

## Know the Risks



Of the 35,000 active online drug sellers, 95% do not comply with applicable laws and pharmacy standards. Medications bought from these sites are sourced outside of the secure supply chain and are often counterfeit, substandard, unapproved, or unlicensed.



Unapproved and unlicensed medications have not been approved by the FDA, meaning their efficacy, side effects, toxicities, and interactions with other drugs may be unknown. Counterfeit and substandard medicines may contain no active ingredient, the wrong active ingredient, or less active ingredient than indicated.

These medicines are extremely difficult to identify because they are often nearly identical to the genuine product. While they will fail to have a therapeutic effect, they may go completely undetected unless they cause an obvious adverse or fatal reaction.

Unqualified personnel frequently manufacture counterfeit, substandard, unapproved, or unlicensed medications in unhygienic conditions. They have been found to contain dangerous and sometimes deadly impurities or poisons, including:

### Heavy Metals

*Aluminum, phosphorus, titanium, tin, strontium, arsenic*

Heavy metal poisoning can cause abdominal pain, dehydration, nausea, vomiting, chills, and eventually lead to multiple organ failure.

### Diethylene Glycol

*Commonly used in antifreeze and brake fluid*

Diethylene glycol isn't permitted for use in human food or drug products because of its severe toxicity, often leading to kidney failure and death if not caught immediately. However, this sweet-tasting, odorless, and colorless alcohol has been used as a cheaper substitute for pharmaceutical-grade glycerol, which is a popular solvent for active ingredients in liquid medications. DEG has been connected with over a dozen mass poisonings, often of children, due to counterfeit and substandard liquid medications.

## Common Household Items

*floor wax, commercial paints, brick dust*

Counterfeiters use all sorts of materials to mimic the appearance of approved medicines. Floor wax has been used to mimic the enteric coating found on capsules, paints and brick dust has been used to mimic the color of pills. These materials contain toxins that can cause vomiting, abdominal pain, dizziness, blurred vision, respiratory difficulty, nervous system disruption, coma, death.

## Drugs You Didn't Ask For

One counterfeit operation used Haldol (haloperidol), a powerful anti-psychotic drug, to make fake Ambien, Xanax, Lexapro and Ativan. This resulted in several victims needing hospitalization for side effects including difficulty breathing, muscle spasms, and muscle stiffness. A counterfeit version of Alli, an FDA-approved weight loss drug, sold online, was found to contain dangerous levels of sibutramine, resulting in stroke.

## Bacteria

In a study of counterfeit and unapproved erectile dysfunction medications seized by authorities in Canada and Austria, 92% of Canadian and 29% of Austrian seized illegal medicines contained bacterial contamination compared to 0% in legally purchased medications. Bacterial contamination can lead to infection and sepsis.

## Can you spot the fake?



## Did You Know?

### Harms

**24% of Americans** with prior experience using online pharmacies report having previously been exposed to harmful, counterfeit, or substandard medication received from an online pharmacy. Yet, even as more consumers are buying prescriptions online, fewer (44%) think it is risky.

### False Assumptions

**44% of Americans** falsely believe that online pharmacies do not need a prescription from a healthcare provider to dispense the medication for certain prescription medicines. **This number jumps to (53%)** among those who have previously purchased prescription medicines online. Meanwhile, **54% of Americans** - up from 45% in 2021 - falsely believe all websites offering healthcare services/prescription medications to Americans via the Internet have been approved by the FDA or state regulators. **This misperception is even higher (68%)** among those who have previously purchased prescription medicines online, up from 59% in 2021.

### Comfort

**59% of Americans** say they would be comfortable ordering controlled substances from an online pharmacy if unavailable at their local pharmacy.

### Factors

**Convenience (59%) and cost-savings (55%)** remain the most frequently cited reasons Americans have or would use online pharmacies – and both outweigh safety concerns.

[Read ASOP Global Foundation's full survey results here.](#)