An assessment of publicly reported incidents of illicit diversion and falsification of medicines and identified emerging issues

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Introduction

- Research
- Definitions
- Limitations of research
- Findings
- Challenges
- Discussion
- Conclusions



Research paper methodology

- 1. to conduct online open-source research, i.e. intelligence produced from publicly available information.
- 2. to categorise identified products as medicines, controlled medicines, and new psychoactive and other substances, indicating whether the product has been subject of illicit diversion and/or falsification.
- 3. provide a narrative on each of the identified products based upon the findings of the open-source research.
- 4. to create a repository of links to identified incidents by product.
- 5. to identify emerging themes or strategic issues.

Definitions

• Medicinal product (medicine):

- any substance or combination of substances presented as having properties for treating or preventing disease in humans;
- any substance or combination of substances which may be used in or administered to human beings either with a view to restoring, correcting, or modifying physiological functions by exerting a pharmacological, immunological, or metabolic action, or to making a medical diagnosis.
- **Controlled medicines:** pharmaceuticals with an identified or emergent clinical application whose active principles are listed under one of the three international drug control conventions.
- **Psychoactive drugs**: substances that, when taken in or administered into one's system, affect mental processes, e.g. perception, consciousness, cognition or mood and emotions. Psychoactive drugs belong to a broader category of psychoactive substances that also include alcohol and nicotine. "Psychoactive" does not necessarily imply dependence-producing, and in common parlance, the term is often left unstated, as in "drug use," "substance use" or "substance abuse."

Limitations

This research and related paper is limited to incidents and content which has been released by authorities and is publicly available online and does not propose to be an exhaustive assessment of all relevant global incidents.

Findings

- Whilst many medicines were subject of reported diversion and illicit trade, controlled medicines were by far the most widely reported as both illicitly diverted and falsified.
- Falsified controlled medicines containing additional dangerous ingredients have been extensively reported.
- Psychoactive and other substances are increasingly reported as being utilised as API within falsified versions of controlled medicines.

'Forensic evidence found at the scenes suggested a major production of Alprazolam, a medicine within Xanax, possibly at a rate of 10,000 pills an hour'

'The drug is so cheap, virtually every pill sold on the street today stamped as a CDN 80 oxycodone tablet actually contains fentanyl'

'rather convincing counterfeits of TEVAbrand Diazepam pills (10 mg, 500 pill bottle) that could potentially deceive not only the intended consumers, but even medical professionals'



Ī	Information
	The website is in the archive.

DRUGS CONTAINING PSYCHOTROPIC SUBSTANCES WERE SENT, M.IN OTHERS, TO THE USA

Date of publishing 04/07/2022

Medicines containing psychotropic substances in bulk were sent from Poland to the USA or Great Britain. In this way, the broken gang could smuggle 250,000 pills, worth about PLN 20 million. The procedure was interrupted by CBSP police officers and prosecutors from the National Prosecutor's Office in Lublin, in cooperation with the American Homeland Security Investigations (HSI). During the action, officers detained 9 suspects and seized over 12.5 thousand pills, including medicines packed and prepared for shipment.



Diversion Challenges



Police discovered factories producing fake pills in Tipton and Wolverhampton

Police say Brian Pitts had grown the Ricit business quickly and may have been in contact with other international drug supply chains.

Specialist equipment seized and arrests made following counterfeit drugs manufacturing crackdown

News Published: 13:49 17/05/2022

Four arrests have been made and specialist manufacturing equipment made to make millions of pounds worth of counterfeit prescription drugs has been seized following dawn raids in the region this morning (17 May 2022).







Falsification Challenges



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Karachi Enforcement foils bid to smuggle 5.6 million Tramadol tablets worth Rs2.6b to Sierra Leone Tuesday March 25, 2025

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26 tonnes of raw opioid material imported in a year

Pakistan's actual need for Tramadol is only fraction of this amount

By M. Waqar Bhatti March 25, 2025



A representational image of medicines can be seen. - Pixabay/File

Other Challenges

Discussion points.....



\$4M worth of prescription opioids disappeared from an Ontario pharmacy. No one can say where they went

CBC analysis shows rise in dangerous and addictive drugs categorized as lost — without explanation

Tara Carman, Andreas Wesley · CBC News · Posted: Jun 27, 2024 4:00 AM EDT | Last Updated: June 28 Tara Carman, Andreas Wesley · CBC News · Posted: June 28



Since the pandemic, unexplained losses from Canadian pharmacies appear to be on the rise, according to a CBC News analysis - including some very large losses of dangerous and addictive drugs. (Jocelyn Shepel/CBC)

....research assessed that losses and thefts were a potential signal of diversion and concluded that '<u>drug diversion in</u> <u>hospitals is a serious and urgent concern</u> <u>that requires immediate attention to</u> <u>mitigate harms</u>' Fan et al 2019

The role that regulated supply chain losses and thefts may play in illicit diversion?

Opioids still top loss reports but benzos rising

The opioid painkiller oxycodone remains the drug reported missing - most often stolen, rather than lost - in the highest quantities, CBC's analysis found. This was especially true in Ontario, Alberta and Newfoundland.

Top drugs reported missing to Health Canada

Units of controlled drugs reported lost or stolen between 2018-2023

Opioid painkiller Benzodiazepine Cold and sinus medication Stimulant used to treat ADHD



Excludes loss reports measured in millilitres, milligrams, grams, kilograms, patches and vials.

Source: Health Canada, analysis by CBC News

Is diversion an early risk indicator for future falsification?



Annex: Product subject of WHO Medical Product Alert No. 1/2025

Product Name	OxyContin 80mg
Stated manufacturer	Mundipharma A/S
Batch	262174
Expiry date	12/2025
dentified in	Switzerland
Available photos	mundipharma Oxycodone hydrachloride tabletki o przedłużonym uwalnianu Orycodone hydrochloride tabletki o przedłużonym uwalnianu Orycodone hydrochloride tabletki o przedłużonym uwalnianu Owcodone hydrochloride tabletki o przedłużonym uwalnianu Owalnie tabletki o przedłużonym Owcodone hydroc



The use of the internet and online services to facilitate • the supply of falsified and diverted medicines

- Trafficking in prescription opioids is an emerging phenomenon
- 46 Dutch Telegram channels offering oxycodone
 (€8.67) and Tramadol (€1.41)
- 21 German Telegram channels offering oxycodone (€9.02) and Tramadol (€0.71)

Increasing public health threats?

'changing the overdose landscape by placing a wider population at risk of unintentional exposure, especially since a large proportion of those who misuse prescription drugs such as benzodiazepines and opioids, obtain them from nonmedical sources'.

Bruzelius, E., Palamar, J. J., Fitzgerald, N. D., Cottler, L. B., Carr, T. C., Martins, S.S. (2024). Law enforcement fentanyl seizures and overdose mortality in US counties, 2013–2020. Drug and Alcohol Dependence, vol 262. 'the appearance of very potent synthetic opioids (such as nitazenes and diverted or counterfeit prescription opioids) on the EU drug market is a serious reason for concern'.

The changing DNA of serious and organised crime: EU Serious and Organised Crime Threat Assessment 2025

There has never been a more dangerous time to take drugs, says NCA as annual threat assessment is published

NSA

The National Crime Agency has today released its annual assessment of serious and organised crime, with a stark warning that taking drugs has never been more dangerous.

The threat from drugs to the UK has increased due to a rise in the production of cocaine, an expanding synthetic drugs market, an increase in the availability of synthetic opioids, and more cannabis being imported.

There has been a significant escalation in the criminal use of nitazenes as a cheap way to increase the strength of certain drugs, particularly heroin. In many cases, users simply do not know what they are consuming, and at least 284 deaths have been linked to high-strength nitazenes since June 2023.



Dangerous fake Mundipharma OxyContin in blister packaging, containing nitazenes. (See comments for full info)





Copyright Keith Stakocic/AP Photo



Undergr6und • 1mo ago

This shit flooded Germany faster then I could ever imagine. I saw them online then a few days later my plug had them a real life friend of mine had em I told em to get rid of this POS but they took it anyways bc they wouldn't believe me and then luckily said that they are weird and didn't turn for shit from what I've heard they are underdosed AF but pls don't buy these and support getting fakes here to Europe



yeyepapa • 1mo ago

I have bought these polish oc80s and they were identical to the real deal pharma oc80s, the coating tasted the exact same and also the taste was similiar. They just felt a little bit weaker but that might just be tolerance. Also the police warned about these and said they contained oxy so maybe they are starting to use nitazenes now after getting a good customer base

Conclusions.....

- **Data** There is limited availability of data or a consolidated comprehensive data set.
- **Research** Outside of North America limited research of the topic and sub-topics has been conducted.
- **Analysis** There is a paucity of detailed analysis to inform evidence-based focus, direction and professional practice.

A final thought.....

The UK's Advisory Council on the Misuse of Drugs (ACMD) in a report produced for the UK government on the diversion and illicit supply of medicines concluded:

- The most prevalent diverted medicines were opioids and benzodiazepines.
- The Internet is an increasing illicit source of medicines with many unregistered online pharmacies supplying prescriptions and medicines unethically.
- There is a common perception that prevalence of diversion and illicit supply of medicines is increasing.
- Quantifying the extent of the issue is difficult owing to a lack of suitable monitoring systems.

This report and insight was published in 2016.....

Thank you

Any questions?

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