



NITAZENE DEATHS ARE LIKELY BEING UNDERESTIMATED DUE TO THEIR DEGRADATION IN POST-MORTEM BLOOD SAMPLES

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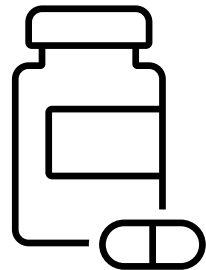
WHAT ARE NITAZENES?



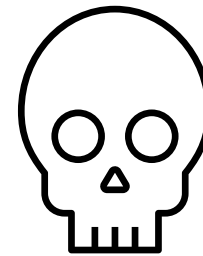
Opioids



Synthetic



Developed
as medicines



Extreme
potencies

13 different nitazenes reported to the UN Early Warning System between 2019-2023

NITAZENE FATALITIES IN THE UK



Nitazenes have been linked to *at least* **400** deaths across the UK since June 2023



But could it be even worse?

CASE STUDIES

Case Study 1: Nitazene detected in post-mortem urine, but not in post-mortem blood, and the drugs detected in the blood in quantities not usually associated with fatality

Case Study 2: Nitazene detected in a blood sample taken on Day 1 post-mortem, but not in a blood sample taken on Day 7

Case Study 3: Nitazene detected in a preserved post-mortem blood sample, but not in the corresponding unpreserved sample

Case Study 4: Nitazene detected in a needle syringe found in the arm of a deceased person, but not in the corresponding post-mortem blood sample

STUDY DESIGN

Study 1 – Administer rats nitazene
and test their blood

Study 2 – Assess epidemiology
data for excess deaths

STUDY 1 – NITAZENE ADMINISTRATION TO RATS



12 male rats

STUDY 1 – NITAZENE ADMINISTRATION TO RATS



← ~14% of the nitazene detected in the PM0 preserved sample immediately analysed remained

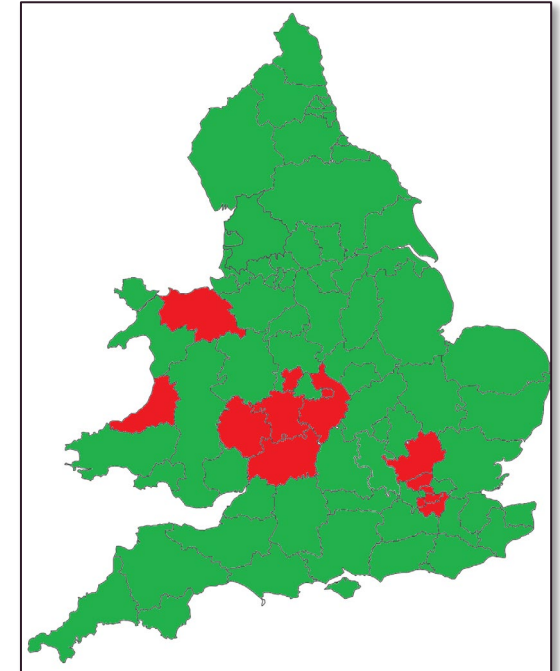
What about urine?

← Less than 4% remained

STUDY 2 – ASSESS EPIDEMIOLOGY DATA FOR EXCESS DEATHS

NATIONAL PROGRAMME ON SUBSTANCE USE MORTALITY (NPSUM)

- A database of deaths following drug use reported to voluntarily by coroners across most of the UK (>90% of jurisdictions) – not currently Scotland.
- Started in 1997 – nearly 60,000 reports received to date
- Cases that qualify for reporting:
 - The presence of psychoactive drugs at post-mortem and/or implication in causing the death
 - The decedent had a history of drug use
- Data fields collected:
 - Demographic data (sex assigned at birth, age, usual address, ethnicity, living arrangements, employment status)
 - Details pertaining to death (cause(s) and manner of death, toxicology, narrative of circumstances)
 - Past medical history (prescribed drugs, co-morbidities, known to use drugs)



STUDY 2 – ASSESS EPIDEMIOLOGY DATA FOR EXCESS DEATHS

Warning of dangerous opiates circulating in the West Midlands

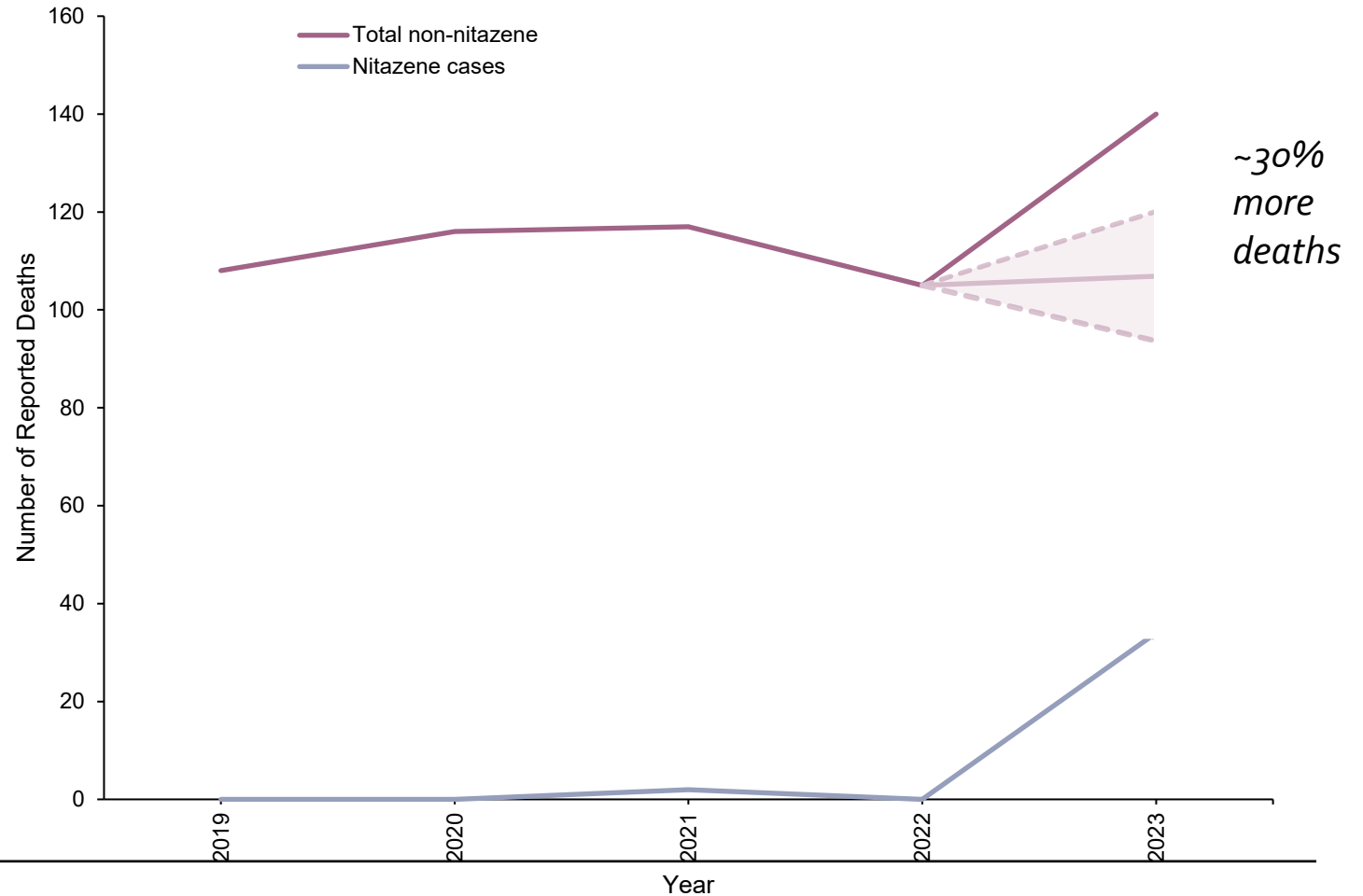
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Authorities have been made aware of dangerous synthetic opiates circulating in the West Midlands.


The area with the fastest turnaround time between death and inquest conclusion (~3 months)



Nitazenes have been linked to *at least* ~~400~~ **530?** deaths across the UK since June 2023

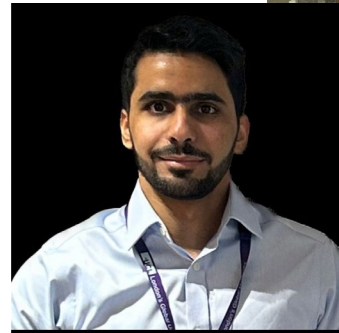


SUMMARY

- Nitazenes are super potent synthetic opioids 
 - There is anecdotal evidence of nitazene loss from human post-mortem blood samples
 - This rat study suggests that nitazene concentration reduces in post-mortem blood samples over time
 - This is a credible explanation for at least part of the excess mortality observed in Birmingham & Solihull in 2023
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WITH THANKS TO....

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