



Behavioral and  
Educational Strategies  
for Avoiding Falsified  
Medicine Exposure  
(BE SAFE) Initiative

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# — Background

Counterfeit medicines are an important public health concern that span multiple therapeutic areas and vast array of countries (including underdeveloped as well as developed countries).

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# Staggering metrics related to counterfeit medicines

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10% of the global drug supply is estimated to be counterfeit.

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In 2021 alone, 2.35 million dose of counterfeit Pfizer products were seized.

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Worldwide sales of counterfeit drugs increased from US\$ 3.5 billion per year in 2005 to an estimated US\$ 200 to 432 billion in recent years

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U.S. fake pill deaths more than doubled from July 2019 to December 2021

Gurney B, Amundson G, Boumediene SL. Ways to battle the \$431 billion fake pharmaceutical industry. Review of Business & Finance Studies 2017; 8(1): 33-40.  
Ofori-Parku SS. Fighting the global counterfeit medicines challenge: A consumer-facing communication strategy in the US is an imperative. J Glob Health 2022; 12.  
[September 5, 2023: U.S. fake pill deaths more than doubled from July 2019 to December 2021 – Partnership for Safe Medicines](#)

# Counterfeit medicines are pervasive health threats to the global population

## Up To 500,000 Killed by Fake Medicines in Sub-Saharan Africa

Figures linked to falsified and substandard medicines in Sub-Saharan Africa

<https://www.statista.com/chart/30068/falsified-medicines-in-sub-saharan-africa/>

## 5 Hidden Poisons in Fake Medicines



<https://medium.com/code-for-africa/getting-a-grip-on-counterfeit-medicine-in-kenya-what-next-d476660cbfd>

## Fake drugs kill more than 250,000 children a year, doctors warn

Printer ink, paint and arsenic found in some drugs sold to treat life-threatening illnesses



<https://www.theguardian.com/science/2019/mar/11/fake-drugs-kill-more-than-250000-children-a-year-doctors-warn>

"We initially thought they were OxyContin," says [Drug Task](#) Force Officer-In-Charge Dan Cummings. "They looked like oxy. They were stamped like oxy pills. Turns out there was a heavy concentration of fentanyl in these tablets. That's terrifying."

## 'As Deadly As A Cyanide Capsule'

<https://www.jacksoncountycombat.com/582/Fentanyl-Laced-Pills-Seized>

# Counterfeit medicines are pervasive health threats to the global population

In China, almost 192,000 people died as a result of counterfeit medications.

The WHO estimates that counterfeit pneumonia drugs cause the death of between 72,000 and 169,000 children annually, and fake anti-malarial drugs cause 116,000 deaths annually.

Hundreds of children died from taking cough and paracetamol syrups in that contained diethylene glycol instead of glycerin.

Several middle-school children died in Canada after ingesting counterfeit Percocet, a pain reliever, which contained a lethal dose of fentanyl

In USA, the presence of fentanyl was found in confiscated pills with deaths attributed to their use in 38 states. Fentanyl laced fake pills have been seized in all 50 states.

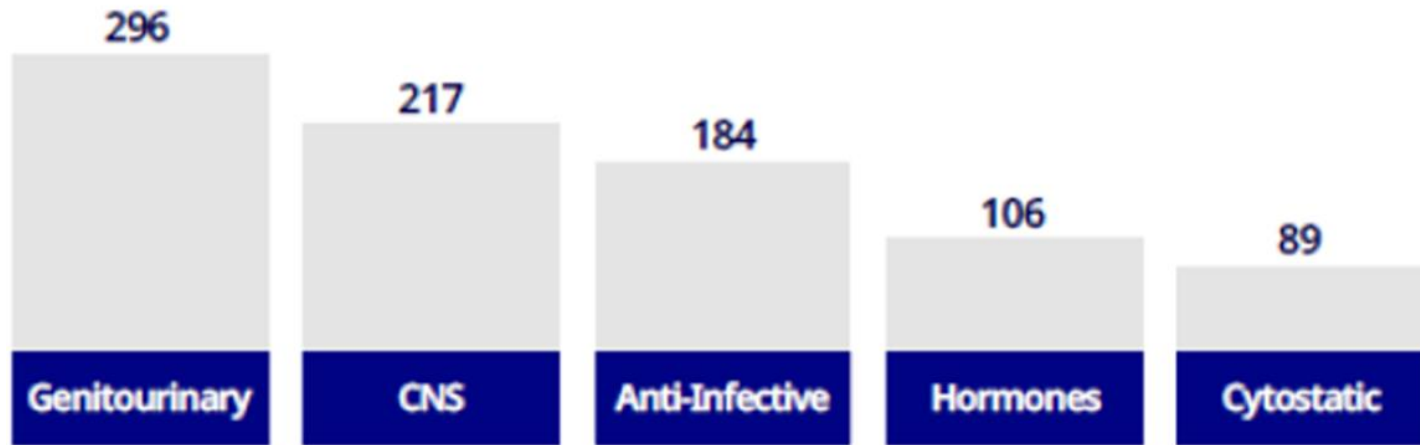
World Health Organization. A study on the public health and socioeconomic impact of substandard and falsified medical products. Geneva: World Health Organization, 2017  
Thiagarajan K. WHO investigates cough syrups after deaths of 66 children in Gambia. British Medical Journal Publishing Group; 2022.  
O'Brien KL, Selanikio JD, Hecdivert C, et al. Epidemic of pediatric deaths from acute renal failure caused by diethylene glycol poisoning. *Jama* 1998; **279**(15): 1175-80.  
DEA Laboratory Testing Reveals that 6 out of 10 Fentanyl-Laced Fake Prescription Pills Now Contain a Potentially Lethal Dose of Fentanyl | DEA.gov

# Impact of counterfeit medical products



Source WHO report <https://www.who.int/publications/i/item/9789241513432>

# Top 5 therapeutic categories for counterfeit medicines



Source: Pharmaceutical Security Institute 2020 Global Situation Report

# Need to address this critical public health challenge

Pfizer safety and Pfizer security in collaboration with Johns Hopkins addressing the global public health challenge





# — Objective of the Collaboration

Understand the current state and public health impact resulting from counterfeit medicines

Understand gaps in knowledge of counterfeit medicines and illicit online pharmacies among healthcare providers

Identify current strategies and interventions implemented by healthcare organizations, academic institutions, public health organizations/associations to prevent counterfeit medicine exposure and use

Conduct a stakeholder meeting with experts to identify research and knowledge gaps and public health intervention strategies to prevent drug counterfeiting.

# Progress so far



HCP surveys ongoing



Site created by JHU to raise awareness on counterfeit medicines - <https://fakemedicinenomore.org/>



Stakeholder meeting planned for November 30, 2023