

The Urgent Need for Connected Labels in Ensuring Our Safety



Photo credit: FDA

By Swami Subramanian
April 18, 2024

In light of recent events involving counterfeit Botox, the looming threat of fake drugs presents a grave danger to public health. With the FDA sounding the alarm on [unsafe Botox](#), with replica boxes surfacing across several states, it's paramount to confront the broader issue of counterfeit pharmaceuticals head-on and seek innovative strategies to uphold medication safety.

Counterfeit medications not only imperil patient well-being but also erode trust in our healthcare infrastructure. The reported symptoms from those exposed to counterfeit Botox underscore the severe repercussions of fake drugs, spanning from impaired vision to respiratory distress. These incidents serve as a stark reminder of the pressing need for heightened measures against drug counterfeiting.

One promising avenue lies in the widespread adoption of Radio Frequency Identification (RFID) and Near Field Communication (NFC)-based validated, connected labels for pharmaceuticals. By integrating these advanced technologies into drug packaging, we can establish a robust system for verifying medication authenticity throughout the supply chain. RFID/NFC-connected labels facilitate

real-time tracking and authentication, empowering healthcare professionals and consumers to validate drug legitimacy before use.

FDA DRUG SAFETY ALERT

“Counterfeit Version of Botox Found in Multiple States”

Counterfeit versions:

- Display active ingredient as “Botulinum Toxin Type A”;
- Include non-English text on the carton;
- Contain lot number C3709C3.

— April 16, 2024

The recent episodes involving counterfeit Botox underscore the critical necessity of implementing comprehensive drug authentication frameworks. Leveraging RFID/NFC technology holds the key to forging a transparent and secure supply chain, shielding patients from the hazards associated with counterfeit medications.

As we navigate the intricacies of drug safety and security, prioritizing innovation and collaboration is paramount. By advocating for the widespread adoption of RFID/NFC-connected labels and raising awareness about the perils of counterfeit drugs, we can fortify the integrity of our healthcare system and safeguard patient welfare on a global scale.

Technology and IoT are powerful allies in the fight against this illicit trade. By leveraging cutting-edge advancements, such as connected labels, we can disrupt these criminal networks and protect patients from the dangers posed by counterfeit medications. Now is the time to harness technology's full potential to safeguard public health and ensure the integrity of our healthcare system. Let's unite in championing the integration of connected labels in drug packaging and take decisive action to thwart the menace of counterfeit medications.

Axia's healthcare consortium and its members stand committed to addressing this pressing issue.

Swaminathan Subramanian is the director of business development at the Axia Institute, where he cultivates corporate partnerships and supports research efforts, innovation, and the growth of the institute's research portfolio. Swami is leading the Patient-Centric Drug Information Distribution Program with drug manufacturers, distributors, pharmacies, and solution providers and can be reached at sswami@msu.edu.

Connect. Collaborate. Solve.