

Methadone Overdose: Patient Information Sheet

Methadone overdose (receiving a larger dose of methadone than intended) is a serious medical emergency.

Methadone is a long-acting medication and can stay in your body for many hours.

Even if you have been on methadone for a long time, taking more methadone than your body is used to can be dangerous. Even what may seem like a small dose increase can be dangerous.

If you are new to methadone or have not been taking your regular dose, even for a few days, you are at increased risk of overdose. Taking too much methadone can result in difficulty breathing (slow or shallow breathing), drowsiness, small pupils and, in some cases, coma and death.

For this reason, your nurse, pharmacist or physician believes that **you MUST go to the emergency department** to be observed for a minimum of 10 hours, and maybe longer, depending on your symptoms.

There is good treatment available in the emergency department that can reverse the effects that you may get from taking too much methadone.

Adapted from the College of Physicians and Surgeons of Ontario, 2005, *Methadone Maintenance Guidelines*, Appendix K. This document is available for download as part of the OpiATE Project Toolkit: please visit methadonesaveslives.ca.

Methadone Overdose: Emergency Department Management

Fax this sheet to the emergency department (call first).

Also give one copy to the patient to carry to the emergency department..

Clinical features: Methadone acts for at least 24 hours, much longer than other opioids. Symptoms begin up to 10 hours after the overdose. Early symptoms include nodding off, drowsiness, slurred speech and emotional lability. Respiratory depression occurs later.

Monitoring: Check frequently for vital signs, check O₂ sat, and hold a brief conversation to assess alertness. ECG & cardiac monitoring are recommended to check for prolonged QT interval and ventricular arrhythmias.

Intubation: This avoids risks of naloxone-induced withdrawal. Intubation is necessary if

- RR < 12; hypercapnea; desaturation persists despite supplemental oxygen
- Patient fails to respond to naloxone within 2 min

Naloxone dosing:

- If the patient has respiratory depression, give 2.0 mg naloxone i.v.
- If no respiratory depression, give 0.01 mg/kg body weight to avoid precipitating withdrawal.
- If no response after initial dose, repeat naloxone 2–4 mg every 2–3 min. If there is no response after 10–20 mg naloxone, search for other causes of the coma.
- If the patient responds to naloxone, infuse at 2/3 the effective dose per hour.
- Give a bolus of 1/2 the effective dose 15–20 min after starting infusion.
- Titrate the dose to avoid withdrawal, while maintaining adequate non-assisted respirations.

Precautions: Ventricular dysrhythmias and cardiac arrest can occur with naloxone-induced withdrawal, especially if patients are withdrawing from other substances. The patient may become agitated and leave AMA. Intubation avoids these risks.

Time intervals for monitoring suspected methadone overdose:

- Observe for at least 10 hours post-overdose.
- Discharge if completely asymptomatic during that time.
- If symptomatic at any time during the 10 hours, observe for at least 24 hours post-overdose.
- If intubated or on naloxone, continue for at least 24 hours post-overdose.
- Monitor for at least 6 hours after naloxone or intubation discontinued.

Discharge warnings: Don't take any methadone, alcohol or sedating drugs until you see your methadone doctor the next day. Have a family member observe you overnight. Call an ambulance if you become more drowsy or difficult to arouse, or are snoring much more loudly than usual.

For further management advice, call the **Ontario Poison Centre (416) 813-5900 (local)** or **1-800-268-9017**.

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Methadone Overdose: Protocol for the Ambulatory Patient

Note: This protocol does NOT extend to patients who are obtunded or unconscious at presentation.

Patients who have had an overdose of methadone, either inadvertently (e.g., dispensing error) or intentional (e.g., consuming multiple take-home doses at one sitting) should receive the following measures:

1. If the additional dose that the patient has received is above and beyond what would be considered a “reasonable” dose increase at his or her stage of treatment, the patient should be counselled on the dangers of methadone overdose and advised to go to the emergency department.

Definition of a “reasonable” dose increase:

Please refer to the Methadone Dosing Issues section starting on page 12 of the CPSO *Methadone Maintenance Guidelines (2005; available at www.cpso.on.ca under*

“Publications”). Reasonable dose increases are usually in the range of 10 to 15 mg increments every three to five days. For example, if a patient has consistently been on 50 mg/d for several weeks and then receives 65 mg by mistake, this would be considered within the range of a “reasonable” dose increase for that patient. However, if the patient had just been increased to 50 mg the day before and then received 65 mg, this would not be considered a reasonable increase as per the CPSO guidelines.

Also, interpret what would constitute a reasonable dose increase in the context of the patient and other substances and medications that they have ingested (e.g., benzodiazepines, methadone inhibitors and inducers, etc.—a list of drug interactions is available at www.drug-interactions.com). Additive effects of sedating drugs and drug interactions may play an important role in determining what a reasonable dose increase is.

2. If you are uncertain, call the Ontario Poison Information Centre at 1-800-268-9017.

3. The patient should be advised on the risks of methadone overdose, including respiratory depression and death, and given the accompanying patient information sheet on the risks of methadone overdose, as well as a copy of the accompanying information sheet for the emergency department.

4. It is reasonable to send the patient by ambulance to the emergency department, but use your clinical judgment.

5. The information sheet for the emergency department should be faxed to the emergency department (ED). Ask to speak with the attending ED physician directly to convey your concern. Advise them that the patient should be observed for a minimum of 10 hours and then discharged only if they have not displayed any signs of lethargy or sedation during that time.

If the patient refuses to go the emergency department, take the following measures:

1. If the patient refuses to go the emergency department, then it is appropriate to fill out a Form 1, which allows an involuntary assessment of the patient. In most instances, it would be appropriate to fill out a Form 1 on a methadone maintenance patient who has had an overdose of methadone and who refuses to go to the emergency department, even if they are alert and coherent, as they have a mental health diagnosis and are also at risk for bodily harm.
2. If the patient refuses to go to the emergency department and a clinical decision is made to not fill out a Form 1 (e.g., if no physician is available onsite or if you are speaking to the patient by phone and have not assessed the patient in the preceding week as required by a Form 1), then it is reasonable to send an ambulance or police to the patient's home. In the event that you feel that it is absolutely not possible to fill out a Form 1 or send the police or ambulance to a patient, the patient should be re-instructed about the dangers of methadone overdose. If possible, give the accompanying patient information sheet, and ask the patient to sign a refusal of medical care release form ("AMA Form").
3. Emphasize to the patient and any partner or family member(s) available that the patient is at risk of respiratory depression (slow breathing) and death and may be most at risk during sleep. Advise the patient not to use any other substances or medications.
4. Most patients will start to exhibit signs and symptoms of overdose (e.g., sleepiness, sedation) within 5 hours, although some patients may not exhibit symptoms until 10 hours have passed.

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