



MEDETOMIDINE

What You Need To Know

What is medetomidine?

Medetomidine is a veterinary anesthetic, similar to and more potent than xylazine¹, that increases the risk for overdose and death through lowering blood pressure, heart rate, and breathing rate. Medetomidine may be “cut” (mixed) into street drugs, illicit drugs, and counterfeit pills containing fentanyl, with the intent to enhance its effects — often without the knowledge of the person using the substance.

- ▶ Medetomidine has been identified through toxicology tests from patients treated in emergency departments and in laboratory tests of illicit drugs seized throughout the United States².
- ▶ In Los Angeles County, medetomidine has only been found in illicit drugs containing fentanyl, and has not been commonly found in the illicit drug supply.

What effects occur if someone uses medetomidine?

Medetomidine can reduce pain and slows brain activity, decreasing breathing rate, slowing heart rate, and lowering blood pressure to induce sedation and sleepiness. Clinically, it is used to put animals to sleep during veterinary surgeries. It is specifically designed for animal surgeries, and was found to be too dangerous to use. Illicit medetomidine has been associated with fatal drug overdoses. People using medetomidine regularly experience medetomidine withdrawal when they stop using it, and can become very sick with high blood pressure, a fast heart rate, confusion, and vomiting. This can become bad enough that sometimes people need to go to the hospital. There is no FDA-approved antidote for medetomidine overdose. If a drug overdose is suspected, 911 should be called immediately. Naloxone should still be administered, since medetomidine is usually mixed with opioids such as fentanyl.

What should I do if someone I know has taken medetomidine?

If someone is having trouble breathing or is having difficulty waking up, call 911 immediately. If the person is not breathing and a drug overdose is suspected, naloxone should still be administered since many street drugs contain illicit opioids such as fentanyl.

For less severe exposures (e.g., alert patients who have not stopped breathing), contact the Poison Control online tool at <http://calpoison.org/contact> or by phone at 1-800-222-1222 (open 24/7).

Naloxone nasal spray is available at Community Health Stations throughout the County: <http://publichealth.lacounty.gov/communityhealthstation>.

If you or someone you know are going to use illicit drugs, please remember the following:

- 1) Do not use alone. Use with a friend or someone who can call 911 and administer naloxone in the event of an overdose.
- 2) Start low and go slow: Medetomidine's effect can last for hours and can build up in your system when used repeatedly.
- 3) In an overdose, still administer naloxone and call 911. Medetomidine is usually mixed with an opioid, and naloxone will still help reverse the opioid's contribution to an overdose.

For more information:

City of Philadelphia Medetomidine palm card:

<http://www.substanceusephilly.com/library/medetomidine-palm-card>

<https://nida.nih.gov/research-topics/emerging-drug-trends>

More information about public health services related to substance use in LA County is accessible through the mobile-friendly RecoverLA platform:

www.RecoverLA.org

Medi-Cal members can find substance use treatment services through the resources below:

- Substance Abuse Service Helpline: 1-844-804-7500
- Services and Bed Availability Tool: <http://SUDHelpLA.org>

¹ County of Los Angeles Department of Public Health. (n.d.). Xylazine in LA County. [Fact sheet]. <http://publichealth.lacounty.gov/sapc/docs/public/overdose-prevention/XylazineLACounty.pdf>.

² Sood, N. (2025). Rise of illicit medetomidine use: a worrisome trend. *The American Journal on Addictions* 34(5): 558-561. doi: 10.1111/ajad.70030. <http://pubmed.ncbi.nlm.nih.gov/40114453>