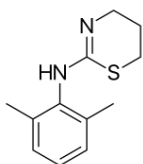


XYLAZINE DRUG FACTS

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Xylazine is a non-opioid pharmaceutical used by veterinarians to treat non-human mammals. Among its many veterinary uses, xylazine is primarily used as a sedative, analgesic, muscle relaxant, and anesthetic. Xylazine has grown in popularity as a recreational drug and cutting agent, and is encountered both knowingly and unknowingly by the user. Xylazine is not approved for use in humans, and is in the process of being scheduled by the DEA.



Xylazine

MW 220.34 g/mol

C₁₂H₁₆N₂S

Most structurally similar to the phenothiazine class of drugs.

Structure

Names

Brand Names: Rompun, Anased, Sedazine, Chanazine

Street Names: Tranz, Tranq Dope, Sleep Cut, Anesthesia de Caballo (horse anesthesia)

Most commonly sold as a clear liquid.

Can be combined with heroin, fentanyl, or other street drugs.

Appearance

Effects

Xylazine exposure may result in, but is not limited to, bradycardia, respiratory depression, hypotension and/or transient hypertension, sedation, hallucinations, and death.

Users may also experience skin infections and ulcers as well as dental abscesses.

There is no specific antidote to treat a xylazine overdose. Because xylazine is not an opioid, Narcan use is not effective.

Pharmacology

Pharmacology information in humans is very limited. Xylazine acts as an agonist at alpha-2 adrenergic receptors. This causes decreases in norepinephrine and dopamine levels, causing observed effects. Additional action mechanisms are proposed.

Xylazine effects have a typical onset of a few minutes and can last up to four hours in animals, with little variation between species. The primary metabolite is DMA (2,6-dimethylaniline).

Fatal exposures have been reported as high as 16,000 ng/mL.

Non-fatal exposures have reported blood levels varying from 30-4,600 ng/mL.

More data is required to establish therapeutic, toxic and lethal concentrations in humans, due to the overlap between fatal and non-fatal levels.

Xylazine is included in our T51 Advanced Toxicology and D01 Controlled Substance Panels.