



Drug Trend Alert: Nitazenes

June 2024

In Hamilton County, there has been an increase in nitazenes detected in the drug supply.

Summary Points

- In Hamilton County, an increasing number of drug seizures have contained nitazenes, particularly N-pyrrolidino etonitazene.
- Nitazenes are associated with a high risk of respiratory depression and death to their potency.
- In comparison to morphine,
 - Isotonitazene is 75x more potent.
 - Metonitazene is 100x more potent.
 - Etonitazene is 1500x more potent.
 - Protonitazene is 200x more potent.
 - N-pyrrolidino etonitazene is 1500x more potent.
- Naloxone should be administered to reverse critical respiratory depression, and repeated naloxone administration may be necessary.
- Never use alone.

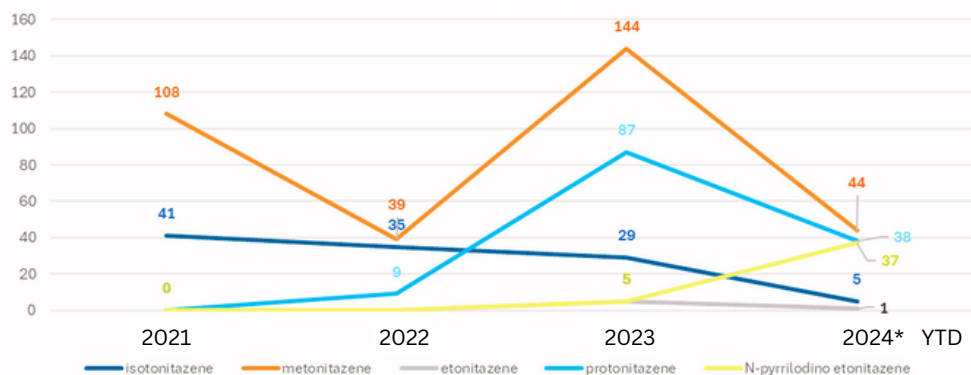
Nitazenes, officially known as benzimidazole-oids, are a potent and dangerous class of synthetic opioids. They were synthesized in the 1950s as an alternative to morphine but were never approved for medical use due to their high potential for dependence and overdose. Nitazenes may be made as crystalline solids and white or brown/yellow powders, and they have been detected in tablets and other drugs such as heroin, ketamine, and synthetic cannabinoids. They can be injected, inhaled, or swallowed in tablet form. The increased trafficking and rising popularity of nitazenes amid the ongoing and unprecedented opioid epidemic in the United States presents a significant public health threat.

In Hamilton County, nitazene analogues such as isotonitazene and metonitazene have been detected in drug seizures as early as 2021. From 2022 to 2023,

however, the number of seizures containing protonitazene increased from 9 to 87 – an annual increase of 867%. As of May 31, 2024, the number of seizures containing N-pyrrolidino etonitazene increased in the first two quarters as compared to all of 2023. The growing emergence of nitazene analogues in the local drug supply underscores the importance of law enforcement, first responders, medical professionals, forensic and laboratory personnel, public health and safety officials, medical examiners, coroners

and the general public to be informed of the dangers, detection methods, and appropriate response protocols to mitigate the impact on public health.

Hamilton County Nitazene Containing Drug Seizures By Type, 2021-2024*



➤➤➤ Clinical Adverse Effects

The effects of nitazenes may vary due to one's size, weight, health, tolerance, and dosage. Generally speaking, the clinical presentation of nitazenes is indistinguishable from other opioids. Similar to other mu-opioid receptor agonists, they result in analgesia, sedation, depression of the respiratory and central nervous system, reduced heart rate, euphoria, pinpoint pupils, hypotension, and gastrointestinal effects such as nausea and vomiting. The potential for health and safety risks, including death, is high due to their potency. Compared to morphine, the potency of isotonitazene, metonitazene, and protonitazene is 75, 100, and 200 times greater, respectively, while both etonitazene and N-pyrrolidino etonitazene are 1500 times greater. An ambulance should be called immediately if someone shows signs of overdose including: slow or shallow breathing, bluish or greyish lips and complexion, passing out, or coma.

➤➤➤ Overdose Response

Treatment for overdoses involving nitazenes is identical to those involving fentanyl and other opioids. Naloxone should be administered to reverse critical respiratory depression, and repeated naloxone administration may be necessary. Note that clinical conditions may change rapidly and unpredictably after naloxone administration due to precipitation of withdrawal, especially if one's condition is reversed too aggressively.

➤➤➤ Withdrawal Management

Withdrawal from nitazenes is comparable to severe opioid withdrawal with effects such as excessive sweating, restless legs, fever, dizziness, flu-like symptoms, anxiety, and panic attacks. Withdrawal management is no different than the standard of care for any opioid.

Harm Reduction

- Start with a low dose to see how you are affected. If swallowing the drug, then it will take longer to take effect than other methods such as injecting.
- Avoid using alone. Instead, have a sober person in close proximity to help if needed.
- Have more than one dose of naloxone available.
- If you are uncertain whether someone is overdosing, then request an ambulance and do not leave the person alone. Note that ambulances are not required to involve law enforcement.



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