

THE DETECTION OF NOVEL NITAZENE-CLASS OPIOIDS IN UNREGULATED DRUG MARKETS IN CANADA



- Nitazenes are highly potent synthetic opioids, sometimes being up to 12 times stronger than fentanyl. They have emerged in Canada's unregulated drug supply, so we took a look at the trends.
- We looked at data from drug checking services in Toronto and British Columbia, National police seizure data (Health Canada's Drug Analysis Service) and death records from the Office of the Chief Coroner of Ontario.

KEY FINDINGS

PREVALENCE & DETECTION

Out of 668,486 drug samples between January 2019 and July 2024, nitazenes were detected in 4,074 (0.61%).

LACK OF AWARENESS

Nitazenes are almost **entirely unexpected** by consumers; they were expected in fewer than 1% of the drug checking samples where they were actually detected.

CHEMICAL DIVERSITY & CO-OCCURRENCE

12 unique nitazene compounds were identified. Frequently co-occurring with other central nervous system depressants: caffeine, benzodiazepine-related drugs, fentanyl, and fentanyl-related analogues.

MARKET TRENDS



Nitazene detections and associated overdoses in Toronto, as well as detections nationwide, rose significantly prior to peaking between January and March 2022, after which they declined.

OVERDOSE & MORTALITY

- 76 samples from Toronto's Drug Checking Service containing nitazenes were associated with a prior non-fatal overdose.
- In Coroner data from Jan 2019-Dec 2022, nitazenes were present in 79 opioid-related deaths across Ontario, and 33 deaths in Toronto.

CONCLUSION



- The unregulated drug market is volatile and unpredictable. Substitutes or adulterants such as nitazenes are added unknowingly to the people using them.
- We need enhanced public health monitoring, drug checking services, and tailored overdose prevention strategies.

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