

Analysis of Rogue Internet Pharmacy Shipping Methods

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LegitScript.com



Executive Summary

For this analysis, which was performed at the request of the United Parcel Service (UPS), LegitScript reviewed the shipping method used in 29 test buys from illegal online pharmacies that, with one exception, were conducted between January and May 2015. In all cases, the drugs were sold by entities that lack legally required pharmacy licenses, and the drugs were either sold without a prescription, were not FDA-approved for safety and efficacy, or both.

Our selection of the 29 Internet pharmacies was, for the purposes of this analysis, conducted randomly aside from two controls. First, we selected only Internet pharmacies that were operating illegally. Second, we “de-conflicted” within networks. To explain this, most Internet pharmacy websites are not stand-alone entities, but rather operate as “affiliates” of a drug distribution network that sources drugs from a single source or a limited number of sources. Within the same network, only one Internet pharmacy would be chosen.

The 29 Internet pharmacies represent, by our estimate, roughly 7% to 9% of the Internet pharmacy market when measuring the market by total number of websites, or about 1% of the Internet pharmacy when measuring the market by shippers.

The key findings of our report are:

- Most websites are importing prescription drugs into the US from outside of the country. There is, however, a relatively small minority (by our estimate, about 5% to 15%) of illegal online pharmacies shipping from within the US to US addresses.
- This dynamic was reflected in our testing, with only two of the illegal online pharmacies actually shipping from a location within the US; the remainder shipped drugs from outside of the US.
- None of the 29 illegal online pharmacies used private carriers at any point in the shipping process. Without exception, all of the online pharmacies used government-sponsored shipping services, such as Canada Post, Deutsche Post or India Post.
- In no case did US Customs stop or intercept the package.
- In all cases, the US Postal Service provided the shipping once the drugs reached US soil (or, in the two instances where the drugs originated from a US pharmacy, the full shipping was provided by the USPS).

Further detail on our findings is provided in the following pages.

Introduction

This report asks and answers a basic question: What shipping methods do “rogue” Internet pharmacies — businesses using the Internet to distribute illegal medicines — use to deliver drugs to customers? The question is an important one for several reasons.

- Illegal online pharmacies have a direct, negative effect on patient safety. There have been multiple instances of patient deaths, overdoses and hospitalizations where the drugs were purchased from a legally noncompliant online pharmacy.¹
- Illegal pharmaceuticals, however, have to arrive in customers’ hands *somehow* — by definition, some sort of delivery service must be used to get the drugs to customers.
- Illegal online pharmacies are rational economic actors, and the individuals who operate them choose payment processing, domain name registration, hosting provider, advertising and shipping services that they believe will be least likely to detect and/or object to the illegal nature of the business.
- Illegal online pharmacies, like their legitimate counterparts, rely in significant part on repeat business (prescription drug refills) as a business strategy. Accordingly, ensuring that delivery is reliable and fast is reasonably understood as contributing to a stable, happy (and repeat) customer base. An important way of disrupting the illegal online pharmacy market is to destabilize the sellers’ relationships with shipping service providers.

This report provides a preliminary assessment of how a sample group of 29 illegal online pharmacies that represent, by our estimate, 7% to 9% of the illegal online pharmacy market shipped the drugs to LegitScript undercover purchasers. In all 29 cases, we either were able to review step-by-step package tracking information about the shipments, or in the absence of step-by-step tracking information, were able to identify the origin and shipping method.

The remaining sections of this report describe our methodology; present the data; and offer caveats and identify limitations to interpreting the data.

¹ See generally, e.g., <http://www.forthepeople.com/blog/illegal-online-pharmacies-providing-faulty-drugs>.

Methodology

This section describes the methodology LegitScript used to conduct the analysis presented in this report, and provides top-level market data as background.

Overview of Internet Pharmacy Market

LegitScript estimates that there are 30,000 to 35,000 websites selling prescription drugs at any one time. Of the total:

- The vast majority, about 90%, target the United States along with other countries. (Perhaps 10% or so exclusively target the US.)
- Measured by website, 95% to 97% of all Internet pharmacies operate illegally by selling prescription drugs without a prescription, selling drugs that are not FDA-approved or selling prescription drugs without adequate pharmacy licensure — or all of the above.
- About 95% of illegal online pharmacies are part of a “network” of websites — a group of websites under common control. These networks range from very small (five to 10 websites) to very large (10,000 to 15,000 websites). Websites within the same network ship drugs from the same source or a limited number of sources.

Selection of Targets for Testing

Our selection of targets for testing was independent of any discussion with the United Parcel Service (UPS), which had no opportunity to select, influence or recommend online pharmacies for testing. No information was provided to UPS regarding the URLs, networks, or businesses that might be the subject of testing until after the testing occurred and drugs were received.

Selections of Internet pharmacies were generally random from LegitScript’s database, with the following exceptions:

1. Internet pharmacies were selected and de-conflicted by network. That is, LegitScript in most cases chose a network of multiple online pharmacies, and selected only one website from that network for testing (because selecting multiple websites from the same network would potentially lead to duplicated results).
2. Only illegal online pharmacies were tested. In all 29 cases, the drugs were sold by entities without legally required pharmacy licensure. In 24 cases, the websites also sold drugs without requiring a prescription, and the drugs were unapproved for sale. In the remaining five (5) instances, the Internet pharmacies lacked legally required pharmacy licensure, and either a) did not require a prescription, or b) sold drugs that are not FDA-approved.

Testing Date Range

Test transactions, with one exception, were conducted between November 2014 and May 2015.

The Data: Our Findings

This section presents four aspects of our findings: 1) the nature of illegality, 2) the shipping origin, 3) the shipping method from the country of origin, and 4) the shipping methodology domestically.

Nature of Illegality

Test transactions are a helpful means of verifying LegitScript’s initial assessments of illegality. All of our assessments regarding legality prior to the test buy were found to be accurate. Of the 29 Internet pharmacies we tested, our successful test buys served to confirm that:

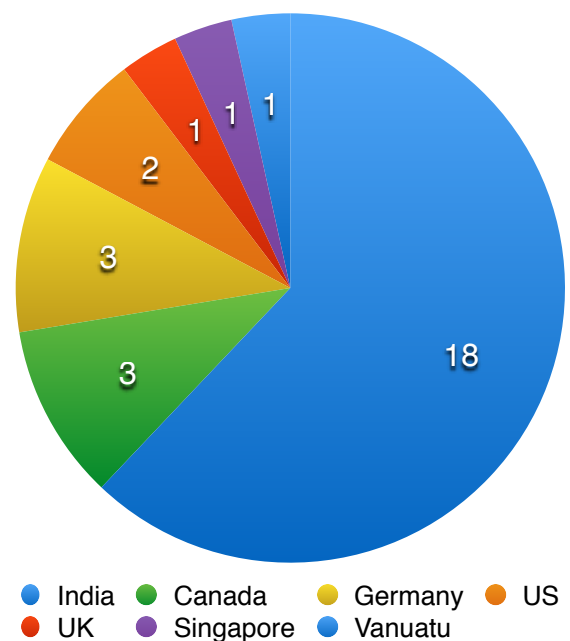
- Twenty-four (24) of the Internet pharmacies engaged in three significant types of illegal, unsafe behavior: 1) the sale of prescription drugs without requiring any prescription, 2) the sale of drugs that are not FDA-approved and are illegally imported into the US outside of the authorized supply chain, and 3) the lack pharmacy of licensure in the jurisdictions the drugs are shipped to.
- Five (5) of the Internet pharmacies lacked legally required pharmacy licensure, and either a) did not require a prescription but the drugs were FDA-approved (two websites) or b) sold drugs that are not FDA-approved but a prescription was required (three websites).

Origin of Drugs

India was overwhelmingly represented as a point of origin for the drugs that we received, with 18 out of the 29 online pharmacies sending us drugs from India.

Tied for second place were Canada and Germany, each serving as the country of origin for three of the drug shipments. In both cases, however, these countries are properly understood as transshipment points for the drugs (as opposed to reflecting the drugs’ true origin). A common strategy of some illegal online pharmacy networks is to unlawfully import drugs in bulk to a pharmacy in a country more likely to be perceived as a “safe” country for drugs; however, these drugs, even if labeled as having been dispensed by a pharmacy in Canada or Germany, are not necessarily the same drugs that a resident of those countries would receive were they to walk into the pharmacy’s brick-and-mortar location.

Country of Origin of Drugs



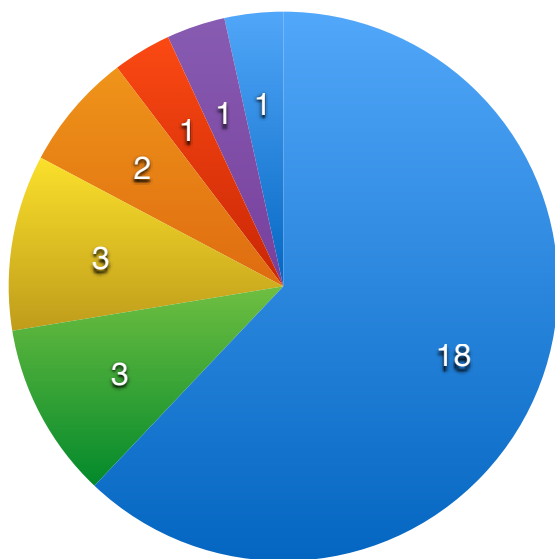
Bringing up the rear was the United States, which was the point of origin for two of our orders, and the UK, Singapore and Vanuatu, each serving as the point of origin for one of our test buys.

Shipping Methodology — Point of Origin

For our test buys, without exception, the drugs were shipped from the country of origin using public (government-run) postal services. For example, every instance of drugs being shipped from India involved the use of India Post. Similarly, drugs shipped from the UK used Royal Mail.

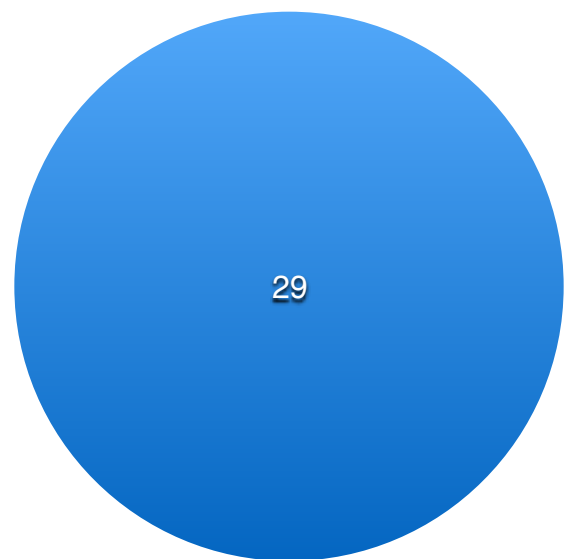
Accordingly, India Post accounted for 18 of the 29 test purchases, followed by three instances of purchases shipped via Deutsche Post and Canada Post, respectively. Two of the shipments were from licensed pharmacies in the US, Urban Chemists (New York) and Troy Pharmacy (Pennsylvania), both of which sold us prescription drugs without requiring a valid prescription. In both cases, USPS Priority Mail was used.

Shipping Method From Origin



- India Post
- Canada Post
- Deutsche Post
- USPS
- Royal Mail
- Singapore Post
- Vanuatu Post

Shipping Method Within US



- US Postal Service

Shipping Methodology — Within United States

Services such as India Post, Vanuatu Post and Canada Post exist only within their own jurisdictions, of course; any packages must be handed off to a different delivery service once the drugs reach the United States. How did the drugs get transported once they entered the US?

For 100% of our 29 test purchases, the US Postal Service was the delivery mechanism to the end customer. In no instance did we identify that a third party such as DHL, EMS, FedEx or UPS was used.

Data in Tabular Form

The following table shows each Internet pharmacy, the reasons why it operates unlawfully (see key on the next page), and the shipping methodology to and within the United States.

Illegal Internet Pharmacy	Pharmacy Network	Nature of Illegality	Shipping Method	Delivery
[REDACTED]	[REDACTED]	A, B, and C	Deutsche Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	Deutsche Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A and C	Canada Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	Royal Mail	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	Singapore Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A and B	USPS Priority	USPS Priority
[REDACTED]	[REDACTED]	A, B, and C	Vanuatu Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A and C	Canada Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	Deutsche Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A, B, and C	India Post	USPS
[REDACTED]	[REDACTED]	A and B	USPS Priority	USPS Priority
[REDACTED]	[REDACTED]	A and C	Canada Post	USPS

Key (Column C, Nature of Illegality):

A - Absence of Legally Required Pharmacy Licenses

B - Sale of Prescription Drugs Without Requirement of Valid Prescription

C - Sale of Unapproved Drugs

Caveats and Data Limitations

LegitScript believes that the 29 illegal online pharmacies represent a sufficient sample from which to conduct a preliminary analysis that reflects the general market approach. However, the 29 websites do not account for the entire illegal online pharmacy market. What percentage, therefore, do we think that these 29 websites account for?

Although it might be tempting to wonder if the 29 websites, out of our estimated 30,000 to 35,000 online pharmacies that are active at any one time, represent only 0.1% of the market, this conclusion would be incorrect: most of these websites are part of a larger network of Internet pharmacies under common control, all of which ship drugs from the same source or limited number of sources. For example, Rx-Partners, EvaPharmacy and Complete Online Pharmacy have about 3,000, 2,000 and 400 websites, respectively. Then again, these networks are known on some occasions to ship drugs from multiple sources and thus potentially use a variety of shipping methods. Therefore, while these three networks alone account for roughly 15% of the illegal online pharmacy market when measured by website, LegitScript assumes that each network may, on average, use three to five sources for drugs (some use a dozen or more, and some have only one). Consequently, those three networks likely account for 3% to 5% of illegal online pharmacies when measured by origin of the drugs.

Adding the rest of the 29 websites to our calculation, we estimate that our sample of 29 websites reflects between 7% and 9% of the market — a reasonable sampling from which to conduct a preliminary assessment, but one which necessarily does not account for the possible use of other shipping services by other networks or websites, or the same networks.

There are additional limitations to this study of which the reader should be aware.

- As noted above, a single online pharmacy network often, but not always, sources drugs from a single location. Alternatively, some networks use multiple shipping origins and methodologies, sometimes depending upon the drug that was ordered.
- Shipping methods and origins can and do change over time, even for the same online pharmacy.
- We cannot rule out the possibility that within the US, shipping methods change depending on the customer's location. We do not think this is likely, however.
- Our estimate of Internet pharmacy market coverage (about 7%) is based on websites — not unique merchants or shippers. If measured by shipper or merchant, however, our cross-section reflects a much smaller segment of the online pharmacy market. LegitScript estimates that there are about 150 active networks of online pharmacies, plus roughly 2,000 or 3,000 individual, unaffiliated shippers worldwide; these independent shippers usually have a smaller commercial footprint than networks. By that metric — measuring by individual shipper or merchant — our analysis considered about 1% of the market.

- LegitScript has seen other shipping methods used (outside of this study) by illegal online pharmacies such as EMS Speed Post and DHL; however, these were not observed in our study.
- Our study considered only personal shipments to the end user, not bulk shipments of diverted or counterfeit drugs.

Conclusion and Analysis

There are a limited number of delivery options in the world for merchants to choose from: government-run postal services, UPS, FedEx, DHL, EMS and others are well-known. Internet pharmacies, like any other business that needs to send goods to customers, need a way to get the drugs to their customers. Disrupting these shipping options is, therefore, one of several means of making it harder for illegal online pharmacies to stay in business and put the health and safety of patients at risk.

Our selection of 29 illegal online pharmacies was intended to be a small but representative sample of the illegal online pharmacy market; most of the Internet pharmacies were engaged in three types of serious illegal activity: the sale of prescription drugs without a prescription; the sale of drugs that are not FDA-approved; and the dispensing of prescription drugs without a valid pharmacy license.

Without exception, we saw that official government-run postal services were used to transport the prescription drugs to the final customer. This was true both in the country of origin, such as India, and after the drugs entered the US. The US Postal Service was used in both instances in which the drugs originated from pharmacies in the United States.

Of particular note, not a single one of our orders was stopped or seized by US Customs. LegitScript recognizes, of course, that no shipping service can possibly open every package or scrutinize every sender. However, there do appear to be known patterns and shippers that over the past few years LegitScript has seen again and again, such as [REDACTED], a drug drop-shipper in India, or [REDACTED], also in India. The US Postal Service and its foreign counterparts may wish to consider a more intelligence-driven approach that would identify shippers known to be engaging in illegal activities; to the extent that foreign postal services are unable or unwilling to refuse shipments from these senders, the information may be useful to US Customs in developing a more targeted approach.