

PUBLIC HEALTH ALERT: Medetomidine in Winnipeg's Drug Supply

Healthy Sexuality and Harm Reduction | Street Connections | February 2026 (initial) | Updated May 1, 2026

- Medetomidine has been confirmed in Winnipeg's drug supply at concerning concentrations (3.19%, 3.56%, 5.50%, 2.31%) Feb – May 2026
- Some samples reportedly linked to a life-threatening overdose events that do not respond well to naloxone
- Medetomidine can cause deep prolonged sedation, severe and rapid reduction in heart rate, and slowed breathing
- Regular consumption can cause physical dependence with severe withdrawal symptoms
- Increasingly found in unregulated opioid supplies across Canada

What we know about medetomidine

Medetomidine is a non-opioid Alpha-2 adrenergic receptor agonist – a sedating and analgesic animal tranquilizer - approved only for veterinary use in Canada. It can be 200-300 times stronger than xylazine⁵. Street names may include “mede”, “tranq dope”, or “rhino tranq”.

Medetomidine in the unregulated drug supply:

- Nearly always found mixed with fentanyl and other opioids, including most in drugs sold as "down"
- Often also found with benzodiazepines
- Varies in colour and form: powder, chunks, pebbles, paste
- Usually present in amounts too small to detect on Fourier Transform Infrared Spectrometer (FTIR) (used in Winnipeg drug checking services), but may be detected with specialized test strips (currently being piloted at Street Connections, Sunshine House's Mobile Overdose Prevention Site (MOPS), and Nine Circles drug checking services)
- Not currently detected on standard urine drug screens

Trends in Canada and the U.S.:

- First identified in Canada's drug supply in 2021²
- Increasingly detected in community drug checking samples, confirmatory testing, and drug poisoning deaths across multiple provinces^{1,2}
- Found in suspected opioid overdoses in Missouri, Colorado, Pennsylvania, California, Maryland, and other U.S. jurisdictions^{2,3}
- Being found at similar concentrations as xylazine, despite being 200-300 times more potent⁵

Local data (see <https://streetconnections.ca/drug-alerts>):

- Medetomidine was confirmed in Winnipeg's drug supply in mid Feb/early March 2026) samples (3.19%, 3.68%, and 5.5%), quantified by Health Canada's Drug Analysis Service; positive findings continue in May 2026 (2.31%).
- Medetomidine is often found in drugs sold as “down” and sometimes mixed with opioids or other sedatives. It has also been found in pressed counterfeit pills. A predominance of samples of “down” checked by Street Connections in early Spring 2026 had medetomidine in them.



Street Connections is an office-based and mobile public health service in Winnipeg.

Our goal is to reduce the spread of sexually transmitted and blood-borne infections (STB-BIs), including hepatitis C and HIV, and to reduce other drug-related harms.

How medetomidine affects people

Acute effects:

- Profound sedation - person may not wake up for a long time (hours)
- Very low heart rate and blood pressure
- Very slow or stopped breathing
- Low body temperature
- Some people report nausea, dizziness, fear, or hallucinations

In overdose:

- Deep and prolonged sedation
- Very low or no pulse
- Poor or incomplete response to naloxone
- Effects can last 90 minutes to several hours, even longer when mixed with fentanyl

Withdrawal (after regular use)¹:

- High blood pressure and fast heart rate (more significant than opioid withdrawal alone)
- Severe agitation, heavy sweating
- Nausea, vomiting, tremor
- Can be severe enough to require ICU care
- Standard opioid treatments won't help the medetomidine component

Responding to medetomidine overdose

Does naloxone work?

No - Naloxone does not reverse medetomidine because it's not an opioid. There is no community-level antidote (reversal agent) available.

BUT - Medetomidine is nearly always found with fentanyl, so always give naloxone anyway. It will reverse the fentanyl, but the person may still be very sedated and will need medical care.

What healthcare providers should know ⁶

- Consider medetomidine when overdoses respond poorly to naloxone
- Continue naloxone for possible opioid component, supportive care for sedation
- Expect prolonged sedation requiring extended monitoring
- Withdrawal presentations may include severe hypertension and tachycardia in people who use "down" including medetomidine regularly
- People who use "down" may not know that medetomidine is in their supply. For someone wanting to decrease or stop their "down" use, medetomidine withdrawal should be considered.
- This withdrawal pattern is different from opioid withdrawal alone and may require higher level of care
- [Seek clinical guidance](#), as needed. Encourage drug checking and harm reduction strategies.

What community service providers should know

- Medetomidine is in Winnipeg's drug supply and causes very long sedation
- People may not respond normally to naloxone - still give it, but expect prolonged unconsciousness
- After giving naloxone, person may need rescue breathing and/or emergency medical care
- People who use "down" regularly may develop severe withdrawal if they stop suddenly

- Withdrawal looks different than opioid withdrawal: high blood pressure, fast heart rate, severe agitation
- Encourage clients to:
 - Use drug checking services
 - Never use alone
 - Start with very small amounts
 - Have naloxone available
- Be aware this is an emerging risk in the community

What the public should know

If you use drugs:

- Medetomidine is extremely potent and now found in Winnipeg's "down" supply
- It causes very long sedation - you may not wake up for hours
- Naloxone helps but doesn't reverse everything - medical care may be needed
- Don't use alone – visit Supervised Consumption Services (MOPS in Winnipeg) or call National Overdose Response Service: 1-888-688-6677
- Start with a very small amount to test potency
- Get your drugs checked before consuming, if possible (see locations in Winnipeg)
- Regular use can cause physical dependence and severe withdrawal

Drug checking services in Winnipeg:

- **Street Connections:** Mon/Wed/Fri 8:30am-3:30pm, 496 Hargrave St, Wpg, MB
- **Nine Circles:** Tues/Wed/Thurs 10:00am-4:00pm, 705 Broadway, Wpg, MB

Supervised consumption and drug checking service in Winnipeg:

- **Mobile Overdose Prevention Service (MOPS):** Wed-Sun 12-4pm, 631 Main St, Wpg, MB:
<https://www.sunshinehousewpg.org/mops>

Get naloxone: Manitoba Naloxone Program: <https://www.gov.mb.ca/health/publichealth/naloxone/>

Drug Alerts: Sign up for Street Connections Drug Alerts <https://streetconnections.ca/drug-alerts>

References

1. Huo, S., et al. (2025). Suspected Medetomidine Withdrawal Syndrome. *MMWR*, 74(15), 266-268. <https://doi.org/10.15585/MMWR.MM7415A2>
2. Schwarz, E.S., et al. (2024). Detection of Medetomidine Among ED Patients. *MMWR*, 73, 672-674. <https://doi.org/10.15585/MMWR.MM7330A3>
3. Sibley, A.L., et al. (2025). Emergence of Medetomidine in the Unregulated Drug Supply. *Drug and Alcohol Review*, 44, 1896-1906. <https://doi.org/10.1111/dar.70024>
4. Sinclair, M.D. (2003). Review of α 2-agonists and medetomidine. *Canadian Veterinary Journal*, 44(11), 885-897.
5. BC Centre for Disease Control. (2024). *Medetomidine Substance Information Sheet*. <https://towardtheheart.com>
6. Centre for Addiction Medicine and Policy, Penn Medicine. (2025). Medetomidine. <https://penncamp.org/medetomidine/>



Street Connections is part of Healthy Sexuality and Harm Reduction in the Winnipeg Health Authority's (WRHA) Population and Public Health Program. We follow a harm reduction philosophy. This means that we support people who use drugs in their efforts to keep themselves and their community safe. We do not judge people for their sexual and drug use practices.

Public health nurses and outreach workers staff the Street Connections van. We drive around the city every evening except Sunday. You can also find us during the day from Monday to Friday in our office on the main floor of 496 Hargrave St. <https://streetconnections.ca/>

Street Connections is not an emergency overdose response team. Call 911 for medical emergencies