CAHAN SD
California Health Alert Network San Diego

To: CAHAN San Diego Participants
Date: October 29, 2026
From: Public Health Services

Health Advisory: Medetomidine in the San Diego County Drug Supply

Key Messages

- Medetomidine, a veterinary sedative and potent alpha-2 adrenergic agonist, is increasingly being found in the illegal drug supply, including in San Diego County.
- Medetomidine toxicity can mimic opioid overdose and can intensify sedative effects of opioids. Its effects are not reversed by naloxone.
- Providers should advise people who use drugs to test their supply for medetomidine using commercially available test strips, often provided through syringe services programs or through the County's Harm Reduction Services Program.

Situation

Medetomidine has been detected in the illicit drug supply particularly in illegally produced fentanyl. When taken with opioids, medetomidine can intensify sedation and loss of consciousness during an opioid overdose. Naloxone does not reverse medetomidine's sedative effects.

Background

Medetomidine, also known as "rhino tranq," "dex," or "mede," is a veterinary sedative and alpha-2 adrenergic agonist that can cause severe hypotension, bradycardia and sedation. Medetomidine is almost exclusively detected as a drug adulterant, and most medetomidine-involved overdoses in the United States also involve illicitly manufactured fentanyl. Although medetomidine is not an opioid, medetomidine toxicity can mimic opioid overdose. Unlike the veterinary sedative xylazine, medetomidine does not cause necrotizing wounds.

Medetomidine was first detected in the United States in 2021. Although the Northeast and Midwest regions of the United States account for the greatest share of medetomidine reports submitted to the National Forensic Laboratory System each year, medetomidine has recently been detected in California including San Diego County**.** Clinical laboratory testing for medetomidine may underestimate the true presence of medetomidine, as the concentration required for detection often exceeds the levels reported in fatal medetomidine overdose cases. Syndromic surveillance is also being used by Public Health Services but has not identified potential cases of medetomidine in 2025-2026.

Patients suspected of experiencing an overdose involving medetomidine should still be treated with naloxone, because fentanyl is involved in most medetomidine-involved overdoses. Naloxone will not reverse the sedative effects of medetomidine. Providers can order medetomidine-specific toxicology tests; however, these typically must be sent to a reference laboratory and may take several days to result.

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Withdrawal can be life-threatening, causing severe hypertension, tachycardia, chest pain, intractable nausea and vomiting, tremor, altered mental status, and agitation**.** Withdrawal symptoms may begin within hours of last use and peak 18–36 hours later. Complications such as non-ST elevation myocardial infarction and posterior reversible encephalopathy syndrome (PRES) have been associated with severe medetomidine withdrawal. Dexmedetomidine infusions may be required along with treatment in an intensive care or emergency room setting.

Actions Requested

1. **Educate** people who use drugs, their caregivers, and other healthcare professionals about the presence of medetomidine in the San Diego County illicit drug supply and the risks of medetomidine exposure (toxicity and withdrawal).
2. **Provide** naloxone and naloxone education to your patients, regardless of their individual substance use history.
3. **Administer** naloxone to anyone experiencing suspected medetomidine overdose because medetomidine is most commonly encountered as an adulterant in illicit opioids.
4. **Develop** medetomidine withdrawal treatment protocols to ensure that patients are appropriately triaged to intensive or emergency care, when needed.
5. **Consider** ordering toxicology tests specific to medetomidine. The American Society of Addiction Medicine draft consensus statement recommends the decision to order a drug test, presumptive or confirmatory, should be patient specific, considering how the results may inform clinical decision making, including follow-up care, among other factors.
6. **Offer** people who use drugs harm reduction strategies to reduce overdose risk, such as:
    a. Using drugs in the presence of a bystander who could administer naloxone, rather than alone.
    b. Testing drugs before use, especially when acquiring from a new source. If drugs test positive for fentanyl or medetomidine, consider using smaller amounts or avoiding use.
        i. Free access to naloxone and fentanyl test strips is available via the County of San Diego's Naloxone Distribution Program. Members of the public can also call 2-1-1 or consult the County's Naloxone Resource Interactive Map to find naloxone near them.
        ii. Medetomidine test strips are available commercially and through the County's Harm Reduction Services Program.
    c. Avoid mixing drugs, as this could increase the risk of accidental medetomidine exposure.
7. **Connect** people who use opioids with medications for opioid use disorder, particularly buprenorphine or methadone, when clinically appropriate. Patients can be referred to the Access and Crisis Line at (888) 724-7240, 9-8-8 or 2-1-1.

Resources

- Medetomidine Rapidly Proliferating Across the US | Center for Forensic Science Research & Education
- Medetomidine Situation Summary | Overdose Prevention | CDC
- Emerging Issue Brief Medetomidine April 2026 | CDPH
- Drug Trends and Alerts | COSD

Thank you for your participation.

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