



LAC DPH Health Advisory:
**Medetomidine in Illicit Drugs: Increased
Risk for Overdose and Severe Withdrawal**
January 15, 2026



This message is intended for emergency, urgent care, primary care, and behavioral health providers in Los Angeles County.

Please distribute as appropriate.

Key Messages

- Medetomidine, a veterinary sedative, has been increasingly identified mixed with fentanyl in several East Coast cities, where it has contributed to overdose and life-threatening withdrawal.
- In Los Angeles County, medetomidine has been detected only infrequently to date; healthcare providers should nevertheless be prepared to recognize and manage medetomidine-related overdose and withdrawal should local prevalence increase.
- Medetomidine is a potent, long-acting α -2 adrenergic agonist that is not reversed by naloxone and can cause prolonged sedation, hypotension, and bradycardia; naloxone should still be administered due to frequent opioid co-exposure.
- Healthcare providers should consider possible medetomidine exposure when patients with overdoses do not fully resolve after naloxone administration.
- Medetomidine withdrawal can be severe and often requires ICU-level care. Early initiation of α -2 adrenergic agonist (e.g., clonidine or dexmedetomidine), frequent monitoring, and concurrent treatment of opioid withdrawal are recommended.

Situation

Medetomidine has been identified through toxicology testing of patients treated in emergency departments and through laboratory testing of seized illicit drugs throughout the United States. Available surveillance data indicate a higher prevalence of medetomidine in the eastern United States, where health departments have reported increases in prolonged overdose-related sedation and severe withdrawal requiring intensive care.

Since May 2025, six illicit drug samples tested through community-based drug checking services in Los Angeles County have been positive for medetomidine. These findings do not currently suggest widespread presence of medetomidine in the local illicit drug supply. Patterns observed in higher prevalence jurisdictions, as noted above, have not been observed in Los Angeles County to date.

Because the illicit drug supply is dynamic, medical and behavioral health providers should be prepared to recognize and manage medetomidine-related effects, including when it is combined with opioids (such as fentanyl) and other sedating substances, should it become more prevalent locally.

The Los Angeles County Department of Public Health (LAC DPH) continues to work closely with partners to monitor the local illicit drug supply and to increase awareness and education for the public.

Medetomidine

Medetomidine is a non-opioid α -2 adrenergic agonist used as a veterinary anesthetic. It is 1) several hundred times more potent than xylazine, 2) longer acting with side effects that include prolonged sedation, hypotension, and bradycardia, and 3) not approved by the U.S. Food and Drug Administration (FDA) for human use.

It can be ingested orally; inhaled, smoked, or snorted; or injected intramuscularly or intravenously.

Medetomidine has been found in drugs containing fentanyl. It can extend subjective euphoria and other opioid effects, and people using these drugs may be unaware that it is present, thereby increasing the risk of a fatal overdose.

Clinical experience from other jurisdictions suggests two common presentations: 1) prolonged sedation following naloxone administration and 2) severe withdrawal that is disproportionate to opioid withdrawal alone.

Naloxone does not reverse medetomidine's effects. However, naloxone is still recommended because medetomidine is found mixed with opioids, and naloxone reverses opioid-induced respiratory depression.

Medetomidine withdrawal syndrome occurs when someone abruptly stops regular use of drugs containing medetomidine. Symptoms include tachycardia, severe hypertension, waxing and waning alertness, tremor, and intractable nausea and vomiting.

Management of medetomidine withdrawal requires:

- Early initiation of an α -2 adrenergic agonist (e.g., clonidine or dexmedetomidine),
- Concurrent treatment of opioid withdrawal with methadone or buprenorphine, when indicated, and
- Close monitoring and symptom management.

Untreated medetomidine withdrawal syndrome often progresses to ICU admission for stabilization. In contrast to xylazine, medetomidine has not been linked to poor wound healing to date.

Medetomidine presence can be checked with test strips for drug samples.

Medetomidine is not included on routine serum or urine drug testing but can be detected through gas or liquid chromatography-mass spectrometry when specifically ordered.

Actions Requested of Providers

- **Administer naloxone** to patients with symptoms of an overdose. Naloxone will reverse any opioid effects that are present and restore breathing. Note: if medetomidine is present, the patient may remain somnolent or minimally responsive. The goal of an overdose reversal is to restore breathing, not to necessarily restore full consciousness.
- **Test suspected overdose cases for medetomidine if they do not fully respond to naloxone treatment.** Testing for medetomidine requires ordering medetomidine-specific toxicology tests, as it is not included in routine serum or urine drug screens.
- **Evaluate and treat medetomidine withdrawal syndrome, when present**
 - Symptoms may include tachycardia, severe hypertension, waxing and waning alertness, tremor, and intractable nausea and vomiting.
 - Refer to the [Philadelphia Department of Public Health's Health Update Responding to overdose and withdrawal involving medetomidine](#) for additional guidance.
 - Because medetomidine withdrawal syndrome commonly presents alongside opioid withdrawal, assertively treat opioid withdrawal syndrome with methadone or buprenorphine. Providers can refer to [California Bridge](#) for protocols and support.
- **Report suspected or confirmed medetomidine overdoses to Poison Control:** 1-800-222-1222 or <http://calpoison.org/contact>
- **Offer naloxone to patients at risk for overdose**
 - Emphasize that naloxone should be given for any suspected drug overdose, even if the substance is unknown.
 - Explain that the goal is to restore breathing and save life.

- Note that naloxone can be given intranasally or intramuscularly; both methods are equally effective.
- Provide education on how to use naloxone: [Recover LA Naloxone Guide](#)
- **Identify patients at risk for overdose and provide anticipatory risk reduction guidance:**
 - Screen all patients, including adolescents, for recreational drug use.
 - Educate patients who use drugs to:
 - Never use alone
 - Use small “tester” doses
 - Stagger drug use with others
 - Avoid mixing drugs
 - Carry naloxone
 - Test their drugs (see Community-based drug checking below)
 - Inform patients that medications and other forms of treatment for substance use are available through treatment programs, primary care services, and other health providers.

Additional Resources

- **Community-based drug checking** is available for free in Los Angeles County. This testing uses Fourier-transform infrared spectroscopy (FTIR), which analyzes a drug sample for a variety of substances, including medetomidine. Results are available in 15-20 minutes. drugcheckinglosangeles.com
- **Los Angeles County Department of Public Health Overdose Prevention Webpage**
This Substance Abuse Prevention and Control (SAPC) website features information sheets and toolkits for the community relevant to overdose prevention, including information about drug testing strips.
publichealth.lacounty.gov/sapc/public/overdose-prevention.htm
- **Poison Control 1-800-222-1222** and <http://calpoison.org/contact>
- **Finding Substance Use Disorder Treatment**
In Los Angeles County, the general public, health care providers, and patients can find publicly funded substance use treatment services and bed availability using an online, filterable service locator known as the Services and Bed Availability Tool (SBAT), in the resource section of www.RecoverLA.org, or by calling the Substance Abuse Service Helpline (SASH). Services include outpatient and intensive outpatient treatment, residential treatment, withdrawal management, and Opioid Treatment Programs.
 - **Service and Bed Availability Tool:** <http://SUDHelpLA.org>
 - **RecoverLA** mobile-friendly platform: www.RecoverLA.org
 - **Substance Abuse Service Helpline (SASH):** 800-854-7771

This communication was sent by Brian Hurley, MD Medical Director, Substance Abuse Prevention and Control, Los Angeles County Department of Public Health.

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