. No one was injured.

Johnson & Johnson was again the target of an attack in 1986. On February 8, Diane Elsroth of Peekskill, New York, died after swallowing two extra-strength Tylenol capsules contaminated with lethal doses of cyanide, which had been purchased in a Bronxville A&P store. Health officials located another bottle of Tylenol in a Woolworth store two blocks away that also contained tainted capsules.

The A&P capsules were manufactured in Fort Washington, Pennsylvania, while the Woolworth capsules were made in Dorado, Puerto Rico. Because there were two locations, officials said it was unlikely the capsules were altered prior to distribution.

The Bronxville police received a letter warning that more capsules and a case of orange juice would be poisoned if the sender did not receive \$2 million within 72 hours. "Make me happy or make more people die," the letter warned.<sup>156</sup> The police arrested Dewitt T. Gilmore Jr., 21, of Mount Vernon who confessed to writing the letter. Gilmore, who was not implicated in Elsroth's death, was sentenced to two and a half years in prison.

Johnson & Johnson initially urged stores to remove Tylenol

---

<sup>156</sup> "Defendant Gets 2 Years for Drug Tampering Threats." *The Associated Press*. June 24, 1986.

capsules from stores and offered a reward of \$100,000. But the company later decided to discontinue altogether the production of two-piece capsules; many states had already urged stores to voluntarily stop selling capsules or banned their sale.<sup>157</sup>

In 1986, two people died from taking extra strength Excedrin, in an elaborate plot to collect money from an insurance policy. Stella Nickell was sentenced to 90 years in prison for poisoning her husband with potassium cyanide planted in capsules of Excedrin, then covering up the murder by slipping tainted bottles into three stores to make the crime appear to be a random killer. One of the bottles of Excedrin that Stella had laced with poison was purchased by Sue K. Snow, 40, an assistant vice president at Puget Sound National Bank in Auburn, Washington, who died from the poison.

The Tylenol and Excedrin cases generated national media attention that, in turn, fueled a dramatic increase in the number of tampering reports. In 1986, the FDA considered product tampering to be the most significant emergency problem. Incidents reported during the year jumped from 127 in 1985 to more than 1,692. About 80 percent of the complaints were unfounded, such as a suicide disguised or misinterpreted as tampering.<sup>158</sup>

The next major product tampering case occurred in February, 1991, when Joseph Meling, a 35-year-old insurance salesman attempted to kill his wife, Jennifer, by placing cyanide in capsules of Sudafed, just one day after her \$700,000 accidental death policy became effective. To cover up the crime, Joseph Meling slipped five additional packages of tainted Sudafed onto the shelves of nearby stores. Two Puget Sound residents, Kathleen Danekar and Stan McWhorter, purchased the cyanide-filled capsules and subsequently died.

The poisonings prompted Burroughs Wellcome Company, which manufactured Sudafed, to recall about a million packages of the

---

<sup>157</sup> "Drug Firms Again Second-Guessing," *Chicago Tribune*. February 16, 1986.

<sup>158</sup> "Young Asks Media to Combat Tampering." *United Press International*. April 16, 1987.

drug. The packages had multiple tamper-resistant features to protect consumers, including “a blue gelatin band around the capsule that makes it impossible to take apart; the aluminum and plastic blister pack; and the carton, which has tape on either end that will break if someone tries to open the package.”<sup>159</sup>

Still, Joseph Meling was able to gain access to the capsules and contaminate them with a poison.

“If you really try hard,” David Barry, Vice President of Research and Development at Burroughs acknowledged, “You can always tamper with this product, or any product.”<sup>160</sup> Joseph Meling was caught and sentenced to life in prison.

Major pharmaceutical tampering incidents also have occurred in other countries. In March 2000, for example, Dr. Ken Pullen and his son, David, were admitted to a hospital after taking Herron headache tablets filled with strychnine. Herron Pharmaceuticals had been warned about such an attack the previous month and attempted to payoff the suspected extortionist with the help of a private security firm. But a garbage collector inadvertently picked up the package with the ransom money (which was fake).

Months elapsed, and then in June, Dennis and Jane Fountain spent four days in a hospital in Brisbane, Australia, after taking the popular painkiller, Panadol, which was laced with strychnine. SmithKline Beecham, the maker of the drug, immediately removed the drugs from pharmacy shelves. The company also received letters, demanding a payment of \$1 million.

The police traced the poison to a friend of Dennis Fountain. Piecing together the investigation, authorities determined that Fountain was behind the attacks and had taken a milder dose of poison to throw off suspicion by the police. Fountain was arrested for product tampering and attempting to murder his wife.

---

<sup>159</sup> “Manufacturer Recalls Sudafed Capsules After Link to Deaths, Illness.” *The Associated Press*. March 4, 1991.

<sup>160</sup> *Ibid.*

Since the 1982 Tylenol case, there have been only a handful of major cases involving drug tampering. While the number of deaths was small in these incidents, the cases guaranteed national media attention. Just a couple of bottles with poison-laced drugs can trigger widespread panic. It is the ability to frighten an entire society by attacking just a few that makes pharmaceuticals a tempting target for terrorists.

The cases also illustrate that tamper-resistant packaging cannot be made full proof. Terrorists could be expected to adulterate pharmaceuticals in the same manner as the extortionists. Without special equipment or knowledge, it is possible to lace pharmaceuticals with poisons or pathogens and surreptitiously place them onto pharmacy shelves. Each package becomes a ticking time bomb.

As terrible as past incidents of product tampering have been, a terrorist attack using pharmaceuticals portends far worse consequences. One only need to imagine the fear that would erupt if terrorists manufactured a drug with cyanide or ricin and distributed it through the Internet or wholesale market.

It is clear from the information presented above that links between terrorists and pharmaceuticals are growing. The day may not be far away when a terrorist group will plan an attack with the same technology used to produce counterfeit drugs. Instead of a handful of tainted bottles, hundreds or even thousands of containers could be distributed at once. Terrorists are already constructing special facilities to weaponize poisons. According to news reports, cosmetics have been adulterated with cyanide that kills on contact. The mind that devised such a weapon will seek other avenues of attack, including possibly pharmaceuticals.





## **VI. CANADIAN PHARMACEUTICAL MARKET**

To analyze the terrorist threat to the medicine supply from Canada, the chapter begins with an overview of Canada's pharmaceutical industry and regulatory framework.

Many Americans purchase pharmaceuticals from Canadian pharmacies. Canada also has liberal immigration laws that have allowed terrorist organizations to get into the country and set up operations.

The chapter examines the Canadian immigration laws, terrorist organizations operating in Canada, and weaknesses in border security. The chapter concludes with a discussion of the terrorist threat resulting from the importation of drugs into the U.S.

### **A. PHARMACEUTICAL INDUSTRY**

Pharmaceutical sales in Canada total nearly \$10 billion, about one twentieth the size of the United States and about two percent of the world market. Canada is on the USTR "Watch List" because it "does not provide adequate data protection in the pharmaceutical area, and systematic inadequacies in Canadian administrative and judicial procedures allow early and often infringing entry of generic versions of patented medicines into the marketplace."<sup>161</sup>

The Canadian pharmaceutical industry is steadily expanding. From \$671 million in 1997, total exports to the U.S. nearly doubled to \$1.25 billion in 2001.<sup>162</sup>

---

<sup>161</sup> USTR 2002 Special 301 Report. Watch List.  
<http://www.ustr.gov/reports/2002/special301-wl.htm>.

<sup>162</sup> Marketing report generated from [http://www.strategis.ic.gc.ca/sc\\_mrkti](http://www.strategis.ic.gc.ca/sc_mrkti).

About 20,000 people are employed in Canada's brand-name pharmaceutical industry. Another 7,000 people work at biopharmaceutical firms, and more than 4,500 people are employed by generic drug manufacturers.

About a fifth of Canada's exports are generic drugs. "Canada's generic [pharmaceutical] industry ... [generates] 20 percent of its sales volume from exporting Canadian-made pharmaceuticals to 120 countries," *Pharmagenetics* reported.<sup>163</sup>

The price for pharmaceuticals in Canada can be less than the United States, in part because of a difference in exchange rates. Prices are also less because the cost of pharmaceuticals is controlled by the government. The Patented Medicine Prices Review Board "governs the prices at which manufacturers sell patented drugs in Canada."<sup>164</sup> The board does not allow drug prices to increase faster than the rate of inflation.

Many of the drugs sold in Canada are produced by U.S. manufacturers.

## **B. REGULATORY FRAMEWORK**

Health Canada, a federal agency, is responsible for enforcing health regulations in partnership with provincial and territorial governments. Within the agency, the Health Products and Food Branch (HPFB) has direct oversight over the approval and sale of drugs and medical devices.

The Branch's Inspectorate is responsible for the "management of inspection, investigation, monitoring activities, and enforcement strategies related to the fabrication, packaging/labeling, testing,

---

<sup>163</sup> "The Canadian Pharmaceutical Market and the Patented Medicines Notification." *Pharmagenetics*. 2002

<sup>164</sup> "Drug Disincentives." *National Post*. May 3, 2003.

importation, distribution, and wholesaling of regulated health products for human and veterinary use.”<sup>165</sup>

To operate a pharmaceutical facility in Canada, a business must have a “drug establishment license” issued by HPFB. Canada organizes the management of its pharmaceutical industry into the following areas:

- Manufacturing (fabricating).
- Packaging/labeling.
- Importing.
- Distributing.
- Wholesaling.
- Testing.

A company can gain government approval to operate in a single element of the industry, such as drug manufacturing, or obtain a license for multiple elements. All manufacturers, packagers/labelers, importers, distributors, wholesalers, and testers are subject to Good Manufacturing Practices (GMP) regulations.<sup>166</sup>

About 400 companies in Canada have received drug establishment licenses, of which about 85 are authorized to import drugs. There are about 50 licensed wholesalers, and more than 225 companies are approved to distribute pharmaceuticals. A complete list of the companies with licenses is available from the Health Canada website.<sup>167</sup> Only licensed importers can bring drugs into Canada. The federal law states, “Products from foreign fabricators and/or packagers must be imported into Canada by a duly licensed importer.”<sup>168</sup>

---

<sup>165</sup> “About Us: the Health Products and Food Branch.” [http://www.hc-sc.gc.ca/hpfb-dgpsa/aboutus\\_e.html#5](http://www.hc-sc.gc.ca/hpfb-dgpsa/aboutus_e.html#5).

<sup>166</sup> “Drug Establishment License Application.” Health Products and Food Branch. Health Canada. [http://www.hc-sc.gc.ca/hpfb-dgpsa/inspectorate/policy\\_foreign\\_insp\\_entire\\_e.html](http://www.hc-sc.gc.ca/hpfb-dgpsa/inspectorate/policy_foreign_insp_entire_e.html).

<sup>167</sup> Health Canada Online. [http://www.hc-sc.gc.ca/hpfb-dgpsa/inspectorate/del\\_march\\_24\\_2003\\_e.html](http://www.hc-sc.gc.ca/hpfb-dgpsa/inspectorate/del_march_24_2003_e.html).

<sup>168</sup> “Drug Establishment License Application.” Health Products and Food Branch. Health Canada. [http://www.hc-sc.gc.ca/hpfb-dgpsa/inspectorate/policy\\_foreign\\_insp\\_entire\\_e.html](http://www.hc-sc.gc.ca/hpfb-dgpsa/inspectorate/policy_foreign_insp_entire_e.html).

To obtain a license to import drugs, a company must provide documentation on the pharmaceutical manufacturers from which it seeks to import drugs. “In order to list a foreign site on its license,” the law declares, “a Canadian importer must provide satisfactory evidence that this foreign site meets the Canadian GMP requirements.”<sup>169</sup> Acceptable evidence can include a valid inspection report that is not more than three years old, a GMP compliance certificate, or a corporate audit report under certain conditions. According to the RMCP, “These foreign plants are assessed by Health Canada for compliance with strict standards before they qualify.”<sup>170</sup>

Some provinces, such as Ontario, require wholesalers to register with the Colleges of Pharmacy in order to operate as a wholesaler in the province. Differences between a wholesaler and a distributor are blurred. As the Canadian Association for Pharmacy Distribution Management (CAPDM) explained, “wholesalers now offer services that go way beyond ‘pick, pack, and ship’ ... include[ing] same-day delivery, electronic billing, software programs, purchasing expertise, inventory management control, and merchandising.”<sup>171</sup> The CAPDM defines distributors as companies operating a warehouse that disburses drugs, sundries, and other health and beauty aids to retail outlets, hospitals, and other similar institutions.

Canada announced in May 2003 that it will begin to regulate drugs imported by Canadian pharmaceutical companies, even if solely intended for export. Section 37 of the Canadian Food and Drugs Act – the main legislation governing pharmaceuticals – stated, “This Act does not apply to any packaged food, drug, cosmetic, or device, not manufactured for consumption in Canada and not sold for consumption in Canada....”

---

<sup>169</sup> Ibid.

<sup>170</sup> “Assessment of Commercial Scale Criminal Copyright Piracy and Trademark Counterfeiting in Canada.” Criminal Intelligence Directorate, Royal Canadian Mounted Police. October 2000.

<sup>171</sup> <http://www.capdm.ca>.

Under the new ruling, imported drugs are not exempt from the Canadian Food and Drugs Act and thus must now be approved by Health Canada and be both manufactured and distributed in compliance with Good Manufacturing Practices. Determining whether a foreign manufacturer, in fact, is producing drugs under GMP is based on an evaluation of documentation provided to the government by importers. Canada does not send inspectors aboard to validate manufacturing processes, unlike the FDA.

Canadians are allowed to bring into the country a three-month supply of a prescription medicine for personal use or for an immediate family member. The drugs must be personally transported “over the border in a hospital or pharmacy dispensed packaging.” It is against the law to buy drugs from another country and ship them by mail to Canadian citizens. According to a Health Canada guidance document, “Prescription medicines cannot be shipped to [Canadians] from outside Canada.”<sup>172</sup>

Independent studies evaluating the effectiveness of Canada’s pharmaceutical regulatory framework are not readily available. For example, while the law requires all drug companies to obtain a drug establishment license to operate, an evaluation of potential weaknesses in this system could not be located. Similarly, an independent evaluation of the regulatory process for imported drugs could also not be located. The FDA has compiled a list of 169,000 foreign drug companies, of which 6,000 are targets of inspection.<sup>173</sup> The FDA regularly sends inspectors abroad to validate drug manufacturing processes, while Canadian authorities only review documents supplied by importers.

An independent evaluation of counterfeit drugs in Canada also could not be obtained. The Royal Canadian Mounted Police

---

<sup>172</sup> “Taking Medicine Across Borders.” Health Products and Food Branch web page. [http://www.hc-sc.gc.ca/hpfb-dgpsa/inspectorate/fact\\_sheet\\_tak\\_med\\_acr\\_bor-entire\\_e.html](http://www.hc-sc.gc.ca/hpfb-dgpsa/inspectorate/fact_sheet_tak_med_acr_bor-entire_e.html).

<sup>173</sup> Biley, Tom, Congressman. “Counterfeit Bulk Drugs.” Testimony before the Oversight and Investigations Subcommittee of the House Commerce Committee on Drug Imports. U.S. Government Printing Office. June 8, 2000 and October 3, 2000.

(RMCP) conducted an assessment of criminal copyright piracy and trademark counterfeiting in Canada in 2000 and concluded that “Counterfeit pharmaceuticals of foreign origin have not become a wide-scale problem in Canada.”<sup>174</sup> But Washington attorney Donald Dekieffer, who specializes in counterfeit pharmaceuticals, stated in 2002 “in the last two years we have seen a growth both in Canada and in the United States of outright counterfeit drugs entering the prescription market.”<sup>175</sup> Most of the fake drugs entering Canada, he said, originate from Internet sales.

To demonstrate the ease with which it is possible to purchase pharmaceuticals without a prescription, newscasters for Canada’s *W-Five* television program purchased drugs from Mexico and Brazil using the Internet. Tom Clark, the host of the news program said “we know that a lot of counterfeit product is making its way into Canada. Sometimes through the mail, other times literally by the container.”<sup>176</sup>

But when the Canadian authorities were asked about the problem, Clark said the government had not made “one single seizure of counterfeit pharmaceuticals.”<sup>177</sup> What the government finds, Clark said, is dependent on how hard it is looking and “Canada isn’t looking very hard at all.”<sup>178</sup>

## **C. TERRORISM GROUPS OPERATING IN CANADA**

“If some can say the Americans were asleep at the switch prior to the 11<sup>th</sup> of September,” David Harris, former chief of strategic

---

<sup>174</sup> “Assessment of Commercial Scale Criminal Copyright Piracy and Trademark Counterfeiting in Canada.” Criminal Intelligence Directorate, Royal Canadian Mounted Police. October 2000. [http://www.rcmp-grc.gc.ca/crim\\_int/copyright\\_piracy.htm](http://www.rcmp-grc.gc.ca/crim_int/copyright_piracy.htm).

<sup>175</sup> “Deadly Fakes.” *W-Five*, CTV Television. March 3, 2002.

<sup>176</sup> *Ibid.*

<sup>177</sup> *Ibid.*

<sup>178</sup> *Ibid.*

planning for the Canadian Security Intelligence Service (CSIS) declared, then “we’ve been in a coma.”<sup>179</sup>

Canada’s refugee and immigration laws are among the most generous in the world, providing an open door for terrorists to enter and operate in the country. “People arrive in [Canada] daily – almost all by commercial jet – and declare one word to our immigration officers: ‘Refugee,’” *The Toronto Sun* reported. While they wait to present their case at a hearing, the asylum seekers are eligible for government benefits, including welfare. “Ninety-five percent of foreigners claiming refugee status are immediately allowed to settle in the country, even though upwards of half of them have no identification,” a Canadian Broadcast Network reported.<sup>180</sup>

The ease with which it is possible to qualify for welfare prompted Somalis to travel to Canada and claim refugee status. The money was then used to fund attacks in Somalia. “Somalis were coming here and making multiple welfare claims under multiple names, then using the proceeds to send home to Somalia,” said John C. Thompson, director of the Mackenzie Institute in Toronto.<sup>181</sup>

After entering Canada, many refugees are never heard from again. “We have thousands of people who’ve come into this country, apparently claimed refugee status, and have disappeared,” explained Rob Runciman, Ontario minister of Public Safety and Security.<sup>182</sup>

About 20 percent of the refugee claimants never appear for their asylum hearings. As a result, the government has issued more than 25,000 outstanding arrest warrants.<sup>183</sup> In the months after the

---

<sup>179</sup> “Canada Turns into Terrorist Haven.” *Insight on the News*. June 24, 2002.

<sup>180</sup> “Al-Qaeda In Canada?” *CBS Worldwide*. May 1, 2002.

<sup>181</sup> “Attacks Force Canadians to Face Their Own Threat.” *The Washington Post*. September 23, 2001.

<sup>182</sup> “Ontario May Detain Migrants Who Don’t Have Papers.” *The Record*. January 4, 2003.

<sup>183</sup> “Canada Turns Into Terrorist Haven.” *Insight on the News*. June 24, 2002.

September 11 terrorist attacks, refugees continued to pour into Canada. From September 11 to May 2002, Canada accepted 15,000 additional refugees. “Of those 15,000,” James Bissett, the former Executive Director of Canada’s immigration service, said, “2,500 come from terrorist countries, Algeria, Pakistan, Afghanistan ... most of them, we don’t know who the hell they are.”<sup>184</sup>

Ahmed Reesam, the Algerian terrorist who planned to bomb the Los Angeles airport during the new Millennium celebrations, offers an illustration on how Canada’s lax laws benefit terrorists. Reesam entered Canada from France, claiming he was a victim of false accusations in Algeria. But in truth, he had attended a terrorist training camp in Afghanistan run by al Qaeda and was part of a secret terrorist cell created in Montreal.

Upon arriving in Canada, authorities provided Reesam a visa, allowing him to remain in the country until he presented his case for asylum at a hearing. For six years, Reesam resided in Canada, living off welfare and “thievery,” which included fencing stolen passports and luggage stolen from hotels. He was arrested several times but never deported. After the fourth arrest, Reesam removed a blank baptismal certificate from a local church and created a new identity from which he was able to get a passport and driver’s license. In late 1999, Customs agents apprehended Reesam on a ferry as he tried to enter the U.S. in a rented car filled with explosives. He was sentenced to 130 years in prison.

Al Qaeda is just one of many terrorist organizations operating in Canada. “We’ve established through our intelligence service and other means that we have 50 terrorist organizations now on our soil,” warned David Harris, former chief of strategic planning for the Canadian Security Intelligence Service. “They range in scope from the IRA to Hezbollah, Hamas ... [and] certainly al Qaeda.”<sup>185</sup>

The terrorist groups in Canada “have had direct or indirect association with the World Trade Center bombing, suicide

---

<sup>184</sup> “Al Qaeda In Canada?” *CBS Worldwide*. May 1, 2002.

<sup>185</sup> *Ibid.*



bombings in Israel, assassinations in India, the murder of tourists in Egypt, the Al Khobar Towers attack in Saudi Arabia and the bombing campaign of the Provisional IRA,” said Ward Elcock, the former director of CSIS.<sup>186</sup>

A 1999 report by the CSIS acknowledged Canada was an “attractive venue for terrorists.” As explained in the report, “Long borders and coastlines offer many points of entry which can facilitate movement to and from various sites around the world, particularly the United States.”<sup>187</sup> Once in Canada, the terrorists raise funds to “support causes abroad, purchase arms, launder money, and build operational networks,” explained Steven Strang at the Criminal Analysis Branch of the RCMP.<sup>188</sup>

“Canada has everything for the discriminating terrorist,” said David Harris, former chief of strategic planning for the CSIS. “It’s a modern economy, so you can get money ... channel it around the world, [and] a vast migrant population so you can fit in.”<sup>189</sup>

Gradually Canada has begun to tighten its immigration laws and border security. The government is issuing new identity cards with enhanced security features. A new law allows Canadian authorities to refuse entry to refugees from the U.S. Officials now have authority to detain people who arrive in Canada without proper documents. In 2001, about 14,000 of the 23,000 people who claimed refugee status at Canadian borders and airports first passed through the United States. The people who now travel to the U.S. then head to Canada, claiming they are refugees will be turned back and will have to apply for asylum in the first place they reach.

At border crossings, a valid picture ID is now required. Security guards are sharing intelligence and exchanging files of criminal records. The United States and Canada also signed a 30-point plan

---

<sup>186</sup> “Attacks Force Canadians to Face Their Own Threat.” *The Washington Post*. September 23, 2001.

<sup>187</sup> “Canada Turns Into Terrorist Haven.” *Insight on the News*. June 24, 2002

<sup>188</sup> “RCMP Analysts Discuss How September 11 Changed the Game.” *Gazette*. Vol. 23. Nov. 6, 2001.

<sup>189</sup> “Al Qaeda In Canada?” *CBS Worldwide*. May 1, 2002

in December 2001, called the Smart Border Declaration, to improve border security. One of its planned provisions is to require cargo manifests from airline, truck, and rail companies 24 hours before crossing into the U.S. All Canadians will also have to register when they enter the U.S. and log out when they leave.

## **D. BORDER SECURITY**

To enhance the control of U.S. borders, the U.S. Customs Service and Immigration and Naturalization Service were transferred to the Department of Homeland Security on March 1, 2003. Elements of these agencies were merged to create the Bureau of Customs and Border Protection (BCBP) and the Bureau of Immigration and Customs Enforcement (BICE).

The reorganization, said Asa Hutchinson, Under Secretary of Border and Transportation Security, will enable the government to improve the “screening of people and goods, and enforcement of [U.S.] customs laws.”<sup>190</sup> The government has as a goal the implementation of a computer system to collect records on the arrival and departure of each alien entering and leaving the U.S. To reduce fraud and bolster security, new laws require the tracking system to incorporate biometrics to validate visitor identification.

The new agencies are also implementing new procedures to “inspect commercial goods to detect potentially dangerous or threatening materials coming across our borders,” Hutchinson said. “The BCBP has deployed, and must continue to develop the technology necessary to inspect arriving and departing conveyances and cargo at our ports of entry rapidly and comprehensively to

---

<sup>190</sup> Hutchinson, Asa, Under Secretary of Border and Transportation Security. “Border Security Technology.” Testimony before the Senate Judiciary Subcommittee on Technology, Terrorism and Government Information. *Federal Document Clearing House Congressional Testimony*. March 12, 2003.

prevent the smuggling of weapons, narcotics, and other contraband.”<sup>191</sup>

Until biometrics security systems are introduced, security at the border checkpoints can be easily evaded. In January 2003, the General Accounting Office (GAO), an investigative arm of Congress, testified on the weaknesses in the screening of entrants into the United States. Agents created fictitious driver’s licenses and birth certificates using a computer and readily available software. GAO agents then attempted to enter the U.S. from Canada, Mexico, and Jamaica at border crossings on land, at sea ports, and airports.

Robert Cramer, the head of the Office of Special Investigations at GAO said, “U.S. government inspections at the border never questioned the authenticity of the identification documents, and our agents encountered no difficulty in entering the country using them.”<sup>192</sup>

At a seaport, two agents entered the U.S. from Canada without being asked to provide identification. On another occasion, “two agents, driving a rented car with Canadian license plates, using fictitious names and counterfeit documents, crossed the border into the United States at a land border crossing,” Cramer said. “A U.S. Customs Director asked for identification and was provided the counterfeit documents. After reviewing the documents, the inspector permitted our agents to enter into the United States.”<sup>193</sup>

At a U.S.-Canadian border crossing, an agent attempted to walk across a nearby park that sits on the border. “One of our agents was able to walk through that park, from Canada, into the United

---

<sup>191</sup> Hutchinson, Asa, Under Secretary of Border and Transportation Security. “Border Security Technology.” Testimony before the Senate Judiciary Subcommittee on Technology, Terrorism and Government Information. *Federal Document Clearing House Congressional Testimony*. March 12, 2003.

<sup>192</sup> Cramer, Robert, Managing Director, Office of Special Investigations, General Accounting Office. “Hearing on Border Security.” Testimony before the Senate Finance Committee. *FDCH Political Transcripts*. January 30, 2003.

<sup>193</sup> Ibid.

States without being stopped or questioned by any government authority,” Cramer said. “Later that agent again walked back to Canada from the United States through the park and again was not questioned by any government authority.”<sup>194</sup>

At checkpoints along the border with Mexico, the agents were asked to show some identification. After producing the counterfeit IDs, they were permitted to enter the U.S. Inspectors in Jamaica examined the fictitious identification and permitted the agents to gain access into the U.S. Based on its investigations, the GAO concluded that one, “people who enter the United States are not always asked to present identification; two, security to prevent unauthorized persons from entering the United States from Canada at the border park [that GAO agents visited] is inadequate; and three, border inspectors are not readily capable of detecting counterfeit identification documents.”<sup>195</sup>

The biometric systems planned for the border crossings and the improved coordination among government agencies should prevent the use of counterfeit identification. But as security measures at checkpoints become more effective, smugglers, terrorists, and other criminals will find alternative, less risky routes to enter the U.S. The process of securing the borders is often compared to a balloon. “When you squeeze on it in one place,” Border Patrol Chief Paul Berg stated, “it expands in another.”<sup>196</sup>

The U.S.-Canadian border stretches 4,000 miles, about twice the distance of the U.S.-Mexican border. Along the borders are vast areas that remain unguarded. The coastlines of America, which stretch nearly 6,000 miles (excluding Alaska), also offer easy access to the U.S. A small foreign vessel smuggling counterfeit goods can travel along a coast and make anchor at one of the thousands of secluded coves or beaches.

---

<sup>194</sup> Ibid.

<sup>195</sup> Ibid.

<sup>196</sup> “The Battle of the Border.” *The Texas Monthly*. April 2001.

“There is literally nothing to stop a terrorist coming across our border,” warned U.S. Senator Jon Kyl, Chairman of the Judiciary Subcommittee on Technology, Terrorism, and Government Information. “It is unpatrolled for many miles, with only limited surveillance.”<sup>197</sup>

The government can enhance security measures at U.S. border crossings, ports, and airports, but it is unlikely to stem the smuggling of contraband or infiltration of terrorists anymore than a series of border controls have stopped the flow of illegal aliens or illicit drugs entering the United States.

### **Drugs Entering the U.S. at Checkpoints**

As many as 10 million people cross American borders annually with drugs, the U.S. Customs estimated.

The FDA has also conducted surveys at border checkpoints to measure the flow of pharmaceuticals flowing into the U.S.

On August 12, 2000, authorities evaluated eight border crossings in California, Arizona, and Texas. “The purpose of the survey was to determine what specific types of products are being imported, and who is importing these products,” William Hubbard, currently Senior Associate Director of Policy, Planning Legislation at the FDA testified.<sup>198</sup> More than 600 interviews were conducted by authorities during a four-hour period. Based on the data, the FDA determined the main drugs entering the U.S. were antibiotics and pain relievers. Only 63 percent of the people interviewed had a prescription; some of the drugs collected by the authorities were not approved for sale in the U.S.

---

<sup>197</sup> “Homeland Security Takes Over at Borders.” *The Arizona Republic*. February 27, 2003.

<sup>198</sup> Hubbard, William K., Senior Associate Commissioner for Policy and Planning at the FDA Testimony. “International Prescription Drug Parity.” Hearing Report by the House Government Subcommittee on Human Right and Wellness. *Federal Document Clearing House Congressional Testimony*. April 3, 2003.

A second survey by the FDA and U.S. Customs measured the flow of drugs coming into the U.S. at three entry points in New York, Michigan, and Washington. During the survey, about 10,000 passenger cars and 58 buses crossed into the U.S., of which 33 were closely inspected. Authorities discovered 47 containers with drug products. The most common drug was pain medicines, followed by herbal products. Some of the pharmaceuticals requiring a prescription in the U.S. were purchased over-the-counter in Canada.

The third FDA survey, conducted on April 11, 2001, examined the number of drugs entering the U.S. along seven U.S.-Mexican checkpoints. “During the four-hour survey, a total of 586 persons imported a total of 1,120 drugs,” Hubbard said.<sup>199</sup> Only 56 percent of the people had obtained a prescription for the drugs.

## **E. TERRORIST THREAT FROM DRUG IMPORTATION**

The Medicine Equity and Drug Safety Act, signed into law by President Clinton in 2000, amended the Federal Food, Drug, and Cosmetic Act to permit wholesalers in the United States to import prescription drugs.

A provision in the Act stated the law would only be implemented if the Secretary of Health and Human Services determined the new law did not reduce the safety of U.S. pharmaceuticals.

In 2001, Secretary Tommy Thompson reviewed the law and determined the importation of drugs would undermine drug safety. “Opening our borders as required under this program,” he stated, “would increase the likelihood that the shelves of pharmacies in towns and communities across the nation would include counterfeit drugs, cheap foreign copies of FDA-approved drugs, expired drugs, contaminated drugs, and drugs stored under inappropriate and

---

<sup>199</sup> Ibid.

unsafe conditions.”<sup>200</sup> His predecessor at HHS, Donna Shalala, reached similar conclusions while in office.<sup>201</sup>

Since Secretary Thompson’s announcement, alternative legislation has been introduced in Congress to legalize the importation of pharmaceuticals from Canada. Amending the U.S. law to permit citizens, pharmacists, or wholesalers to directly reimport/import pharmaceuticals would likely lead to a dramatic increase in drugs flowing across the northern border and by mail into America.

A flood of drugs spilling into the United States, in turn, could fuel the growth of a counterfeit drug market in Canada, according to Hubbard. “Throwing the door open to drugs purchased by individuals directly from Canadian sellers,” he said “will encourage unscrupulous individuals to devise schemes using Canada as a transshipment point for dangerous product from all points of the globe.”<sup>202</sup>

The terrorist groups operating in Canada would also likely be attracted to the new drug opportunities. The IRA funded a laboratory in the United States to produce counterfeit pharmaceuticals to generate money to purchase arms. If the importation of drugs were legalized, similar laboratories could be set up by terrorist organizations in Canada to produce fake drugs and distribute them to the U.S.

Canada’s liberal refugee and immigration laws have allowed terror groups to easily slip into the country and set up networks. Dozens of terrorist organizations are believed to be operating in Canada, including Hezbollah, which has an “enormous infrastructure,”

---

<sup>200</sup> “Secretary Thompson Determines That Safety Problems Make Drug Reimportation Unfeasible.” U.S. Newswire, HHS Press Office. July 10, 2001.

<sup>201</sup> Letter from HHS Secretary Donna Shalala to President Bill Clinton, dated Dec. 26, 2000.

<sup>202</sup> “Attack of the [Medicine] Clones; Allowing Re-importation of US Prescription Drugs is Dangerous.” *Washington Times*. July 16, 2002.

according to a senior Israeli security official.<sup>203</sup> Hezbollah has already been involved in the smuggling of large quantities of pharmaceuticals (pseudoephedrine) from Canada to the United States. Setting up a laboratory in Canada to produce and distribute counterfeit drugs directly to U.S. citizens would not appear to be a major hurdle.

Allowing the importation of drugs would facilitate an attack on the U.S. involving the medicine supply. Terror organizations in Canada would not have to smuggle adulterated drugs across the border to infiltrate the U.S. wholesale or retail market. If the importation of drugs were legal, terrorists in Canada could simply launch an attack through the mail system or by tainting counterfeit drugs bound for the U.S.

Criminal elements, including organized crime syndicates that are already involved in the production of synthetic drugs, would also likely seek to exploit new illegal drug opportunities.

“Canada is a free market for the underworld,” stated Antonio Nicaso, a mafia expert and co-editor of the Toronto based Italian newspaper *Corriere Canadese*. “There are 18 different organized crime groups and members of those groups in Canada.”<sup>204</sup> Nicaso said Canada is already “a popular transshipment point for Mexican and other organized crime groups to move synthetic drug supplies into the United States because of Canada’s laxer controls on drugs.”<sup>205</sup>

Finally, there is a threat the criminal networks in Canada could jointly cooperate with terrorist groups to take advantage of changes in the importation of drugs. Alliances are strengthening between organized crime and terrorist groups, according to U.S. Deputy Attorney General Michael Chertoff. It no longer makes sense to

---

<sup>203</sup> “Canadian a Suspect in Plot to Kill Israeli PM.” *National Post*. April 5, 2003.

<sup>204</sup> “U.S. Moves to Close Canadian Drug Route for Illegal Stimulant.” *The New York Times*. March 5, 2002.

<sup>205</sup> “Drug Patents/Safety and Savings Certification for Canadian Drug Imports.” *U.S. Senate Record Vote Analysis*. July 17, 2002.



“differentiate between terrorism and organized crime and drug dealing,” he said. “These groups do not hold themselves independent. They work with one another. Terrorists get engaged in drug activity. They have relationships with organized crime.”<sup>206</sup>

---

<sup>206</sup> “Drugs and Terrorist Groups Go Together.” October 22, 2001. <http://www.inq7.net>.



## VII. MEXICAN PHARMACEUTICAL MARKET

Millions of Americans travel across the border to Mexico to purchase pharmaceuticals, providing opportunities for terrorists to attack the U.S.

To begin the analysis of the terrorist threat to the medicine supply, the chapter describes Mexico's pharmaceutical industry and regulatory framework. Sections then examine the types and quantity of pharmaceuticals entering the U.S., Mexico's counterfeit drug market, and terrorist threats from Mexico.

### A. REGULATORY FRAMEWORK

Many drugs sold by prescription in the U.S. can be purchased in Mexico over-the-counter (OTC) and even controlled pharmaceuticals, such as Valium and Tylenol 3, are available if the price is right.

"The market reality," explains *Business Mexico*, "is that except for those medicines considered dangerous because they act on the nervous system, such as sleeping pills or morphine-based [drugs], practically all the rest are sold OTC."<sup>207</sup>

Government regulations and inspections to ensure the safety of pharmaceuticals in Mexico are rudimentary. "There is no equivalent of the Food and Drug Administration in Mexico and regulations are less strict," said the *Orange County Register*. "For

---

<sup>207</sup> "Over-the-Counter Sales Revive Pharmaceutical Industry." *Business Mexico*. April 1997.

example, no agency oversees border *farmacias*, which have tripled in number since 1997.”<sup>208</sup>

The federal government in Mexico separates pharmaceuticals into three main categories:

1. **Popular products** – Over-the-counter drugs sold without a prescription.
2. **Ethical products** – Drugs requiring a prescription.
3. **Government products** – Drugs sold to public health systems in Mexico.

Popular products available over-the-counter in Mexico include many pharmaceuticals sold only by prescription in the U.S., including antibiotics, heart medications, cholesterol drugs, antihistamines, birth control pills, gastro-intestinal tract drugs, estrogen compounds and some steroids.<sup>209</sup>

Popular products are available the same as “candy bars and gum are sold in the U.S.,” said Dr. Marvin Shepherd, Professor of Pharmacy at the University of Texas at Austin. Many drugs offered for sale have not been approved by the FDA and can be dangerous. In 1999, for example, Dipyrone, which is sometimes called “the Mexican aspirin” was available for purchase even though it “was banned or had been withdrawn in at least 22 countries,” according to the *Los Angeles Times*.<sup>210</sup> The drug can destroy a person’s ability to fight minor infections.

Ethical products in Mexico are injectables, drugs such as Valium, some narcotics (Tylenol 3), and some steroids, stimulants, and

---

<sup>208</sup> “There Are Risks in Purchasing Drugs Abroad.” *Orange County Register*. November 5, 2002.

<sup>209</sup> Shepherd, Marvin, Ph.D., Director, Center For Pharmacoeconomic Studies/College Of Pharmacy University Of Texas Austin. “Imported Pharmaceuticals.” Testimony before the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>210</sup> “Out-of-Control Pharmaceuticals.” *Los Angeles Times*. May 26, 1999.

muscle relaxants. To purchase these controlled substances requires a prescription written by a doctor in Mexico. Two copies of the prescription are required, one of which is provided to a pharmacy as a record for the sale of an ethical product.

Government products are pharmaceuticals purchased by the government for the country's public health system such as the Social Security Institute for Government Workers, as well as clinics and hospitals of public enterprises (Pemex).

Each drug sold in Mexico lists the maximum price that can be charged, which is determined by the Commerce Secretariat. In most cases pharmaceuticals sell at lower prices. "If we tried to charge the maximum authorized price, sales would fall," said Hector Bolanos, Director of the Association of Manufacturers of OTC Products.<sup>211</sup>

Many Americans are under the false belief that a large percentage of the pharmaceuticals in Mexico are manufactured in the United States and exported to Mexico. "This is not the case," according to *Drug Topics*. "Over 90 percent of the pharmaceuticals sold in Mexico are manufactured in Mexico, and probably fewer than 10 percent have a U.S. FDA approval."<sup>212</sup>

There are few college-educated pharmacists in Mexico. For pharmacies that sell only popular products, it is not necessary to have such a professional on staff. As a result, these establishments are generally managed by clerks, who have limited knowledge of medicines.

"In Latin America, and in particular in Mexico, the availability of professional staff at pharmacies is low, and the public is waited on

---

<sup>211</sup> "Over-the-Counter Sales Revive Pharmaceutical Industry." *Business Mexico*. April 1997.

<sup>212</sup> "How Safe are Foreign Drugs." *Drug Topics*. May 3, 1999.

by unskilled personnel that has a high turnover,” a report by the European Commission stated.<sup>213</sup>

For pharmacies that offer controlled substances for sale, there must be a college-educated pharmacist on staff. However, the individual is not required to be present when the sale of a controlled substance is transacted.<sup>214</sup>

Most Mexicans self-prescribe medications. The European Commission surveyed 747 Mexican pharmacies and found only 13 percent of the drugs sold at the sites were recommended by the staff. Of these pharmacies, only 21 percent had computers.

The report said few studies had been “undertaken in Mexico that address the issue of pharmacy staff preparation. Little is known,” it said, “about their level of scholastic preparation or if they have any kind of special training in the proper handling of drugs.”<sup>215</sup>

The absence of authoritative information on pharmaceuticals often leads to the misuse of drugs. The European Commission report said “approximately one out of five consumers [in Mexico] acquires a drug that is not adequate to his or her symptoms. For example, antibiotics continue to be used in 49 percent of diarrheic ailments.”<sup>216</sup>

The misprescribing of medicines can lead to a resistance to antibiotics. Health officials in New Mexico have examined seasonal farm workers from across the border. There has been a slight increase in the number of workers with tuberculosis. In about one-

---

<sup>213</sup> “Infopharma Project in Mexico.” Technical Report. <http://www.imim.es/inforpharma/workshop-mexico-material/A7-technicalreportMX1.htm>.

<sup>214</sup> Shepherd, Marvin, Ph.D., Director, Center For Pharmacoeconomic Studies/College Of Pharmacy University Of Texas Austin. “Imported Pharmaceuticals.” Testimony before the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>215</sup> “Infopharma Project in Mexico.” Technical Report. <http://www.imim.es/inforpharma/workshop-mexico-material/A7-technicalreportMX1.htm>.

<sup>216</sup> Ibid.

third of the cases, there is some degree of resistance of antibiotics used to treat the disease.

## **B. PHARMACEUTICALS ENTERING THE UNITED STATES**

Mexican pharmacies annually attract millions of “tourists.” Americans flood across the border to Mexico to purchase low-cost drugs, prescription drugs, and drugs unavailable in the U.S. In Tijuana alone, there are more than 1,400 pharmacies that cater to U.S. citizens, twice the number from two years earlier.<sup>217</sup>

“A short walk from the American border, surrounded by gaudy bars and gewgaws” *The New York Times* reported, “hundreds of pharmacies sell millions of dollars’ worth of medicine for a song.”<sup>218</sup>

According to Dr. Shepherd, Professor of Pharmacy at the University of Texas at Austin, “You walk in any of them [pharmacies along the Mexican border] and you talk to the owner, the owner will say 95 percent of the people who purchase drugs here are U.S. residents and that’s what they’re made for.”<sup>219</sup>

Some Americans travel to Mexico on tour buses that advertise, “Mexican drug runs.”<sup>220</sup> Almost any prescription drug is available in Mexico, as well as many others not sold in the U.S.

---

<sup>217</sup> “Fake Drugs Color Debate on Imports; Congress Ponders Risks of Bringing Medicines Across the Border.” *The Hartford Courant*. August 21, 2002.

<sup>218</sup> “In Tijuana, a New Kind of Drug Peril.” *The New York Times*. August 14, 2002.

<sup>219</sup> Shepherd, Marvin, Ph.D., Director, Center For Pharmacoeconomic Studies/College Of Pharmacy University Of Texas Austin. “Imported Pharmaceuticals.” Testimony before the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>220</sup> “In Tijuana, a New Kind of Drug Peril.” *The New York Times*. August 14, 2002.

Many of the Mexican pharmaceuticals are purchased by Americans addicted to drugs. “An estimated four million Americans are addicted to painkillers, and hundreds of thousands swallow or inject banned anabolic steroids,” *The New York Times* said. “Those looking to get high or get big, rather than get well, can get anything they want here [in Mexico].”<sup>221</sup>

Hard data on the number of people crossing into Mexico to buy drugs is unavailable. “What is smuggled cannot be measured and what is declared is a tiny amount of what makes it across,” explained the *Los Angeles Times*.<sup>222</sup>

Dr. Shepherd conducted a study in 1995 of drugs purchased by Americans in Nuevo Laredo, which is located in Mexico across the border from Laredo, Texas. More than a million vehicles travel to Nuevo Laredo and back to the U.S. each month. “In Nuevo Laredo, they have maybe 25,000 to 30,000 walkovers on a Saturday afternoon and about ... 25 to 40 percent of those walkovers are coming back with a pharmaceutical product,” Dr. Shepherd said.<sup>223</sup>

Texans purchase about 60 percent of the pharmaceuticals in Nuevo Laredo, with the rest bought by U.S. citizens from other states.<sup>224</sup> Of the top 15 drugs transported into the U.S., all were controlled substances.

Dr. Shepherd contends that most of the drugs are not for personal use. “The majority of drugs brought across the border are for illicit purposes,” he said. “They’re resold on the street.”<sup>225</sup> At the time of

---

<sup>221</sup> Ibid.

<sup>222</sup> “Dangerous Medicine: On the Trail of Black Market Drugs.” *Los Angeles Times*. May 24, 1999.

<sup>223</sup> Shepherd, Marvin, Ph.D., Director, Center For Pharmacoeconomic Studies/College Of Pharmacy University Of Texas Austin. “Imported Pharmaceuticals.” Testimony before the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>224</sup> Ibid.

<sup>225</sup> “Dangerous Medicine: On the Trail of Black Market Drugs.” *Los Angeles Times*. May 24, 1999.



the study, Shepherd estimated Americans were buying more than 11,000 Valium tablets in Nuevo Laredo each day.<sup>226</sup>

Many Mexican drugs brought across the border end up in unlicensed clinics and open markets that cater to Latinos, according to Don Ashton, a California health officer.<sup>227</sup> The “vast majority” of the Mexican drug products offered for sale are also not FDA approved, he said.<sup>228</sup>

In 2002, health officials in Contra Costa County, in Northern California, discovered prescription drugs for sale over the counter at Mexican markets in the area. A lack of health insurance is cited as one reason immigrants purchase drugs at the markets. But as Juan, a man from Jalisco, told a reporter, it was much simpler to remember what his mother gave him when sick and buy it at a Mexican market.<sup>229</sup>

Although a prescription is required to purchase a controlled substance in Mexico, it can be easily obtained for a price. People along the streets will claim to be doctors and offer to write prescriptions for controlled substances for only \$25.<sup>230</sup>

In some cases, Mexican doctors collude with pharmacies to sell controlled substances. “Doctors working in tandem with pharmacies illegally ‘sell’ prescriptions,” *Copley News Service*

---

<sup>226</sup> Shepherd, Marvin, Ph.D., Director, Center For Pharmacoeconomic Studies/College Of Pharmacy University Of Texas Austin. “Imported Pharmaceuticals.” Testimony before the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>227</sup> “Task Force Sweeping County for Illegal Prescription Drug Sales.” *Los Angeles Times*. December 5, 2000.

<sup>228</sup> Shepherd, Marvin, Ph.D., Director, Center For Pharmacoeconomic Studies/College Of Pharmacy University Of Texas Austin. “Imported Pharmaceuticals.” Testimony before the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>229</sup> “Over the Counter, Under the Radar.” *East Bay Express*. October 2, 2002.

<sup>230</sup> “Dangerous Medicine: On the Trail of Black Market Drugs.” *Los Angeles Times*. May 24, 1999.

reported. “And in many cases, medications are sold without any prescription.”<sup>231</sup>

“You go into them [doctor’s office] and you won’t even see the doc; you’ll see a clerk who writes the prescriptions,” said Dr. Shepherd.<sup>232</sup> The clerk will direct the patient to an international pharmacy a couple blocks away to purchase the drugs. At some pharmacies, after asking for a controlled pharmaceutical, a clerk will procure a prescription and then bring it back to the store to make the sale.

Some pharmacies sell controlled substances that are stored off the premises. When a customer goes to a pharmacy, “a clerk steps out to a nearby building or car and brings back the medication,” *Copley News Service* said.<sup>233</sup>

Mexican pharmaceuticals sold to Americans often do not have directions. Some of the drugs are counterfeit, with English labels and packaged in bottles that appear to be American.<sup>234</sup> Other drugs have descriptions in Spanish and “no one knows how to take it whether it’s a controlled substance or a non-controlled substance,” Dr. Shepherd said.<sup>235</sup>

Richard Gonzales, the U.S. Consul in Tijuana, acknowledged, “We have concerns about the quality of medicine people buy. We

---

<sup>231</sup> “Mexico Tries to Put a Lid on Prescription Drug Trade.” *Copley News Service*. June 17, 2001.

<sup>232</sup> Shepherd, Marvin, Ph.D., Director, Center For Pharmacoeconomic Studies/College Of Pharmacy University Of Texas Austin. “Imported Pharmaceuticals.” Testimony before the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>233</sup> “Mexico Tries to Put Lid on Prescription Drug Trade.” *Copley News Service*. June 17, 2001.

<sup>234</sup> Glover, John, Vice President, Corporate Security, Bristol – Myers Squibb Company. “Importation of Pharmaceutical Products.” Testimony before the Oversight and Investigations Subcommittee of the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>235</sup> Shepherd, Marvin, Ph.D., Director, Center For Pharmacoeconomic Studies/College Of Pharmacy University Of Texas Austin. “Imported Pharmaceuticals.” Testimony before the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

understand it's a good deal if people can buy their medicine for 40 cents a pill instead of a dollar. But our question is: how good is this stuff?"<sup>236</sup>

## C. COUNTERFEIT PHARMACEUTICALS

Hard data on the quantity of counterfeit pharmaceuticals in Mexico is unavailable. "U.S. law enforcement officials believe that the amount of counterfeit and substandard medications in Mexico could be as high as 25 percent," according to the U.S. Department of State.<sup>237</sup> James Christian, head of security for Novartis, believes the problem could be much higher.<sup>238</sup>

Many of the counterfeit drugs originate in Asia. "Companies in India and China are heavily involved in manufacturing counterfeit drugs that eventually make their way to the Mexican border and into the hands of U.S. consumers," stated John Glover, a former FBI agent who retired in March 2002 as Vice President for Corporate Security at the Bristol-Myers Squibb Company.<sup>239</sup>

"Counterfeiters in India and China share the dubious distinction of being the largest manufacturers of counterfeit pharmaceuticals," said William Rastetter, head of IDEC Pharmaceuticals. "Much of their phony product is shipped to Mexico where it eventually finds its way into the hands of U.S. consumers."<sup>240</sup>

In the first six months of 1997, U.S. Customs officers seized \$60 million in counterfeit pharmaceuticals that had been shipped to the

---

<sup>236</sup> "In Tijuana, a New Kind of Drug Peril." *The New York Times*. August 14, 2002.

<sup>237</sup> "Consular Information Sheet." U.S. Department of State.

<sup>238</sup> "Bad Medicine." *The San Diego Union-Tribune*. August 5, 2001.

<sup>239</sup> Glover, John, Vice President, Corporate Security, Bristol – Myers Squibb Company. "Importation of Pharmaceutical Products." Testimony before the Oversight and Investigations Subcommittee of the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>240</sup> "Pharmaceuticals From Aboard: A Looming Threat to U.S. Consumers." *The San Diego Union-Tribune*. January 2, 2002.

Foreign Trade Zone in San Diego and destined for Mexico. The drugs allegedly originated in India. “Some of these seized pharmaceuticals were re-packaged under unsanitary conditions in the U.S. by companies who were not following accepted pharmaceutical industry practices,” the *Public Record* reported.<sup>241</sup>

The drugs were ultimately “aimed at U.S. tourists.” Some labels on the drugs implied that the pharmaceuticals were “from England or the British Virgin Islands. Other packaging [was] designed to make these pharmaceuticals appear that they were manufactured in the U.S.”<sup>242</sup>

Only a limited number of counterfeit drug cases in Mexico have been reported by the media. *Chemical News & Intelligence* said in 2000 that the Association for Pharmaceutical Industry Investigations (AMIIF) filed a formal complaint with the Mexican Health Secretary alleging a Mexican company was manufacturing counterfeit drugs and supplements. Allegedly counterfeit “generic” drugs were being sold in more than 200 pharmacies at prices up to 75 percent less than the brand-name products. “We have tested a number of these supposedly generic products currently on sale at pharmacies throughout the country and have found that [they] are not what they claim to be and can cause damage to one’s health,” AMIIF said.<sup>243</sup>

Organized crime syndicates in Mexico are involved in the production of counterfeit pharmaceuticals, according to Glover.<sup>244</sup> “Information has been received from reliable confidential sources,” Glover said, “that Mexican organized criminal elements are

---

<sup>241</sup> “Warning Issued on Foreign Pharmaceuticals.” *Public Record* (Palm Desert). March 13, 1998.

<sup>242</sup> *Ibid.*

<sup>243</sup> “Mexico’s Pharma Industry Seeks Crackdown on Bogus Drugs.” *Chemical News & Intelligence*. May 18, 2000.

<sup>244</sup> “Fake Drugs Color Debate on Imports; Congress Ponders Risks of Bringing Medicines Across the Border.” *The Hartford Courant*. August 21, 2002.

involved in the distribution and sale of counterfeit medicines in Mexico.”<sup>245</sup>

He also stated that “most, if not all, of the pharmacies located along the border, are owned and operated by Mexican organized crime groups.”<sup>246</sup>

Professional crime rings that manufacture counterfeit drugs in Mexico are nimble and difficult to locate. “By the time a counterfeiting operation is identified by a pharmaceutical company, it has generally been in operation for some time,” said Christian. “In my experience, the professional criminals who engage in counterfeiting of pharmaceuticals are able to elude arrest and prosecution by shifting their operations from location to location and by taking advantage of delays in the investigation process.”<sup>247</sup>

Some bogus drugs sold in Mexico likely originate in Brazil, which has a substantial counterfeit drug market. In 1999, authorities identified 132 counterfeit products distributed in Brazil. The government initiated a program to identify the counterfeiters and the Brazilian Minister of Health subsequently located nearly 20 clandestine labs.

Counterfeit drugs are also manufactured in Colombia for international distribution. In 2000, more than 400 products from 80 companies were seized by the INVIMA, the country’s food and drug authority. The drugs were either expired, adulterated, diverted, or counterfeit.

---

<sup>245</sup> Glover, John, Vice President, Corporate Security, Bristol – Myers Squibb Company. “Importation of Pharmaceutical Products.” Testimony before the Oversight and Investigations Subcommittee of the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

<sup>246</sup> Ibid.

<sup>247</sup> Christian, James, Vice President and Head of Global Corporate Security Novartis International AG. “The Importation of Pharmaceutical Products.” Testimony before the Oversight and Investigations Subcommittee of the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

## **D. TERRORIST GROUPS OPERATING IN MEXICO**

Although about a quarter of the foreign terrorist groups designated by the U.S. State Department operate in Latin America, there is no evidence of international terrorism in Mexico.

“Obviously, no country can say that it is invulnerable and that it is exempt from the threat of terrorism” said Jorge Castaneda, Mexico’s foreign affairs minister. Still, he said he did not “see a significant threat of terrorism” in Mexico.<sup>248</sup>

In Latin America, most terrorist attacks are related to domestic terrorism. The violence is largely confined to local areas. Chile, for example, experienced two major incidents in 2001; a letter bomb mailed to the U.S. Embassy and a letter tainted with anthrax sent to a Santiago doctor’s office. In Peru, more than 130 domestic terrorist incidents were identified in 2001, most of which were linked to narcotics trafficking.

The majority of terrorist incidents in Latin America occur in Colombia. The Revolutionary Armed Forces of Colombia (FARC) and the United Self-Defense Forces of Colombia (AUC) are responsible for an estimated 3,500 murders.

In Mexico during the mid 1990s, the Popular Revolutionary Army (EPR) staged a series of small-scale attacks against military police outposts, power stations, and public buildings. Attacks in 1996 killed at least 30 people. More recently, three bombs planted by The People’s Revolutionary Armed Forces (FARP), a splinter group of the EPR, exploded at Banamex bank branches in Mexico City in August 2001. Four guerrillas were found guilty and sentenced to between ten and 13 years in prison. Both the EPR and FARP have limited their attacks to Mexico and are not designated foreign terrorist organizations by the State Department.

---

<sup>248</sup> “Mexican Foreign Minister Fills in for Grounded President on U.S. Trip.” *The Associated Press*. April 18, 2002.

Although U.S. officials are unconcerned about domestic terrorists in Mexico, they have long worried other terror groups could use Mexico to stage an attack against the United States.

In 1987, an alert was issued along the U.S.-Mexican border for “suspected Islamic Jihad terrorists” seeking to gain access to the U.S. to assassinate an American law enforcement official. Information from intelligence sources said a “hit team” was “making its way to the border from Mexico City.”<sup>249</sup>

More recently, *The Washington Times* reported “A group of al Qaeda terrorists [was] attempting to infiltrate the United States to conduct attacks.”<sup>250</sup> Officials claimed 14 al Qaeda members were “working with Mexican organized crime groups, such as drug trafficking organizations, in an attempt to enter the United States covertly.”<sup>251</sup>

The information on the threat was later dismissed by the Justice Department. Not disputed, however, was the possible alliance between Mexico’s organized crime and terrorists. Mexico’s Arellano-Felix drug cartel in Tijuana and Colombia FARC rebels are allegedly working together. According to the Heritage Foundation, “Mexican authorities have uncovered evidence suggesting that the FARC is supplying the cartel with cocaine in exchange for weapons and money – a charge the FARC denies.”<sup>252</sup>

Because Mexico and the U.S. share a 2,000-mile border, events in Mexico can trigger a terrorist alert in the U.S. In May 2002, a truck carrying more than seven tons of sodium cyanide was stolen by three armed men with assault rifles while traveling through Central Mexico. Although officials believed the incident was most likely a robbery, they refused to rule out the possibility that terrorists were involved. U.S. border agents were placed on alert.

---

<sup>249</sup> “Border Patrol Goes on Alert.” *The Washington Post*. July 26, 1987.

<sup>250</sup> “Terrorists Said to Seek Entry to U.S. via Mexico.” *The Washington Times*. April 7, 2003.

<sup>251</sup> Ibid.

<sup>252</sup> “U.S. Coalition Against Terrorism Should Include Latin America.” Heritage Foundation Reports. October 9, 2001.

A month earlier, al Qaeda operatives had attempted to attack the U.S. Embassy in Rome with cyanide. Having tons of cyanide fall into the hands of terrorists was a nightmare scenario. Several weeks after the incident, Mexican authorities located all of the cyanide in a gully alongside a dirt road, ending fears the material had been taken by terrorists.

To guard against future terrorist attacks in the U.S., Mexico has deployed 18,000 soldiers at airports, seaports, bridges, and border crossings that link to the U.S. It is the first time Mexico has used troops to help defend the U.S. “Mexico is not going to be used as a transit point,” Interior Minister Santiago Creel pledged, “for any terrorist or anyone who wished to harm the United States.”<sup>253</sup>

---

<sup>253</sup> “The Mexican Border: U.S. and Mexico Coordinate Military Efforts for Mutual Protection Against Terror.” *The New York Times*. March 23, 2003.



## VIII. INTERNET PHARMACIES

Nearly every prescription drug can be purchased on foreign and domestic website pharmacies. The proliferation of Internet pharmacies has created a low-risk opportunity for terrorists to mount an attack against the U.S. with adulterated drugs.

This chapter describes the Internet pharmacy market and U.S. regulations to prevent abuses. Sections next examine the growth of Canadian online pharmacies and common deceptive tactics employed by owners in foreign countries and the U.S. to lure Americans consumers. About a third of the Internet pharmacies examined that purported to be in Canada were either registered in another country or the origin could not be determined.

The chapter includes a series of case studies on pharmacy websites to illustrate methods of deceptive advertising, false registration to hide a site's ownership, marketing tactics, and the risks from buying drugs from unknown and uncertified Internet sites. The final section discusses how terrorists have used the Internet to plan attacks, communicate, raise funds, and disseminate propaganda. It may next be used as a weapon.

### A. THE INTERNET PHARMACEUTICAL MARKET

An Internet pharmacy can be simply a web page that advertises pharmaceuticals for sale. Other Internet pharmacies stock drugs and have on-site physicians. Anyone with an Internet connection can purchase drugs from these webpage pharmacies and have the products delivered to their homes through the mail. The three types of Internet pharmacies are:

- **Prescription Pharmacies** – Internet pharmacies that dispense prescription drugs only after receiving a prescription from a patient's health care provider;

- **Resident Physician Pharmacies** – Pharmacies that have a resident physician who provides a prescription based on consumer answers to a questionnaire;
- **Non-Prescription Pharmacies** – Pharmacies that dispense prescription drugs without any prescription from a doctor.<sup>254</sup>

“The first category of Internet pharmacies offers consumers a safe and effective alternative to a local pharmacy, often saving consumers hundreds of dollars,” said Richard Blumenthal, Attorney General of Connecticut. The other Internet pharmacies, he warned, are “disasters waiting to happen.”<sup>255</sup>

## 1. Internet Prescription Pharmacies

U.S. Internet prescription pharmacies offer for sale prescription drugs to individuals with a prescription from a U.S.-licensed doctor. Examples are Walgreens.com and CVS.com. The prescriptions are filled by a U.S.-licensed pharmacist (see figure 7). The pharmacies do not sell prescription drugs to individuals who have not been physically examined by a doctor. Once a consumer registers with a prescription Internet pharmacy, refills can be ordered through the website as authorized by the prescription.

Internet prescription pharmacies must comply with the licensing and inspection requirements of the federal government, the states in which they are registered, and with each state to which they mail pharmaceuticals.”

### VIPPS Certification

In the United States, the National Association of Boards of Pharmacy (NABP) evaluates online pharmacies to determine if they comply with U.S. laws. Internet pharmacies that meet standards

---

<sup>254</sup> Blumenthal, Richard. Attorney General of Connecticut. Testimony Before The House Committee on Government Reform. *Federal News Service*. March 27, 2003.

<sup>255</sup> Ibid.

and regulations are awarded a certificate, called the Verified Internet Pharmacy Practice Sites (VIPPS).

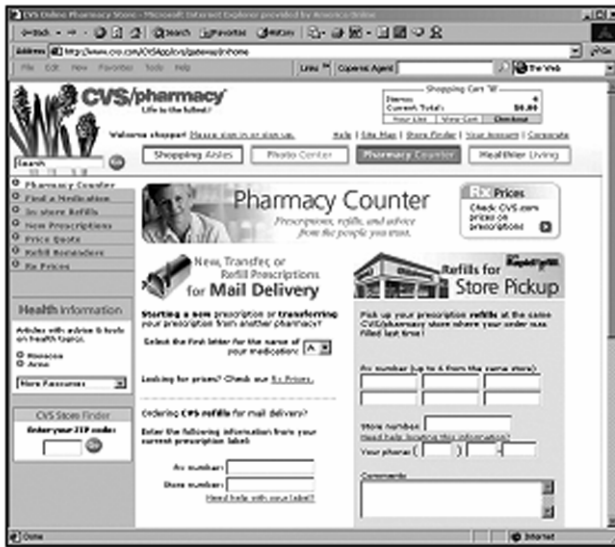


figure 7

According to the NABP, “pharmacies displaying the VIPPS seal have demonstrated to NABP compliance with VIPPS criteria including patient rights to privacy, authentication and security of prescription orders, adherence to a recognized quality assurance policy, and provision of meaningful consultation between patients and pharmacists.”<sup>256</sup>

VIPPS-certified Internet pharmacy websites are identified by the VIPPS seal displayed on the website. Consumers can also search the database of VIPPS-certified sites by going to the NABP<sup>257</sup> (figure 8 shows the VIPPS website).

<sup>256</sup> National Association of Boards of Pharmacy.  
<http://www.nabp.net/vipps/intro.asp>.

<sup>257</sup> National Association of Boards of Pharmacy.  
<http://www.nabp.net/vipps/consumer/search.asp>.



figure 8

## 2. Internet Resident Physician Pharmacies

Internet resident physician pharmacies have a resident doctor who provides a prescription based on answers from a questionnaire completed by a consumer.

The drug consumer is not required to have previously visited a physician. After completing the questionnaire or “online consultation,” a physician affiliated with the website reviews the information and writes a prescription if warranted. The pharmacy then mails the prescription drug to the consumer.

AmericanPrescription.com is an example of this type of web page pharmacy. It states that consumers can receive free online medical consultations by a U.S.-licensed physician before purchasing pharmaceuticals from their site.

As explained on the site, consumers fill out a questionnaire that asks about a consumer’s medical history. The site then explains, a doctor from AmericanPrescriptions.com “will review it and if he approves you, he will then send a prescription to our pharmacy and it will be mailed to you” (see figure 9).



figure 9

### 3. Internet Non Prescription Pharmacies

Internet non-prescription pharmacies sell prescription drugs without a prescription from a doctor and without any online medical consultation.

Some of these websites include a medical questionnaire that consumers must submit before ordering. But a licensed physician does not review the questionnaire, nor does a physician write a

prescription for prescription pharmaceuticals. These websites are illegal in the United States.

HealthPlusPharmacy.com does not require a prescription or online consultation before sending pharmaceuticals to the consumer (see figure 10).



figure 10

On the homepage, HealthPlusPharmacy.com advertises, “A prescription is NOT required at this pharmacy although we do recommend you consult a physician before placing your order.”

The website pharmacy offers many prescription drugs for sale, such as Prozac and Viagra, which can be shipped throughout the world to consumers who have never seen a physician.

#### 4. Regulatory Framework in the U.S.

Regulating the Internet pharmaceutical industry poses unique challenges to authorities in the U.S. The same laws that apply to traditional pharmacies apply to Internet pharmacies. Under federal law:

- It is illegal to sell a prescription pharmaceutical without a prescription from a licensed U.S. physician.
- It is illegal for anyone other than the manufacturer to re-import a drug from another country.

All prescription pharmaceutical sales from foreign Internet sites are illegal under U.S. law if the drugs are mailed to the purchaser.

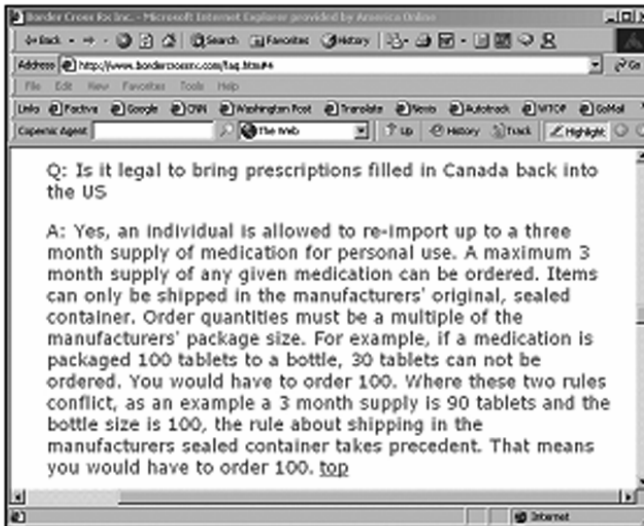


figure 11

Some online pharmacies claim that people can legally import up to a 90-day supply of their prescription medications through the Internet. Other WebPages advertise that prescription pharmaceuticals can be imported for personal use. “Neither of

these claims is true,” according to the FDA (see figure 11 for an example of false advertising on BorderCrossRx.com).<sup>258</sup>

State laws can further complicate the regulation of the Internet pharmacy industry. Each state has enacted laws to govern traditional pharmacies to protect patients from harm.

When prescription pharmaceuticals are sold by Internet pharmacies to consumers across state lines, it may violate state laws. Only a handful of state legislatures have passed laws to address issues that arise from online prescribing.<sup>259</sup>

## 5. Proliferating Websites

The number of Internet websites that offer pharmaceuticals for sale is nearly impossible to determine. There are more than 800,000 sites that appear when “internet pharmacy” is typed in a Google search engine.

More than 116,000 Internet sites appear when searching “Internet pharmacy prescription drugs” (see figure 12 for the results from Google searches using different phrases).

| Search Phrases                  | Number of Google Results |
|---------------------------------|--------------------------|
| Internet Pharmacy Aspirin       | 13,800                   |
| Internet Pharmacy Viagra        | 87,000                   |
| Internet Pharmacy Antibiotics   | 21,000                   |
| Internet Pharmacy United States | 169,000                  |
| Internet Pharmacy Canada        | 135,000                  |
| Internet Pharmacy Mexico        | 82,000                   |

figure 12

---

<sup>258</sup> “Observations.” *FDA Consumer Magazine*. September-October 2002. [http://www.fda.gov/fdac/departs/2002/502\\_obs.html](http://www.fda.gov/fdac/departs/2002/502_obs.html).

<sup>259</sup> Hubbard, William K., Associate Commissioner for Policy and Planning at the FDA Testimony. “International Prescription Drug Parity.” Hearing Report by the House Government Subcommittee on Human Right and Wellness. *Federal Document Clearing House Congressional Testimony*. April 3, 2003.



Not every site or “hit” in a search of the Internet is a pharmacy selling drugs. The sites may contain articles or reports, may link to government, business, or personal websites, or simply offer data. Some sites link to pharmaceutical manufacturers and others no longer are active.

Many of the websites, however, are Internet pharmacies. The higher an Internet address appears on a list from an Internet search, the more likely consumers are to buy from that site. However, placement of a site is not an indicator of quality or legitimacy. Position can be manipulated by programming techniques or purchased by the highest bidder.

The names that appear in the search of pharmacies on the Internet can be deceiving. A domain name or Internet address can be linked to another webpage. As an example, the address, OnlinePharmacy.org automatically transfers users to another website named e-Scripts-MD.com. Website pharmacies also create multiple websites to increase the chance their website will appear when searching the Internet.

“The objective of this design and operation,” said Carmen Catizone, NABP Executive Director, “is to capture as many consumers as possible and deceive consumers into believing that the WebPages are independent sites operating and offering to deliver drugs.”<sup>260</sup>

A website address or domain name in the United States can have a variety of “extensions,” including “com,” “net,” “org,” “biz,” “info,” “us,” “bz,” and “tv.” A name with a different extension is a different address. Each domain name can be purchased for as little as \$35 a year. Other countries have additional extensions. A website that appears to be located in one country may actually be blindly linked to a pharmacy in another country.

---

<sup>260</sup> Catizone, Carmen, M.S., R.P.H., D.P.H. Executive Director National Association of Boards of Pharmacy. “Internet Pharmacy Consumer Safeguards.” Testimony before the House Committee on Government Reform. *Federal Document Clearing House Congressional Testimony*. March 27, 2003.

Given the multiple names, addresses, and links for websites, it would require a Herculean effort to sort out the actual number of Internet pharmacies or businesses that offer drugs for sale. The complexity and variety of the websites also make it difficult for law enforcement officials to protect the public from fraudulent Internet pharmacies.

“Authorities have trouble tracking down Internet sites that fail to comply with state licensing requirements and standards,” said Tom Davis, Chairman of the House Committee on Government Reform. “Many [websites] do not disclose identifying information, change their names and appearances often, and sometimes disappear without a trace.”<sup>261</sup>

Consumers can face similar problems when trying to determine the actual location of a website pharmacy and efficacy of the drugs offered for sale. “The anonymous design of the Internet and desire by rogue operators to hide from detection,” said Carmen Catizone, “significantly limit the ability of regulators and consumers to identify the source of an Internet site or the practitioners affiliated with that site.”<sup>262</sup>

## **6. Affiliate Pharmaceutical Networks**

Internet pharmacies can expand their reach on the Internet by establishing affiliate pharmaceutical websites. An affiliate website advertises information on drug products for sale to consumers. Sales are electronically forwarded to a central pharmacy, which disburses the drugs. For each sale, the affiliate is paid a commission. A consumer who visits a website in the network may never know a drug sale from the affiliate was completed by another website pharmacy (see figure 13).

---

<sup>261</sup> Davis, Tom, Representative. “Internet Pharmacy Consumer Safeguards.” Testimony before the House Committee on Government Reform. *Federal Document Clearing House Congressional Testimony*. March 27, 2003.

<sup>262</sup> Catizone, Carmen, M.S., R.P.H., D.P.H. Executive Director National Association of Boards of Pharmacy. “Internet Pharmacy Consumer Safeguards.” Testimony before the House Committee on Government Reform. *Federal Document Clearing House Congressional Testimony*. March 27, 2003.

Some Internet pharmacies have hundreds of affiliates that link to their sites. The website, ValuePrescribe.com, openly advertises for affiliates. Becoming an affiliate, it states, “is simple, and takes only a few minutes to setup. All you need to do is place links from your website to ours. We keep track of how many visitors you referred, and how many referrals became customers. The only thing left for you to do is to wait for your next commission check!” An affiliate of ValuePrescribe.com can earn “\$25.00 plus 10% for every new customer order placed.”

Consumers who purchase a prescription drug from an affiliate of ValuePrescribe.com are asked to provide medical information on a form. This information is automatically forwarded to ValuePrescription.com, which completes the transaction. Numerous Internet pharmacies include kits and instructions to help recruit affiliates. An affiliate website can be created in a matter of hours from anywhere in the world.

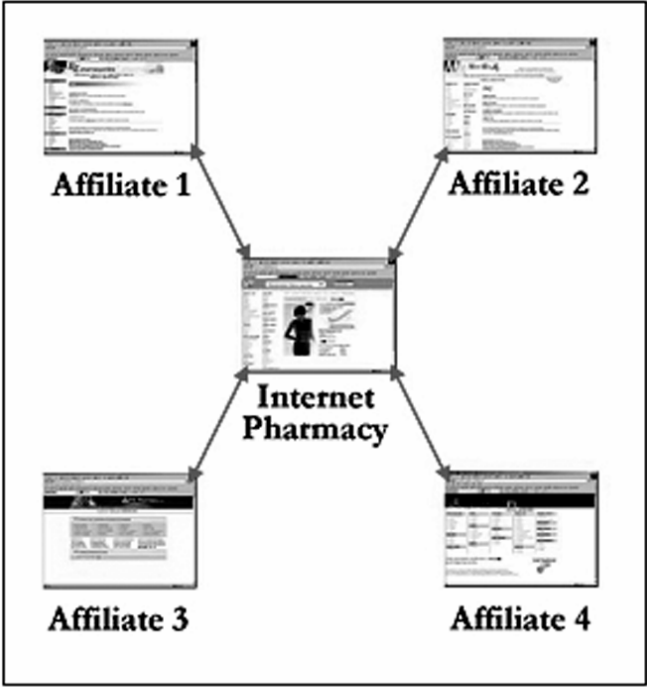


figure 13

For example, the website Online-Apotheke-Europe.com (see figure 14) advertises Retin-A, Valtrex, Zoloft, and other prescription pharmaceuticals as an affiliate for the Internet pharmacy 1PharmacyOnline.com of North Carolina. Online-Apotheke-Europe.com was set up by Ray Pasnen. Pasnen appears to be an aspiring musician in Bermuda and an operator of numerous other affiliate WebPages.

Pasnen also appears to be without a regular home address and he registers his WebPages at the Swizzle Inn, a popular dive bar in Bermuda where he frequently performs.

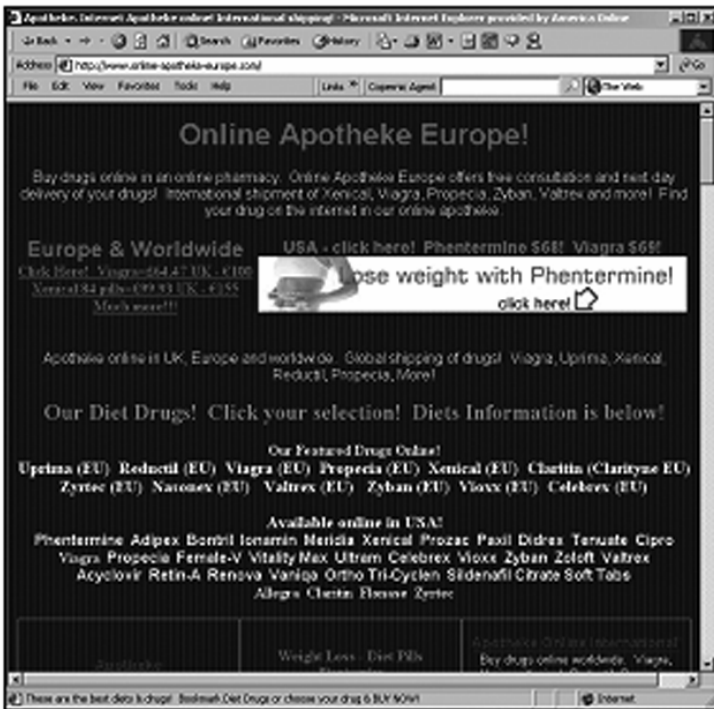


figure 14

## 7. Online Consultations

Internet pharmacies often offer free “online consultations” as a substitute for a patient visiting a doctor to get a prescription for a drug. An online consultation usually consists of a questionnaire to gather information on a consumer’s medical history.

The medical information is reviewed by a certified doctor, who determines if a sale is approved for a prescription drug. These website doctors can earn \$35 to \$50 for every prescription, according to *The Miami Herald*. Some website doctors daily review hundred of prescriptions. The *Miami Herald* questioned the process, asking, “How could a doctor deal with 200 online questionnaires and prescriptions a day?”<sup>263</sup>

Medical professionals believe the use of online consultations should not replace a physical exam conducted when doctors prescribe medication. “The practice of good medicine requires the establishment of a doctor-patient relationship,” said Dr. James Thompson, chief executive officer of the Dallas-based Federation of State Medical Boards. “It needs a face-to-face encounter, a physical exam, the keeping of medical records and follow-up with a patient.”<sup>264</sup>

The Federation of State Medical Boards of the United States, Special Committee on Professional Conduct and Ethics, believes online consultations are unethical. “Prescribing of medications by physicians based solely on an electronic medical questionnaire,” it states “clearly fails to meet an acceptable standard of care and is outside the bounds of professional conduct.”<sup>265</sup>

---

<sup>263</sup> “Loopholes allow Web sites to sell drugs without doctor’s visit.” *The Miami Herald*. July 2, 2002.

<sup>264</sup> “Is taking your ills online the best cure?; Access to prescription drugs over the Internet is stirring debate.” *The Dallas Morning News*. February 5, 2003.

<sup>265</sup> Hubbard, William K., Associate Commissioner for Policy and Planning at the FDA Testimony. “International Prescription Drug Parity.” Hearing Report by the House Government Subcommittee on Human Right and

Online medical consultation, according to medical professionals, can be easily manipulated. “There is no control mechanism of any kind,” warned Dale Breden of the North Carolina Medical Board regarding Internet pharmacies. “A 12-year-old boy could be filling out that questionnaire and getting anything he wanted,” by claiming to be an adult.<sup>266</sup>

After submitting a medical questionnaire, a consumer has no assurance the information has actually been reviewed by a certified doctor. *The Miami Herald* purchased 30 diet pills from discreetdrugs.com, a site operated by USA Prescription of Davie, Florida.

The diet pills, the newspaper explained, “were shipped by Prescription Resources of Charlotte, N.C. The prescription was supposedly written by a Dr. W. Thompson.”<sup>267</sup> No information was provided on the location of Dr. Thompson. However, *The Miami Herald* learned he was “already facing disciplinary action in Missouri concerning a single charge of dispensing a controlled substance ‘without sufficient examination.’”<sup>268</sup>

Rx Network, which fills prescriptions for USAPrescription.com and other Internet pharmacies, also has had legal problems. The Florida Board of Pharmacy imposed a \$48,000 fine against Rx Network of Broward County for inappropriately dispensing “excessive quantities” of weight-loss drugs.<sup>269</sup>

In the legal complaint, a judge was shown a prescription list in which “customers received refills well before their first orders ran

---

Wellness. *Federal Document Clearing House Congressional Testimony*. April 3, 2003.

<sup>266</sup> “Buying drugs on the Internet can mean clicking around state laws.” *The Miami Herald*. June 1, 2002.

<sup>267</sup> “Loopholes allow Web sites to sell drugs without doctor’s visit.” *The Miami Herald*. July 2, 2002.

<sup>268</sup> Ibid.

<sup>269</sup> “Health Officials Allow Online Pharmacy to Continue Operating.” American Health Line. April 18, 2003.

out,” *The Miami Herald* reported. “One patient obtained a 90-day supply of obesity drug Bontril and 22 days later bought another 90-day supply.”<sup>270</sup>

### **USAPrescription.com**

The pharmacy website “USAPrescription.com” sells prescription pharmaceuticals such as Celebrex, Ultram, Vioxx, Zyban, Flonase, Viagra, Propecia, and numerous other products. It states that no prior drug prescription is required and the medical consultation is free.

USAPrescription.com states, “Upon approval, one of our U.S. licensed physicians will issue a prescription for an FDA-approved medication. Your prescription will be filled and shipped in one business day by a U.S. licensed pharmacy in a discreet package that assures your confidentiality and privacy.”

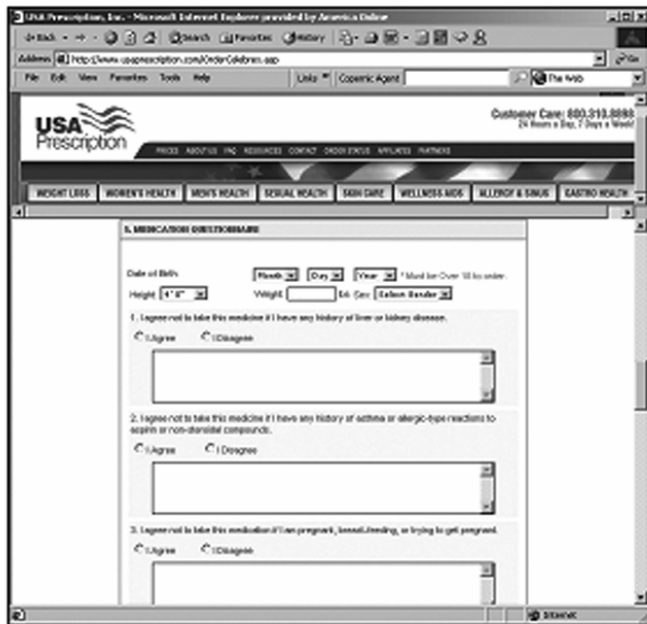


figure 15

<sup>270</sup> “Judge nixes order to shut pharmacy.” *The Miami Herald*. January 14, 2003.

In the consultation questionnaire, the purchaser is required to answer a variety of questions, including age, height, weight, and sex (see figure 15 to view the online consultation form). To buy some drugs, such as Celebrex, an individual must be 18. The questionnaire first lists a series of statements, which follow:

1. I agree not to take this medication if I am pregnant, breast-feeding, or trying to get pregnant.
2. I agree not to take this medicine if I have any history of liver or kidney disease.
3. I agree not to take this medicine if I have any history of asthma or allergic-type reactions to aspirin or non-steroidal compounds.
4. I agree not to take this medicine if I have any history of heart failure, fluid retention, or uncontrolled hypertension.
5. I agree not to take this medicine if I have had any adverse reactions to sulfa-containing compounds.
6. I agree not to take this medicine if I have any history of ulcer disease, bleeding, or symptoms of gastrointestinal disease such as gnawing or burning stomach pain, black or tarry stools or vomiting. I also agree to notify my health care provider if I experience any of the above systems.
7. I agree to notify my health care provider of any untoward side effects while taking this medication (including, but not limited to any bleeding, skin rash, unexplained weight gain or edema, itching, yellow jaundice, nausea or fatigue).

The questionnaire requires the purchaser to respond to the following questions:

1. Please list all medications that you plan to take while on this program.



2. Please list all past or present allergies including allergies to any medications.
3. Please list all past surgeries and provide details including the condition that was treated with each surgery.
4. Please list all current medical conditions.
5. Is there anything in your medical history that you consider to be relevant?
6. Please list all over-the-counter and prescription medications that you are currently taking and the length of time for each.
7. Please explain the specific medical reason for ordering this medication. The physician must know the exact nature of your medical problem in order to prescribe this medication. This cannot be left blank.

USAPrescription.com states that a certified physician reviews the information submitted through the website before filling any prescription. To prevent abuse in the system, the website explains, “The doctors are paid a flat fee per questionnaire, whether they approve or reject an application.”<sup>271</sup>

## **8. Drugs Sold by Internet Pharmacies**

American consumers are playing Russian Roulette when it comes to the purchase of drugs from some Internet pharmacies. The pharmaceuticals may be authentic and safe to consume. But the drugs also may not be approved by the FDA or could be counterfeit drugs.

---

<sup>271</sup> “Is taking your ills online the best cure?; Access to prescription drugs over the Internet is stirring debate.” *The Dallas Morning News*. February 5, 2003.

“Although some patients may purchase genuine product,” said William Hubbard, currently FDA Senior Associate Commissioner of Policy, Planning, and Legislation, “others may unknowingly buy counterfeit copies that contain inert ingredients, legitimate drugs that are outdated and have been diverted to illegitimate resellers, or dangerous sub-potent or super-potent products that were improperly manufactured.”

Additionally, “Some medications sold on the Internet may be legal in foreign countries but not approved for use in the U.S.,” Hubbard said. “Products not approved for sale in the U.S. often do not conform to the GMP and quality assurance requirements in U.S. laws and regulations, and it is illegal for a foreign pharmacy to ship such drugs into the U.S.”<sup>272</sup>

The National Association of Boards of Pharmacy has warned the public about purchasing drugs on the Internet. “The protections offered by the Internet,” said Richard Markuson, President of NABP, “often serve to cloak the identity and origin of many online pharmacy sites, making it almost impossible for the consumer to determine where their drugs originate.”<sup>273</sup>

Internet pharmacies have become a primary source for illegal drugs consumed in the United States. Federal officials estimate the illegal steroid market is a \$1 billion industry. “Internet steroid dealing is growing exponentially,” said Philip Osborn, the national program manager for the cyber crimes unit at the U.S. Customs Service.<sup>274</sup>

---

<sup>272</sup> Hubbard, William K., Associate Commissioner for Policy and Planning at the FDA Testimony. “International Prescription Drug Parity.” Hearing Report by the House Government Subcommittee on Human Right and Wellness. *Federal Document Clearing House Congressional Testimony*. April 3, 2003.

<sup>273</sup> “A Game of Remedy Roulette: Cipro Sales.” *Rocky Mountain News*. October 23, 2001.

<sup>274</sup> “Steroid traffic flows on Internet.” Copley News Service. March 10, 2003

Because many online pharmacies sell steroids, consumers often mistakenly believe the drugs are FDA-approved and legal to purchase.

A “dangerous precedent” is set when unlicensed pharmacies are allowed to dispense non-FDA-approved drugs, said Carmen Catizone, NABP Executive Director. “Access to medications through illegal means does not resolve the problem of access, but only increases the opportunity that U.S. citizens will be harmed by unregulated entities.”<sup>275</sup>

Online pharmacies often incorrectly prescribe pharmaceuticals. An example is Lupron, which is sold by websites as a “fertility medication,” according to Lynne Millican, a patient-advocate and registered nurse. But FDA, she said, has “never approved Lupron for infertility, or fertility treatment, or [in-vitro fertilization (IVF)] treatment, or any variant of IVF or [assisted reproductive technology].”<sup>276</sup>

Many Internet pharmacies also do not provide sufficient directions on drug usage, according to a study by Dr. Tracey Bessell, of Monash University in Victoria, Australia. “Many internet pharmacy sites gave no advice on product use while the quality of information at a large number was so poor [as] to be of little or no benefit to consumers,” the *Southland Times* said.<sup>277</sup>

## 9. Canadian Online Pharmacies

Canadian Internet pharmacies are big business. “Canada’s Internet drugstores sell \$1 billion U.S. annually in cut-rate patented drugs into the United States,” according to *USA Today*.<sup>278</sup>

---

<sup>275</sup> “Stop illegal Rx imports, urges NABP; Community Practice; National Association of Boards of Pharmacy lobbying Bush Administration on drug importation.” *Drug Topics*. March 17, 2003

<sup>276</sup> Millican, Lynne. “Cloning and Women’s Health.” Testimony before the Senate Commerce Science and Transportation Committee. *Federal Document Clearing House Congressional Testimony*. March 27, 2003.

<sup>277</sup> “Pills or poison? Click with care.” *The Southland Times*. April 10, 2003.

<sup>278</sup> “Terence Corcoran: Internet pharmacies are an artificial industry built on a flawed premise.” *Calgary Herald*. February 9, 2003.

In one day a Canadian Internet pharmacy sent 500 packages of prescription drugs to U.S. consumers, said William Hubbard at the FDA. Another pharmacy, he said, “boasted that since it added Internet sales to its local pharmacy a year ago, the store has gained about 100,000 U.S. customers.”<sup>279</sup>

Many websites claim that drug sales from Canadian Internet pharmacies directly to U.S. citizens are legal. But “this is false,” said Hubbard.<sup>280</sup> Canadian Internet pharmacies also claim the drugs they sell “are Canadian versions of drugs approved in the United States,” he said, “but we don’t know what they are because there is no regulatory oversight of these drugs.”<sup>281</sup>

Before selling prescription drugs to Americans, Canadian online pharmacies often require prescriptions from American doctors, which are then rewritten by Canadian doctors. Other Canadian Internet pharmacies only require an online consultation.

The dispensing of pharmaceuticals in Canada is regulated by Colleges of Pharmacists. For example, the Ontario College of Pharmacists is the registering and regulating body for pharmacies in Ontario.

Most Colleges have warned doctors not to co-sign prescriptions for patients they have not examined. The council of the College of Physicians and Surgeons of Alberta, for example, recently informed members “cross-border prescribing” without examining patients “could constitute unbecoming conduct.”<sup>282</sup>

---

<sup>279</sup> Hubbard, William K., Associate Commissioner for Policy and Planning at the FDA Testimony. “Prescription Drug Reimportation.” Testimony before the House Energy and Commerce Committee. *Federal Document Clearing House Congressional Testimony*. July 25, 2002.

<sup>280</sup> “Prescription Drug Reimportation.” *Federal Document Clearing House Congressional Testimony*. July 25, 2002.

<sup>281</sup> “Stores pop up to help seniors buy Canadian drugs.” *USA Today*. April 9, 2003.

<sup>282</sup> “Is Canada America’s favourite drugstore?” *Medical Post*. December 31, 2002.

To be registered by the Ontario College of Pharmacists, an Internet pharmacy must be accredited and meet all the requirements and obligations of all federal and provincial legislation.<sup>283</sup>

The Ontario College has a specific policy to prevent Canadian Internet pharmacies from blindly selling pharmaceuticals to American consumers. The policy states:

Pharmacists shall not facilitate or enter into agreements with physicians for the purposes of co-signing or rewriting prescriptions for out-of-country patients. If a prescription is filled in Ontario, the Standards of Practice for pharmacists and pharmacies for Ontario must be met, regardless of where the patient resides and these Standards cannot be waived through any agreements or contracts.<sup>284</sup>

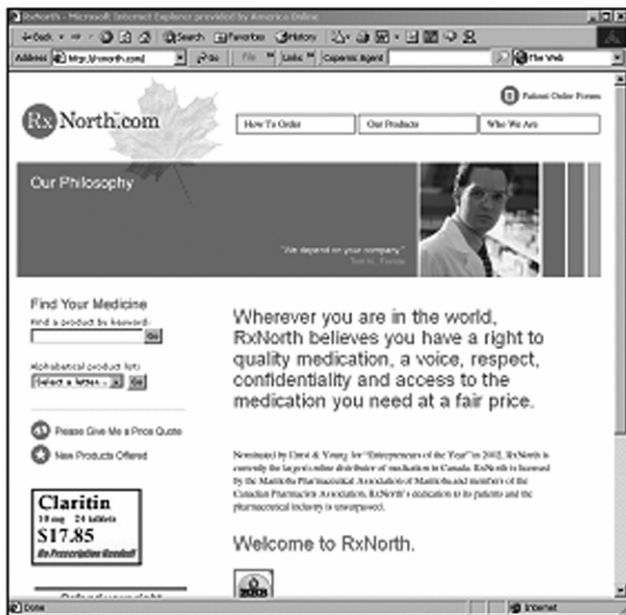


figure 16

<sup>283</sup> "Policy for Ontario Pharmacies Operating Internet Sites." Ontario College of Pharmacists.

<http://www.ocpinfo.com/client/ocp/OCPHome.nsf/web/Policy+for+Ontario+Pharmacies+Operating+Internet+Sites/OpenDocument>.

<sup>284</sup> Ibid.

RxNorth represents a typical Canadian pharmaceutical website (see figure 16). As described by the *Gazette*, it “has carved out a rich niche by exploiting Canada’s controls on prescription costs, taking advantage of the strong U.S. dollar, testing the legal limits of cross-border commerce and chipping at the profits of drug manufacturers.”<sup>285</sup>

RxNorth.com requires American consumers to submit prescriptions written by American doctors before they supply any pharmaceuticals.

RxNorth is owned by MediPlan, which “is part of a booming Internet pharmacy business that employs 1,500 in Manitoba,” the *Halifax Daily News* said. “The provincial government expects the business to double soon. It’s growing so fast that companies are looking overseas for pharmacists.”<sup>286</sup>

Not everyone is optimistic about the future of Internet pharmaceutical sales from Canada. “It’s not legal [to provide Americans with drugs from Canada through the Internet],” said Carol Pengelly, a pharmacist for 30 years in Canada. “I keep expecting it to be stopped.”<sup>287</sup>

A growing number of authorities and industry specialists believe the sale of Canadian pharmaceuticals to Americans through the Internet is a perversion of Canadian law. “The alleged purpose of the price controls is to provide Canadians with lower-price pharmaceuticals,” observed the *Calgary Herald*. “It is not intended to provide U.S. seniors with lower-price pharmaceuticals. Even less is it intended to act as a subsidy to 28-year-old pharmacists who are

---

<sup>285</sup> “Not-So Corner Drugstore; Canadian Web firms are supplying low-cost prescriptions to many elderly Americans. But manufacturers and regulators are chafing.” *Los Angeles Times*. February 21, 2003.

<sup>286</sup> “Web whizkids’ pharmacy firm flying high.” *The Halifax Daily News*. February 5, 2003.

<sup>287</sup> “Not-So Corner Drugstore; Canadian Web firms are supplying low-cost prescriptions to many elderly Americans. But manufacturers and regulators are chafing.” *Los Angeles Times*. February 21, 2003.

making millions of dollars off the price differences between Canada and the United States.”<sup>288</sup>

## **B. FRAUD AND COUNTERFEITING BY INTERNET PHARMACIES**

Articles on e-commerce victims have been widely published, including problems with Internet pharmacies. Numerous websites warn consumers to avoid specific sites known for defrauding purchasers.

“Unfortunately the Internet and related e-mail systems provide easy and inexpensive tools for dishonest operators to defraud the public, with potentially life-threatening consequences,” the National Conference of State Legislatures (NCSL) wrote.<sup>289</sup> Among the dangers the NCSL identified are:

- Counterfeit products that do not contain the ingredients named;
- Diluted products or outdated products, perhaps relabeled with a false expiration date;
- Financial scams in which no product is delivered, or credit card numbers are stolen or misused;
- Tainted products that could actually harm people who take them.<sup>290</sup>

According to the NCSL, “These practices may not be predominant, but it is difficult for individuals to evaluate web and e-mail offers that are ‘too good to be true.’”<sup>291</sup>

---

<sup>288</sup> “Terence Corcoran: Internet pharmacies are an artificial industry built on a flawed premise.” *Calgary Herald*. February 9, 2003.

<sup>289</sup> [www.ncsl.org/programs/health/Rxemerg.htm](http://www.ncsl.org/programs/health/Rxemerg.htm).

<sup>290</sup> *Ibid.*

<sup>291</sup> *Ibid.*

Tracey Bessell, a research pharmacist at the Monash Institute of Health Service Research, conducted a study of 104 Internet pharmacies. Some of the sites he examined were “deliberately fraudulent.” Among the problems he discovered were that the sites “disguised their packaging, they were deliberately trying to avoid Customs, they supplied no information at all, and it was really quite difficult to verify exactly what it was that you were being sent.”<sup>292</sup>

Some pharmacy websites openly discuss their efforts to avoid detection by authorities. “The oddest site we found,” Bessell noted, “was a site selling anabolic steroids from somewhere in Asia. This particular site actually advertised that they would repackage medicines in such a way as to try and avoid Customs detection, and even if the package was a bit open and the tablets were dirty, they were probably still OK to use.”<sup>293</sup>

The discount pharmaceutical websites are undermining the safety of the drug supply, according to the *Pharmaceutical Executive*: “Such online stores are ideal breeding grounds for the spread of inexpensive, lower-quality knockoffs, and regulation of the marketing and sale of counterfeit drugs over the Internet is virtually nonexistent.”<sup>294</sup>

In the wake of the anthrax attacks in late 2001, many Americans turned to Internet pharmacies to purchase Cipro. But as Congressman Tom Davis explained, Internet drug sales can be dangerous. “The risks of this kind of self-medicating,” he said, “can include adverse reactions from inappropriately prescribed medications, dangerous drug interactions, and use of counterfeit or tainted products.”<sup>295</sup>

---

<sup>292</sup> “E-Pharmacies.” *Radio National*. August 26, 2002.

<sup>293</sup> Ibid.

<sup>294</sup> “Companies Must Take an Aggressive Approach That Includes Investigation and Punishment.” *Pharmaceutical Executive*. June 2002.

<sup>295</sup> Davis, Tom, Representative. “Internet Pharmacy Consumer Safeguards.” Testimony before the House Committee on Government Reform. *Federal Document Clearing House Congressional Testimony*. March 27, 2003.



The Food and Drug Administration “warned that 11 foreign Internet vendors were distributing useless or harmful versions of the much-sought anti-anthrax drug Cipro,” the *Pittsburgh Post-Gazette* reported.<sup>296</sup>

The anthrax scare brought Internet pharmacies that sell counterfeit pharmaceuticals to the attention of the media. However, authorities acknowledge the problem continues to exist with all pharmaceuticals and health-related products.

## **C. POLICING FRAUDULENT DRUG WEBSITES**

Although the ability of governments worldwide to curb the sale of pharmaceuticals over the Internet is limited, both Canada and the United States have brought legal action against Internet pharmacies. Pharmacy boards and medical associations have begun monitoring Internet pharmacies and have taken disciplinary actions on their own.

### **1. Canadian Actions**

Numerous Internet pharmacy websites offer prescription drugs for sale that are not accredited by pharmacy regulators in Canada, the Ontario College of Pharmacists warned. “The public needs to know,” it said “that some websites presenting themselves as online ‘pharmacies’ or ‘drugstores’ may be operating without a pharmacy license and dispensing prescriptions without the oversight of a licensed pharmacies.”<sup>297</sup>

The Ontario College of Pharmacists filed charges in May 2002 against The Canadian Drug Store Inc., charging that the Internet site

---

<sup>296</sup> “Fakes Pose Growing Threat to Prescription Drug Supply.” *Pittsburgh Post-Gazette*. September 17, 2002.

<sup>297</sup> “Ontario College of Pharmacists Advises Ontarians to Verify Legitimacy of Internet Pharmacy Sites Before Use.” News Release. Ontario College of Pharmacists. May 14, 2002.

unlawfully operated an unlicensed pharmacy and used an unregistered pharmacist to fill out prescriptions for U.S. residents. “The College also filed charges against a licensed pharmacist, pharmacy, and physician in Ontario for helping to facilitate the delivery of prescription and non-prescription drugs to U.S. residents,” said John Taylor, Associate Commissioner of Regulatory Affairs at the FDA.<sup>298</sup>

According to *The Gazette*, “Most physicians’ colleges have issued statements about the burgeoning Internet pharmacy industry, reminding their members that it is against standards of practice to be signing prescriptions for patients they’ve never examined.”<sup>299</sup> The colleges warned members they could face “disciplinary action.” At least eight British Columbia physicians reportedly stopped writing such prescriptions after the warnings, according to Brian Taylor, Deputy Registrar of the College of Physicians and Surgeons of British Columbia.

The Ontario College of Pharmacists has also taken a strong role in overseeing the operations of its members. In early 2003, the Ontario College of Pharmacists “adopted a policy forbidding pharmacists from facilitating or entering into agreements with physicians for the purposes of co-signing or rewriting prescriptions for out-of-country patients.”<sup>300</sup>

## **2. United States Actions**

The FDA is actively working to identify and shut down fraudulent and illegal Internet pharmacies. It has initiated several hundred criminal investigations, made 150 arrests involving 60 web

---

<sup>298</sup> Taylor, John, Associate Commissioner of Regulatory Affairs FDA. “Access To Affordable Drugs In South Florida.” Testimony before the House Energy and Commerce Committee. *Federal Document Clearing House Congressional Testimony*. March 10, 2003.

<sup>299</sup> “The Drug Trade: Americans are flocking to online stores where they can buy Canadian drugs at dramatic savings.” *The Gazette*. April 5, 2003.

<sup>300</sup> Ibid.

pharmacies, and issued nearly 200 warning letters to domestic and foreign online pharmacies.<sup>301</sup>

The FDA “has had success in prosecuting Internet drug sales, especially in cases where customers are sold products without valid prescriptions,” *USA Today* reported.<sup>302</sup>

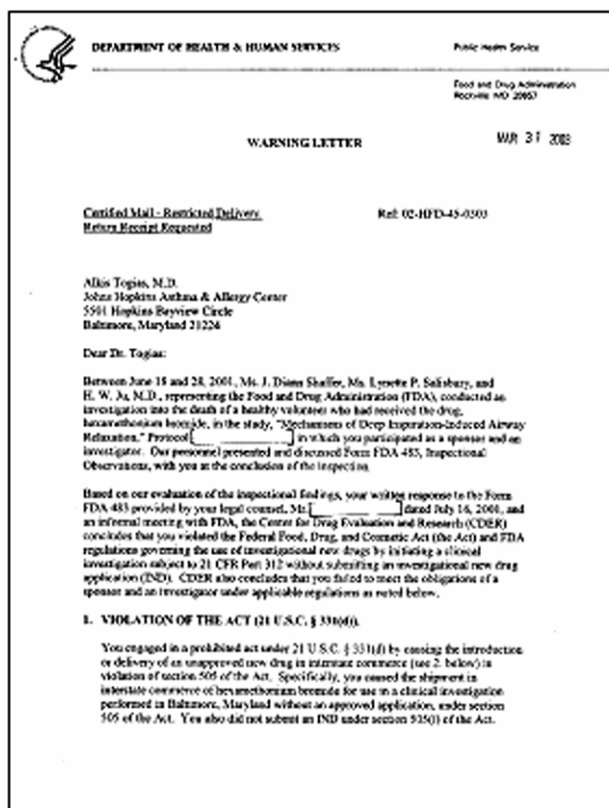


figure 17

The warning letters (see figure 17) are sent to websites that “may be engaged in illegal activity such as offering to sell prescription

<sup>301</sup> “US Congress urged over web pharmacy.” *Pharma Marketletter*. April 7, 2003.

<sup>302</sup> “Stores pop up to help seniors buy Canadian drugs.” *USA Today*. April 9, 2003.

drugs to U.S. citizens without valid (or in some cases without any) prescriptions.”<sup>303</sup>

Because state laws govern Internet pharmacies differently, the FDA is also actively engaged with a number of states to jointly pursue illegal Internet sites.<sup>304</sup> In addition to the FDA, the Canadian Office of Criminal Investigation (OCI) has manually reviewed thousands of websites that sell pharmaceuticals and participated in undercover buys from Internet pharmacies.

States and state medical boards are seeking to shut down illegal pharmacy websites, but their resources are limited. In some states, regulations have not sufficiently evolved to govern Internet pharmacies. States also face challenges when prosecuting Internet pharmacy owners because illegal sales and transactions often occur across state lines. According to William Hubbard at the FDA, “Doctors may or may not be in the same state where the patient lives, so states may have difficulty prosecuting under their existing criminal or consumer protection laws.”<sup>305</sup>

The American Medical Association (AMA) has issued a strong statement against fraudulent online pharmacies. “The AMA remains vigorously opposed to the illegal sale of prescription drugs via the Internet,” the association stated. “Because imported prescription drugs are not regulated or approved by the FDA, the quality is unknown. There are no guarantees that the patient is even receiving the drug they ordered.”<sup>306</sup>

Below are specific legal actions taken in the U.S. against Internet pharmacy operators:

---

<sup>303</sup> “Prescription Drug Reimportation.” *Federal Document Clearing House Congressional Testimony*. July 25, 2002.

<sup>304</sup> Hubbard, William K., Associate Commissioner for Policy and Planning at the FDA Testimony. “International Prescription Drug Parity.” Hearing Report by the House Government Subcommittee on Human Right and Wellness. *Federal Document Clearing House Congressional Testimony*. April 3, 2003.

<sup>305</sup> Ibid.

<sup>306</sup> “AMA Applauds FDA Action on Internet Prescribing.” American Medical Association. March 24, 2003.

- In April 2003, a restaurant owner, two of her sons and a Webmaster from Miami were convicted of running an unlicensed Internet pharmacy. The individuals were accused of dispensing drugs, including Cipro and “an assortment of thyroid drugs and painkillers,” without prescriptions through [younglifestyle.com](#) and [genericlifestyle.com](#). Betty Gorman, sons James and John and website designer Kenneth Dodd were convicted of fraud conspiracy and 121 counts of illegal sales. “Prosecutors insisted the business tried to avoid easy detection and kept operating after the Food and Drug Administration wrote a warning letter to Dodd in March 2001.”<sup>307</sup>
- In February 2003, *The Dallas Morning News* reported, “Nationwide, four doctors have had their licenses revoked for offering Internet prescriptions ... Last month, the Medical Board of California revoked a physicians’ license for prescribing medicine over the Internet without conducting physical examinations.”<sup>308</sup>
- In October 2002, a federal grand jury in Arizona “returned a 198 count indictment against Kwikmed, Inc., Cymedic Health Group, Inc., four owners of these corporations, and two physicians associated with the corporations.” The indictment alleged that the defendants sold prescription drugs, including Viagra, Celebrex, Xenical, and Propecia, on [Kwikmed.com](#) and [Cymedic.com](#). The websites did not require prescriptions and instead only required consumers to complete an online questionnaire.<sup>309</sup>

---

<sup>307</sup> “4 convicted in Miami of running unlicensed Internet pharmacy.” *The Associated Press*. April 4, 2003.

<sup>308</sup> “Is taking your ills online the best cure?” *The Dallas Morning News*. February 5, 2003.

<sup>309</sup> Hubbard, William K., Associate Commissioner for Policy and Planning at the FDA Testimony. “International Prescription Drug Parity.” Hearing Report by the House Government Subcommittee on Human Right and

- In September 2002, Carl David Roberts pled guilty to “distribution of controlled substances and conspiracy to violate the FD&C Act.” In January 2003, he was sentenced to a prison term of 57 months. Roberts administered an Internet site that sold prescription drugs, including Schedule II narcotics, without prescriptions. He received his drugs from suppliers in Mexico, the Netherlands, and Ecuador.<sup>310</sup>
- In June 2002, a Federal Court in Alabama jailed Anton Puztai for selling \$6.5 million worth of prescription drugs, including Viagra, to customers without prescriptions. The *Australian Financial Review* wrote, “even in a successful prosecution, the case illustrates the difficulty of fully stopping a scam on the Internet.”<sup>311</sup>
- In May 2002, New York prosecutors charged seven people and five companies with counterfeiting Viagra. Some of the pills had little of the drug, some had none. The investigation lasted nine months and uncovered a distribution ring that “stretched from fake pill mills in China and India to Internet sellers in Nevada and Colorado.”<sup>312</sup>
- In May 2002, James T. Kimball of Florida received a 13-year sentence and a \$25,000 fine by a U.S. District Court for selling a regulated pharmaceutical. He was found guilty of selling the prescription drug Deprenyl without a prescription. He used the Internet as a marketing tool. *St.*

---

Wellness. *Federal Document Clearing House Congressional Testimony*. April 3, 2003.

<sup>310</sup> Hubbard, William K., Associate Commissioner for Policy and Planning at the FDA Testimony. “International Prescription Drug Parity.” Hearing Report by the House Government Subcommittee on Human Right and Wellness. *Federal Document Clearing House Congressional Testimony*. April 3, 2003.

<sup>311</sup> “Jailed for Selling Viagra on Net.” *Australian Financial Review*. June 21, 2002.

<sup>312</sup> “Regulatory Issues: U.S. facing influx of counterfeit drugs.” *Medical Letter on the CDC & FDA*. July 21, 2002

*Petersburg Times* wrote, “Investigators calculated that Kimball’s illegal drug sales skyrocketed after he began marketing deprenyl on the Internet, and that his companies made \$ 2.67-million from 1991 to 1999.”<sup>313</sup>

- In May 2002, a Los Angeles pharmacy and two pharmacists were fined almost \$90 million in a California Board of Pharmacy proceeding for filling more than 3,500 illegal prescriptions over the Internet. “The case was brought under a state law that creates a requirement to fill a prescription pursuant to a good-faith medical examination. The Internet site concentrated on filling prescriptions for lifestyle drugs such as Viagra and Propecia,” according to Hubbard.<sup>314</sup>
- In March 2002, Pillbox Pharmacy, a Texas pharmacist, three doctors, two corporations, and another individual were charged in a Federal indictment “alleging that they conspired to illegally dispense drugs in connection with an Internet pharmacy operation.” Between January 1, 2000, and June 12, 2001, the defendants allegedly earned more than \$7.7 million from the Internet sales of just two drugs “without establishing a patient history, performing a mental or physical exam, using appropriate diagnostic or laboratory testing, or providing any means to monitor medication response.”<sup>315</sup>
- In February 2002, a jury in Alabama convicted Anton Pusztai and Anita Yates of 23 counts, including “conspiracy to commit violations of the Federal Food, Drug, and Cosmetic Act, conspiracy to commit money laundering, mail

---

<sup>313</sup> “Man sentenced to 13 years for drug sales.” *St. Petersburg Times*. October 20, 2000.

<sup>314</sup> Hubbard, William K., Associate Commissioner for Policy and Planning at the FDA Testimony. “International Prescription Drug Parity.” Hearing Report by the House Government Subcommittee on Human Right and Wellness. *Federal Document Clearing House Congressional Testimony*. April 3, 2003.

<sup>315</sup> *Ibid.*

fraud, dispensing misbranded drugs, and operating a drug repackaging facility not registered with the FDA.” They used a website called the Norfolk Men’s Clinic (Viagra.au.com) to sell Viagra, Propecia, Celebrex and Xenical. The Internet website was not licensed and did not require prescriptions. Yates and Pusztai ordered drugs from a local pharmacy in Alabama and a drug wholesaler, Yvan Degomme, in Miami. They wrote fake prescriptions using the names of doctors in Romania and Australia, and they enlisted a local doctor, Roger Eiland, to rewrite the prescriptions. “The couple and their employees then removed the drugs from their original bottles, repackaged them in plastic sleeves, and shipped them out to customers in the United States and elsewhere.”<sup>316</sup>

- In January 2002, Dr. Mario Alvarez-Valentin of Puerto Rico was sentenced to 26 months in jail for wire fraud in connection with the unlawful sale of Viagra over the Internet. He was contracted by Internet websites to authorize prescriptions for Viagra for U.S. consumers. “From April 2000 to January 2001, Alvarez, who was only licensed to practice in Puerto Rico, prescribed and caused to be prescribed more than 4,000 prescriptions for Viagra,” according to Hubbard. “In doing so, he violated the licensing laws of at least 20 states.”<sup>317</sup>
- On June 7, 2001, Gerald Bevins was convicted in U.S. District Court of “conspiracy to defraud the U.S. and commit offenses against the U.S. by introducing misbranded drugs into interstate commerce and smuggling.” Bevins was sentenced to serve twenty-four months in prison. He

---

<sup>316</sup> “Love and illegal drugs on the Internet; Investigator’s Reports; couple who met on Internet conspires to sell illegal drugs.” *FDA Consumer*. September 1, 2002.

<sup>317</sup> Hubbard, William K., Associate Commissioner for Policy and Planning at the FDA Testimony. “International Prescription Drug Parity.” Hearing Report by the House Government Subcommittee on Human Right and Wellness. *Federal Document Clearing House Congressional Testimony*. April 3, 2003.



operated the website Medications Express, which sold Mexican prescription pharmaceuticals without a prescription. Bevins, his wife, and his daughter traveled to Tijuana, Mexico to purchase the pharmaceuticals and smuggled them back into the U.S. “The drugs supplied by Bevins were labeled in Spanish,” according to Hubbard.<sup>318</sup>

## **D. CASE STUDIES**

In an investigation, GlobalOptions randomly selected and reviewed 178 websites registered in Canada, Mexico, India, Barbados, Kyrgyz Republic, United States, and other countries that sell pharmaceuticals. The full list of the 178 websites, including registration and contact information, is located in Appendix D.

Information on the websites was collected from a variety of sources, including databases contained in *WHOIS*. By searching *WHOIS*, basic information can be obtained on website domain names, including the registrant, administrative contact, and technical contact. The databases also include the addresses for the server where a web page is physically hosted (see figure 18).

It can be helpful to consumers to know where an Internet pharmacy is located to determine if drugs sold on a website are potentially dangerous. Knowing where a website is located, however, is no guarantee the drugs are shipped from that location or that the drugs are safe and effective. An Internet pharmacy registered in one country can theoretically sell prescription drugs manufactured in many others countries.

---

<sup>318</sup> Ibid.

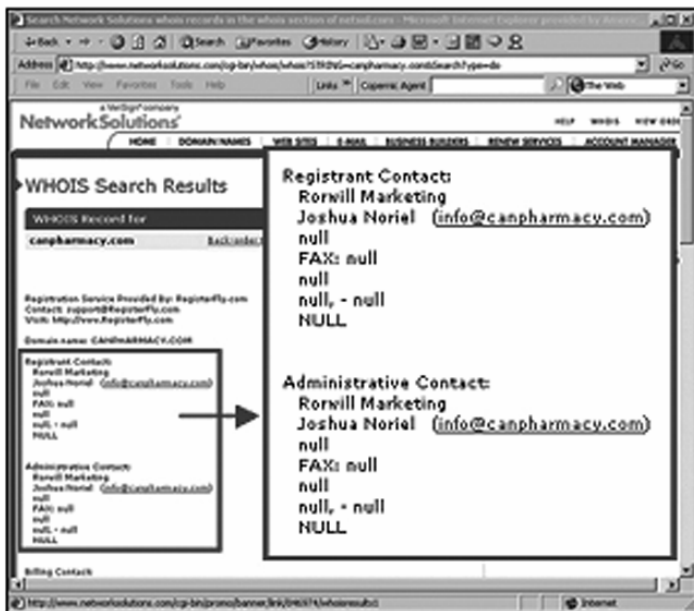


figure 18

The origins of the drugs sold on the websites mentioned in the case studies could not be traced because of false or misleading information published in the *WHOIS* databases.

The owners and designers of pharmacy websites often do not provide accurate information on who operates the websites, the companies that provide the pharmaceuticals, or information to contact a representative if a consumer has a medical question.

Besides the Verified Internet Pharmacy Practice Sites (VIPPS) certification by the U.S. National Association of Boards of Pharmacy, there is no source of information to help consumers identify the potential sources of pharmaceuticals sold on the Internet or the backgrounds and locations of those who sell the drugs.

The case studies describe a variety of methods used by pharmaceutical websites to deceive potential customers, hide identities, and defraud customers. The information presented does not necessarily represent any legal improprieties committed by the owners of the websites, although some actions clearly appear unethical and potentially dangerous.

## 1. Misleading “Canadian” Internet Pharmacies

Forty-five Internet pharmacies out of the 178 that were reviewed either advertised or appeared to be from Canada. Of these 45 websites, 15 (33 percent) appeared to falsely advertise their country of origin in an effort to attract American consumers or consumers in search of Canadian Internet pharmacies (see Appendix D for a detailed table of the 45 Canadian websites).

| Domain Name                  | Country of Origin |
|------------------------------|-------------------|
| bootikweb.com                | Barbados          |
| dsiparentconnectionstcmn.com | Barbados          |
| trustcdcanadianpharmacy.com  | Barbados          |
| canadarxfree.com             | Mexico            |
| canadarxconnection.com       | U.S.              |
| canadianpharmacylink.com     | U.S.              |
| canadian-prescriptions.net   | U.S.              |
| discountdrugsofcanada.com    | U.S.              |
| economedsplus.com            | U.S.              |
| canadameds.com               | Unknown           |
| canadian-drugs.com           | Unknown           |
| mapleleafmeds.com            | Unknown           |
| qualityprescriptiondrugs.com | Unknown           |
| canadarx.com                 | Unknown           |

figure 19

The 15 websites that falsely advertise their origin as Canadian (see figure 19) are either registered in the *WHOIS* database to an address outside of Canada or there was insufficient information to determine the country of origin.

It should be noted that registration information posted by Internet pharmacies in *WHOIS* databases is often falsified. Therefore, some of the other 45 “Canadian” websites may also not originate from Canada. Due to the lack of standards and regulations governing the Internet, a complete and accurate accounting of the 45 sites can only be obtained through extensive computer forensics.

### Canadarxfree.com

CanadaRxFree.com would appear to be a Canadian website, given its name and the Canadian flag on the homepage (see figure 20).

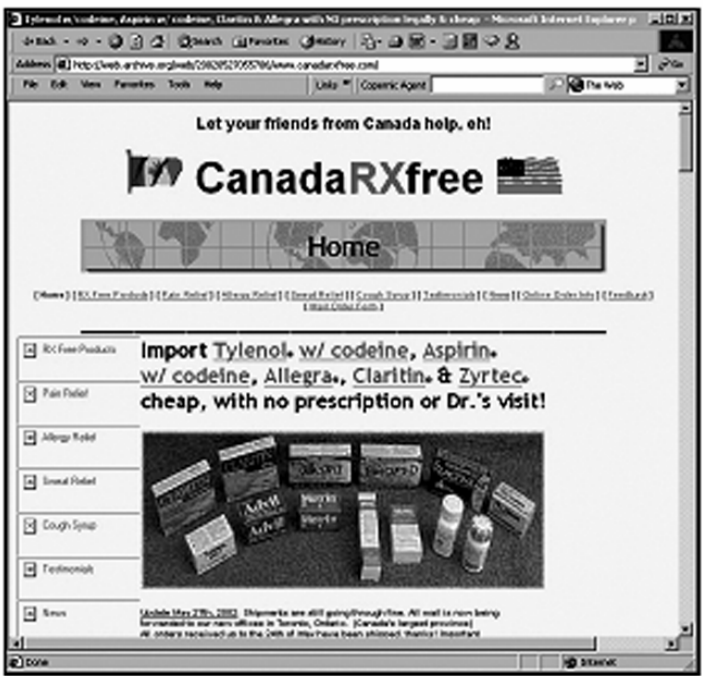


figure 20

The website, CanadaRxFree.com, however, is registered in Mexico to:

Juan Gonzales  
Av. Insurgentes #632  
Col. Lomas de Chapultepec  
Mexico City, DF 11850 MX

Further investigation is necessary to confirm the identity and location of the site owner and operator, but preliminary research shows this website is not based in Canada.

The website is currently not operating, but it may have been transferred to another domain name as often happens with Internet pharmacies. Internet pharmacy operators that fear legal actions will frequently move their webpages to new servers to avoid detection from authorities.

### Canadarxconnection.com

CanadarxConnection.com also prominently features Canadian and American flags and claims, “We are one of the largest Canadian pharmacies online, providing U.S.-approved, brand-name prescription drugs at savings up to 80%” (see figure 21). Despite its name and appearance, Canadarxconnection.com is registered in Florida.



figure 21

Whether or not the individual listed on the site is the actual registrant requires further investigation; however, the individual who uses that email address also posts heavily on the fetish newsgroup alt.sex.enemas. While posting in this newsgroup is not illegal, it demonstrates how little information about Internet pharmacies operators – in both Canada and abroad – is made available to American consumers.

## 2. 1-Buy-Viagra.com

The website 1-Buy-Viagra.com is an example of an Internet pharmacy owner who appears to have purposefully registered websites under false names to avoid detection (see figure 22).

WHOIS information for 1-Buy-Viagra.com lists Jack Harrison as the registrant. According to the WHOIS records, Jack Harrison lives at 3800 W. 110<sup>th</sup> Avenue in southeast Washington, D.C. However, 110<sup>th</sup> Avenue is a fictitious address. The phone number listed is also a fake number. It can be assumed that the name “Jack Harrison” is also probably false.

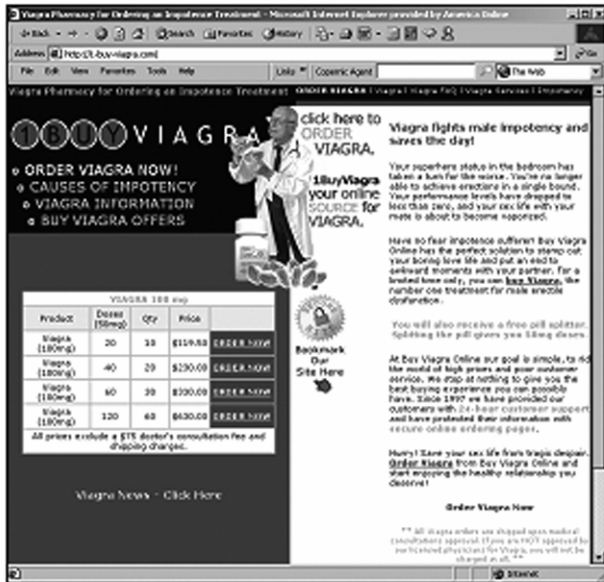


figure 22

The same individual who registered 1-Buy-Viagra.com also registered the following domain names:

- 1-viagra.com.
- buy-viagra-herbal-viagra-alternatives.com.
- cure-genital-warts-condylox.com.
- diflucan-vaginal-yeast-infections.com.
- impotence-erectile-dysfunction-male-impotency.com.
- natural-alternative-4-viagra.com.
- online-pharmacy-directory.com.
- viagra-order-online.com.

None of the addresses provided by the registrant appear to be real. All of the phone numbers have been falsified. The domain server on which all the WebPages are hosted, ns1.prihost.com, is registered to Private Hosting Inc, which is located in Phoenix, Arizona.

### **3. USA-Pharmacy-Online.com**

The website USA-Pharmacy-Online.com is an example of a lack of transparency in the ownership and operation of affiliate websites (see figure 23).

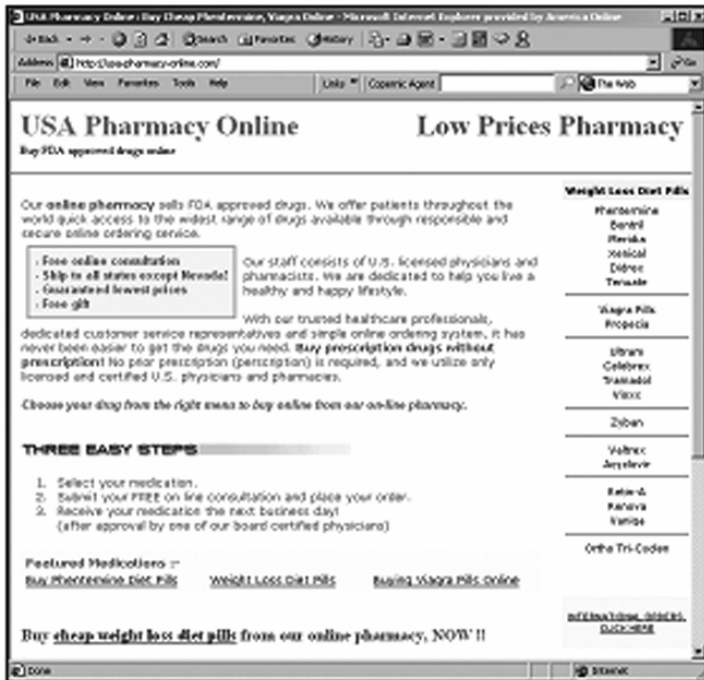


figure 23

USA-Pharmacy-Online.com is an affiliate of USAPrescription.com from Davie, Florida (see Chapter VIII, Section A-6 for a discussion of affiliates). USA-Pharmacy-Online.com is run by Rickson Rodricks of India. The WHOIS database, however, lists “Dinkar Bhogate” as the registrant; no other information is provided in the database besides the e-mail address rickson7@yahoo.com.

The webpage advertises that it offers “patients throughout the world quick access to the widest range of drugs available through responsible and secure online ordering service.” The website does not advertise anywhere on the page that it is an affiliate of USAPrescription.com until consumers get to the order form.

Individuals have posted on newsgroups that Rodricks Webpages should be avoided at all costs. One posting accused Rodricks of running “a strange scam of some sort.” Another posting stated his advertisements “should have been enough to keep you from giving



him your money! EGADS. In fact, it should have been enough to send you running in the other direction.<sup>319</sup>

Rx Network, which fills prescriptions for USAPrescription.com and other Internet pharmacies, has had legal problems. The Florida Board of Pharmacy fined Rx Network \$48,000 for filling excessive quantities of diet pill prescriptions.<sup>320</sup>

#### 4. 247-Pharmacy.com

247-Pharmacy.com, like many Internet pharmacies, misrepresents the law and regulations regarding the importation of pharmaceuticals in the U.S.

247-Pharmacy.com, registered in Costa Rica, sells pharmaceuticals such as Claritin, Codeine, Propecia, Valtrex, and Viagra. The site advertises, “No Prescription needed – Easy to order – No Medical Forms to complete – Free delivery of drugs – Discrete packaging.”

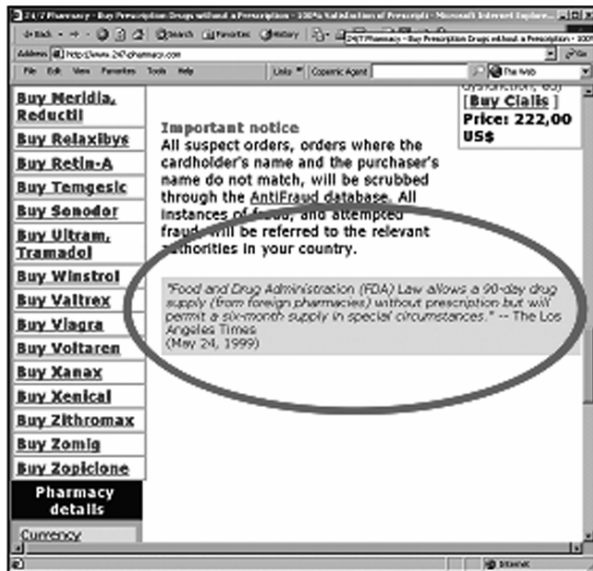


figure 24

<sup>319</sup> <http://www.klausdahl.com/forum/>.

<sup>320</sup> “State Fines Online Medicine Service.” *Sun-Sentinel*. March 7, 2003.

At the bottom of the home page is written, “Food and Drug Administration (FDA) Law allows a 90-day drug supply (from foreign pharmacies) without prescription but will permit a six-month supply in special circumstances.’ – The *Los Angeles Times* (May 24, 1999)” (see figure 24).

While the information quoted is correct, it is misleading because it is against the law to purchase prescription drugs from a non-U.S. Internet pharmacy and have them shipped into the country. Furthermore, it is illegal to purchase pharmaceuticals without a prescription.

A disclaimer on the webpage states, “In the event the requested products are detained and confiscated by foreign customs the loss lies completely with the purchaser.” The operator of this website clearly understands that mailing the pharmaceuticals to U.S. customers is illegal, despite the misinformation included on the site.

## **5. Pharmica.Com**

When American consumers visit U.S. Internet pharmacies, there is no guarantee that the operator is a U.S.-licensed pharmacist with a clean record.

Pharmica.com is run by Michael Lorne Bezonsky. The website is registered to the Pharmica Online Pharmacy at the following address:

520 Washington Bl., Suite 800  
Marina Del Rey, CA 90292

A search of the address showed that Mr. Bezonsky is a resident of the Marina Del Rey address, which is also the location for Pharmica Online Pharmacy (see figure 25). He has several e-mail addresses, including, [pharmica@aol.com](mailto:pharmica@aol.com), [rx@pharmica.com](mailto:rx@pharmica.com), [support@pharmica.com](mailto:support@pharmica.com).



figure 25

Mr. Bezonsky, 43, who filed for bankruptcy, is not a licensed pharmacist in California. He operates a variety of websites and has registered numerous businesses with the California Secretary of State.

In 1998, Bezonsky filed for bankruptcy in the United States Bankruptcy Court in the Central District of California. The bankruptcy public record lists Bezonsky as “Doing Business As” M.S.B. Management Inc. and Sportsopedics Inc. The record states his assets totaled \$25,000 while his liabilities are \$126,506.<sup>321</sup>

<sup>321</sup> California Bankruptcy Court Case (No. 98-32593), filed June 5, 1998.

## E. TERRORIST USE OF THE INTERNET

Just as the Internet has become an integral part of the modern world, so too has it become an indispensable tool for terrorists to anonymously communicate worldwide, raise funds, disseminate propaganda, and plan and carry out attacks. In the future, the Internet may be even used as a weapon to mount a cyber attack.

The September 11<sup>th</sup> hijackers relied on computers at libraries and photocopying centers “to communicate by e-mail with one another and other al Qaeda operatives overseas,” according to authorities.<sup>322</sup>

The al Qaeda operatives also “sent each other thousands of messages in a password-protected section of an extreme Islamic Web site ... [and] communicated using free web-based e-mail accounts provided by a popular Internet company,” according to the Anti-Defamation League.<sup>323</sup>

Buck Revell, former Chief of Operations at the FBI, said the Internet “allows even small or regional terrorist groups to have a worldwide C3I (Command, Control, Communication and Intelligence) system, and propaganda dissemination capability.”<sup>324</sup>

Millions of dollars have been raised by terrorists from websites. Money for Hamas was collected from a website run by a charity in Texas named the Holy Land Foundation for Relief and Development (HLF). “The HLF website, which is no longer online,” ADL explained, “gave little indication that the charity funded terrorism.”<sup>325</sup>

---

<sup>322</sup> “FBI’s reading list worries librarians.” *USA TODAY*. December 17, 2002.

<sup>323</sup> “Jihad Online: Islamic Terrorists and the Internet.” Anti-Defamation League. 2002. [http://www.adl.org/internet/jihad\\_online.pdf](http://www.adl.org/internet/jihad_online.pdf).

<sup>324</sup> “A year after 9/11: where are we now? The dissention over technology has migrated from the East to the West over the last 12 months.” *Communications of the ACM*. September 1, 2002.

<sup>325</sup> “Jihad Online: Islamic Terrorists and the Internet.” Anti-Defamation League. 2002. [http://www.adl.org/internet/jihad\\_online.pdf](http://www.adl.org/internet/jihad_online.pdf).

Hamas supporters also managed an Internet hosting service, according to the ADL. “Though this service, InfoCom Corporation, does not itself spread propaganda,” ADL said, “it has hosted the websites of IAP, the Holy Land Foundation for Relief and Development (HLF), and other Muslim propaganda outlets, such as the television station Al-Jazeera.”<sup>326</sup> Additionally, InfoCom is “the registered owner of ‘.iq’ – the Internet country code for Iraq.”<sup>327</sup>

The InfoCom office in Dallas was raided by U.S. authorities and its export privileges were revoked “on the basis of suspicions that InfoCom violated” the “law by shipping computers to Libya and Iran,” two states that sponsor terrorism.<sup>328</sup>

Government authorities have also frozen the assets of other charities that use the Internet to funnel money to terrorism, including the Benevolence International Foundation (BIF), the Global Relief Foundation, and the Al-Haramain Foundation.<sup>329</sup>

BIF was started by Saudi Sheik Adil Abdul Galil Batargy, a bin Laden associate. The organization generated millions for al Qaeda and sent more than \$600,000 to Chechen extremists.<sup>330</sup>

The BIF website provided a bank account number where funds could be directly wired by donators and included information on how money could be donated with a credit card (see figure 26).

Al Qaeda operatives have registered or hosted websites in many countries, including Italy, Sweden, England, Poland, Malaysia, and the U.S.<sup>331</sup>

---

<sup>326</sup> “US pulls the plug on Muslim websites.” *The Guardian*. Sept. 10, 2001.

<sup>327</sup> Ibid.

<sup>328</sup> “Jihad Online: Islamic Terrorists and the Internet.” Anti-Defamation League. 2002. [http://www.adl.org/internet/jihad\\_online.pdf](http://www.adl.org/internet/jihad_online.pdf).

<sup>329</sup> Ibid.

<sup>330</sup> Ibid.

<sup>331</sup> Ibid.

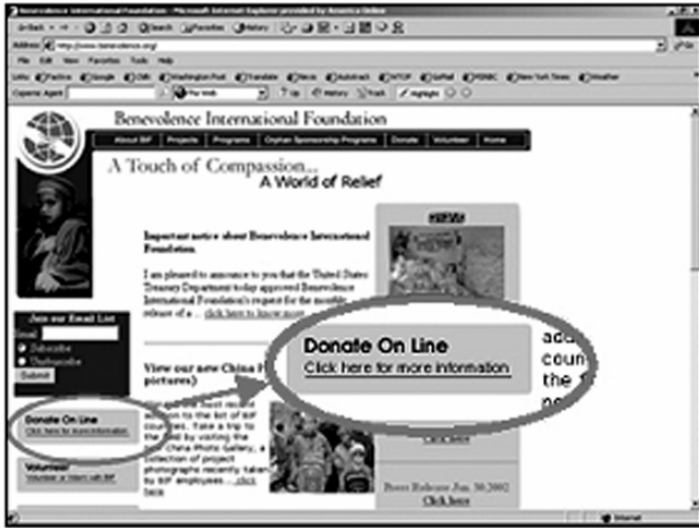


figure 26

According to Alan Slobodin, senior oversight counsel for the Energy and Commerce Subcommittee on Oversight and Investigations, Internet sales of counterfeit drugs have benefited terrorist groups in the Middle East. There is strong evidence, according to the FDA's *Warning Letter Bulletin*, that “profits from some Rx drug counterfeiting, and even cosmetics counterfeiting, is supporting terrorist groups.”<sup>332</sup>

Identifying and monitoring websites that funnel money to terrorist organizations is a never-ending challenge. Websites operated by terror groups have been removed from servers “only to reappear a short time on the servers of another Internet Service Provider,” the ADL said.<sup>333</sup>

There is evidence terrorists have considered a cyber attack against high value targets. The U.S. utility industry thought information on its control system was safe. But documentation for the control

<sup>332</sup> “Cyber Letters to Web-Based Pharmacies Not Seen Halting Counterfeiting, Illegal Rx’s.” *Warning Letter Bulletin*. October 22, 2001.

<sup>333</sup> “Jihad Online: Islamic Terrorists and the Internet.” Anti-Defamation League. 2002. [http://www.adl.org/internet/jihad\\_online.pdf](http://www.adl.org/internet/jihad_online.pdf).

systems “turned up in al Qaeda safe houses in Afghanistan,” *Mechanical Engineering* reported.<sup>334</sup> It turns out the same hardware, software, documentation, and training used to manage the U.S. power grid also controls the grids in Iraq, Saudi Arabia, Indonesia, and Iran.

---

<sup>334</sup> “SCADA vs. the hackers.” *Mechanical Engineering*. December, 2002.





## **IX. MAIN TERRORIST THREATS TO THE MEDICINE SUPPLY**

The following chapter analyzes the primary terrorist threats to America's medicine supply that were outlined briefly in Section III. The three main threats identified by GlobalOptions include: terrorists producing and selling harmful pharmaceuticals; terrorist attacks financed from the sale of counterfeit pharmaceuticals; and a terrorist attack using pharmaceuticals laced with poisons or pathogens.

### **A. TERRORISTS PRODUCING AND SELLING HARMFUL PHARMACEUTICALS**

International legal and diplomatic pressure on state sponsors of terrorism has led to a decline in funding for terrorist organizations. To replace the money, terror groups have sought alternative sources of money, including the sale of counterfeiting products, smuggling, coupon scams, and narcotics trafficking. Terrorists have also turned to pharmaceuticals to generate funds.

As terror groups increasingly penetrate the counterfeit pharmaceutical market, there is a threat the drugs they distribute will be fabricated with injurious chemicals, causing harm to the public. Terrorist organizations are more violent than other criminal elements and are more inclined to produce dangerous counterfeit drugs.

### **B. TERRORISTS RAISING FUNDS FROM PHARMACEUTICALS FOR ATTACKS**

Terrorist groups are attracted to the pharmaceutical market for the same reasons as organized crime networks. The production and distribution of counterfeit drugs is highly profitable and relatively

low risk. Although no evidence has been uncovered that directly links terror groups to the production of counterfeit drugs, it is only a matter of time before this will occur.

Terrorist organizations are already involved in the counterfeiting of goods, such as videotapes, T-shirts, and computer software. Producing counterfeit drugs is an obvious method to generate funds.

Hezbollah generated millions of dollars by smuggling pharmaceuticals from Canada to clandestine laboratories in the U.S. to produce methamphetamine. There is evidence terrorists have also used the Internet to sell counterfeit drugs. With each additional moneymaking venture, the terrorists are learning how to gain access to the industry and expand their illegal operations.

Terrorist groups are being drawn into the counterfeit pharmaceutical market through alliances with organized crime, which already is active in the illegal production and distribution of drugs. From the alliances, terrorists are learning how to set up drug operations and launder profits, while organized crime syndicates acquire clandestine skills. As a result of the growing partnerships, U.S. Deputy Attorney General Michael Chertoff believes it no longer makes sense to “differentiate between terrorism and organized crime and drug dealing.”<sup>335</sup>

Neil Livingstone wrote that money is the mother’s milk of terrorism. The international pharmaceutical counterfeit market is a potential bonanza for terrorists. As much as five to eight percent of all drugs produced are counterfeit. In developing countries, the quantity of fake drugs is often much higher. There is a threat that terrorist organizations will muscle into the counterfeit drug market and generate tens of millions of dollars to bankroll attacks against the United States and other countries.

---

<sup>335</sup> “Drugs and Terrorists Groups Go Together.” October 22, 2001. <http://www.inq7.net>.

## **C. TERRORISTS LAUNCHING AN ATTACK USING THE MEDICINE SUPPLY**

Terrorists have not launched an attack using an adulterated medicine, but step-by-step they are gaining expertise on the production and distribution of pharmaceuticals. It is likely only a matter of time before such an incident occurs.

To finance operations, terrorist groups have smuggled pharmaceuticals and profited from counterfeit drugs sold on the Internet. Terrorist groups affiliate with organized crime groups, which are actively involved in counterfeiting pharmaceuticals.

Leaders and top aides of many terror groups, some with graduate educations in medicine and biology, seek to raise death tolls and destruction by mounting attacks with chemical and biological weapons. Strikes have already been attempted using cyanide and ricin, which are likely ingredients in a terrorist attack.

To weaponize poisons, terrorist organizations have established clandestine laboratories. A cream allegedly produced with cyanide that kills on contact was intercepted by authorities in Turkey. Mixing cyanide or ricin with pharmaceuticals does not require special equipment or knowledge. Product tampering cases in the past demonstrate the ease with which it is possible to contaminate pharmaceuticals.

Terrorists could lace pharmaceuticals with poisons or pathogens and place them on pharmacy shelves. Each bottle becomes a ticking time bomb. For large-scale attacks, terrorists could readily purchase machines to produce thousands of tainted pills. Terrorists could also obtain the same packaging equipment available to legitimate pharmaceutical manufacturers.

Instead of a handful of adulterated bottles, terrorists could produce and distribute thousands of containers simultaneously. More alarming, multiple pharmaceuticals could be targeted (*i.e.*, bottles of Celebrex, tetracycline, and Viagra could be adulterated and

distributed at the same time). The public would suspect all drugs were tainted with poisons, undermining the integrity of the medicine supply system. In addition to deaths from swallowing poisoned drugs, many others would likely die from avoiding pharmaceuticals believed to be tainted.

Terrorists want to maximize fear in attacks. A terrorist attack on the medicine supply would produce widespread panic and confusion. The initial Tylenol drug tampering case, in which seven people were killed, generated more news coverage than any incident since President Kennedy's assassination two decades earlier. Public confidence in pharmaceuticals was undermined for months after the incident.

Similarly, the letters containing anthrax mailed to the media and government officials dominated news internationally for weeks and forced new mailroom procedures everywhere. The potential economic consequence of an attack could be staggering. The cost to Johnson & Johnson to remove and repackage the Tylenol in 1982 was \$100 million. If multiple drugs had been tampered with, the expense would have likely reached into the billions of dollars to replace and repackage the suspect pharmaceuticals.

Below are three terrorism scenarios:

### **1. Attack from Canada**

A terrorist attack could originate in Canada because of the large number of terrorist groups operating in the country, inadequate border security between the U.S. and Canada, and a history of pharmaceutical smuggling by terrorists.<sup>336</sup>

Canada's liberal immigration laws and generous welfare benefits have been a magnet, attracting terrorist organizations around the world. The Canadian Security Intelligence Service has

---

<sup>336</sup> See Operation Mountain Express

acknowledged the presence of 50 terrorist organizations on its soil, including al Qaeda, which have vowed to strike the U.S.

Hezbollah, which is reported to be working closely with al Qaeda, has established an “enormous infrastructure” in Canada, according to security officials. Hezbollah has operated a drug ring, smuggling Canadian pharmaceuticals into the U.S.

The border between Canada and the United States stretches 4,000 miles, about twice the distance of the U.S.-Mexican border. According to U.S. Senator John Kyl, “There is literally nothing to stop a terrorist coming across our border.”<sup>337</sup>

In a terrorist attack involving the medicine supply, terror groups could potentially manufacture pharmaceuticals tainted with poisons or pathogens in Canada or mail the drugs to Canada from a foreign source. By producing false labels and packaging, the drugs would appear to be authentic. The terrorists, relying on previous experience, could then smuggle the contaminated drugs across the porous, unsecured border into the U.S.

Terrorists could generate bogus pedigree papers. The false papers would allow the terrorists to introduce the poisoned drugs, through wholesalers, into the U.S. medicine supply system. In Florida, a grand jury report stated, “uneducated, inexperienced, ill-informed rank amateurs with no pharmaceutical experience, many with criminal records, make up a sizable portion of [the state’s] drug wholesalers.”<sup>338</sup>

Once the poisoned drugs enter the system, they might be exchanged many times before sold to a retailer. By then, the terrorists would have slipped back across the border to Canada.

---

<sup>337</sup> “Homeland Security Takes Over at Borders.” *The Arizona Republic*. February 27, 2003.

<sup>338</sup> “First Interim Report of the Seventeenth Statewide Grand Jury.” Case No: SCO2-2645. Supreme Court of the State of Florida.

## **2. Attack from Mexico**

Millions of Americans flood across the border into Mexico to purchase pharmaceuticals, creating an opportunity for terrorists to launch a terrorist attack.

Mexico's pharmaceutical industry is largely unregulated. Almost any drug can be obtained for a price. In Tijuana alone, there are more than 1,400 pharmacies that cater to U.S. citizens. A terrorist attack using pharmaceuticals would require a terrorist to smuggle poisoned drugs into Mexico and then sell them to one of the many unregulated Mexican pharmacies along the border. Authorities estimate as many as 25 percent of the pharmaceuticals sold in Mexico are counterfeit or substandard.

Once the poisoned drugs enter the Mexican retail market, many would be purchased by Americans crossing the border. One study found that 25,000 to 30,000 Americans walk from Laredo, Texas, across the border into Nuevo Laredo on Saturday afternoons, of which 25-40 percent purchase pharmaceutical products.<sup>339</sup> About 60 percent of the purchases are by Texans and the rest are by people throughout the U.S.

For pharmacies that sell prescription drugs in Mexico, it is not required to have a university-educated pharmacist on staff. As a result, clerks, who may have limited knowledge of medicine, generally manage these establishments.

In 1995, as many as 11,000 Valium tablets were sold each day in Nuevo Laredo. A terrorist attack in Mexico using a popular drug, such as Valium, could kill hundreds or even thousands of people. After selling the drugs, the terrorists would have time to escape before the first death or injury occurred.

---

<sup>339</sup> Shepherd, Marvin, Ph.D., Director, Center For Pharmacoeconomic Studies/College of Pharmacy University of Texas Austin. "Imported Pharmaceuticals." Testimony before the House Energy and Commerce Committee. *Federal News Service*. June 7, 2001.

### **3. Attack from the Internet**

A terrorist attack using the Internet would be the lowest-risk to terrorists, while potentially being the most deadly for consumers. A terrorist organization, with limited technical skills, could establish an online pharmacy, generate a customer base, and then deliver tainted pharmaceuticals to unsuspecting consumers from almost anywhere in the world.

Government officials are aware of the threat of an Internet-based terrorist attack. Following the anonymous attacks with letters laced with anthrax, the public purchased large quantities of Cipro, an antibiotic, to treat anthrax. Officials openly stated their fear that terrorists would attempt to sell adulterated Cipro over the Internet.

Terrorists have become experts in using the Internet, which has become an indispensable tool for them to anonymously communicate worldwide, raise funds, disseminate propaganda, and plan and carry out attacks.

From any computer hooked to the Internet, terrorists could easily create a false Internet pharmacy that appeared to originate from the U.S. or Canada. Many Internet pharmacies already mislead customers by displaying Canadian and American flags, even though the sites are hosted in other countries.

When registering the domain name, the terrorists could provide false or misleading information – just as many website pharmacy operators do – to hide their identities.

By offering lower prices than drugs on other websites, terrorists would quickly receive a large number of orders from consumers. The terrorists could then select U.S. addresses and simultaneously express mail the poisoned drugs to America.

The volume of pharmaceuticals shipped through the international mail is enormous, making detection of pharmaceuticals by authorities nearly impossible. Authorities have little or no advance information on mail shipments, and many express mail packages

falsely claim the contents are documents when, in fact, pharmaceuticals are inside.

The terrorists could further increase the amount of fear, public confusion, and deaths by contaminating several pharmaceuticals with poisons and distributing them to hundreds of locations.

The Internet could also be used to purchase pharmaceutical manufacturing equipment. E-Bay and other websites regularly advertise such equipment. Due to the widespread availability of advanced packaging and labeling technology, terrorists could undermine tamper-resistant measures that have been in place for the past twenty years.



## **X. CONCLUSION**

“The threat of a terrorist group using a nuclear, biological or chemical weapon of mass destruction in the United States is real. It is not a matter of ‘if’ but rather ‘when’ such an event will occur.”

*Congressional investigator John Sopko, testifying before the Senate Governmental Affairs Committee on March 28, 1996.*

Sopko’s words in 1996 proved to be a prescient warning about the threat of chemical and biological terrorist attacks. Since September 11, 2001, terror groups have attempted numerous strikes using cyanide and ricin.

In early 2002, authorities disrupted an al Qaeda attack using cyanide against the U.S. embassy in Rome. Months later, officials in London thwarted a planned attack by terrorists using pressurized canisters of cyanide in London’s subway system. Scotland Yard’s anti-terrorism branch and MI5 discovered in January 2003 a makeshift laboratory erected by terrorists in East London to produce ricin. The following month, French officials found traces of ricin in the Gare de Lyon railway station in Paris.

Suicide bombers in Israel have laced nuts and bolts, which are packed around explosives to boost the lethality of an attack, with rat poison, an anti-coagulant. Victims who survive an initial attack will bleed uncontrollably from their wounds. Al Qaeda and Hezbollah are reportedly cooperating on a joint chemical weapons laboratory to produce weapons using cyanide and a nerve agent.

With each new incident, terrorists are learning and refining methods to mount chemical and biological terrorist attacks. As terror groups seek novel and more deadly strikes, authorities fear they may launch an attack against the United States using pharmaceuticals laced with poisons or pathogens.

The FDA's Counterfeit Drug Working Group met after the September 11 terrorist attacks to examine potential threats to the United States. The discussion, according to news accounts, quickly turned to drug counterfeiting and terrorism. Benjamin England, counsel to the Associate Commissioner for Regulatory Affairs, warned, "Terrorists could tamper with drugs in several ways." They could "infiltrate the manufacturing facility, tamper with the product while it is in commerce, or knock it off and introduce it downstream."<sup>340</sup> On Capitol Hill, Congresswoman Diana DeGette discussed the possibility of terrorists using the Internet to advertise Cipro and then sending a counterfeit drug adulterated with a poison.

Industry executives have also raised concerns about terrorist attacks against the medicine supply. "It's no longer inconceivable that a terrorist ... could introduce toxins or bio-organisms into counterfeit pharmaceuticals," said William Rastetter, Chairman of IDEC Pharmaceuticals.<sup>341</sup>

Terrorist groups are incrementally gaining knowledge about the pharmaceutical industry, foreshadowing the day when they may mount an attack using counterfeit drugs adulterated with poisons or pathogens. Contrary to conventional wisdom, many terrorist organizations have specialized education and training in biology, medicine, and related fields.

Already the Irish Republican Army has funded a clandestine laboratory in Florida to manufacture a counterfeit, anti-parasite drug for livestock. With profits from the operation, IRA members purchased arms and other drugs to sell on the black market in the U.K.

In Canada, Hezbollah gained access to large quantities of pseudoephedrine, an active ingredient in many common cold remedies, and then smuggled the drug across the border to

---

<sup>340</sup> "Price Differentiation Can Encourage Counterfeiting: FDA Reevaluating Approach To Fake Drugs." Drug Utilization Review. May 1, 2002.

<sup>341</sup> "Pharmaceuticals From Abroad; A Looming Threat to U.S. Consumers." *The San Diego Union-Tribune*. January 2, 2002.

underground laboratories in the United States for production of methamphetamine, or “speed.”

Terrorist groups in the Middle East are profiting from the sale of counterfeit drugs sold on the Internet, according to the Senior Oversight Counsel for the House Energy and Commerce Subcommittee on Oversight and Investigations.

Terrorist groups are being drawn into the counterfeit pharmaceutical market through alliances with organized crime, which already is active in the illegal production and distribution of drugs. From these alliances, terrorists are learning how to set up drug networks and launder profits, while organized crime syndicates acquire clandestine skills.

Terrorists seek to create fear and chaos. Past incidents of drug tampering, while not specifically linked to terrorism, demonstrate the potential for such attacks to produce mass panic. In 1982, after bottles of Tylenol tainted with cyanide were sold in Illinois, killing seven people, Johnson & Johnson recalled twenty-two million bottles at a cost of more than \$100 million.

A terrorist attack against America’s medicine supply could originate in Canada because of the large number of terrorist groups operating in the country, inadequate border security between the U.S. and Canada, and a history of pharmaceutical smuggling by terrorists. The border between Canada and the United States stretches 4,000 miles, about twice the distance of the U.S.-Mexican border. Terrorists could manufacture counterfeit drugs with poisons. By producing false labels and packaging, the drugs would appear to be authentic. The terrorists, relying on previous experience, could then smuggle the contaminated drugs across the porous, unsecured border into the U.S.

Authorities in Mexico may fare little better than their northern counterparts when it comes to stopping a terrorist attack. Millions of Americans annually flood across the border into Mexico to purchase pharmaceuticals, creating an opportunity for terrorists to launch an attack against the medicine supply system. In Tijuana

alone, there are more than 1,400 pharmacies that cater to U.S. citizens. In a terrorist attack, poisoned counterfeit drugs could be sold to one of the many unregulated Mexican pharmacies along the border. Once the tainted drugs enter the Mexican retail market, many would be purchased by Americans crossing the border.

Terrorists have become experts in using the Internet, which has become an indispensable tool for them to anonymously communicate worldwide, raise funds, disseminate propaganda, and plan and carry out attacks. A terrorist organization, with limited technical skills, could set up an online pharmacy, generate a customer base, and then deliver tainted goods by mail from virtually anywhere in the world.

The volume of pharmaceuticals shipped through the international mail is enormous, making detection of pharmaceuticals by officials nearly impossible. Authorities have little or no advance information on mail shipments, and many express mail packages falsely claim the contents are documents when, in fact, pharmaceuticals are inside.

Terror groups can readily purchase machines to produce tainted pills. E-Bay and other websites regularly advertise the sale of pharmaceutical manufacturing equipment. Due to the widespread availability of advanced packaging and labeling technology, terrorists could undermine tamper-resistant measures that have been in place for the past twenty years.

Terrorists have launched attacks by placing poisons in food products. Terrorists have created a cosmetic cream mixed with cyanide that kills on contact. To paraphrase John Sopko, it may not be a matter of “if,” but rather “when” terrorists will mount an attack with drugs tainted with poisons or pathogens.

## APPENDIX A – COUNTERFEIT PHARMACEUTICAL INCIDENTS

Below is a partial list of incidences of counterfeit pharmaceutical distribution:

| Date           | Location | Case  |
|----------------|----------|---|
| May 2002       | U.S.     | Eli Lilly notified pharmacy professionals of several product tampering incidents involving Zyprexa (olanzapine). The drug is used to treat schizophrenia and acute bipolar mania. Bottles with 60 tablets had been emptied and filled with aspirin. Counterfeits were found in Minnesota and Wisconsin. <sup>340</sup>  |
| May 2002       | U.S.     | GlaxoSmithKline alerted pharmacies that bottles of Ziagen (abacavir sulfate) had been tampered with and were incorrectly labeled as Combivir (lamivudine plus zidovudine). The drug is used to treat HIV. Drugs were found in four states. <sup>341</sup>   |
| June 2002      | U.S.     | Johnson & Johnson announced that one lot of its anemia treatment drug Procrit was found in Texas to have been "greatly reduced" in potency. <sup>342</sup>  |
| July 2001      | India    | "[D]rug inspectors along with member of the Delhi Medical Association (DMA) collected 53 samples from different locations in and around Bhagirath Place. It is a wholesale market notorious for its second hand drugs and scrap market in Delhi. Most of these samples belonged to well-known companies such as Pfizer, Novartis, Lupin, Dabur, and Glaxo. At least nine samples had no medical ingredient and four had it in negligible amounts." <sup>343</sup> |
| July 2000      | Italy    | "Italian authorities seized two tons of raw materials for counterfeit drugs transported from India and China for repackaging in Europe and sale in North and South America." <sup>344</sup>   |
| February 2002  | India    | Fake drugs were seized in Jagatpuri in East Delhi, included 10,000 vials of Netromycin, antibiotic. <sup>345</sup>  |
| December 2002  | U.S.     | US Customs seized thousands of counterfeit OxyContin tablets at airports in New York and Boston. <sup>346</sup>   |
| December 2001  | Colombia | Authorities seized counterfeit vitamins and antihistamine pills made from dyed cement. <sup>347</sup>   |
| September 2001 | U.S.     | U.S. Customs seized 36,000 counterfeit Viagra pills concealed in stuffed toy animals from China. <sup>348</sup>   |
| 1999           | U.S.     | FDA attributed 17 deaths to a suspected counterfeit drug, antibiotic gentamicin sulfate. <sup>349</sup>   |
| 1998           | Brazil   | Three Brazilian men died from taking a fake version of a prostate cancer drug Androcur (cyproterone). <sup>350</sup>  |

<sup>340</sup> Congressional Testimony, John Theriault, Senate Special Aging Committee. July 9, 2002.

<sup>341</sup> Congressional Testimony, John Theriault, Senate Special Aging Committee. July 9, 2002.

<sup>342</sup> "J&J's Procrit Anemia Drug Found to Be Diluted." *Los Angeles Times*. June 8, 2002.

<sup>343</sup> "Licensed To Kill." The Centre for Science and Environment's *Health and Environment Newsletter*. July/August 2002.

<sup>344</sup> "Licensed To Kill." The Centre for Science and Environment's *Health and Environment Newsletter*. July/August 2002.

<sup>345</sup> "Fake Drugs Thrive in City Marts." *The Times of India*. February 20, 2002.

<sup>346</sup> "Fake Oxycontin Seized; Digest; Customs Services Seizes Counterfeit Drugs." *Chain Drug Review*. January 20, 2003.

<sup>347</sup> "Fake Drugs a Global Problem on the Rise." *United Press International*. April 19, 2002.

<sup>348</sup> Congressional Testimony, John Theriault, Senate Special Aging Committee. July 9, 2002.

<sup>349</sup> "Antibiotic Imports May Have Killed 17." *USA Today*. May 9, 2000.

| Date           | Location | Case  |
|----------------|----------|---|
| 1998           | Brazil   | Fake contraceptive pills thought to be a popular brand, Microvlar, were distributed in Brazil. <sup>351</sup>   |
| 1995           | Nigeria  | 2,500 people died from taking a fake meningitis vaccine. <sup>352</sup>   |
| 1995           | Haiti    | 89 people died from a counterfeit cough syrup containing anti-freeze. <sup>353</sup>  |
| September 1991 | China    | A hospital near Chongqing provided a bottle to a patient of what was supposed to be albumin, a blood protein. The bottle contained toxic liquid, according to the family, and the patient died. The family said they caught the hospital director discarding the albumin bottle in a public toilet after the death. <sup>354</sup>  |
| 1985-1991      | U.S.     | Flavine International, a New Jersey company, imported an unapproved foreign product and substituted it for an approved product. The drugs included oxytetracycline, gentamicin sulfate, and sulfamethazine. "To fill these orders, defendants bought drugs from an unapproved overseas manufacturer, falsely declaring their origin." <sup>355</sup> The company "also replaced the manufacturers' certificates of analysis with fraudulent certificates of analysis that falsely claimed that the drugs were made by an approved manufacturer." <sup>356</sup> |
| November 1984  | U.S.     | 1 million Ovulen pills recalled after two lots of counterfeit pills were introduced into the pharmaceutical market. <sup>357</sup>  |
| Mid 1980s      | U.S.     | An estimated two million counterfeit, sub-potent birth control pills were sold in the U.S., which contained estrogen or no estrogen. <sup>358</sup>   |

<sup>350</sup> "A Dose Of Unreality As More Counterfeit Drugs Enter Us Market, Officials Say Patients Face Serious Risk Counterfeit Drugs Putting More Us Patients At Risk." *The Boston Globe*. August 26, 2001.

<sup>351</sup> "Executives Sentenced In Brazil After Sale Of Phony Birth-Control Pills." *Associated Press Worldstream*. August 3, 2000.

<sup>352</sup> "Fake Drugs a Global Problem on the Rise," *United Press International*. April 19, 2002.

<sup>353</sup> "Fake Drugs a Global Problem on the Rise," *United Press International*. April 19, 2002.

<sup>354</sup> "China's Killer Headache: Fake Pharmaceuticals," *The Washington Post*. August 30, 2002.

<sup>355</sup> Testimony, "The Importation of Bulk Counterfeit Pharmaceutical Products," Patricia L. Maher, Deputy Assistant Attorney General, Civil Division, U.S. Department of Justice. October 3, 2000.

<sup>356</sup> Testimony, "The Importation of Bulk Counterfeit Pharmaceutical Products," Patricia L. Maher, Deputy Assistant Attorney General, Civil Division, U.S. Department of Justice. October 3, 2000.

<sup>357</sup> Testimony, "The Importation of Bulk Counterfeit Pharmaceutical Products," Patricia L. Maher, Deputy Assistant Attorney General, Civil Division, U.S. Department of Justice. October 3, 2000.

<sup>358</sup> Testimony, "The Importation of Bulk Counterfeit Pharmaceutical Products," Patricia L. Maher, Deputy Assistant Attorney General, Civil Division, U.S. Department of Justice. October 3, 2000.

## APPENDIX B – ATTACKS ON FOOD PRODUCTS

Below is a partial list of terrorist attacks on food supplies:

| Date      | Location    | Contaminated Food Products  |
|-----------|-------------|---|
| 2000      | U.S.        | Two seventh grade students allegedly spread rat poison on salsa, causing 34 students to become sick. Fifteen students were rushed to emergency rooms after complaining of headaches, nausea, and stomach pains. Packets of rat poison had been placed around the school to control rodents.   |
| 1999      | Israel      | Eggs sold in Israel were contaminated with salmonella, killing two people.  |
| 1989      | U.S.        | Two grapes from Chile purchased in a Philadelphia supermarket were found to be laced with cyanide.  |
| 1989      | Britain     | A blackmailer placed a threatening letter in a jar of Heinz baby food and demanded 1 million pounds from Heinz. Five days later, a jar of Heinz yogurt was found with small glass fragments, prompting the company to remove jars from similar stores. The following week a nine-month-old girl was rushed to a hospital after taking a spoon full of yogurt with a piece of broken razor blade. Jars of lamb meal from Cow & Gate, another baby food company, were found with glass fragments. Heinz and Cow & Gate offered 100,000 pounds as a reward for the blackmailer. Thousands of stores withdrew their products until tamper-resistant containers were introduced. |
| 1988      | Britain     | Two telephone calls and a series of letters were sent to a dog food manufacturer "believed to be Pedigree Pet Foods," warning that dog food had been contaminated. If the company refused to pay 500,000 pounds, more cans would be poisoned. In an effort to catch the blackmailer, the company paid 20,000 pounds.  |
| 1988      | Italy       | Grapefruit sales were banned after fruit was injected with poison.  |
| 1987      | Britain     | A Safeway store received threats that food would be contaminated with weed killer, arsenic and ground glass unless the store agreed to pay 40,000 pounds.   |
| 1986      | U.S.        | Jell-O removed products from stores after contamination threats.  |
| 1986      | U.S.        | One person died after taking a Tylenol tablet containing cyanide.   |
| 1986      | U.S.        | A Lipton Cup-A-Soup packet was tainted with poison, killing a 27-year-old man in New Jersey.  |
| 1986      | U.S.        | News reports warned that glass shards were found in Gerber baby food.   |
| 1986      | Britain     | Cadbury was asked to pay 5 million pounds or its Crunchie bars would be poisoned.   |
| 1985      | Japan       | At least eight people died after drinking fruit juice laced with a pesticide.   |
| 1984      | U.S.        | Members of the Bhagwan Shree Rajneesh cult contaminated salad bars at 11 restaurants with salmonella.   |
| 1984      | U.S.        | Girl Scout cookies were found to contain staples, pins, and glass.  |
| 1984      | Britain     | The Animal Liberation Front threatened to contaminate Mars bars with rat poison.  |
| 1978      | Middle East | A dozen people became ill after eating oranges, lemons, and grapefruit from Israel, contaminated with mercury by Palestinian terrorists.  |
| 1974      | Middle East | Palestinian militants claimed to have contaminated grapefruit with liquid mercury.  |
| 1984-1989 | Japan       | An extortionist threatened to poison sweets produced by Ezaki Glico Company. Six months later, Moranago Company, another sweets manufacturer, receives similar blackmail threats. For five years the terror campaign continued, affecting 31 companies, five of which went out of business.   |





## APPENDIX C – COUNTRIES WITH TERRORIST ACTIVITY AND COUNTERFEIT DRUG ACTIVITY

Following is a list of countries with terrorist activities and evidence of counterfeit drug activity:

| Country               | Terrorist Activity   | Counterfeit Drugs       |
|-----------------------|--|-------------------------|
| Afghanistan           | Harakat ul-Mujahidin (HUM);<br>Gama'a al-Islamiyya (Islamic Group);<br>Islamic Movement of Uzbekistan (IMU);<br>Al-Jihad (Egyptian Islamic Jihad);<br>Al Qaeda | No                      |
| Albania               | Al Qaeda   | No                      |
| Algeria               | Armed Islamic Group (GIA);<br>Salafist Group for Call and Combat (GSPC);<br>Al Qaeda   | No                      |
| Angola                | Total Independence of Angola (UNITA)   | No                      |
| Argentina (Triborder) | Terrorist attacks, no group named.   | Yes <sup>359, 360</sup> |
| Austria               | Gama'a al-Islamiyya (Islamic Group);<br>Al Qaeda   | No                      |
| Australia             | Al Qaeda   | No                      |
| Azerbaijan            | Al Qaeda   | No                      |
| Bahrain               | Al Qaeda   | No                      |
| Bangladesh            | Al Qaeda   | Yes <sup>361</sup>      |
| Belgium               | Al Qaeda   | No                      |
| Bolivia               | Terrorist attacks, no group named.   | No                      |
| Bosnia                | Al Qaeda   | No                      |
| Canada                | Liberation Tigers of Tamil Eelam (LLTE)  | No                      |
| China                 | Uighur Islamic extremists.   | Yes <sup>362</sup>      |
| Chile                 | Attacks, no group named.   | No                      |
| Colombia              | Revolutionary Armed Forces of Colombia (FARC);<br>United Self-Defense Forces of Colombia (AUC)   | Yes <sup>363, 364</sup> |
| Cuba                  | State Sponsor of Terrorism   | Yes <sup>365</sup>      |
| Ecuador               | Terrorist attacks, no group named.   | No                      |
| Egypt                 | Gama'a al-Islamiyya (Islamic Group);<br>Al-Jihad (Egyptian Islamic Jihad);<br>Al Qaeda   | No                      |
| Eritrea               | Al Qaeda   | No                      |
| France                | Al Qaeda   | No                      |
| Germany               | Al Qaeda   | Yes <sup>366</sup>      |

<sup>359</sup> "Combating Counterfeits." *Pharmaceutical Executive*. June 1, 2002.

<sup>360</sup> "Online Drugs' Safety Debated Import Bill Would Cut Costs, Restrictions." *The Denver Post*. August 5, 2001.

<sup>361</sup> "Beware of Spurious Drugs!" *Weekly Holiday*. February 1, 2002.

<sup>362</sup> "China's Killer Headache: Fake Pharmaceuticals." *The Washington Post*. August 30, 2002.

<sup>363</sup> 2002 Special 301 Report, Intellectual Property. United States Trade Representative.

<sup>364</sup> "Combating Counterfeits." *Pharmaceutical Executive*. June 1, 2002.

<sup>365</sup> "Online Drugs' Safety Debated Import Bill Would Cut Costs, Restrictions." *The Denver Post*. August 5, 2001.

| Country                          | Terrorist Activity  | Counterfeit Drugs  |
|----------------------------------|---|--------------------|
| Georgia                          | Chechen terrorists.   | No                 |
| Greece                           | Revolutionary Nuclei (formerly ELA);<br>Revolutionary Organization 17 November  | Yes <sup>367</sup> |
| Guinea                           | Terrorist attacks, no group named.  | No                 |
| India                            | Liberation Tigers of Tamil Eelam (LTTE);<br>Al Qaeda  | Yes <sup>368</sup> |
| Indonesia                        | Jemaah Islamiya Organization (JI)   | No                 |
| Iran                             | State Sponsor of Terrorism;<br>Mujahedin-e Khalq Organization (MEK);<br>Al Qaeda  | No                 |
| Iraq                             | State Sponsor of Terrorism;<br>Abu Nidal Organization (ANO);<br>Kurdistan Workers' Party (PKK) a.k.a. Kurdistan Freedom and<br>Democracy Congress (KADEK);<br>Mujahedin-e Khalq Organization (MEK);<br>Palestine Liberation Front (PLF) | No                 |
| Ireland                          | IRA;<br>Al Qaeda  | No                 |
| Israel, West Bank,<br>Gaza Strip | Al-Aqsa Martyrs Brigade;<br>HAMAS (Islamic Resistance Movement);<br>Kahane Chai (Kach);<br>Palestinian Islamic Jihad (PIJ)  | Yes <sup>369</sup> |
| Italy                            | Al Qaeda  | Yes <sup>370</sup> |
| Japan                            | Aum Shinrikyo   | No                 |
| Jordan                           | Palestinian Islamic Jihad (PIJ);<br>Al Qaeda  | No                 |
| Kazakhstan                       | Hizb ut-Tahrir  | No                 |
| Kenya                            | Al Qaeda  | No                 |
| Kosovo                           | Al Qaeda  | No                 |
| Kuwait                           | Terrorist attacks, no group named.  | No                 |
| Kyrgyzstan                       | Islamic Movement of Uzbekistan (IMU)  | No                 |
| Lebanon                          | Abu Nidal Organization (ANO) operates in Lebanon.;<br>Asbat al-Ansar;<br>Hizballah (Party of God);<br>Al-Jihad (Egyptian Islamic Jihad);<br>Palestinian Islamic Jihad (PIJ);<br>Al Qaeda  | Yes <sup>371</sup> |
| Libya                            | State Sponsor of Terrorism;<br>Al Qaeda   | No                 |
| Malaysia                         | Abu Sayyaf Group;<br>Al Qaeda   | No                 |
| Mauritania                       | Al Qaeda  | No                 |
| Netherlands                      | Al Qaeda  | Yes <sup>372</sup> |

<sup>366</sup> "Counting Counterfeiters." Centre for Economics and Business Research. July 15, 2002.

<sup>367</sup> "Counting Counterfeiters." Centre for Economics and Business Research. July 15, 2002.

<sup>368</sup> "Pharmaceutical Piracy a Tough Pill to Swallow." *The Moscow Times*. April 9, 2001.

<sup>369</sup> Testimony of Mr. Donald Dekieffer, House Energy and Commerce, June 7, 2001.

<sup>370</sup> "Counting Counterfeiters." Centre for Economics and Business Research. July 15, 2002.

<sup>371</sup> "Counterfeit Drugs, Lebanon's Other Killer." *Manchester Guardian Weekly*. December 26, 1982.

<sup>372</sup> "Counting Counterfeiters." Centre for Economics and Business Research. July 15, 2002.

| Country              | Terrorist Activity   | Counterfeit Drugs            |
|----------------------|--|------------------------------|
| Nigeria              | Terrorist attacks, no group named.   | Yes <sup>375, 374</sup>      |
| North Korea          | State Sponsor of Terrorism   | No                           |
| Pakistan             | Harakat ul-Mujahidin (HUM);<br>Jaish-e-Mohammed (JEM) (Army of Mohammed);<br>Al-Jihad (Egyptian Islamic Jihad);<br>Lashkar-e Tayyiba (LT) (Army of the Righteous);<br>Lashkar I Jhangvi;<br>Al Qaeda | Yes <sup>375</sup>           |
| Paraguay (Triborder) | Terrorist attacks, no group named.   | No                           |
| Philippines          | Abu Sayyaf Group;<br>Communist Party of the Philippines/ New People's Army (CPP/NPA);<br>Al Qaeda  | Yes <sup>376</sup>           |
| Peru                 | Shining Path (Sendero Luminoso, SL)  | Yes <sup>377</sup>           |
| Qatar                | Al Qaeda   | No                           |
| Russia               | Al Qaeda   | Yes <sup>378, 379, 380</sup> |
| Saudi Arabia         | Al Qaeda   | No                           |
| Syria                | State Sponsor of Terrorism;<br>Palestinian Islamic Jihad (PIJ);<br>Popular Front for the Liberation of Palestine (PFLP);<br>PFLP-General Command (PFLP-GC)   | No                           |
| Somalia              | Al Qaeda   | No                           |
| South Africa         | Al Qaeda   | Yes <sup>381</sup>           |
| Spain                | Basque Fatherland and Liberty (ETA)  | Yes <sup>382, 383</sup>      |
| Sri Lanka            | Liberation Tigers of Tamil Eelam (LLTE)  | No                           |
| Sudan                | State Sponsor of Terrorism;<br>Gama'a al-Islamiyya (Islamic Group);<br>Al-Jihad (Egyptian Islamic Jihad);<br>Al Qaeda  | No                           |
| Switzerland          | Al Qaeda   | No                           |
| Tajikistan           | Islamic Movement of Uzbekistan (IMU);<br>Al Qaeda  | No                           |
| Tanzania             | Al Qaeda   | No                           |
| Thailand             | Jemaah Islamiyah;<br>Liberation Tigers of Tamil Eelam (LLTE);<br>Hizballah (Party of God)  | Yes <sup>384</sup>           |
| Tunisia              | Al Qaeda   | No                           |

<sup>375</sup> "Poison Pills: Deadly Fake Drugs Are Rampant," *Montreal Gazette*. February 23, 2003.

<sup>374</sup> "Nigerian President Calls on Doctors to Eliminate Fake Drugs." *Xinhua General News Service*. February 28, 2003.

<sup>375</sup> "Counterfeit Medicines Flooding Country." *Africa News*. November 3, 2002.

<sup>376</sup> "US Calls on Philippines To Enforce Intellectual Property Rights." *Agence France Presse*. January 10, 2003.

<sup>377</sup> "In some nations, 80% of drugs "are counterfeit." *Pharma Marketletter*. October 7, 2002.

<sup>378</sup> "Russia Views Drug Counterfeiting." *Pharma Marketletter*. March 4, 2003.

<sup>379</sup> "Ministries To Join Forces in Struggle Against Bootleggers," *The St. Petersburg Times*. February 29, 2003.

<sup>380</sup> "US Special 301 Watch List Targets Generic Threat." World Market Research 2002.

<sup>381</sup> "Illegal Trade in Medicines," *Global News Wire*. September 10, 2002.

<sup>382</sup> "Authorities Break Illegal Medicine Chain." *World Markets Analysis*. October 29, 2002.

<sup>383</sup> "Counting Counterfeiters." Centre for Economics and Business Research. July 15, 2002.

<sup>384</sup> "Attack of the [Medicine] Clones." *The Washington Times*. July 16, 2002.

| Country              | Terrorist Activity  | Counterfeit Drugs  |
|----------------------|---|--------------------|
| Turkey               | Kurdistan Workers' Party (PKK) a.k.a. Kurdistan Freedom and Democracy Congress (KADEK);<br>Revolutionary People's Liberation Army/Front (DHKP/C);<br>Al Qaeda | Yes <sup>385</sup> |
| Uganda               | Al Qaeda  | No                 |
| United Arab Emirates | Al Qaeda  | No                 |
| United Kingdom       | Gama'a al-Islamiyya (Islamic Group);<br>Al-Jihad (Egyptian Islamic Jihad);<br>IRA;<br>Al Qaeda  | No                 |
| United States        | Al Qaeda;<br>Hizbullah (Party of God)   | Yes <sup>386</sup> |
| Uzbekistan           | Islamic Movement of Uzbekistan (IMU);<br>Al Qaeda   | No                 |
| Yemen                | Gama'a al-Islamiyya (Islamic Group);<br>Al-Jihad (Egyptian Islamic Jihad);<br>Al Qaeda  | No                 |

<sup>385</sup> Pharmaceutical Piracy a Tough Pill to Swallow. *The Moscow Times*. April 09, 2001.

<sup>386</sup> Testimony, "Counterfeit Bulk Drugs," U.S. House Committee on Commerce, Serial No. 106-164, memo, FDA Forensic Chemistry Center. June 8 and October 3, 2000.

## APPENDIX D – INTERNET PHARMACIES

### A. LIST OF REVIEWED INTERNET PHARMACIES

The following table lists Internet pharmacies, their countries of origin, the registration information provided by the site owners, and the corresponding domain servers and IP addresses. The country of origin was determined from both the registration information and preliminary investigations using proprietary and public databases. It should be noted that none of the countries of origin can be conclusively determined without further investigation.

| Domain Name           | Country of Origin | Registrant   | Administrative Contact   | Technical Contact  | Domain Servers/ IP Addresses   |
|-----------------------|-------------------|--|--|--|--|
| 0prescription.com     | U.S.              | E-Millennium Ltd SA<br>#BM-1252<br>8357 West Flagler St. Suite D<br>Miami, FL 33144-2072<br>US<br>800-224-2000 | Vasquez, Richard<br>firstpharmacy@yahoo.com<br>#BM-1252<br>8357 West Flagler St. Suite D<br>Miami, FL 33144-2072<br>US<br>800-224-2000 | Vasquez, Richard<br>firstpharmacy@yahoo.com<br>#BM-1252<br>8357 West Flagler St. Suite D<br>Miami, FL 33144-2072<br>US<br>800-224-2000 | ns1.prlhost.com<br>168158.215.80<br>ns2.prlhost.com<br>168158.215.81   |
| 100mg-viagra.com      | U.S.              | E-Millennium Ltd SA<br>#BM-1252<br>8357 West Flagler St. Suite D<br>Miami, FL 33144-2072<br>US<br>800-224-2000 | Vasquez, Richard<br>firstpharmacy@yahoo.com<br>#BM-1252<br>8357 West Flagler St. Suite D<br>Miami, FL 33144-2072<br>US<br>800-224-2000 | Vasquez, Richard<br>firstpharmacy@yahoo.com<br>#BM-1252<br>8357 West Flagler St. Suite D<br>Miami, FL 33144-2072<br>US<br>800-224-2000 | ns1.prlhost.com<br>168158.215.80<br>ns2.prlhost.com<br>168158.215.81   |
| 1-buy-viagra.com      | U.S.              | Netfuse Inc.<br>3800 W 110th Av SE<br>Washington, DC 20011<br>US   | Harrison, Jack<br>netfuse@yahoo.com<br>3800 W 110th Av SE<br>Washington, DC 20011<br>US  | Harrison, Jack<br>netfuse@yahoo.com<br>3800 W 110th Av SE<br>Washington, DC 20011<br>US  | ns1.prlhost.com<br>168158.215.80<br>ns2.prlhost.com<br>168158.215.81   |
| 1click-viagra.com     | England           | Harvey, Stan<br>(1)LUCKVIAGRA3-DOOM<br>32 Chitts Hill<br>Colchester, Essex CO3 5ST<br>GB                       | Harvey, Stan<br>JLGNHCOAI<br>stan.harvey@HTINTERNET.COM<br>32 Chitts Hill<br>Colchester, Essex CO3 5ST<br>UK                           | Harvey, Stan<br>JLGNHCOAI<br>stan.harvey@HTINTERNET.COM<br>32 Chitts Hill<br>Colchester, Essex CO3 5ST<br>UK                           | ns1.hypermart.net<br>66.150.0.50<br>ns2.hypermart.net<br>206.29.192.47 |
| 1drugstore-online.com | Singapore         | David Lee<br>429 Rochor Road<br>Startech Holding Limited.<br>188452<br>Singapore                               | David Lee<br>429 Rochor Road<br>Startech Holding Limited.<br>188452<br>Singapore   | David Lee<br>429 Rochor Road<br>Startech Holding Limited.<br>188452<br>Singapore   | ns1.ediataprofessional.com<br>ns2.ediataprofessional.com               |

| Domain Name   | Country of Origin | Registrant   | Administrative Contact  | Technical Contact   | Domain Servers/<br>IP Addresses  |
|---|-------------------|--|---|---|--|
| 1-viagra.com  | U.S.              | Martin Marketing<br>5300 S Candle Weed Dr<br>Suite B<br>New York, NY 10012<br>US<br>212-967-2011                                   | edlugmart@yahoo.com<br>Martin, Jim<br>firstpharmacy@yahoo.com<br>5300 S Candle Weed Dr<br>Suite B<br>New York, NY 10012<br>US<br>212-967-2011 | edlugmart@yahoo.com<br>Martin, Jim<br>firstpharmacy@yahoo.com<br>5300 S Candle Weed Dr<br>Suite B<br>New York, NY 10012<br>US<br>212-967-2011 | ns1.prihost.com<br>168.158.215.80<br>ns2.prihost.com<br>168.158.215.81 |
| 247-pharmacy.com  | Costa Rica        | CGPI, Inc<br>Fernando Estevez<br>Director<br>pharmacyshop@yahoo.com<br>La Loma, Bello Horizonte<br>Apdo. 1764<br>Escazu 1250<br>CR | pharmacyshop@yahoo.com<br>212-967-2011  | pharmacyshop@yahoo.com<br>212-967-2011  | ns1.netherweb.com<br>ns2.netherweb.com<br>ns3.netherweb.com            |
| 24hourdrugstore.tv  | El Salvador       | Sonke Stefan Schallmeyer<br>sales@24hourdrugstore.tv<br>C/Janda s/n<br>Las Palmas, 35525<br>ES<br>34 610 389890                    | Sonke Stefan Schallmeyer<br>admin@24hourdrugstore.tv<br>C/Janda s/n<br>Las Palmas, 35525<br>ES<br>34-928-542160                               | Sonke Stefan Schallmeyer<br>webmaster@24hourdrugstore.tv<br>C/Vinamar 7<br>Las Palmas, 35625<br>ES<br>34-928-542160                           | ns.nameservers.net<br>ns2.nameservers.net<br>ns3.nameservers.net       |
| 2-buy-viagra-procpccid-<br>xemical-prescriptions-<br>online.com | Germany           | Pharmacia Europa<br>Strasse Cordo 22<br>Grost, DE 401 RT<br>DE<br>36-1882/00431  | viagra_germany@yahoo.com<br>Strasse Cordo 22<br>Grost, DE 401 RT<br>DE<br>36-1882/00431   | Furgen, Heinz<br>viagra_germany@yahoo.com<br>Strasse Cordo 22<br>Grost, DE 401 RT<br>DE<br>36-1882/00431                                      | ns1.prihost.com<br>168.158.215.80<br>ns2.prihost.com<br>168.158.215.81 |
| 4prescriptionsonline.com  | U.S.              | Teresa Jarvis<br>256 Stebbins Terrace<br>Port Charlotte, Florida 33952<br>United States  | prescriptionsonline@hotmail.com<br>256 Stebbins Terrace<br>Pt. Charlotte, Florida 33952<br>United States<br>941-627-0536                      | Jarvis, Teresa<br>rs-yvordille@yahoo.com<br>256 Stebbins Terrace<br>Pt. Charlotte, Florida 33952<br>United States<br>941-627-0536             | ns1.hypermart.net<br>ns2.hypermart.net                                 |
| alviagra.com  | U.S.              | E-Millennium Ltd SA<br>#BM-1252<br>8357 West Flagler St. Suite D<br>Miami, FL 33144-2072<br>US<br>800-224-2000                     | Vasquez, Richard<br>firstpharmacy@yahoo.com<br>#BM-1252<br>8357 West Flagler St. Suite D<br>Miami, FL 33144-2072<br>US<br>800-224-2000        | Vasquez, Richard<br>firstpharmacy@yahoo.com<br>#BM-1252<br>8357 West Flagler St. Suite D<br>Miami, FL 33144-2072<br>US<br>800-224-2000        | ns1.prihost.com<br>168.158.215.80<br>ns2.prihost.com<br>168.158.215.81 |
| aatax.com   | U.S.              | Hosting-Network, Inc. AATrax-<br>COM-DOJ<br>1516 Jackson Street<br>P.O. Myers, FL 33901<br>USA                                     | Hosting-Network, Inc.<br>bedns@bedns.com<br>1516 Jackson Street<br>P.O. Myers, FL 33901<br>USA  | Hosting-Network, Inc.<br>bedns@bedns.com<br>1516 Jackson Street<br>P.O. Myers, FL 33901<br>USA  | ns1.fastnameserv.com<br>ns2.fastnameserv.com                           |

| Domain Name   | Country of Origin | Registrant  | Administrative Contact   | Technical Contact  | Domain Servers/<br>IP Addresses  |
|---|-------------------|---|--|--|--|
| affordablemedications.com                                 | U.S.              | 800-605-4883<br>bedns@edns.com<br>Private Medical Services Inc<br>1250 East Hallandale Beach Blvd<br>PH-A<br>Hallandale, FL 33009<br>US | 800-605-4883<br>info@affordablemedications.com<br>Worldwide Web Enterprises, L.C.<br>20533 Biscayne Blvd. Ste #4-N221<br>Aventura, FL 33180<br>US                  | 800-605-4883<br>info@affordablemedications.com<br>Worldwide Web Enterprises, L.C.<br>20533 Biscayne Blvd. Ste #4-N221<br>Aventura, FL 33180<br>US                  | ns1.softaware.com<br>216.34.201.175<br>ns2.softaware.com<br>216.34.201.174     |
| affordable-prescriptions.com                              | U.S.              | Key West Web Services<br>PO BOX 5253<br>Key West, FL 33045<br>US  | Ed Ohlson admin@kwws.com<br>Key West Web Services<br>PO BOX 5253<br>Key West, FL 33045<br>US<br>305-296-9143<br>Fax: 305-293-9461                                  | Ed Ohlson admin@kwws.com<br>Key West Web Services<br>PO BOX 5253<br>Key West, FL 33045<br>US<br>305-296-9143<br>Fax: 305-293-9461                                  | ns.keywestweb.net<br>64.39.7.64<br>ns2.keywestweb.net<br>64.39.7.65            |
| affordable-chemical-prescriptions.com                     | U.S.              | Michael Bernier<br>RedZone<br>PO BOX 4635<br>Ponsumouth, New Hampshire<br>03820<br>United States  | Michael mike@redzoneglobal.com<br>PO BOX 4635<br>Ponsumouth, New Hampshire<br>03820<br>United States<br>603-766-1350   | Pettersen, Kurt<br>kpr@ablberokvch.com<br>4936 Allamar Dr.<br>Boise, Idaho 83704<br>United States<br>603-766-1350  | dns1.kurtsdns.com<br>dns2.kurtsdns.com   |
| americamprescriptions.com                                 | U.S.              | French, Donna<br>AMERICANPRESCRIPTIONS-DOM<br>Route 1 Box 214 AA<br>Atlanta, TX 75551<br>US   | French, Donna<br>FDI040<br>digfrench@hotmail.com<br>Donna French<br>Route 1 Box 214 AA<br>Atlanta, TX 75551<br>US<br>903-796-5887<br>903-796-5835                  | French, Donna<br>FDI040<br>216.198.199.180<br>ns4.webminders.com<br>216.198.199.201  | ns3.webminders.com<br>216.198.199.180<br>ns4.webminders.com<br>216.198.199.201 |
| amerimedrx.com  | U.S.              | AmeriMed Industries, LLC<br>AMERIMEDRX-DOM<br>2255 Glades Road, Suite 324A<br>Boca Raton, FL 33431<br>US                                | AmeriMed Industries, LLC<br>A19162-OR<br>fmbyers@mindspring.com<br>2255 Glades Road, Suite 324A<br>Boca Raton, FL 33431<br>US<br>561-702-5301<br>Fax: 561-658-2808 | AmeriMed Industries, LLC<br>A19162-OR<br>fmbyers@mindspring.com<br>2255 Glades Road, Suite 324A<br>Boca Raton, FL 33431<br>US<br>561-702-5301<br>Fax: 561-658-2808 | ns1.prosolutionsinc.com<br>63.84.31.1<br>ns2.prosolutionsinc.com<br>63.84.31.2 |
| anhrax-chlamydia-gonorrhea-syphilis-symptoms-pictures.com | Mexico            | Antonio Gonzalez<br>Calle Fresco # 145<br>Puebla 72210<br>Mexico  | Gonzalez, Antonio<br>doctor_ana_gonzalez@terra.com.mx<br>x<br>Calle Fresco #145<br>Puebla 72210<br>Mexico<br>222-222640  | Gonzalez, Antonio<br>doctor_ana_gonzalez@terra.com.mx<br>x<br>Calle Fresco #145<br>Puebla 72210<br>Mexico<br>222-222640  | ns1.cinopipe.com<br>ns2.cinopipe.co  |

| Domain Name                               | Country of Origin | Registrant  | Administrative Contact  | Technical Contact   | Domain Servers/<br>IP Addresses  |
|---|-------------------|---|---|---|--|
| buy-cheap-phenentermine-pills-online.com  | Canada            | Faux Printing<br>830 McMillan Avenue<br>Winnipeg, MB R3M0V4<br>CA                                     | Hansell, Jane<br>jhansell@shaw.ca<br>920 McMillan Avenue<br>Winnipeg, MB R3M0V4<br>CA<br>204-478-1603                         | Domain Registrations<br>jonathan@12cheaptopdomains.com<br>920 Cranbrook Court, Suite #7<br>help@12cheaptopdomains.com<br>www.12cheaptopdomains.com<br>Davis, CA 95616<br>US<br>415-682-3859 | ns1.dttapipe.net<br>64.27.0513<br>ns2.dttapipe.net<br>64.27.6476                   |
| buymedsdirect.com                         | U.S.              | convergent marketing llc<br>TVLHMEYND<br>5934 arrowhead dr<br>frisco, TX 75034<br>US                  | convergent marketing llc<br>BLBFEBEO<br>pbdtvett@hotmail.com<br>5934 arrowhead dr<br>frisco, TX 75034<br>US<br>214 415-1853   | VertSign, Inc.<br>HOST-ORG<br>names@owordnic.net<br>21355 Ridgeway Circle<br>Dulles, VA 20166<br>US<br>888-642-9675   | ns1.infocosthosting.net<br>208.147.2495<br>ns2.infocosthosting.net<br>208.147.2496 |
| buy-ultram-pain-medications-online.com    | England           | World Wide Pharmacy Network<br>13 The Pallasades<br>Birmingham, UK B21XA4<br>GB<br>+44-7-977-567-8333 | Parke, George<br>firstpharmacy@yahoo.com<br>13 The Pallasades<br>Birmingham, UK B21XA4<br>GB<br>+44-7-977-567-8333            | Parke, George<br>firstpharmacy@yahoo.com<br>13 The Pallasades<br>Birmingham, UK B21XA4<br>GB<br>+44-7-977-567-8333  | ns1.prlhost.com<br>168158.215.80<br>ns2.prlhost.com<br>168158.215.81               |
| buy-viagra-discreetly.com                 | Germany           | WantViagra.com Inc.<br>585 Main St<br>Jesssp, NM 021-23<br>DK   | Guzak, Donnitc bigs@lack.net<br>585 Main St<br>Jesssp, NM 021-23<br>DK<br>000-000-0000  | Guzak, Donnitc bigs@lack.net<br>585 Main St<br>Jesssp, NM 021-23<br>DK<br>000-000-0000  | ns1.lhost.ca<br>ns2.lhost.ca   |
| buy-viagra-herbal-viagra-alternatives.com | U.S.              | JUMP.net<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800                      | Plassard, Jean Marc<br>netuse@yahoo.com<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800               | Plassard, Jean Marc<br>netuse@yahoo.com<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800   | ns1.prlhost.com<br>168158.215.80<br>ns2.prlhost.com<br>168158.215.81               |
| cheapest-phenentermine-online.com         | U.S.              | Adam Goldberg<br>Pill Palace<br>6215 NW 38th Drive<br>Coral Springs, Florida 33067<br>United States   | Goldberg, Adam<br>killagms@aol.com<br>Pill Palace<br>6215 NW 38th Drive<br>Coral Springs, Florida 33067<br>US<br>954-829-7750 | Goldberg, Adam<br>killagms@aol.com<br>Pill Palace<br>6215 NW 38th Drive<br>Coral Springs, Florida 33067<br>US<br>954-829-7750   | ns2.rackspace.com  |
| cheappviagra.info                         | Germany           | C2384562-IRMS<br>Frank Tschakert<br>Kaelbergarten 27<br>Hohenweiden<br>N/A C99<br>06179<br>DE         | C2384562-IRMS<br>Frank Tschakert<br>Kaelbergarten 27<br>Hohenweiden<br>N/A C99<br>06179<br>DE                                 | GI 204269-IRMS<br>P R O site prositie<br>Nommendamallee 42-43<br>Berlin<br>Berlin C99<br>13599<br>DE  | ns7.worldserver.net<br>ns8.worldserver.net   |



| Domain Name                               | Country of Origin        | Registrant   | Administrative Contact  | Technical Contact  | Domain Servers/<br>IP Addresses  |
|---|--------------------------|--|---|--|--|
| com-pharmacy.com                          | Germany<br>or<br>Namibia | +49-3456131465<br>+49-3456131465<br>info@cheapvagina.info<br>Tom Krieger<br>krieger@wwwseiten.de#1<br>Tucholskyst.r.18<br>Frankfurt<br>60598<br>DE | +49-3456131465<br>info@cheapvagina.info<br>Tom Krieger<br>krieger@wwwseiten.de#1<br>Tucholskyst.r.18<br>Frankfurt<br>60598<br>DE                    | +49-3079000810<br>info@prostic.de<br>Tom Krieger<br>krieger@wwwseiten.de#1<br>Tucholskyst.r.18<br>Frankfurt<br>60598<br>DE | net1.namweb.com.na<br>dns1.namweb.com.na                                   |
| cure-genital-warts-<br>condylox.com       | U.S.                     | Netfuse Inc.<br>3800 W 110th Av SE<br>Washington, DC 20011<br>US<br>212-902-1400   | Harrison, Jack netfuse@yahoo.com<br>3800 W 110th Av SE<br>Washington, DC 20011<br>US<br>212-902-1400  | Harrison, Jack netfuse@yahoo.com<br>3800 W 110th Av SE<br>Washington, DC 20011<br>US<br>212-902-1400                       | ns1.prlhost.com<br>68.158.215.80<br>ns2.prlhost.com<br>68.158.215.81       |
| cydrugs.com                               | U.S.                     | George Dennison<br>news@pharmacy-news.com<br>P.O.Box 028508<br>Miami, FL 33102<br>US<br>305-639-3488<br>Fax: 305-639-3492                          | George Dennison<br>news@pharmacy-news.com<br>P.O.Box 028508<br>Miami, FL 33102<br>US<br>305-639-3488<br>Fax: 305-639-3492                           | George Dennison<br>news@pharmacy-news.com<br>P.O.Box 028508<br>Miami, FL 33102<br>US<br>305-639-3488<br>Fax: 305-639-3492  | ns.global3connect.com<br>ns2.global3connect.com                            |
| denmarkdrugs.com                          | Bermuda                  | Ray Pasnen<br>3 blue hole hill<br>bailey's bay, cr-04<br>Bermuda   | Pasnen, Ray<br>bandseek@hotmail.com<br>3 blue hole hill<br>bailey's bay, cr-04<br>Bermuda<br>212-330-6808   | Pasnen, Ray<br>bandseek@hotmail.com<br>3 blue hole hill<br>bailey's bay, cr-04<br>Bermuda<br>212-330-6808                  | ns2.server-4.com   |
| dietshopcentral.com                       | U.S.                     | Couponainment<br>DIETSHOPCENTRAL-DOM<br>8323 Southwest Fwy. Ste 350<br>Houston, TX 77074-1617<br>US  | Couponainment<br>E12891-OR<br>stump@mergate.com<br>8323 Southwest Fwy. Ste 350<br>Houston, TX 77074-1617<br>US<br>713-484-7283<br>Fax: 713-484-7289 | Verisign, Inc.<br>HOST-ORG<br>namehost@worldnic.net<br>21355 Ridgeway Circle<br>Dulles, VA 20166<br>US<br>1-888-642-9675   | ns8.san.yahoo.com<br>66.218.71.205<br>ns9.san.yahoo.com<br>64.58.79.83     |
| diflucan-vaginal-yeast-<br>infections.com | U.S.                     | JUMP net<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800   | Plassard, Jean Marc<br>netfuse@yahoo.com<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800                                    | Plassard, Jean Marc<br>netfuse@yahoo.com<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800           | ns1.prlhost.com<br>68.158.215.80<br>ns2.prlhost.com<br>68.158.215.81       |
| discountdrugspharmacy.com                 | U.S.                     | Zebra Net Group<br>6538 Collins Ave. suite 258<br>Miami Beach, FL 33141-4694<br>US   | info@DiscountDrugsPharmacy.com<br>Zebra Net Group<br>6538 Collins Ave Suite 258<br>Miami Beach, FL<br>33141-4694                                    | info@DiscountDrugsPharmacy.com<br>Zebra Net Group<br>6538 Collins Ave Suite 258<br>Miami Beach, FL<br>33141-4694           | ns1.softaware.com<br>216.34.201.175<br>ns2.softaware.com<br>216.34.201.174 |

| Domain Name                | Country of Origin        | Registrar  | Administrative Contact  | Technical Contact  | Domain Servers/<br>IP Addresses  |
|----------------------------|--------------------------|--|---|--|--|
| discount-prescriptions.com | U.S.                     | Discount Prescriptions<br>500 W La Jolla Place<br>San Diego, CA 92122<br>US<br>619-545-0911  | US<br>Master<br>web info@discount-<br>prescriptions.com<br>500 W La Jolla Place<br>San Diego, CA 92122<br>US  | US<br>Master<br>info@discount-<br>prescriptions.com<br>500 W La Jolla Place<br>San Diego, CA 92122<br>US   | ns1.prihost.com<br>168.158.215.80<br>ns2.prihost.com<br>168.158.215.81     |
| drugbuyers.com             | Panama                   | Trinica Inc. DRUGBUYERS3.DOM<br>34-20 Calle 34<br>Panama, Panama<br>PA   | Martin, Alexander<br>AMQ596<br>alexander_martin@hotmail.com<br>Trinica Inc.<br>34-20 Calle 34<br>Panama<br>PA   | Martin, Alexander<br>AMQ596<br>alexander_martin@hotmail.com<br>Trinica Inc.<br>34-20 Calle 34<br>Panama<br>PA  | ns5.esosoft.net<br>206.142.247.5<br>ns6.esosoft.net<br>206.142.247.6       |
| drugsexport.com            | Canada                   | International Drugs<br>1401 Islington Avenue<br>Toronto<br>M9A3K5<br>ON<br>Canada  | Biljana Marinikovic<br>1401 Islington Avenue<br>Toronto<br>M9A3K5<br>ON, Canada<br>interexportdrugs@sprint.ca<br>Phone: 4162349320                          | Biljana Marinikovic<br>1401 Islington Avenue<br>Toronto<br>M9A3K5<br>ON, Canada<br>interexportdrugs@sprint.ca<br>Phone: 4162349320   | ns1.worldwideidns.net<br>ns2.worldwideidns.net                             |
| drugs-express.com          | U.S.                     | Access RX CR SA<br>Drugs Express<br>Ultrapark Free Zone Bldg. 7B Ste.<br>4<br>La Aurora, Heredia<br>CR<br>800-930-8770<br>drugs-express@access-inet.com<br>www.wsseiten<br>Tom Krieger<br>Tueholskyst.r.18<br>Frankfurt<br>60598<br>DE | J Lambert<br>Ultrapark Free Zone Bldg. 7B Ste.<br>4<br>La Aurora, Heredia<br>CR<br>800-930-8770<br>domain-master@access-inet.com<br>krieger@www.wsseiten.de | Domain Registrar<br>575 8th Avenue - 11th Floor<br>New York, NY 10018<br>US<br>902-749-2701<br>Fax: 902-749-5429<br>domain-rtgistrar@register.com<br>krieger@www.wsseiten.de | dns39.register.com<br>216.21.234.90<br>dps40.register.com<br>216.21.226.90 |
| drugspharma.com            | Namibia<br>or<br>Germany | www.wsseiten<br>Tom Krieger<br>Tueholskyst.r.18<br>Frankfurt<br>60598<br>DE  | krieger@www.wsseiten.de   | krieger@www.wsseiten.de  | net4.namweb.com.na<br>dns1.namweb.com.na                                   |
| drugstoretrader.com        | U.S.                     | ICU Creations<br>11901 Santa Monica Blvd.<br>Los Angeles, CA 90025<br>US<br>info@icucc.com<br>310-466-4440<br>Fax: 310-388-1190<br>http://www.icucc.com  | info@icuccreations.com<br>11901 Santa Monica Blvd. Suite<br>#617<br>Los Angeles, CA 90025<br>US<br>310-466-4440<br>Fax: 310-388-1190                        | tech@icuccreations.com<br>11901 Santa Monica Blvd. Suite<br>#617<br>Los Angeles, CA 90025<br>US<br>310-466-4440<br>Fax: 310-388-1190   | ns1.lmdsnet.com<br>64.70.89.196<br>tank1.lmdsnet.com<br>64.70.89.195       |

| Domain Name                    | Country of Origin | Registrant  | Administrative Contact  | Technical Contact   | Domain Servers/<br>IP Addresses  |
|--------------------------------|-------------------|---|---|---|--|
| drugs-without-prescription.com | Canada            | Synergy Health Organization<br>1555 E. Flamingo Road<br>Las Vegas, NV 89119<br>US                             | Synergy Health Organization<br>physplus-ac@bushmail.com<br>Synergy Health Organization<br>1555 E. Flamingo Road<br>Las Vegas, Nevada 89119<br>US<br>250-380-1296                | Chris Norris<br>accouns@urbanweb.net<br>Urban Web Design Inc<br>102-19 Dallas Road<br>Victoria, BC V8Y 5A6<br>CA<br>250-380-1296<br>Fax: 250-380-1298                           | ns2.web2010.com<br>216.65.3.100<br>ns2.web2010.com<br>216.157.79.246           |
| econo-rx.com                   | U.S.              | Yong Hahn<br>iGlobe Communications, Inc<br>39-A W Edsall Ave<br>Palisades Park, New Jersey<br>07650<br>US     | Hahn, Yong<br>seongjin_k@yahoo.com<br>iGlobe Communications, Inc<br>39-A W Edsall Ave<br>Palisades Park, New Jersey<br>07650<br>US<br>201-945-5951                              | Hahn, Yong<br>seongjin_k@yahoo.com<br>iGlobe Communications, Inc<br>39-A W Edsall Ave<br>Palisades Park, New Jersey<br>07650<br>US<br>201-945-5951                              | ns2.hostcentric.net  |
| edrugstore.md                  | U.S.              | PharmacyNet Services, LLC<br>Dover<br>US  | Terry Butler<br>edrugstore.md@aol.com   | Terry Butler<br>edrugstore.md@aol.com   | ns1.aoinindustries.com<br>20915.201.2<br>ns2.aoinindustries.com<br>20915.201.5 |
| e-rx.net                       | U.S.              | Amy Polinsky<br>Polman Imports Inc<br>4130 Lansing Ave<br>Cooper City, Florida 33026<br>US                    | Polinsky, Amy<br>bigg2133@bellsouth.net<br>4130 Lansing Ave<br>Cooper city, Florida 33026<br>US<br>954-558-4994   | Polinsky, Amy<br>bigg2133@bellsouth.net<br>4130 Lansing Ave<br>cooper city, Florida 33026<br>US<br>954-558-4994   | ns1.e-rx.net<br>ns2.e-rx.net   |
| e-scripts-md.com               | U.S.              | eSCRIPTS-MD, LLC<br>E-SCRIPTS-MD-DM<br>2000 Powers Ferry Rd SE<br>Marietta, GA 30067-1403<br>US               | Internet Marketing Consultants,<br>LLC.<br>22405754O<br>dmsiddim@domain-services.net<br>2000 Powers Ferry Road<br>Marietta, GA 30067<br>US<br>770-226-8184<br>Fax: 123 123 1234 | Internet Marketing Consultants,<br>LLC.<br>22405754O<br>dmsiddim@domain-services.net<br>2000 Powers Ferry Road<br>Marietta, GA 30067<br>US<br>770-226-8184<br>Fax: 123 123 1234 | udns1.ultradns.net<br>204.69.234.1<br>udns2.ultradns.net<br>204.74.101.1       |
| escureprofessional.com         | Thailand          | Daungthip Chutivaraopon<br>36/30 Soi 3/4 Ladawan Srimakarin<br>Rd,Bangplee<br>Samutprakarn, 10540<br>Thailand | Daungthip Chutivaraopon<br>northonther@hotmail.com<br>36/30 Soi 3/4 Ladawan Srimakarin<br>Rd,Bangplee<br>Samutprakarn, 10540<br>Thailand<br>253-595-6574<br>Fax: 253-595-6574   | Chutivaraopon, Daungthip<br>northonther@hotmail.com<br>36/30 Soi 3/4 Ladawan Srimakarin<br>Rd,Bangplee<br>Samutprakarn, 10540<br>Thailand<br>253-595-6574<br>Fax: 253-595-6574  | ns2.edutaprofessional.com  |
| eupills.net                    | Bermuda           | RayPasenen<br>3 Blue Hole Hill<br>Baileys Bay, CR-04  | RayPasenen<br>bandbseek@hotmail.com<br>3 Blue Hole Hill   | Pasenen, Ray<br>bandbseek@hotmail.com<br>OptiNet  | ns2.server-2.com   |

| Domain Name                                | Country of Origin | Registrant   | Administrative Contact   | Technical Contact  | Domain Servers/<br>IP Addresses   |
|--|-------------------|--|--|--|---|
| findpharmacies.com                         | U.S.              | Bermuda<br>J. R. Limited Group<br>6538 Collins Ave suite 258<br>Miami Beach, FL 33141-4694<br>US                           | Bailey's Bay, CR-04<br>Bermuda<br>212-330-6808<br>info@findpharmacies.com<br>J. R. Limited Group<br>6538 Collins Ave suite 258<br>Miami Beach, FL 33141-4694<br>US | 3 Blue Hole Hill<br>Bailey's Bay, CR-04<br>Bermuda<br>212-330-6808<br>info@findpharmacies.com<br>J. R. Limited Group<br>6538 Collins Ave suite 258<br>Miami Beach, FL 33141-4694<br>US | ns1.softaware.com<br>216.34.201.175<br>ns2.softaware.com<br>216.34.201.174        |
| getdrugsonline.com                         | U.S.              | Affiliate Marketing Experts<br>503 Beckford Glen Dr.<br>Waxhaw, NC 28173<br>US<br>704-846-6248<br>don@totalwebresource.com | Affiliate Marketing Experts<br>503 Beckford Glen Dr.<br>Waxhaw, NC 28173<br>US<br>704-846-6248<br>don@totalwebresource.com   | Affiliate Marketing Experts<br>503 Beckford Glen Dr.<br>Waxhaw, NC 28173<br>United States -- US<br>704-846-6248<br>don@totalwebresource.com  | ns1.dns77.com<br>209.115.132.20<br>ns2.dns77.com<br>209.115.132.21                |
| globalpharmaceuticals.com                  | U.S.              | Mark Powell<br>Mgagi<br>16509 77th Trail N<br>Palm Beach Gardens, Florida<br>33418<br>US                                   | Powell, Mark powelma@nova.edu<br>16509 77th Trail N<br>Palm Beach Gardens, Florida<br>33418<br>US<br>561-747-2757  | Powell, Mark powelma@nova.edu<br>16509 77th Trail N<br>Palm Beach Gardens, Florida<br>33418<br>United States<br>561-747-2757   | ns1.fusionsolutions.com<br>ns2.fusionsolutions.com                                |
| healthpluspharmacy.com                     | Vanuatu           | Holdings, Monarch<br>healthpluspharmacy-dom<br>PO box 257<br>Port Vila, Port Vila 00000<br>VU                              | Holdings, Monarch<br>nx180<br>controller@hug.com.au<br>PO box 257<br>Port Vila, Port Vila 00000<br>VU  | Holdings, Monarch<br>nx180<br>controller@hug.com.au<br>PO box 257<br>Port Vila, Port Vila 00000<br>VU  | ns3.powweb.com<br>63.251.213.33<br>ns2.powweb.com<br>207.212.16.4                 |
| healthychoicepharmacy.com                  | Australia         | Steve Plath<br>51 Regent Street<br>Wynnum<br>4178<br>QLD<br>Australia<br>mcgolds@manwestss.qld.edu.au<br>07-3396-9301      | Steve Plath<br>51 Regent Street<br>Wynnum<br>4178<br>QLD<br>Australia<br>mcgolds@manwestss.qld.edu.au<br>07-3396-9301  | Domain Administrator<br>PO BOX 7169<br>East Brisbane<br>4169<br>Qld<br>Australia<br>domainadmin@server-dns.com<br>+61-7-3249-2500<br>Fax: +61-7-3249-2633                              | bnce001n.server-dns.com<br>wic001n.server-dns.com.au<br>spc001n.server-dns-us.com |
| herpes-clinic.com                          | U.S.              | Martin Marketing<br>5300 S Candle Weed Dr<br>Suite B<br>New York, NY 10012<br>US<br>212-967-2011                           | Martin, Jim<br>firstpharmacy@yahoo.com<br>5300 S Candle Weed Dr<br>Suite B<br>New York, NY 10012<br>US<br>212-967-2011   | Martin, Jim<br>firstpharmacy@yahoo.com<br>5300 S Candle Weed Dr<br>Suite B<br>New York, NY 10012<br>US<br>212-967-2011   | ns1.prlhost.com<br>168.158.215.80<br>ns2.prlhost.com<br>168.158.215.81            |
| highultimate-anti-aging-growth-hormone.com | U.S.              | Martin Marketing<br>5300 S Candle Weed Dr<br>Suite B   | Martin, Jim<br>firstpharmacy@yahoo.com<br>5300 S Candle Weed Dr<br>Suite B   | Martin, Jim<br>firstpharmacy@yahoo.com<br>5300 S Candle Weed Dr  | ns1.prlhost.com<br>68.158.215.80<br>ns2.prlhost.com                               |

| Domain Name                                       | Country of Origin | Registrant   | Administrative Contact   | Technical Contact   | Domain Servers/<br>IP Addresses  |
|---|-------------------|--|--|---|--|
|   |                   | New York, NY 10012<br>US<br>212-967-2011   | Suite B<br>New York, NY 10012<br>212-967-2011  | Suite B<br>New York, NY 10012<br>US<br>212-967-2011   | 68.158.215.81  |
| human-growth-hormone-supplements.com              | U.S.              | Martin Marketing<br>5300 S Candle Weed Dr<br>Suite B<br>New York, NY 10012<br>US<br>212-967-2011                                 | firstpharmacy@yahoo.com<br>5300 S Candle Weed Dr<br>Suite B<br>New York, NY 10012<br>US<br>212-967-2011  | Martin, Jim<br>firstpharmacy@yahoo.com<br>5300 S Candle Weed Dr<br>Suite B<br>New York, NY 10012<br>US<br>212-967-2011                                      | ns1.prihost.com<br>68.158.215.80<br>ns2.prihost.com<br>68.158.215.81               |
| impotence-erectile-dysfunction-male-impotency.com | U.S.              | JUMP.net<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800   | Plassar, Jean Marc<br>netfuse@yahoo.com<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800  | Plassar, Jean Marc<br>netfuse@yahoo.com<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800   | ns1.prihost.com<br>168.158.215.80<br>ns2.prihost.com<br>168.158.215.81             |
| kwikmed.com                                       | U.S.              | PCM Venture 1 LLC<br>admin@kwikmed.com<br>PO Box 13252<br>Scottsdale, AZ 85267<br>US<br>Phone: 877-594-5633<br>Fax: 480-707-4599 | PCM Venture 1 LLC<br>admin@kwikmed.com<br>PO Box 13252<br>Scottsdale, AZ 85267<br>US<br>Phone: 877-594-5633<br>Fax: 480-707-4599                       | Register.com<br>Domain Registrar<br>domain-registrar@register.com<br>575 8th Avenue<br>New York, NY 10018<br>US<br>Phone: 902-749-2701<br>Fax: 902-749-5429 | ns1.kwikcolossal.com<br>216.154.251.125<br>ns2.kwikcolossal.com<br>212.100.246.117 |
| khred.com   | U.S.              | TSU Management<br>4616 W. Sahara Ave. PMB 275<br>Las Vegas, NV<br>89102-3796<br>US   | TSU Management<br>4616 W. Sahara Ave. PMB 275<br>Las Vegas, NV<br>89102-3796<br>US   | info@khred.com<br>TSU Management<br>4616 W. Sahara Ave. PMB 275<br>Las Vegas, NV 89102-3796<br>US   | ns1.software.com<br>216.34.201.175<br>ns2.software.com<br>216.34.201.174           |
| medicapharma.com                                  | U.S.              | S., Vincent<br>MEDICAPHARMA-DOM<br>1455 Tallevast Road<br>Suite L1128<br>Sarasota, FL 34243<br>US                                | S., Vincent<br>28463351<br>tigersleep@yahoo.com<br>1455 Tallevast Road<br>Suite L1128<br>Sarasota, FL 34243<br>US<br>646-219-0645<br>Fax: 123-123-1234 | S., Vincent<br>28463351<br>tigersleep@yahoo.com<br>1455 Tallevast Road<br>Suite L1128<br>Sarasota, FL 34243<br>US<br>646-219-0645<br>Fax: 123-123-1234      | ns8.sun.yahoo.com<br>66.218.71.205<br>ns9.sun.yahoo.com<br>64.58.79.83             |
| medicine.com                                      | Cayman Islands    | Anything.com Ltd. c.ky)<br>P.O. Box 309, Uigland House<br>George Town, Grand Cayman<br>KY  | administration, domain<br>contact@anything.com<br>P.O. Box 309, Uigland House<br>George Town, Grand Cayman<br>KY<br>212-937-2077                       | administration, domain<br>contact@anything.com<br>P.O. Box 309, Uigland House<br>George Town, Grand Cayman<br>KY<br>212-937-2077                            | ns1.md.com<br>207.70.7.168<br>ns2.md.com<br>207.70.7.175                           |

| Domain Name     | Country of Origin               | Registrant  | Administrative Contact  | Technical Contact   | Domain Servers/<br>IP Addresses  |
|-----------------|---------------------------------|---|---|---|--|
| medpharmacy.com | Ireland                         | EuroIX Ltd<br>The Colonnade<br>87 Harcourt Street<br>Dublin 2<br>IE<br>Registration Service Provider:<br>METABILITY LLC,<br>operations@metability.com<br>614-766-8700 | Fax: 212-937-2077<br>O'Neill, Gordon<br>operations@metability.com<br>The Colonnade<br>87 Harcourt Street<br>Dublin 2<br>IE<br>+ 353-1-4767177<br>FAX: + 353-1-4767180 | Fax: 212-937-2077<br>O'Neill, Gordon<br>operations@metability.com<br>The Colonnade<br>87 Harcourt Street<br>Dublin 2<br>IE<br>+ 353-1-4767177<br>FAX: + 353-1-4767180 | ns1.usaspw3m.com<br>204.42.41.150<br>ns2.usaspw3m.com<br>204.42.41.151<br>ns3.backofficecmachine.com<br>204.42.41.150<br>ns4.backofficecmachine.com<br>204.42.41.151 |
| medscripsmd.com | U.S.                            | Medscrips, LLC<br>Tim McCoy<br>242 West Valley Avenue, Ste 203<br>Birmingham, AL 35209<br>US<br>205-313-3686<br>Fax: 205-313-3696<br>tim@medic.net                    | Medscrips, LLC<br>Tim McCoy<br>242 West Valley Avenue, Ste 203<br>Birmingham, AL 35209<br>US<br>205-313-3686<br>Fax: 205-313-3696<br>tim@medic.net                    | Medscrips, LLC<br>Tim McCoy<br>242 West Valley Avenue, Ste 203<br>Birmingham, AL 35209<br>US<br>205-313-3686<br>Fax: 205-313-3696<br>tim@medic.net                    | dns27.register.com<br>216.21.254.84<br>dns28.register.com<br>216.21.226.84   |
| medsmex.com     | U.S.                            | Medicine Mexico FMQHCOAFOD<br>PMB 330 4233 SE 182nd Ave.<br>Gresham, OR 97030<br>US   | Medicine Mexico BQGYLYHILAO<br>medicine.mexico@gc.net<br>Medicine Mexico<br>PMB 330 4233 SE 182nd Ave.<br>Gresham, OR 97030<br>US<br>503-665-0787                     | Medicine Mexico<br>BQGYLYHILAO<br>medicine.mexico@gc.net<br>Medicine Mexico<br>PMB 330 4233 SE 182nd Ave.<br>Gresham, OR 97030<br>US<br>503-665-0787                  | ns.westhost.net<br>209.204.249.248<br>ns2.westhost.net<br>209.204.250.200  |
| med-source.net  | U.S.                            | Jerri Korulja<br>3816 Esters Road, #405<br>Irving, TX 75038<br>US<br>214-632-9220<br>jerri_korulja@yahoo.com  | Elvis Korulja<br>3816 Esters Road, #405<br>Irving, TX 75038<br>US<br>214-632-9220<br>jerri_korulja@yahoo.com  | Register.Com<br>Domain Registrar<br>575 8th Avenue - 11th Floor<br>New York, NY 10018<br>US<br>902-749-2701<br>Fax: 902-749-5429<br>domain-registrar@register.com     | ns.addlr.com<br>209.249.147.233<br>ns2.addr.com<br>209.249.147.237   |
| medsviamail.com | U.S.                            | MedsViaMail.com<br>3830 Metro Parkway<br>Suite 172<br>Ft. Meyers, Florida 33916<br>US   | Support, Organization<br>sales@ordermedsonow.com<br>3830 Metro Parkway<br>Suite 172<br>Ft. Meyers, Florida 33916<br>US<br>888-232-8086<br>info@ltime.net              | Support, Organization<br>sales@ordermedsonow.com<br>3830 Metro Parkway<br>Suite 172<br>Ft. Meyers, Florida 33916<br>US<br>888-232-8086<br>info@ltime.net              | ns3.anonwebhost.com<br>64.21.143.160<br>ns1.anonwebhost.com<br>64.21.143.161   |
| myclinics.com   | Turks and<br>Caiicos<br>Islands | Alex Cohen<br>LTMIC ltd.<br>99999<br>Turks and Caiicos Islands  | Alex Cohen<br>LTMIC ltd.<br>99999<br>Turks and Caiicos Islands  | Alex Cohen<br>LTMIC ltd.<br>99999<br>Turks and Caiicos Islands  | sdns.goldenlines.net.il  |

| Domain Name  | Country of Origin | Registrar   | Administrative Contact   | Technical Contact  | Domain Servers/<br>IP Addresses   |
|--|-------------------|---|--|--|---|
| myprescriptionmedications.com                          | Kyrgyz Republic   | xosting@inbox.ru<br>Domain Admin<br>Karloveska 19, #92<br>Bishkek<br>720000<br>KG   | xosting@inbox.ru   | xosting@inbox.ru   | ns1.mydomain.com<br>ns2.mydomain.com<br>ns3.mydomain.com  |
| natural-alternative-4-viagra.com                       | U.S.              | rlump.net<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800   | Plassard, Jean Marc<br>netfuse@yahoo.com<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US<br>423-299-1800   | Plassard, Jean Marc<br>netfuse@yahoo.com<br>1300 Cumberland Wharf<br>Blountville, TN 37618<br>US   | ns1.prihost.com<br>168.158.215.80<br>ns2.prihost.com<br>168.158.215.81  |
| netpharmacy.co.nz                                      | New Zealand       | Rachel Kazenbrood Pharmacy Ltd<br>Rob Phillips<br>109 Parnell Road<br>Parnell<br>Auckland<br>NZ<br>rphilipps@stra.co.nz<br>+64-9-528 7983 | Domainz<br>Inspire Net Limited<br>Private Bag 1810<br>PO Box 4387<br>Wellington, NZ<br>Palmerston North, NZ<br>4service@domainz.net.nz<br>domains@inspire.net.nz<br>+64-4-918-1740<br>+64-6-357 8559 | Domainz Limited<br>Greenock House<br>Floor 4, Unit 4<br>domainz@domainz.net.nz<br>+64-4-473 4567   | ns1.inspire.net.nz<br>203.114.128.1<br>ns2.inspire.net.nz<br>203.114.128.2  |
| nubrain.com  | U.S.              | Nubrain<br>NUBRAIN-DOM<br>P.O. Box 1364<br>Lawrenceville<br>GA, 30246<br>US<br>770-339-9896   | George, Kulper<br>KG1685<br>nubrain@cris.com<br>Cosmic Sales & Mkt. Inc.<br>PO Box 420282<br>Atlanta, GA 30342-0282<br>770-339-9896<br>Fax: 770-339-9896   | Networks, FastDns<br>GD184<br>reg@fastdns.net<br>FastDns<br>3080 Ogden Ave<br>Lisle, IL 60532<br>Fax: 630-357-8545                       | ns.host4u.net<br>209.150.128.30<br>ns2.host4u.net<br>209.150.129.3  |
| online-discount-pharmacy-with-online-prescriptions.com | U.S.              | Global Cyber Strategies<br>Plaza of the Americas<br>700 North Pearl Suite 2150<br>Dallas, TX 75251<br>US<br>214-979-8565                  | Manager, Domain<br>dmanage@gcs-corp.com<br>Plaza of the Americas<br>700 North Pearl Suite 2150<br>Dallas, TX 75251<br>US<br>214-979-8565   | Manager, Domain<br>dmanage@gcs-corp.com<br>Plaza of the Americas<br>700 North Pearl Suite 2150<br>Dallas, TX 75251<br>US<br>214-979-8565 | ns1.worldnets.com<br>65.221.201.3<br>ns2.worldnets.com<br>216.205.90.34<br>mx1-1.worldnets.com<br>65.221.201.3<br>mx1-2.worldnets.com<br>65.221.201.3<br>mx1-3.worldnets.com<br>65.221.201.3<br>mx1-4.worldnets.com<br>65.221.201.3 |
| onlinemedz.com   | U.S.              | MedScripts, LLC<br>Tim McCoy<br>242 West Valley Avenue, Ste 203   | MedScripts, LLC<br>Tim McCoy<br>242 West Valley Avenue, Ste 203  | Register.Com<br>Domain Registrar<br>575 8th Avenue - 11th Floor  |   |

| Domain Name                   | Country of Origin | Registrar   | Administrative Contact   | Technical Contact   | Domain Servers/<br>IP Addresses  |
|-------------------------------|-------------------|---|--|---|--|
| online-pharmacy-directory.com | U.S.              | Birmingham, AL 35209<br>US<br>205-313-3686<br>Fax: 205-313-3696<br>tim@mellic.net | Birmingham, AL 35209<br>US<br>205-313-3686<br>Fax: 205-313-3696<br>tim@mellic.net  | New York, NY 10018<br>US<br>902-749-2701<br>Fax: 902-749-5429<br>domain-registrar@register.com  | ns1.prihost.com<br>68.158.215.80<br>ns2.prihost.com<br>68.158.215.81                             |
| onlinepharmacydrugs.com       | U.S.              | FB Marketing (NA)<br>NA<br>3121 Iron Gate Trail<br>Jamestown, NC 27282<br>US      | Scott Burns<br>sburns16@hpc.infi.net<br>336-855-0905<br>3121 Iron Gate Trail<br>Jamestown, NC 27282<br>US                              | Scott Burns<br>sburns16@hpc.infi.net<br>336-855-0905<br>3121 Iron Gate Trail<br>Jamestown, NC 27282<br>US   | ns1.ehost.com<br>ns2.ehost.com   |
| onlinepills.com               | U.S.              | FFD, Inc.<br>ONLINEPILLS-DOOM<br>P.O. Box 151<br>null<br>US                       | Olvey, Mike W<br>MWO15<br>webmaster@lfplopdoc.com<br>Ffd, Inc<br>P.O. Box 151<br>Tyrone, GA 30290<br>770-631-8819<br>Fax: 770-631-8594 | TierraNet Inc.<br>TH33-ORG<br>hostmaster@tierranet.com<br>TierraNet Inc.<br>9573 Chesapeake Drive Suite 100<br>San Diego, CA 92123<br>US<br>858-560-9416<br>Fax: 858-560-9417 | ns1.tierra.net<br>216.104.162.2<br>ns2.tierra.net<br>216.104.165.2                               |
| orderphentermineonline.net    | Bermuda           | RayPasnen<br>3 Blue Hole Hill<br>Bailey's Bay, CR-04<br>Bermuda                   | Pasnen, Ray<br>handbsck@yahoo.com<br>3 Blue Hole Hill<br>Bailey's Bay, CR-04<br>Bermuda<br>212-330-6808                                | Pasnen, Ray<br>handbsck@hotmail.com<br>OptiNet<br>3 Blue Hole Hill<br>Bailey's Bay, CR-04<br>Bermuda<br>212-330-6808  | ns2.server-2.com   |
| originaldrugs.com             | Belarus           | None<br>Grodno-3 PO Box 21<br>Grodno, BY 230003<br>BY<br>375152722273             | Bayarski, Yury o.y@ut.by<br>Grodno-3 PO Box 21<br>Grodno, BY 230003<br>BY<br>375152722273  | Bayarski, Yury o.y@ut.by<br>Grodno-3 PO Box 21<br>Grodno, BY 230003<br>BY<br>375152722273   | ns1.bottomlinewebhosting.net<br>216.218.202.107<br>ns2.bottomlinewebhosting.net<br>64.62.139.125 |
| overnightprescriptions.com    | Unknown           | Podolak Group<br>Brian Podolak nonth@yahoo.com<br>US                              | Podolak Group<br>Brian Podolak nonth@yahoo.com<br>US   | Podolak Group<br>Brian Podolak nonth@yahoo.com<br>US  |  |
| overseas-meeds.com            | U.S.              | Chad Smith<br>PO Box 70041<br>Myrtle Beach, SC 29572<br>US                        | Smith, Chad<br>admin@overseas-meeds.com<br>PO Box 70041<br>Myrtle Beach, SC 29572<br>US<br>843-449-3111                                | Smith, Chad<br>admin@overseas-meeds.com<br>PO Box 70041<br>Myrtle Beach, SC 29572<br>US<br>843-449-3111   | ns3.azhosting.com<br>ns1.azhosting.com   |



| Domain Name        | Country of Origin | Registrant  | Administrative Contact  | Technical Contact   | Domain Servers/<br>IP Addresses  |
|--------------------|-------------------|---|---|---|--|
| paylessdrugs.com   | U.S.              | Administrator<br>PO BOX 2032<br>Little River, SC 29566<br>US  | A. N<br>littserver@att.net<br>PO BOX 2032<br>Little River, SC 29566<br>US   | A. N<br>littserver@att.net<br>PO BOX 2032<br>Little River, SC 29566<br>US   | ns.webair.net<br>216.130.161.1<br>ns2.webair.net<br>216.130.161.6      |
| petscriptions.com  | U.S.              | Cicada Dynamic Systems<br>Web Master<br>4157 Pitts Ave #1<br>Cincinnati, OH 45223<br>US<br>513-541-2072<br>webmaster@cicadadesign.com   | Cicada Dynamic Systems<br>Web Master<br>PO Box 23188<br>Cincinnati, OH 45223<br>US<br>513-541-2072<br>webmaster@cicadadesign.com  | Register Com<br>Domain Registrar<br>575 8th Avenue - 11th Floor<br>New York, NY 10018<br>US<br>902-749-2701<br>domain-registrar@register.com  | ns.rackspace.com<br>207.235.16.2<br>ns2.rackspace.com<br>207.71.44.121 |
| pharmacy.place.cc  | Germany           | Stephan Bock<br>stephan.bock@gmx.net<br>Smartbedirect<br>Kochstr. 8<br>Huerth, NRW 50354<br>DE<br>+49-2233-966707   | Stephan Bock<br>stephan.bock@gmx.net<br>Smartbedirect<br>Kochstr. 8<br>Huerth, NRW 50354<br>DE<br>+49-2233-966707   | Stephan Bock<br>stephan.bock@gmx.net<br>Smartbedirect<br>Kochstr. 8<br>Huerth, NRW 50354<br>DE<br>+49-2233-966707   | ns1.f-netone.com<br>ns2.f-netone.com                                   |
| pharmacy.geoff.com | Hong Kong         | Chagan Reliance Limited<br>domain@unitedpharmacies.com<br>Edwin Cheung and Siu HK<br>Certified Public Accountants<br>Room 1204, 12/F, Shanghai Ind.<br>Investment Bldg. - 48-62 Hennessy<br>Road<br>Wanchai,<br>HK<br>852-28511480<br>Fax: 852-28511480 | Chagan Reliance Limited<br>domain@unitedpharmacies.com<br>Edwin Cheung and Siu HK<br>Certified Public Accountants<br>Room 1204, 12/F, Shanghai Ind.<br>Investment Bldg. - 48-62 Hennessy<br>Road<br>Wanchai,<br>HK<br>852-28511480<br>Fax: 852-28511480 | Chagan Reliance Limited<br>domain@unitedpharmacies.com<br>Edwin Cheung and Siu HK<br>Certified Public Accountants<br>Room 1204, 12/F, Shanghai Ind.<br>Investment Bldg. - 48-62 Hennessy<br>Road<br>Wanchai,<br>HK<br>852-28511480<br>Fax: 852-28511480 | ns.host4u.net<br>209.150.128.30<br>ns2.host4u.net<br>209.150.129.3     |
| pillmail.com       | U.S.              | Woorinet Internet Solution<br>39-A W Edsall Ave<br>Palisades Park, New Jersey 07650<br>US   | seconglin_k@yahoo.com<br>39-A W Edsall Ave<br>Palisades Park, New Jersey 07650<br>US<br>201-945-5951  | Hahn, Yong<br>seconglin_k@yahoo.com<br>39-A W Edsall Ave<br>Palisades Park, New Jersey 07650<br>US  | ns1.hostcentric.net<br>ns2.hostcentric.net                             |
| pill-pharmacy.com  | U.S.              | Server General Network<br>Customer Owned Domain<br>hostmaster@servercentral.net<br>312-829-1111<br>Fax: 312-829-1110<br>2002 West Chicago Ave<br>PMB 101 / Hostmaster<br>Chicago, IL  | Server General Network<br>Customer Owned Domain<br>hostmaster@servercentral.net<br>312-829-1111<br>Fax: 312-829-1110<br>2002 West Chicago Ave<br>PMB 101 / Hostmaster<br>Chicago, IL  | Server General Network<br>Customer Owned Domain<br>hostmaster@servercentral.net<br>312-829-1111<br>Fax: 312-829-1110<br>2002 West Chicago Ave<br>PMB 101 / Hostmaster<br>Chicago, IL  |  |

| Domain Name       | Country of Origin | Registrant  | Administrative Contact  | Technical Contact   | Domain Servers/<br>IP Addresses                                    |
|-------------------|-------------------|---|---|---|--|
| pillscribe.com    | U.S.              | 60622-5548<br>US<br>Yong Hahn<br>iGlobe Communications, Inc<br>39-A W Edsall Ave<br>Palisades Park, New Jersey<br>07650<br>US               | 60622-5548<br>US<br>Hahn, Yong<br>seongin_k@yahoo.com<br>iGlobe Communications, Inc<br>39-A W Edsall Ave<br>Palisades Park, New Jersey<br>07650<br>US | 60622-5548<br>US<br>Hahn, Yong<br>seongin_k@yahoo.com<br>iGlobe Communications, Inc<br>39-A W Edsall Ave<br>Palisades Park, New Jersey<br>07650<br>US | ns2.hostcentric.net  |
| pillsdepot.com    | Panama            | Customer Support<br>Hosting Provider Service<br>P.O. Box Panama<br>Rep de Panama<br>Tocumen, Not Applicable 33333<br>Panama<br>888-435-0435 | Service-Diez, Customer<br>hostmaster@promel.net<br>P.O. Box Panama<br>Tocumen, Not Applicable 33333<br>Panama<br>888-435-0435                         | Service-Diez, Customer<br>hostmaster@promel.net<br>P.O. Box Panama<br>Tocumen, Not Applicable 33333<br>Panama<br>888-435-0435                         | dns1.theprescriptionnetwork.com<br>dns2.theprescriptionnetwork.com |
| pillsguide.com    | U.S.              | iGlobe<br>39-A W Edsall Ave<br>Palisades Park, New Jersey<br>07650<br>US  | Hahn, Yong<br>seongin_k@yahoo.com<br>39-A W Edsall Ave<br>Palisades Park, New Jersey<br>07650<br>US   | Hahn, Yong<br>seongin_k@yahoo.com<br>39-A W Edsall Ave<br>Palisades Park, New Jersey<br>07650<br>US   | ns1.hostcentric.net<br>ns2.hostcentric.net                         |
| pillsmarket.com   | U.S.              | iGlobe Communications, Inc<br>39-A W Edsall Ave<br>Palisades Park, New Jersey 07650<br>US   | Hahn, Yong<br>seongin_k@yahoo.com<br>39-A W Edsall Ave<br>Palisades Park, New Jersey 07650<br>US  | Hahn, Yong<br>seongin_k@yahoo.com<br>39-A W Edsall Ave<br>Palisades Park, New Jersey 07650<br>US  | ns1.hostcentric.net<br>ns2.hostcentric.net                         |
| pillsstore.com    | U.S.              | Jive Network<br>1450 N US Hwy 1<br>Ste 700<br>Ormond Beach, Florida<br>32174<br>US  | Admin, Domain domains@zlg.com<br>1450 N US Hwy 1<br>Ste 700<br>Ormond Beach, Florida<br>32174<br>US<br>888-249-8422                                   | Admin, Domain domains@zlg.com<br>1450 N US Hwy 1<br>Ste 700<br>Ormond Beach, Florida<br>32174<br>US<br>888-249-8422                                   | ns1.zlg.com<br>208.135.181.10<br>ns2.zlg.com<br>208.135.181.20     |
| pillvalue.com     | U.S.              | Jive Network<br>1450 N US Hwy 1<br>Ste 700<br>Ormond Beach, Florida<br>32174<br>US  | Admin, Domain domains@zlg.com<br>1450 N US Hwy 1<br>Ste 700<br>Ormond Beach, Florida<br>32174<br>US<br>888-249-8422                                   | Admin, Domain domains@zlg.com<br>1450 N US Hwy 1<br>Ste 700<br>Ormond Beach, Florida<br>32174<br>US<br>888-249-8422                                   | ns1.zlg.com<br>208.135.181.10<br>ns2.zlg.com<br>208.135.181.20     |
| planetariumed.com | U.S.              | JDF Management<br>1125 E. Broadway Suite 76<br>Glendale, CA 91205   | info@planetariumed.com<br>JDF Management<br>1125 E. Broadway suite 76   | info@planetariumed.com<br>JDF Management<br>1125 E. Broadway suite 76   | ns1.softaware.com<br>216.34.201.175<br>ns2.softaware.com           |

| Domain Name           | Country of Origin        | Registrant   | Administrative Contact   | Technical Contact  | Domain Servers/<br>IP Addresses  |
|-----------------------|--------------------------|--|--|--|--|
| planetdrugsdirect.com | New Zealand              | Planetdrugsdirect Ltd<br>PO Box 34092, Birkenhead<br>Auckland<br>New Zealand                     | Buck, Rory<br>rory@zwebb.co.nz<br>1/12 Earl St<br>Sydney, NSW 2088<br>Australia<br>61 2 9960 5740<br>Fax: 61 2 9960 4745 | Buck, Rory<br>rory@zwebb.co.nz<br>1/12 Earl St<br>Sydney, NSW 2088<br>Australia<br>61 2 9960 5740<br>Fax: 61 2 9960 4745               | 216.34.201.174<br>ns1.net24.net.nz<br>ns2.net24.net.nz   |
| planetpills.com       | U.S.                     | Jive Network<br>1450 N US Hwy 1<br>Ste 700<br>Ormond Beach, Florida<br>32174<br>US               | Admin, Domain domains@zlg.com<br>1450 N US Hwy 1<br>Ste 700<br>Ormond Beach, Florida<br>32174<br>US                      | Admin, Domain domains@zlg.com<br>1450 N US Hwy 1<br>Ste 700<br>Ormond Beach, Florida<br>32174<br>US                                    | ns1.zlg.com<br>208.135.181.10<br>ns2.zlg.com<br>208.135.181.20   |
| platinum-rx.com       | U.S.                     | Mark Saks<br>Impact Health Care<br>9495 Sunset Drive, Suite 294<br>Miami, Florida<br>33173<br>US | Saks, Mark eyesguy001@aol.com<br>Impact Health Care<br>9495 Sunset Drive, Suite 294<br>Miami, Florida<br>33173<br>US     | Saks, Mark eyesguy001@aol.com<br>Impact Health Care<br>9495 Sunset Drive, Suite 294<br>Miami, Florida<br>33173<br>US                   | ns2.servpath.com   |
| prescription-dtug.net | Namibia<br>or<br>Germany | Tom Krieger<br>krieger@wwwseiten.de<br>Tucholskysstr.18<br>Frankfurt<br>60598<br>DE              | Tom Krieger<br>krieger@wwwseiten.de<br>Tucholskysstr.18<br>Frankfurt<br>60598<br>DE                                      | Tom Krieger<br>krieger@wwwseiten.de<br>Tucholskysstr.18<br>Frankfurt<br>60598<br>DE  | net4.namweb.com.na<br>dns1.namweb.com.na   |
| price-rx.com          | Belarus                  | Grodno-3 PO Box 21<br>BY<br>230003<br>37515272273  | Bayarski, Yury<br>o_y@ut.by  | Bayarski, Yury<br>o_y@ut.by<br>Grodno-3 PO Box 21<br>Grodno, BY<br>230003<br>37515272273   | ns.jaguarp.net<br>66.227.56.27<br>ns2.jaguarp.net<br>66.227.63.0<br>ns3.jaguarp.net<br>66.227.62.0<br>ns4.jaguarp.net<br>66.227.56.240 |
| quikrelief.net        | U.S.                     | DQI<br>QUIKRELIEF-DOM<br>P.O. Box 166347<br>Irving, TX<br>75016<br>US                            | DQI<br>F20886-OR<br>efk_75261@yahoo.com<br>DQI<br>P.O. Box 166347<br>Irving, TX<br>75016<br>US                           | VerSign, Inc.<br>HOST-ORG<br>namehost@worldnic.net<br>VerSign, Inc.<br>21355 Ridgeway Circle<br>Dulles, VA 20166<br>US<br>888-612-9675 | ns1.iwebbiz.net<br>66.45.30.76<br>ns2.iwebbiz.net<br>66.45.30.77   |

| Domain Name          | Country of Origin  | Registrant  | Administrative Contact   | Technical Contact  | Domain Servers/<br>IP Addresses  |
|----------------------|--------------------|---|--|--|--|
| respiratory-care.com | Saudi Arabia       | MSI<br>Abdullah Alshinimeri<br>aalshinimer@yahoo.com<br>1425 ICU King Fahd Hospital<br>PO Box 22490<br>Riyadh, Riyadh<br>11426<br>SA<br>96612520088 | MSI<br>Abdullah Alshinimeri<br>aalshinimer@yahoo.com<br>aalshinimer@yahoo.com<br>1425 ICU King Fahd Hospital<br>PO Box 22490<br>Riyadh, Riyadh<br>11426<br>SA<br>96612520088 | MSI<br>Abdullah Alshinimeri<br>aalshinimer@yahoo.com<br>aalshinimer@yahoo.com<br>1425 ICU King Fahd Hospital<br>PO Box 22490<br>Riyadh, Riyadh<br>11426<br>SA<br>96612520088 | dns1.name-services.com<br>dns2.name-services.com<br>dns3.name-services.com<br>dns4.name-services.com<br>dns5.name-services.com |
| righthsway.com       | U.S.               | DMG Online<br>1108 14th Street, Suite 231<br>Cody, WY<br>82414<br>US  | DMG Online<br>info@righthsway.com<br>1108 14th Street, Suite 231<br>Cody, WY<br>82414<br>US  | DMG Online<br>info@righthsway.com<br>1108 14th Street, Suite 231<br>Cody, WY<br>82414<br>US  | ns1.softaware.com<br>216.34.201.175<br>ns2.softaware.com<br>216.34.201.174   |
| rockbottom-rx.com    | U.S.               | jill Miles<br>dms@jirp.com<br>23233 N. Pima Rd #113 PMB # 155<br>Scottsdale, AZ 85255<br>US   | jill Miles<br>dms@jirp.com<br>23233 N. Pima Rd #113 PMB # 155<br>Scottsdale, AZ 85255<br>US  | jill Miles<br>dms@jirp.com<br>23233 N. Pima Rd #113 PMB # 155<br>Scottsdale, AZ 85255<br>US  | bunny-furrybuddies.com<br>moekat.furrybuddies.com<br>penguin.furrybuddies.com  |
| rx2world.com         | Vanuatu            | Lusk<br>c/- Monarch Holdings<br>PO Box 257<br>Port Vila<br>00000<br>Vanuatu   | Simon Anderson<br>controller@ihug.com.au<br>Monarch Holdings<br>PO Box 257<br>Port Vila<br>00000<br>Vanuatu  | Verto Hostmaster<br>hostmaster@verto-hosting.com<br>5050 Blue Lake Dr.<br>Boca Raton<br>33431<br>FL<br>US<br>888-663-6648<br>Fax: 888-663-6655<br>krieger@www.seiten.de      | ns1.wolfweb.com.au<br>ns2.wolfweb.com.au   |
| rxbudget.com         | Namibia or Germany | www.seiten<br>Tom Krieger<br>krieger@www.seiten.de#1<br>Tucholskystr.18<br>Frankfurt<br>60598<br>DE   | krieger@www.seiten.de  | krieger@www.seiten.de  | net4.namweb.com.na<br>dns1.namweb.com.na   |
| rxcity.net           | U.S.               | Entertainment Hosting Services, Inc.<br>1147 E. Broadway Suite 76<br>Glendale, CA<br>91205<br>US  | Entertainment Hosting Services, Inc.<br>admin@entertainmenthosting.com<br>1125 E. Broadway Suite 76<br>Glendale, CA<br>91205<br>US   | Entertainment Hosting Services, Inc.<br>admin@entertainmenthosting.com<br>1125 E. Broadway Suite 76<br>Glendale, CA<br>91205<br>US   | ns1.softaware.com<br>216.34.201.175<br>ns2.softaware.com<br>216.34.201.174   |

| Domain Name          | Country of Origin        | Registrant   | Administrative Contact  | Technical Contact   | Domain Servers/<br>IP Addresses  |
|----------------------|--------------------------|--|---|---|--|
| rx-max.com           | U.S.                     | American Medical Services, LLC<br>Phil Perout<br>phil@ams-llc.org<br>405 Gretna Blvd.<br>Suite 202<br>Gretna, LA<br>70053<br>US<br>504-263-5151  | 413-643-2453<br>American Medical Services, LLC<br>Phil Perout<br>phil@ams-llc.org<br>405 Gretna Blvd.<br>Suite 202<br>Gretna, LA<br>70053<br>US<br>504-263-5151<br>wizard@wiz.com.na  | 413-643-2453<br>American Medical Services, LLC<br>Phil Perout<br>phil@ams-llc.org<br>405 Gretna Blvd.<br>Suite 202<br>Gretna, LA<br>70053<br>US<br>504-263-5151<br>wizard@wiz.com.na      | dns27.registrar.com<br>216.211.234.84<br>dns28.registrar.com<br>216.211.226.84   |
| rx-nam.com           | Namibia<br>or<br>Germany | Thorsten Hubner<br>wizard@wiz.com.na<br>PO Box 31412<br>Pionierspark<br>Windhoek<br>9000   | 413-643-2453<br>American Medical Services, LLC<br>Phil Perout<br>phil@ams-llc.org<br>405 Gretna Blvd.<br>Suite 202<br>Gretna, LA<br>70053<br>US<br>504-263-5151<br>wizard@wiz.com.na  | wizard@wiz.com.na   | dns1.namweb.com.na<br>ruby2.oasys.com.na   |
| rx-sale.com          | Namibia<br>or<br>Germany | to@tomkrieger.de<br>Pharmacy<br>NET Marketing<br>President<br>PO Box 9419 Eros<br>Windhoek<br>Namibia<br>9000  | to@tomkrieger.de  | to@tomkrieger.de  | net1.namweb.com.na<br>dns1.namweb.com.na<br>ans.joker.com<br>194.176.0.2<br>b.ans-joker.com<br>194.245.101.19<br>c.ans-joker.com<br>194.245.50.1 |
| safemedcs.com        | Mexico                   | SafeMeds S.A. de C.V.<br>Allan Sibaja Alvarado<br>Ave. Insurgentes Sur, Entre<br>Viaducto y Huatusco<br>Colonia Roma. C.P. 06760, Mexico<br>D.F. 06760<br>MX<br>525555748873<br>Fax: 786-513-2214<br>admin@safemedcs.com | Administrative Contact:<br>SafeMeds S.A. de C.V.<br>Allan Sibaja Alvarado<br>Ave. Insurgentes Sur, Entre<br>Viaducto y Huatusco<br>Colonia Roma. C.P. 06760, Mexico<br>D.F. 06760<br>MX<br>525555748873<br>Fax: 786-513-2214<br>admin@safemedcs.com | Registrar Com<br>Domain Registrar<br>575 8th Avenue<br>New York, NY 10018<br>US<br>212-798-9200<br>Fax: 212-629-9305<br>dbouchon@registrar.com  | ns1.internet-dns.net<br>208.238.102.2<br>ns2.internet-dns.net<br>216.877.0.197   |
| samedaydrugstore.com | U.S.                     | PNP Management<br>3579 E. Foothill Blvd, Suite 394<br>Pasadena, CA<br>91107<br>US<br>David Dillon<br>davedll@sam.rr.com<br>3965 Hawk St. #C<br>San Diego, CA   | PNP Management<br>info@samedaydrugstore.com<br>3579 E. Foothill Blvd, Suite 394<br>Pasadena, CA<br>91107<br>US<br>David Dillon<br>davedll@sam.rr.com<br>3965 Hawk St. #C<br>San Diego, CA   | PNP Management<br>info@samedaydrugstore.com<br>3579 E. Foothill Blvd, Suite 394<br>Pasadena, CA<br>91107<br>US<br>David Dillon<br>davedll@sam.rr.com<br>3965 Hawk St. #C<br>San Diego, CA | ns1.softaware.com<br>216.34.201.175<br>ns2.softaware.com<br>216.34.201.174   |
| smart-drugs.net      | U.S.                     | David Dillon<br>davedll@sam.rr.com<br>3965 Hawk St. #C<br>San Diego, CA  | David Dillon<br>davedll@sam.rr.com<br>3965 Hawk St. #C<br>San Diego, CA   | David Dillon<br>davedll@sam.rr.com<br>3965 Hawk St. #C<br>San Diego, CA   | ns0.aitcom.net<br>208.234.1.34<br>ns1.aitcom.net<br>216.117.186.139  |

| Domain Name                         | Country of Origin | Registrant  | Administrative Contact  | Technical Contact   | Domain Servers/<br>IP Addresses   |
|-------------------------------------|-------------------|---|---|---|---|
| the-dispensary.com                  | Australia         | 92103<br>US<br>858-270-9015<br>NI Lusk<br>25 Hippwood St<br>Brisbane, 4170<br>AU<br>+61421345058<br>Fax: 555-555-5555 | 92103<br>US<br>858-270-9015<br>NI Lusk<br>t139@hotmail.com<br>25 Hippwood St<br>Brisbane, 4170<br>AU<br>+61421345058<br>Fax: 555-555-5555                               | 92103<br>US<br>858-270-9015<br>Domain Administrator<br>domains@vrc-uk.com<br>WRC (UK) Limited<br>Well Court<br>14-16 Farringdon Lane<br>London, EC1R 3AU<br>UK<br>+44 1474 740724 | ns2.altcom.net<br>208.294.1.36<br><br>ns.wrcworldwide.com<br>65.108.51.34<br>ns2.wrcworldwide.com<br>65.108.52.11 |
| thedoctorspharmacy.com              | U.S.              | eDentity Media, Inc<br>3063 Paradise Bay Rd<br>Port Ludlow, Washington 98365<br>US                                    | Mahana, Steven<br>edentity@edentitymedia.com<br>eDentity Media, Inc<br>3063 Paradise Bay Rd<br>Port Ludlow, Washington 98365<br>US<br>866-333-3744<br>Fax: 888-840-6477 | Mahana, Steven<br>edentity@edentitymedia.com<br>eDentity Media, Inc<br>3063 Paradise Bay Rd<br>Port Ludlow, Washington 98365<br>US<br>866-333-3744<br>Fax: 888-840-6477           | dns1.edentitymedia.com<br>dns2.edentitymedia.com  |
| themcdshop.com                      | U.S.              | Justin Hill<br>Hill Auto Details<br>302 Englewood<br>Long View, Texas<br>75605<br>US                                  | Justin Hill<br>Hill Auto Details<br>302 Englewood<br>Long View, Texas<br>75605<br>US<br>903-738-9861  | Hill, Justin nimishi@protouch.net<br>302 Englewood<br>Long View, Texas<br>75605<br>US<br>903-738-9861   | ns1.lnhi.net<br>ns2.lnhi.net  |
| themcdshoprx.com                    | U.S.              | Hill Auto Details<br>302 Englewood<br>Long View, Texas<br>75605<br>US   | Hill Auto Details<br>justin.hill@bcgglobal.net<br>302 Englewood<br>Long View, Texas<br>75605<br>US<br>903-738-9861  | Hill Auto Details<br>justin.hill@bcgglobal.net<br>302 Englewood<br>Long View, Texas<br>75605<br>US<br>903-738-9861  | ns2.lnhi.net  |
| theprescriptionnetwork.com          | U.S.              | The Prescription Network<br>TPN<br>Miami<br>33122<br>FL<br>US   | TPN<br>Miami<br>33122<br>FL<br>US<br>hostmaster@promel.net<br>888-435-0435  | TPN<br>Miami<br>33122<br>FL<br>US<br>hostmaster@promel.net<br>888-435-0435  | dns1.theprescriptionnetwork.c<br>om<br>dns2.theprescriptionnetwork.c<br>om  |
| top-10-viagra-pharmacies-online.com | Unknown           | Viagra Online<br>na<br>na, na 00000<br>IN<br>98798798   | online; Viagra<br>meds@top-10-viagra-pharmacies-<br>online.com<br>na<br>na, na 00000<br>IN<br>98798798  | online; Viagra<br>meds@top-10-viagra-pharmacies-<br>online.com<br>na<br>na, na 00000<br>IN<br>98798798  | ns0.directnic.com<br>204.251.10.100<br>ns1.directnic.com<br>206.251.177.2   |

| Domain Name                | Country of Origin  | Registrant  | Administrative Contact  | Technical Contact  | Domain Servers/<br>IP Addresses  |
|----------------------------|--------------------|---|---|--|--|
| ultimaterx.com             | Dominican Republic | MenPhills<br>Zona Franca Industrial<br>Las Americas<br>Km.42<br>Santo Domingo, RD<br>DO<br>809-724-0334   | Martinez, Billy<br>firstpharmacy@yahoo.com<br>Zona Franca Industrial<br>Las Americas<br>Km.42<br>Santo Domingo, RD<br>DO<br>809-724-0334                    | Martinez, Billy<br>firstpharmacy@yahoo.com<br>Zona Franca Industrial<br>Las Americas<br>Km.42<br>Santo Domingo, RD<br>DO<br>809-724-0334           | ns1.prlhost.com<br>168.158.215.80<br>ns2.prlhost.com<br>168.158.215.81   |
| uprima-rx.com              | U.S.               | Marketing, Internet NIZGQTOEOD<br>2100 S Dobson Rd<br>Tempe, AZ<br>85281<br>US  | Pharmacy, Uprima DZLAEIAYWI<br>info@uprima-rx.com<br>12 Cowpers Corner<br>Worthing, Sussex<br>S12 5JZ<br>UK<br>4416978556287321<br>123-123-1234             | Pharmacy, Uprima<br>KKBIBG(MFI)<br>info@uprima-rx.com<br>12 Cowpers Corner<br>Worthing, Sussex<br>S12 E44<br>UK<br>440109288973876<br>123-123-1234 | ns1.uprima-rx.com<br>168.158.215.80<br>ns2.uprima-rx.com<br>168.158.215.81                                     |
| uprima-uk.com              | England            | Marketing, Internet OFVESBDDJID<br>12 Cowpers Corner<br>Worthing, Sussex<br>S12 E44<br>GB   | Pharmacy, Uprima GSDNXU1FYXI<br>info@uprima-uk.com<br>12 Cowpers Corner<br>Worthing, Sussex<br>E12 544<br>UK<br>4401832878367698<br>123-123-1234            | Pharmacy, Uprima HTQHMOBIMI<br>info@uprima-uk.com<br>12 Cowpers Corner<br>Worthing, Sussex<br>E12 544<br>UK<br>44018887768678678<br>123-123-1234   | ns1.prlhost.com<br>209.147.106.226<br>ns2.prlhost.com<br>168.158.215.99  |
| usa-pharmacy-online.com    | India              | Dinkar Bhogate<br>rickson7@yahoo.com<br>dinkarbhogate@hotmail.com<br>IN   | Dinkar Bhogate<br>dinkarbhogate@hotmail.com<br>IN   | Dinkar Bhogate<br>dinkarbhogate@hotmail.com<br>IN  |  |
| usprescription.com         | U.S.               | USA Prescription, Inc.<br>5400 S. University Drive<br>Suite 401<br>Davie, FL<br>33328<br>US   | Hostmaster, USA Prescription, Inc.<br>admin@USAPrescription.com<br>5400 S. University Drive<br>Suite 401<br>Davie, FL<br>33328<br>US<br>954-252-0166        | Hostmaster<br>METABility<br>operations@metability.com<br>655 Metro Place South<br>Suite 450<br>Dublin, OH<br>43017<br>US<br>614-766-8700           | ns1.metability.com<br>65.83.251.51<br>ns3.metability.com<br>65.83.251.53<br>ns2.metability.com<br>65.83.251.52 |
| valtheopharmaceuticals.com | Australia          | Liberty Lifestyle Pty Ltd<br>Managing Director<br>enquiries@valtheopharmaceuticals.com<br>PO Box 103 Concord West<br>Sydney, NSW 2138<br>AU<br>+61287650749 | Liberty Lifestyle Pty Ltd<br>Managing Director<br>enquiries@valtheopharmaceuticals.com<br>PO Box 103 Concord West<br>Sydney, NSW 2138<br>AU<br>+61287650749 | Domain Administration<br>domainadmin@server-dns.com<br>PO BOX 990<br>Fortitude Valley, QLD 4006<br>AU<br>+61 7 32492500<br>Fax: +61 7 3249 2533    | ns12.zoneedit.com<br>64.246.26.64<br>ns14.zoneedit.com<br>209.126.159.80                                       |

| Domain Name                  | Country of Origin | Registrar   | Administrative Contact  | Technical Contact   | Domain Servers/<br>IP Addresses  |
|------------------------------|-------------------|---|---|---|--|
| valueprescribe.com           | U.S.              | Medical Web Services<br>Chris Hoising<br>chosing@etecno.com<br>4101 Ravenswood RD<br>Suite 322<br>Dania, FL<br>33312<br>US<br>954-797-0244<br>Fax: 954-797-0266 | Medical Web Services<br>Chris Hoising<br>chosing@etecno.com<br>4101 Ravenswood RD<br>Suite 322<br>Dania, FL<br>33312<br>US<br>954-797-0244<br>Fax: 954-797-0266 | Medical Web Services<br>Chris Hoising<br>chosing@etecno.com<br>4101 Ravenswood RD<br>Suite 322<br>Dania, FL<br>33312<br>US<br>954-797-0244<br>Fax: 954-797-0266 | ns1.prihost.com<br>168.158.215.80<br>ns2.prihost.com<br>168.158.215.81 |
| viagra-ordering-online.co.uk | U.S.              | Viagra Ordering Online  |   |   |  |
| viagra-order-online.com      | U.S.              | Netfuse Inc.<br>3800 W 110th Av SE<br>Washington, DC<br>20011<br>US<br>212-902-1400   | Harrison, Jack netfuse@yahoo.com<br>3800 W 110th Av SE<br>Washington, DC<br>20011<br>US<br>212-902-1400   | Harrison, Jack netfuse@yahoo.com<br>3800 W 110th Av SE<br>Washington, DC<br>20011<br>US<br>212-902-1400   | ns1.prihost.com<br>168.158.215.80<br>ns2.prihost.com<br>168.158.215.81 |
| viagrapharmacy.tv            | U.S.              | Andre Prati alpiglobal@aol.com<br>ALP Enterprises<br>PO Box 8404<br>Coral Springs, FL<br>33075<br>US<br>954-304-1681  | Andre Prati alpiglobal@aol.com<br>ALP Enterprises<br>PO Box 8404<br>Coral Springs, FL<br>33075<br>US<br>954-304-1681  | Register.com Inc.<br>tvreg@register.com<br>575 Eighth Avenue<br>11th Floor<br>New York, NY<br>10018<br>US<br>212-798-9100                                       | ns-philex.net<br>ns2.philex.net  |
| viagra-universe.com          | Canada            | Viagra Universe<br>1243 Trafalgar Rd. South<br>Suite G<br>Oakwood, Ontario<br>K1R 7Y7<br>CA   | Flanagan, Mark<br>via_planet@yahoo.com<br>1243 Trafalgar Rd. South<br>Suite G<br>Oakwood, Ontario<br>K1R 7Y7<br>CA<br>864-9568                                  | Flanagan, Mark<br>via_planet@yahoo.com<br>1243 Trafalgar Rd. South<br>Suite G<br>Oakwood, Ontario<br>K1R 7Y7<br>CA<br>864-9568                                  | ns2.rri0.net<br>24.199.159.35<br>ns1.rri0.net<br>24.199.159.34         |
| viagravalue.com              | U.S.              | Registration Private<br>Domains By Proxy, Inc.<br>15111 N Hayden Rd.<br>Suite 160<br>PMB355<br>Scottsdale, Arizona 85260<br>US                                  | viagravalue.com@domainsbyproxy.com<br>Domains By Proxy, Inc.<br>15111 N Hayden Rd.<br>Suite 160<br>PMB355<br>Scottsdale, Arizona<br>85260<br>US                 | viagravalue.com@domainsbyproxy.com<br>Domains By Proxy, Inc.<br>15111 N Hayden Rd.<br>Suite 160<br>PMB355<br>Scottsdale, Arizona<br>85260<br>US                 | ns30.edns1.com   |



| Domain Name       | Country of Origin | Registrar   | Administrative Contact   | Technical Contact  | Domain Servers/<br>IP Addresses  |
|-------------------|-------------------|---|--|--|--|
| viamedic.com      | U.S.              | Viamedic, Inc<br>VIAMEDIC2-DOM<br>P.O.Box 25856<br>Tempe, AZ<br>85285<br>US                         | #80-624-2599<br>WebMaster<br>WE7914-ORG<br>web@securemedical.com<br>Secure Medical, Inc.<br>5801 S. McClintock #109<br>Tempe, AZ<br>85283<br>US<br>800-990-9681      | #80-624-2599<br>WebMaster<br>WE7914-ORG<br>web@securemedical.com<br>Secure Medical, Inc.<br>5801 S. McClintock #109<br>Tempe, AZ<br>85283<br>US<br>800-990-9681      | ns1.sechosting.com<br>207.88.166.100<br>ns2.sechosting.com<br>207.88.167.1 |
| viapills.com      | Costa Rica        | Access RX, CR, S.A<br>YFKVJWJRD<br>La Aurora, Heredia<br>CR   | Access RX, CR, S.A<br>L20987-OR<br>manager@accessrx.com<br>Ultrapark Free Zone, Bldg. 7B, Ste.<br>4<br>La Aurora, Heredia<br>CR<br>800-930-8770<br>Fax: 800-709-6687 | Access RX, CR, S.A<br>L20987-OR<br>manager@accessrx.com<br>Ultrapark Free Zone, Bldg. 7B, Ste.<br>4<br>La Aurora, Heredia<br>CR<br>800-930-8770<br>Fax: 800-709-6687 | ns.host4u.net<br>209.150.128.30<br>ns2.host4u.net<br>209.150.129.3         |
| vigor-ex.com      | U.S.              | Entertainment Hosting Services,<br>Inc.<br>1147 E. Broadway Suite 76<br>Glendale, CA<br>91205<br>US | admin@entertainmenthosting.com<br>Entertainment Hosting Services,<br>Inc.<br>1125 E. Broadway Suite 76<br>Glendale, CA<br>91205<br>US<br>413-643-2453                | admin@entertainmenthosting.com<br>Entertainment Hosting Services,<br>Inc.<br>1125 E. Broadway Suite 76<br>Glendale, CA<br>91205<br>US<br>413-643-2453                | ns1.softaware.com<br>216.34.201.175<br>ns2.softaware.com<br>216.34.201.174 |
| v-viagra.com      | Israel            | M. Koen<br>sysadmin@v-viagra.com<br>+972-64341997<br>Ben Gurion 100<br>Ramat Gan<br>32654<br>IL     | M. Koen<br>sysadmin@v-viagra.com<br>+972-64341997<br>Ben Gurion 100<br>Ramat Gan<br>32654<br>IL  | M. Koen<br>sysadmin@v-viagra.com<br>+972-64341997<br>Ben Gurion 100<br>Ramat Gan<br>32654<br>IL  | ns1.servpath.com<br>ns2.servpath.com                                       |
| weddelvermedz.com | U.S.              | Rx-Max LLC<br>Phil Perreut<br>phil@ams-llc.org<br>405 Grema Blvd<br>Suite 202<br>LA<br>70053<br>US  | phil@ams-llc.org   | phil@ams-llc.org   | ns1.websitemachine.com<br>ns2.websitemachine.com                           |
| wetellyou.net     | U.S.              | wet<br>tell.you<br>85632<br>US  | info@wetellyou.net<br>wetellyou.net<br>wet<br>tell.you   | info@wetellyou.net<br>wetellyou.net<br>wet<br>tell.you   | ns1.softaware.com<br>216.34.201.175<br>ns2.softaware.com<br>216.34.201.174 |

| Domain Name         | Country of Origin | Registrant  | Administrative Contact   | Technical Contact  | Domain Servers/<br>IP Addresses  |
|---------------------|-------------------|---|--|--|----------------------------------|
| wholesaleviagra.biz | U.S.              | DomainDiscover<br>Scott Gill<br>gilly031@yahoo.com<br>DDDD-0000753141<br>401 12th St S<br>Arlington<br>VA<br>22202<br>United States<br>US<br>716-310-4244 | 85632<br>US<br>SG<br>DDDD-0000842963<br>gilly031@yahoo.com<br>WVB<br>1521 Spring Gate #10109<br>McLean<br>VA<br>22120<br>United States<br>US<br>716-310-4244 | 85632<br>US<br>Scott Gill<br>gilly031@yahoo.com<br>DDDD-0000753141<br>401 12th St S<br>Arlington<br>VA<br>22202<br>United States<br>US<br>716-310-4244 | ns1.geodns.net<br>ns2.geodns.net |

## B. LIST OF INTERNET PHARMACIES PURPORTEDLY FROM CANADA

The following websites advertise that they are "Canadian Internet Pharmacies." The listings highlighting in gray show websites that are not registered in Canada despite advertising otherwise or the registration information provided by the Internet pharmacy owner is not sufficient enough to conclude that the site is located in Canada.

| Domain Name                  | Actual Country of Origin | Registrant   | Administrative Contact  | Technical Contact  | Domain Servers/ IP Addresses   |
|------------------------------|--------------------------|--|---|--|--|
| adb-care.com                 | Canada                   | Adv-Care Pharmacy Inc.<br>Amr Bannis<br>abannis@ccgroup.com<br>50 Heathcote Ave.<br>Toronto, ON<br>M2L1Z1<br>CA<br>416-444-6242<br>905-948-1991<br>Fax: 905-948-0464 | TCE Group Inc.<br>Amr Bannis<br>abannis@ccgroup.com<br>50 Heathcote Ave.<br>Toronto, ON<br>M2L1Z1<br>CA<br>416-444-6242<br>Fax: 416-444-7824                | Register.Com<br>Domain Registrar<br>domain-registrar@register.com<br>575 8th Avenue - 11th Floor<br>New York, NY<br>10018<br>US<br>902-749-2701<br>Fax: 902-749-5429 | dns1.colossium.com<br>216.95.249.3<br>dns2.colossium.com<br>216.95.249.4 |
| bootikweb.com                | Barbados                 | Domain Manager<br>domain_manager@bootikweb.com<br>702-920-7656<br>FAX: 702-920-7656<br>PO Box 27W<br>Worthing Post Office,<br>BB                                     | Domain Manager<br>domain_manager@bootikweb.com<br>702-920-7656<br>FAX: 702-920-7656<br>PO Box 27W<br>Worthing Post Office,<br>BB                            | Technical Support<br>domain_manager@bootikweb.com<br>702-920-7656<br>FAX: 702-920-7656<br>PO Box 27W<br>Worthing Post Office,<br>BB                                  | ns1.bootikweb.com<br>ns2.bootikweb.com                                   |
| canadadiscounpharm<br>cy.com | Canada                   | Internet In Depth<br>103-8880 No. One Road<br>Richmond, British Columbia<br>V7C 4C3<br>Canada  | Dale, Dave<br>dave@dale@internetindepth.com<br>Internet In Depth<br>103-8880 NO. ONE ROAD<br>Richmond, British Columbia<br>V7C4C3<br>Canada<br>604-271-6927 | Dale, Dave<br>dave@dale@internetindepth.com<br>Internet In Depth<br>103-8880 NO. ONE ROAD<br>Richmond, British Columbia<br>V7C4C3<br>Canada                          | ns1.widge.net<br>ns2.widge.net   |
| canadadrugs.com              | Canada                   | Thorkelson, Kris<br>canadadrugs4-dom<br>24 Terracon Place<br>Winnipeg, Manitoba<br>R2J 4G7<br>CA   | Thorkelson, Kris<br>DZJFTSKVI<br>kthorkelson@canadadrugs.com<br>24 Terracon Place<br>Winnipeg, Manitoba<br>R2J 4G7<br>CA<br>204-654-5170                    | Gunter-Smith, Brock<br>VRTZLUNBAI<br>brock@gogator.com<br>305-70 Arthur Street<br>Winnipeg, Manitoba<br>R3B 1G7<br>CA<br>204-885-7742<br>204-887-2725                | dns1.emindbiz.com<br>66.38.255.4<br>dns2.emindbiz.com<br>66.38.255.5     |
| canadamedexpress.co<br>m     | Canada                   | Canada Med Express<br>canadamedexpress-dom<br>330 McCowan Road Suite 1508  | Canada Med Express<br>G25519-OR<br>web@canadamedexpress.com   | Canada Med Express<br>G25519-OR<br>web@canadamedexpress.com  | ns.ebsi.net<br>207.179.146.170<br>ns2.ebsi.net                           |

| Domain Name           | Actual Country of Origin | Registrar   | Administrative Contact  | Technical Contact   | Domain Servers/ IP Addresses  |
|-----------------------|--------------------------|---|---|---|---|
| canadameds.com        |                          | Scarborough, ON M1J 3N3<br>CA   | Canada Med Express<br>330 McCowan Road Suite 1508<br>Scarborough, ON M1J 3N3<br>CA<br>416-877-9453<br>Fax: 123-123-1234   | Canada Med Express<br>330 McCowan Road Suite 1508<br>Scarborough, ON M1J 3N3<br>CA<br>416-877-9453<br>Fax: 123-123-1234   | 207.179.146.171<br>dns1.miramich.net<br>207.179.146.170                             |
| canadapharmacy.com    | Unknown                  | WM Holdings, Inc.<br>PO Box 313<br>Shaftsbury, Vermont 05262<br>United States                     | Holley Jennifer<br>hostmaster@websitesandmore.com<br>Websites & More<br>P.O. Box 313<br>Shaftsbury, Vermont 05262<br>United States<br>802-000-0000<br>Fax: 802-000-0000         | Master, Host<br>hostmaster@websitesandmore.com<br>W&M Holdings, Inc.<br>PO Box 313<br>Shaftsbury, Vermont 05262<br>United States<br>802-000-0000<br>Fax: 802-000-0000 | ns.websitesandmore.com<br>ns2.websitesandmore.com                                   |
| canadapharmacy.com    | Canada                   | World-Wide Exports Inc.<br>PO Box 188<br>Sumas, WA 98295<br>US                                    | Sikka, Mony<br>mony@canadapharmacy.com<br>PO Box 188<br>Sumas, WA 98295<br>US   | Sikka, Mony<br>mony@canadapharmacy.com<br>PO Box 188<br>Sumas, WA 98295<br>US   | ns1.w3media.net<br>192.197.96.11<br>ns2.w3media.net<br>192.197.96.12                |
| canadax.com           | Unknown.                 | W&M Holdings, Inc.<br>PO Box 313<br>Shaftsbury, Vermont<br>05262<br>United States                 | 604-532-9311<br>Master, Host<br>hostmaster@websitesandmore.com<br>W&M Holdings<br>PO Box 313<br>Shaftsbury, Vermont 05262<br>United States<br>802-000-0000<br>Fax: 802-000-0000 | Master, Host<br>hostmaster@websitesandmore.com<br>W&M Holdings<br>PO Box 313<br>Shaftsbury, Vermont 05262<br>United States<br>802-000-0000<br>Fax: 802-000-0000       | ns.websitesandmore.com<br>ns2.websitesandmore.com                                   |
| canadaxconnection.com | U.S.                     | 2720 NE 183rd Street<br>TH 23<br>Aventura, FL 33160<br>US   | Pollock, Danny<br>cdp33160@aol.com <sup>367</sup><br>2720 NE 183rd Street<br>TH 23<br>Aventura, FL 33160<br>US<br>1.3059328767<br>Fax: 1.3059324462                             | support@zerowebhosting.com<br>75 Ashwaran Road<br>Toronto, ON M3J1Z7<br>CA<br>(416)398 4887   | ns.zerowebhosting.com<br>208.56.139.122<br>ns2.zerowebhosting.com<br>208.56.138.108 |
| canadaxfree.com       | Mexico                   | Juan Gonzales<br>Av. Insurgentes #632<br>Col. Lomas de Chapultepec<br>Mexico City, DF 11850<br>MX | Gonzales, Juan 1234567890@the-linker.com.tx.k<br>Av. Insurgentes #632<br>Col. Lomas de Chapultepec<br>Mexico City, DF 11850<br>MX   | Gonzales, Juan 1234567890@the-linker.com.tx.k<br>Av. Insurgentes #632<br>Col. Lomas de Chapultepec<br>Mexico City, DF 11850<br>MX                                     |   |

<sup>367</sup> An individual with the e-mail address cdp33160@aol.com is a highly active poster on the alt.sex.erasmas newsgroup.

| Domain Name             | Actual Country of Origin | Registrant  | Administrative Contact  |  | Technical Contact   |   | Domain Servers/ IP Addresses   |
|-------------------------|--------------------------|---|---|--|---|---|--|
|                         |                          |   |   |  |   |   |  |
| canadiandrugs.com       | Canada                   | Manlab Internet<br>OVLGDPJQND<br>2071 Portage Avenue<br>Winnipeg, Manitoba<br>R3J 0K9<br>CA                           | 525-456-9833<br>Fax: 525-456-9833   | Balacko, Bill<br>QVQHDBUFFI<br>info@canistrx.com<br>400 Tache Avenue<br>Winnipeg, Manitoba<br>R2H 3C3<br>CA<br>800-640-2221<br>204-123-1234                          | 525-456-9833<br>Fax: 525-456-9833                                       | Manlab Internet<br>OELBAHQZO<br>noc@MANLAB.COM<br>2071 Portage Avenue<br>Winnipeg, MB<br>R3J 0K9<br>CA<br>204-985-4180<br>Fax: 204-985-4185 | dns1.manlab.com<br>139.142.215.3<br>dns2.manlab.com<br>139.142.215.4 |
| canadiandrugs.ca        | Canada                   | Well Being Pharmacy<br>Registrant Number 29<br>Registrant Number 396830   | Mic Paterson<br>i-123844ypcf@usersca3.internic.ca<br>Website 2000<br>38 Montbrook Road<br>Winnipeg, MB<br>R2R 1K4<br>Canada<br>204-637-7334 | Mic Paterson<br>i-123844ypcf@usersca3.internic.ca<br>Website 2000<br>38 Montbrook Road<br>Winnipeg, MB<br>R2R 1K4<br>Canada<br>204-637-7334                          | ns.siteprotect.com<br>64.26.0.23<br>ns2.siteprotect.com<br>64.26.38.2   |   |  |
| canadian-drugs.com      | Unknown                  | W&M Holdings Inc.<br>PO Box 313<br>Shaftsbury, Vermont<br>05262<br>United States<br>802-000-0000<br>Fax: 802-000-0000 | W&M Holdings<br>P.O. Box 313<br>Shaftsbury, Vermont<br>05262<br>United States<br>802-000-0000<br>Fax: 802-000-0000                          | Master, Host<br>hostmaster@websitesandmore.com<br>W&M Holdings<br>P.O. Box 313<br>Shaftsbury, Vermont<br>05262<br>United States<br>802-000-0000<br>Fax: 802-000-0000 | ns.websitesandmore.com<br>ns2.websitesandmore.com                       |   |  |
| canadiandrugsdirect.com | Canada                   | Canadian Drugs Direct Ltd.<br>101-149 Ingram St<br>Duncan, BC<br>v9J 1N8<br>CA  | Stearns, Jason<br>info@saagenet.com<br>1060 Yates Street<br>200<br>Victoria, BC<br>V8V 3M6<br>CA<br>250-386-7243<br>Fax: 250-380-1051       | Stearns, Jason<br>info@saagenet.com<br>1060 Yates Street<br>200<br>Victoria, BC<br>V8V 3M6<br>CA<br>250-386-7243<br>Fax: 250-380-1051                                | ns1.saagenet.com<br>64.180.112.47<br>ns2.saagenet.com<br>216.232.95.157 |   |  |
| canadianmedservice.com  | Canada                   | Alec Leflour<br>218-1460 Chevrier Blvd.<br>Winnipeg, MB<br>R3T1Y6<br>CA   | Alec Leflour<br>info@canadianmedservice.com<br>218-1460 Chevrier Blvd.<br>Winnipeg, MB<br>R3T1Y6<br>CA<br>204-927-1454<br>Fax: 204-927-1468 | Alec Leflour<br>info@canadianmedservice.com<br>218-1460 Chevrier Blvd.<br>Winnipeg, MB<br>R3T1Y6<br>CA<br>204-927-1454<br>Fax: 204-927-1468                          | ns1.weblife2000hosting.com<br>ns2.weblife2000hosting.com                |   |  |

| Domain Name                      | Actual Country of Origin | Registrar  | Administrative Contact   | Technical Contact  | Domain Servers/ IP Addresses  |
|----------------------------------|--------------------------|--|--|--|---|
| canadianmedsonline.com           | Canada                   | Anderson Law Firm Prof. Corp.<br>1400 - 2002 Victoria Avenue<br>Regina, SK<br>S4P 0K7<br>CA  | Anderson, Dwayne<br>danderson@accesscomm.ca<br>1400 - 2002 Victoria Avenue<br>Regina, SK<br>S4P 0K7<br>CA<br>306-789-8868  | Moses, Mike<br>mmoses@lwn.com<br>7909 47th Ave. N.W.<br>Calgary, AB<br>T3B 1Z2<br>CA<br>902-852-4381<br>Fax: 902-484-6136  | dns1.owneworldhost.com<br>142.176.164.66<br>ns01.amnis.net<br>198.169.127.101 |
| canadianpharmacylink.com         | U.S.                     | Canadian Pharmacy Link<br>#450-250 H. Street<br>Blaine, WA 98230<br>US   | Canadian Pharmacy Link<br>canadianpharmacylink@hotmail.com<br>#150-250 H. Street<br>Blaine, WA<br>98230<br>604-351-1491  | NetNirion Communications, Inc.<br>Doom Admin<br>Dom@netnirion.com<br>Suite 1410 Harbour Center<br>Vancouver, BC<br>V6B 4N6, CA<br>604-688-8946<br>604-688-8934                   | ns1.netnirion.com<br>204.174.223.1<br>ns2.netnirion.com<br>204.174.223.31     |
| canadianprescriptioncenter.com   | Canada                   | Manlab Internet<br>USJWJLKQD<br>2071 Portage Avenue<br>Winnipeg, Manitoba<br>R3J 0K9<br>CA   | Schultz, Betty<br>TMVDJSGTQI<br>bschultz@yahoo.com<br>92 High Point Drive<br>Winnipeg, MB R2G 3R4<br>CA<br>204-663-8863<br>Fax: 204-663-8862                                     | Manlab Internet<br>OELBAHQZO<br>nose@MANLAB.COM<br>2071 Portage Avenue<br>Winnipeg, MB<br>R3J 0K9<br>CA<br>204-663-8863<br>204-985-4180<br>Fax: 204-985-4185                     | dns1.manlab.com<br>139.142.215.3<br>dns2.manlab.com<br>139.142.215.4          |
| canadian-prescription-center.com | Canada                   | Betty Schultz<br>bschultz@aol.com<br>92 High Point Drive<br>Winnipeg, Manitoba<br>R2G 3R4<br>CA<br>941-955-4105<br>Fax: 941-955-4105 | Betty Schultz<br>bschultz@aol.com<br>92 High Point Drive<br>Winnipeg, Manitoba<br>R2G 3R4<br>CA<br>941-955-4105<br>Fax: 941-955-4105   | Betty Schultz<br>bschultz@aol.com<br>92 High Point Drive<br>Winnipeg, Manitoba<br>R2G 3R4<br>CA<br>941-955-4105<br>Fax: 941-955-4105   | frs.frogsmart.net<br>sns.frogsmart.net  |
| canadian-prescriptions.net       | U.S.                     | Domains by Proxy, Inc.<br>15111 N Hayden Rd., Suite 160<br>PMB353<br>Scottsdale, Arizona 85260<br>United States                      | Domains by Proxy, Inc.<br>canadian-prescriptions.net@domainsbyproxy.com<br>15111 N Hayden Rd., Suite 160<br>PMB353<br>Scottsdale, Arizona 85260<br>United States<br>480-624-2599 | Domains by Proxy, Inc.<br>canadian-prescriptions.net@domainsbyproxy.com<br>15111 N Hayden Rd., Suite 160<br>PMB353<br>Scottsdale, Arizona 85260<br>United States<br>480-624-2599 | ns1.hostica.com<br>ns2.hostica.com<br>ns3.hostica.com<br>ns4.hostica.com      |
| canpharmacy.com                  | Unknown                  | Rorwill Marketing<br>Joshua Noriel<br>info@canpharmacy.com   | Rorwill Marketing<br>Joshua Noriel<br>info@canpharmacy.com   | Rorwill Marketing<br>Joshua Noriel<br>info@canpharmacy.com   | ns3.powweb.com<br>ns2.powweb.com  |

| Domain Name              | Actual Country of Origin | Registrar   | Administrative Contact   | Technical Contact  | Domain Servers/ IP Addresses   |
|--------------------------|--------------------------|---|--|--|--|
| canpharmex.com           | Canada                   | Kyle Romaniuk<br>424 Wallace Avenue<br>Winnipeg<br>MB<br>CA<br>R2E 0B2                                | Kyle Romaniuk<br>kyle@gogator.com<br>424 Wallace Avenue<br>Winnipeg<br>MB<br>CA<br>R2E 0B2<br>204-661-2201<br>204-837-2725                               | Kyle Romaniuk<br>kyle@gogator.com<br>424 Wallace Avenue<br>Winnipeg<br>MB<br>CA<br>R2E 0B2<br>204-661-2201<br>204-837-2725<br>www.123cheatpdomains.com                           | dns1.emindbiz.com<br>dns2.emindbiz.com   |
| cheapcanadiadrugs.net    | Canada                   | Faux<br>830 McMillan Avenue<br>Winnipeg, MB R3M0V4<br>CA  | Hansell, Nora<br>jhansell@shaw.ca<br>830 McMillan Avenue<br>Winnipeg, MB R3M0V4<br>CA<br>204-478-1603  | Domain Registrations<br>jonathan@123cheatpdomains.com<br>920 Cranbrook Court, Suite #7<br>Davis, CA 95616<br>US<br>415-682-3859  | ns1.dtapipe.net<br>64.27.05.13<br>ns2.dtapipe.net<br>64.27.64.76   |
| coastalmex.com           | Canada                   | Coastal Contacts<br>RRYXTQUFD<br>104-1715 Cook Street<br>Vancouver, BC<br>V5Y 3J6<br>CA               | Coastal Contacts<br>DIDSWESRFO<br>michela@coastalcontacts.com<br>104-1715 Cook Street<br>Vancouver, BC<br>V5Y 3J6<br>CA<br>604-669-1555                  | Radiant Communications Canada<br>Inc<br>IGXPFEMKO<br>domains@radiant.net<br>Suite 1600 - 1050 West Pender<br>Vancouver, BC<br>V6E 4T3<br>CA<br>604-257-0500<br>Fax: 604-608-0999 | dns1.radiant.net<br>216.21.129.1<br>dns2.radiant.net<br>216.21.128.1   |
| crossborderpharmacy.com  | Canada                   | Robertson, Dave<br>CROSSBORDERPHARMACY2-DOM<br>80 Mount Belcher Place SE<br>Calgary, AB T2Z 2G1<br>CA | Robertson, Dave<br>AWYHUTADH<br>Dave.Robertson@shaw.ca<br>80 Mount Belcher Place SE<br>Calgary, AB<br>T2Z 2G1<br>CA<br>403-254-1516<br>Fax: 403-254-4597 | Holley, Jennifer<br>JH5508<br>hostmaster@websitesandmore.com<br>Websites & More<br>PO Box 313<br>Shaftsbury, VT<br>05262<br>US<br>802-000-0000<br>Fax: 802-000-0000              | ns1.zoneedit.com<br>207.254.248.200<br>ns3.zoneedit.com<br>209.61.140.1<br>ns7.zoneedit.com<br>207.228.252.107 |
| discounrdrugsocanada.com | U.S.                     | Discount Drugs of Canada<br>MJOVWCHUSD<br>16085 Via Monteverde<br>Delray Beach, FL 33446<br>US        | Curtis, Lonnie<br>LC482<br>lcurtis@grulecco.com<br>G. Rule Co.<br>2250 Candlewood Ln.<br>Akron, OH<br>44333<br>330-665-5917<br>Fax: 330-666-7324         | Curtis, Lonnie<br>LC482<br>lcurtis@grulecco.com<br>G. Rule Co.<br>2250 Candlewood Ln.<br>Akron, OH<br>44333<br>330-665-5917<br>Fax: 330-666-7324                                 | dns.ssysrc.com<br>209.251.33.2<br>backdns.ssysrc.com<br>209.251.35.5<br>ns3.ssysrc.com<br>209.251.45.5         |

| Domain Name             | Actual Country of Origin | Registrant   | Administrative Contact   | Technical Contact   | Domain Servers/ IP Addresses   |
|-------------------------|--------------------------|--|--|---|--|
| doctorolve.com          | Canada                   | Peninsula Medical Clinic<br>7-8317 124th Street<br>Surrey, B.C. V3W9G2<br>CA   | Patricia Assad<br>andy.assad@home.com<br>182 Mt. Assiniboine Circle S.E.<br>Calgary, Alberta<br>T2Z2N6<br>CA<br>403-257-8845                             | Patricia Assad<br>andy.assad@home.com<br>182 Mt. Assiniboine Circle S.E.<br>Calgary, Alberta<br>T2Z2N6<br>CA<br>403-257-8845                            | kir2.smartf.com<br>206.12.31.2<br>ns1.protocolic.com<br>209.52.13.1        |
| dsiparentconnection.com | Barbados                 | Domain Manager<br>domain_manager@dsiparentconnecti<br>onstcm.com<br>PO Box 27W<br>Worthing Post Office,<br>BB<br>702-920-7656<br>Fax: 702-920-7656 | Domain Administrator<br>domain_manager@dsiparentconnecti<br>onstcm.com<br>PO Box 27W<br>Worthing Post Office,<br>BB<br>702-920-7656<br>Fax: 702-920-7656 | Technical Support<br>domain_manager@dsiparentconnecti<br>onstcm.com<br>PO Box 27W<br>Worthing Post Office,<br>BB<br>702-920-7656<br>Fax: 702-920-7656   | ns1.dsiparentconnectionst<br>cm.com<br>ns2.dsiparentconnectionst<br>cm.com |
| economedsplus.com       | U.S.                     | Domain Administrator<br>AGWVVOISPD<br>4340 E. Indian School Rd.<br>Phoenix, AZ 85018<br>US   | Domain Administrator<br>TDMSFMDJGI<br>admin@ecommedsplus.com<br>EconoRx<br>4340 E. Indian School Rd.<br>Phoenix, AZ 85018<br>US<br>800-550-6331          | VeriSign, Inc.<br>HOST-ORG<br>namehost@worldnic.net<br>VeriSign, Inc.<br>21355 Redgetop Circle<br>Dulles, VA 20166<br>US<br>888-642-9675                | ns2.intermedia.net<br>207.5.44.2<br>ns3.intermedia.net<br>207.5.1.222      |
| lifelinecan.com         | Canada                   | Martin Technical<br>MARTECH<br>OAEVFXKZD<br>511 Kanata Street<br>Winnipeg, Manitoba<br>R2C1G3<br>CA  | Martin Technical<br>MARTECH<br>TSDAINRPO<br>tmartin@ms.net<br>511 Kanata Street<br>Winnipeg, Manitoba R2C1G3<br>CA<br>204-782-7636<br>Fax: 204-661-5869  | Martin Technical<br>MARTECH<br>TSDAINRPO<br>tmartin@ms.net<br>511 Kanata Street<br>Winnipeg, Manitoba R2C1G3<br>CA<br>204-782-7636<br>Fax: 204-661-5869 | dns1.ms.net<br>205.200.16.65<br>dns2.ms.net<br>205.200.16.69               |
| mappleadmeds.com        | Unknown                  | Genover Insurance Inc.<br>PO Box 10088<br>Yakima<br>98909<br>WA<br>US  | Par Assad<br>passad@eulaplanet.net<br>PO Box 10088<br>Yakima<br>98909<br>WA<br>US<br>403-257-8845  | Verio Verio<br>12345 Blue Lake Dr:<br>Boca Raton<br>FL<br>33431<br>US<br>hostmaster@verio-hosting.com<br>888-663-6648                                   | ns1.la.verio-web.com<br>ns1.lb.verio-web.com                               |
| mintopharmacy.com       | Canada                   | Moonlite Software<br>MINTOPHARMACY-DOM<br>1601-200 Bay Street<br>Ottawa<br>Ontario, K1R 7W8  | Michael Voss<br>VM3489<br>moonlite@storm.ca<br>1601-200 Bay Street<br>Ottawa, Ontario  | Storm Internet Services<br>AS475-ORG<br>registrat@storm.ca<br>203-350 Sparks Street<br>Ottawa, Ontario  | pins.storm.ca<br>204.187.144.47<br>sns.storm.ca<br>203.87.239.16           |



| Domain Name                      | Actual Country of Origin | Registrant |   | Administrative Contact  |   | Technical Contact  |  | Domain Servers/ IP Addresses |
|----------------------------------|--------------------------|------------|---|---|---|--|--|------------------------------|
|                                  |                          |            |   |   |   |  |  |                              |
| pharmacycan.com                  | Canada                   | CA         | Mark Holdsworth<br>361 Queenston St.<br>Winnipeg, MB<br>R3N 0W9<br>CA   | KIR 7W8<br>CA<br>613-236-5007<br>Fax: 613-236-5007<br>mholdsworth@shaw.ca   | Holdsworth, Mark<br>mholdsworth@shaw.ca<br>361 Queenston St.<br>Winnipeg, MB<br>R3N 0W9<br>CA   | KIR 788<br>CA<br>613-567-6585<br>Fax: 613-567-3227                       | frs.frogsmart.net<br>sns.frogsmart.net |                              |
| pharmacy-online.ca               | Canada                   | CA         | Mr Barney Britton<br>President<br>Mint Drugs<br>mint@home.com<br>#1 #131-1829 Ranchlands Blvd Nw<br>Calgary, AB<br>T3G 2A7<br>Canada<br>403-241-1444<br>Fax: 403-241-1634 | Mr Barney Britton<br>President<br>Mint Drugs<br>mint@home.com<br>#1 #131-1829 Ranchlands Blvd Nw<br>Calgary, AB<br>T3G 2A7<br>Canada<br>403-241-1444<br>Fax: 403-241-1634 | Mr Barney Britton<br>President<br>Mint Drugs<br>mint@home.com<br>#1 #131-1829 Ranchlands Blvd Nw<br>Calgary, AB<br>T3G 2A7<br>Canada<br>403-241-1444<br>Fax: 403-241-1634 | f02801.tac.net<br>205.233.109.39<br>f02802.tac.net<br>205.233.109.40     |  |                              |
| prescripnet.com                  | Canada                   | CA         | Convergent Media Network<br>5 Dragon Alley 532 1/2 Fisgard<br>Victoria, BC V8N1R4<br>CA   | Timothy Vasko<br>tim1@onlinecmn.com<br>Convergent Media Network<br>5 Dragon Alley<br>Victoria, BC<br>V8N1R4<br>CA<br>250-386-1266   | Timothy Vasko<br>timi@onlinecmn.com<br>Convergent Media Network<br>5 Dragon Alley<br>Victoria, BC<br>V8N1R4<br>CA<br>250-386-1266   | ns.baremetal.com<br>209.133.48.1<br>ns.pacificcoast.net<br>216.86.100.2  |  |                              |
| qualityprescriptiondrug<br>s.com | Unknown                  |            | Conover Insurance Inc.<br>PO Box 10088<br>Yakima<br>98909<br>WA<br>USA  | Pat Assid<br>passa.d@cluplanet.net<br>PO Box 10088<br>Yakima<br>98909<br>WA<br>USA<br>409-257-8845  | Verio Verio<br>hostmaster@verio-hosting.com<br>12345 Blue Lake Dr.<br>Boca Raton<br>33431<br>FL<br>US<br>888-663-6648   | ns19a.nameservers.net<br>ns19b.nameservers.net                           |  |                              |
| realfastdrugstore.com            | Canada                   | CA         | Mama's Drugstore Inc.<br>4505 Antelope Cres.<br>Mississauga, Ontario<br>L4Z 2X2<br>Canada   | Mayhem Arts<br>admin@mayhemarts.com<br>Admin Manager<br>4505 Antelope Cres<br>Mississauga, Ontario<br>L4Z 2X2<br>CA<br>905-501-1398                                       | Mayhem Arts<br>tech@mayhemarts.com<br>Technical Manager<br>4505 Antelope Cres<br>Mississauga, Ontario<br>L4Z 2X2<br>CA<br>905-501-1398                                    | ns1.bellhosting.com<br>206.47.4.20<br>ns2.bellhosting.com<br>206.47.4.21 |  |                              |

| Domain Name               | Actual Country of Origin | Registrar   | Administrative Contact  | Technical Contact   | Domain Servers/ IP Addresses  |
|---------------------------|--------------------------|---|---|---|---|
| rx1.biz                   | Canada                   | Rx1.biz Pharmacy Inc.<br>561 Machray Avenue<br>Winnipeg, Manitoba<br>R2W 1B1<br>Canada  | Pankratz, Jason<br>jason@rx1.biz<br>Rx1.biz Pharmacy Inc.<br>561 Machray Avenue<br>Winnipeg, Manitoba<br>R2W 1B1<br>Canada<br>866-791-7711<br>Fax: 866-791-9911<br>mediplan@escape.ca | Pankratz, Jason<br>jason@rx1.biz<br>Rx1.biz Pharmacy Inc.<br>561 Machray Avenue<br>Winnipeg, Manitoba<br>R2W 1B1<br>Canada<br>866-791-7711<br>Fax: 866-791-9911<br>budgethostingweb@specialistweb.com | ns1.paconline.net<br>ns2.paconline.net  |
| rxbyfax.com               | Canada                   | Mediplan Health Consulting Inc<br>Andrew Strempfer<br>mediplan@escape.ca<br>President<br>115 Main St. South<br>Minnedosa, Manitoba<br>R0J 1E0<br>CA | mediplan@escape.ca  |   | ns1.refhost.net<br>ns2.refhost.net  |
| rx-canada.com             | Canada                   | Adlington Pharmacy<br>Jeff Uhl<br>admin@spelunking.mb.ca<br>884 Portage Avenue<br>Winnipeg, MB<br>R2H1S8<br>CA<br>204-774-9999<br>Fax: 204-783-4223 | Adlington Pharmacy<br>jeff Uhl<br>admin@rx-canada.com<br>884 Portage Avenue<br>Winnipeg, MB<br>R2H1S8<br>CA<br>204-774-9999<br>Fax: 204-783-4223                                      | Spelunking Web Design<br>DNS Admin<br>admin@swd.ca<br>802 Warsaw Ave<br>Winnipeg, MB<br>R3M1C9<br>CA<br>866-222-7977  | ns1.spelunking.mb.ca<br>209.217.80.2<br>ns2.spelunking.mb.ca<br>209.217.80.4        |
| rxcanada4less.com         | Canada                   | Marf's Plaza Pharmacy<br>1357 Pipeline Road<br>Coquitlam, BC V3E 2C8<br>CA  | Nider, Marvin<br>scott@ouryachi.com<br>1357 Pipeline Road<br>Coquitlam, BC<br>V3E 2C9<br>CA<br>604-464-2281<br>604-464-2696<br>Fax: 604-464-2696                                      | Admin, Network<br>postmaster@easyhosting.com<br>10 Kellfield Rd<br>Rexdale, ON<br>M9W 5A2<br>CA<br>877-414-5665<br>877-414-5665<br>Fax: 416-233-6970  | ns.combustionlabs.com<br>208.56.139.200<br>ns2.combustionlabs.com<br>208.56.138.186 |
| saveoncanadianmeds.com    | Canada                   | canadian pharmacy services<br>12366 64 Avenue<br>Surrey<br>BC<br>V3W 1W7<br>CA  | canadian pharmacy services<br>Surjivan Bawa<br>I-161259wind@users3.internic.ca<br>12366 64 Avenue<br>Surrey<br>BC<br>V3W 1W7<br>CA<br>604-596-3903                                    | canadian pharmacy services<br>Surjivan Bawa<br>I-161259wind@users3.internic.ca<br>12366 64 Avenue<br>Surrey<br>BC<br>V3W 1W7<br>CA<br>604-596-3903  | dns.internic.ca<br>dns2.internic.ca   |
| thecanadiandrugs4less.com | Canada                   | saveoncanadianmeds.com  | saveoncanadianmeds.com  | Register Com<br>Domain Registrar  | ns1.permation.com<br>204.174.231.1  |

| Domain Name                 | Actual Country of Origin | Registrant   | Administrative Contact  | Technical Contact  | Domain Servers/ IP Addresses   |
|-----------------------------|--------------------------|--|---|--|--|
| thecanadiandrugstore.com    | Canada                   | V5P 3K8<br>CA<br>604-321-4599  | 17128 Ash Crescent<br>Vancouver, BC<br>V6P 3K7<br>CA<br>604-321-4599  | domain-registrar@register.com<br>575 8th Avenue - 11th Floor<br>New York, NY 10018<br>US<br>902-749-2701<br>Fax: 902-749-5429                    | ns2.netnation.com<br>204.174.223.31  |
| trustedcanadianpharmacy.com | Barbados                 | The Canadian Drugstore Inc.<br>1696 Avenue Rd.<br>Toronto, Ontario<br>M5M-4A7<br>CA                                  | Shawn, Billy<br>billy@thecanadiandrugstore.com<br>1696 Avenue Rd.<br>Toronto, Ontario<br>M5M-4A7<br>CA<br>416-932-8569<br>Fax: 416-932-0083         | Molson, Mike<br>mmols@bcav.net<br>55 City Centre Drive<br>Ground floor<br>Mississauga, Ontario<br>L5B 1M3<br>CA<br>905-896-6370 x1164            | ns1.roundtheaven.net<br>205.150.176.17<br>ns2.roundtheaven.net<br>199.243.148. |
|                             |                          | Domain Manager<br>domain_manager@trustedcanadiapharmacy.com<br>PO Box 27W<br>BB<br>702-920-7656<br>Fax: 702-920-7656 | Domain Administrator<br>domain_manager@trustedcanadiapharmacy.com<br>PO Box 27W<br>Worthing Post Office,<br>BB<br>702-920-7656<br>Fax: 702-920-7656 | Technical Support<br>domain_manager@trustedcanadiapharmacy.com<br>PO Box 27W<br>Worthing Post Office,<br>BB<br>702-920-7656<br>Fax: 702-920-7656 | ns1.trustedcanadiapharmacy.com<br>ns2.trustedcanadiapharmacy.com               |

Upon initial investigation, 33 percent of the sites that advertise themselves as “Canadian online drugstores” do not appear to actually be from Canada.

