



Nitazenes

Nitazenes are a class of synthetic opioid drugs often found in pills and powder sold on the streets. Nitazenes are specifically developed to be cheap, easy to manufacture, highly intoxicating, and most fall outside the official Controlled Substances Act. There are 10 known forms of nitazenes, and the most common are isotonitazene, metonitazene, and etonitazene. There are no quality, purity, or manufacturing standards for these drugs.

Nitazenes are many times more powerful than fentanyl. They attach to receptors in the brain and cause depression of the central nervous system. These drugs have been responsible for many deaths worldwide. They are increasingly recorded in toxicology reports and death certificate cause-of-death fields. According to *The Drug Monitor*, the recent sharp increase in overdose deaths in the U.S. has been attributed to nitazenes.

Nitazene Dangers

Nitazenes cause the respiratory system to slow to dangerous levels. A person who has

overdosed on a drug containing nitazenes will have pinpoint pupils, slow or non-existent breathing, and a low heart rate. They will be difficult or impossible to wake up. Narcan can sometimes reverse the overdose, but first responders never know how many doses of Narcan it will take to save the person's life.

An individual in nitazene overdose respiratory distress will often be unresponsive and unable to provide information to those treating them. But even if they are responsive or accompanied by other people, these overdose victims may not know what they have taken.

Conventional fentanyl test strips cannot detect the presence of nitazenes. The only way to know for sure if any form of powdered drug, or any counterfeit pill contains nitazenes is through advanced laboratory testing. A bag of heroin for example might contain small amounts of sedatives, crushed prescription drugs, cocaine, methamphetamine, quinidine, Benadryl, and nitazenes. An unsuspecting user has no way of knowing what he or she is ingesting. Because of the cocktail of substances in today's street drugs, for too many users, even one-time use can result in death.

No Amount of Nitazenes is Safe

The lethal doses for nitazenes in humans, particularly in combination with other drugs or medical conditions, are not known. Many factors influence overdose-related death, including not only the drug, but also the amount taken, the way in which it was taken, possible drug-drug interactions or drug-alcohol interactions, body weight, opioid tolerance, and underlying health status. But even if an overdose does not result in death, survivors may be left with short-term or long-term mental impairment or physical disabilities. This non-lethal overdose condition is so serious that the term “toxic brain injury” has recently become a phrase used to describe the results of a non-fatal overdose.

Overdose deaths are the main cause of death for Americans between the ages of 25 and 64 years and for every opioid-overdose fatality, there are 6.4 to 8.4 “nonfatal overdoses.”

Dealing with the Problem

Many people who use illicit drugs have not even heard of nitazenes, much less are they aware of their risks. Therefore, addressing the problem of nitazene overdoses in America will require a comprehensive and collaborative response from legislators, healthcare professionals, law enforcement, and the community.

The first step will be to improve the monitoring of nitazene-related incidents to better understand the problem and begin to formulate a response. Next, targeted public awareness campaigns to educate communities about the dangers of nitazenes will be important. We will also need to strengthen and expand treatment to support individuals struggling with opioid addiction, including those affected by nitazene abuse, and implement and enforce strict regulations on the production, distribution, and sale of synthetic opioids, including nitazenes, to curb their availability in the illicit market.

Doctors will need to work with specialized experts to develop protocols to treat a confirmed or suspected nitazene overdose. First responders, emergency department clinicians, and others on the front lines will need to be informed that nitazenes have invaded the street drug market, that polysubstance drug abusers may be taking nitazenes without knowing it, and that nitazenes by themselves may be sold in counterfeit pills falsely labeled as popular pharmaceutical opioids.

The United States already spends about \$11 billion annually on opioid overdoses, but this amount will need to increase substantially in order to deal with the added burden of nitazenes in the U.S. drug supply.