BRITISH COLUMBIA CENTRE ON SUBSTANCE USE
Networking researchers, educators & care providers

Managing Acute Opioid Withdrawal

Note: This document provides information on opioid agonist treatment (OAT) options. Regional health authorities may opt to develop relevant pre-printed orders (PPOs), decision support tools (DSTs), workflows, or other tools to support implementation

Preamble

Manage acute opioid withdrawal with goals to:

Prioritize the safety of the patient

- Support the patient while their primary medical condition is treated
- Help prevent patient-initiated discharge
- Minimize self-management (e.g., unregulated opioid use) of withdrawal or pain
- Minimize the risk of significantly reducing opioid tolerance to reduce the risk of mortality after discharge
- Minimize withdrawal-related agitation and possible injuries
- Prevent medical sequelae such as dehydration, acute kidney injury, aspiration, and electrolyte imbalances that may result from diarrhea and vomiting

Provide comfort

- Opioid withdrawal is a severely uncomfortable and distressing syndrome
- Address any concerns the patient may have from past withdrawal management experiences
- Manage opioid withdrawal as soon as possible
- Offer food and water, if the patient is interested

Each patient requires an individualized care plan to manage opioid withdrawal.

- Clinical discretion must be used to prioritize patient safety
- Tolerance varies between individuals. Due to the unregulated drug supply, some patients may have very high tolerance

This document is about managing acute opioid withdrawal in patients who present to acute care in withdrawal. The strategies in this document may also be used to prevent withdrawal in patients who are at risk of developing withdrawal.

Identifying Acute Opioid Withdrawal

Subjective acute withdrawal symptoms may appear within 12–30 hours since the last opioid use, depending on the opioid formulation:

Short-acting opioids (e.g., heroin, oxycodone)

- Symptoms and signs can emerge within 12 hours of last use, peak within 24–48 hours, and diminish over 3–5 days

Intermediate-acting opioids (e.g., fentanyl)

- Symptoms and signs can emerge within 12 hours from last use, peak within 48 hours, and may last up to 7 days

Long-acting opioids (e.g., methadone)

- Symptoms and signs can emerge within 30 hours (sooner for subtherapeutic doses) from last use, peak within 3-7 days and may last up to 10 days

Patients may experience subacute withdrawal, which can last for longer, protracted periods of time (e.g., weeks to months) and lead to return to unregulated opioid use.

Signs and symptoms of acute opioid withdrawal include:

- Cravings
- Nausea
- Diarrhea
- Sweating
- Chills
- Stomach cramps
- Muscle aches
- Agitation
- Anxiety
- Runny nose
- Eye tearing
- Frequent yawning
- Enlarged pupils
- Goose flesh

Opioids should be provided to manage withdrawal, cravings, and pain.

Assessments should include patient self-report of symptoms.

- Many subjective symptoms present prior to objective signs
- **After an initial assessment and medical history, it is important to immediately provide medications before an individual progresses further into withdrawal**
  - Do not wait until there are objective signs of withdrawal and pain before initiating treatment
  - Do not wait until the Clinical Opiate Withdrawal Scale (COWS) score is high to initiate treatment[1] when trying to stabilize withdrawal
- Non-opioid medications may be considered as adjunct treatment for symptomatic management

[1] Use of the COWS to guide management of withdrawal is only appropriate during a traditional induction of buprenorphine.

Medications to Manage Acute Opioid Withdrawal

Considerations for Prescribing Opioids to Prevent or Manage Withdrawal

Opioids, short and/or long-acting (e.g., OAT, hydromorphone), are the preferred medication to prevent or treat acute opioid withdrawal.

For patients at risk of developing withdrawal, offer and provide PRN opioids to manage withdrawal symptoms.

Patient presentations of withdrawal are variable, titrate to comfort based on patient self-report.

For patients in withdrawal, have a conversation with the patient and tailor the dose to their needs and tolerance (e.g., high tolerance due to unregulated fentanyl use).

- Start at a low dose and titrate to effect
- Evaluate and encourage the patient to communicate whether medications are effective (e.g., self-reported resolution of withdrawal symptoms)
- Consider doses that are lower than standard, if clinically indicated (e.g., severe co-morbidities)

Acute pain will generally not be sufficiently managed by a patient's opioid agonist treatment dose or short-acting opioid withdrawal medications.

Follow site-specific protocols for managing acute pain

Consider that the patient may experience withdrawal from more than one substance.

Consult the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other local addiction medicine resources if uncertain about clinical decision making.

Opioid Agonist Treatment to Prevent or Manage Acute Opioid Withdrawal

Opioid agonist treatment is the standard of care for opioid use disorder (OUD).

All patients with OUD should be offered OAT in alignment with their goals.

To **prevent** withdrawal, order the patient's OAT maintenance dose or initiate OAT.

To **manage** withdrawal, OAT can be ordered to manage withdrawal symptoms.

- Order buprenorphine, methadone, or slow-release oral morphine to manage withdrawal symptoms
- Patients may choose to initiate OAT and continue or discontinue post-discharge

  Clinicians should encourage patients to continue OAT post-discharge, and provide education on the safety benefits of OAT (e.g., reduced mortality)
- Short-term OAT may be offered and is beneficial to the patient while in hospital

☞ See OAT Initiation resource for starting dose guidance.

As-needed (PRN) Opioid Medications to Manage Acute Opioid Withdrawal

Discuss PRN options with the patient to find a suitable medication that aligns with their preferences and goals.

Order short-acting PRN opioids for patients:

- In conjunction with their OAT dose

  Withdrawal symptoms may not be adequately managed during initiation and titration
- Experiencing acute pain
- Who decline OAT initiation due to personal or medical reasons
- As a temporizing measure until definitive decisions regarding OAT have been made

Discuss with the patient that PRN opioids are used to support their stay in the hospital and might not be continued post-discharge.

Medication options:

- Hydromorphone
- Morphine

Other PRN opioids may be considered on a case-by-case basis.

Table 1. *As-needed Opioid Medications to Manage Opioid Withdrawal*

Indication	Dosing schedule	Dose	Instructions
Hydromorphone			
Patients who can tolerate oral medications with low or uncertain opioid tolerance	Q2H PRN	• 4–8mg PO • Dose may be insufficient dose to alleviate withdrawal symptoms for many patients	• Titrate to effect (e.g., self-reported resolution of withdrawal symptoms • Hold if Pasero Opioid-induced Sedation Scale (POSS) is 3 or greater, or the RR is less than 10 • Consult with the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other local addiction medicine resource if: ○ The patient demonstrates continued tolerance or withdrawal symptoms above 24mg of PRN and scheduled hydromorphone ○ Considering providing injectable formulation of hydromorphone orally
Patients who can tolerate oral medications with high opioid tolerance	Q2H PRN	• 8–16mg PO • Higher starting doses may be used at clinician discretion • In exceptional cases, doses as high as 40mg PRN may be required	
Patients who are unable to tolerate oral medications (e.g., nausea, vomiting) or patient preference	Q1H PRN	• 1–4mg IV • No maximum dose	
Patients who report difficulty asking or accessing PRN opioids	Q4H while awake	• 8–16mg PO	
Morphine			
Patients who can tolerate oral medications with low or uncertain opioid tolerance	Q2H PRN	• 20–40mg PO • Dose may be insufficient to alleviate withdrawal symptoms for many patients	• Titrate to effect (e.g., self-reported resolution of withdrawal symptoms) • Hold if POSS is 3 or greater, or the RR is less than 10 • Consult with the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other local addiction medicine resource if: ○ The patient demonstrates continued tolerance or withdrawal symptoms above 100mg of PRN and scheduled morphine
Patients who can tolerate oral medications with high opioid tolerance	Q2H PRN	• 40–80mg PO • In exceptional cases, doses as high as 200mg PRN may be required	
Patients reporting difficulty accessing PRN opioids (e.g., delays in dispensing medications), consider scheduled morphine	Q4H while awake	• 40–80mg PO	
Patients unable to tolerate oral medications (e.g., nausea or vomiting) or patient preference	Q1H	• 5–20mg IV • No maximum dose	

Consult the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other local addiction medicine resources to discuss alternate options, if needed.

Reversal of Overdose

Administer Naloxone 0.1—0.2mg IM/IV q2min PRN

- If the cause of overdose is unclear, administration of naloxone in incremental doses is still recommended
- Start with a lower dose to avoid unnecessary pronounced withdrawal

Administration	If the RR is less than 10 or oxygen saturation (SpO2) is less than 90% (less than 88% for those diagnosed with COPD) and decreased level of consciousness (LOC) Administer q2min until RR is greater than 10 and Sp02 is greater than 90% If there is insufficient response to the initial dose, administer subsequent doses q2min IM/IV: • 0.4mg • 0.8mg • 2mg • 4mg • 10mg Titrate doses to improve spontaneous respiratory effort and minimize withdrawal symptoms
Monitoring	Vital signs: q15min for the first hour In some facilities, patients may need to be transferred to another unit/ward for more frequent monitoring
Observation Period	
Minimum 2 hours	Less than 0.8mg of naloxone administered and the opioid was smoked, snorted, or injected
Minimum 6 hours	More than 0.8mg of naloxone was administered and oral ingestion of opioid
Minimum 4–6 hours	High possibility of co-occurring substance use or concern of overdose secondary to long-acting opioids (e.g., methadone or SROM)
Opioid half-life may exceed the half-life of naloxone (approximately 1.5 hours) and overdose symptoms may resume once naloxone wears off • Do not administer opioids (OAT or PRN) after naloxone has been administered until the patient is assessed for risk of overdose symptoms returning • Consult with the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other local addiction medicine resources as needed	

Monitoring Before and After Opioid Administration

Monitor to ensure there is no development of opioid toxicity (a triad of symptoms including pinpoint pupils, respiratory depression, and a decreased level of consciousness).

Monitor for sedation and respiratory depression.

- Use the POSS; see Appendix 1
  - Do not administer opioids if POSS score is 3 or greater

Differentiate between drowsiness and sedation to avoid inappropriately holding medication.

- Someone who is drowsy from lack of sleep should be easily roused and able to maintain a conversation
- Symptoms of sedation include:
  - Decreased LOC
  - Nodding off or being unresponsive
  - Slurred speech
  - Impaired physical coordination

Adjunct Non-opioid Medications to Manage Acute Opioid Withdrawal

Adjunct non-opioid medications can be used in conjunction with opioids to help manage withdrawal symptoms:

- Acetaminophen for pain: 650–975mg po q6h PRN; maximum 4000mg/day or 2000mg/day for older adults or those with liver impairment
- Ibuprofen for pain: 400mg po q6h PRN
- Loperamide for diarrhea: 2–4mg po q6h PRN; maximum 16mg/day
- Clonidine for sweating, tremors, chills, and anxiety: 0.1–0.2mg po q6h PRN
- Dimenhydrinate for nausea and vomiting: 25–50mg po q4h PRN or 25–50mg IV q4h PRN
- Ondansetron for nausea and vomiting: 4mg po q8h PRN

Other non-opioid adjunct medications may be used to manage withdrawal symptoms based on clinician discretion and patient needs and preferences.

How to Help – Practical Strategies to Keep You and Your Patients Safe

It is important to create a space for discussion about substance use that aims to be culturally safe, free of stigma, and anti-racist so that patients feel safe enough that they do not leave before their care is completed.

Clinicians may be concerned about providing opioids or opioid agonist treatment and the potential for a patient to overdose when using unregulated substances.

- Clinicians are responsible for making decisions based on the patient's presentation and with the consent of the patient
- Decisions to provide or administer medications should be based on whether the patient meets the clinical indication for that medication at the time of assessment

If a patient shares that they have used or intend to use unregulated substances:

- ☐ Have a conversation to understand why they are using unregulated substances (e.g., underdosing of OAT, lack of awareness of available prescribed medications)
- ☐ Remind patient that using unregulated substances in the hospital is not permitted
- ☐ Offer additional medications for treatment of withdrawal
- ☐ When necessary for patient stabilization, preventing self-discharge or leaving to use/risk of overdose, discuss the use of overdose prevention services or supervised consumption services in hospital or off site (if available)
- ☐ Offer harm reduction supplies and education
- ☐ Hold OAT or PRN opioid doses if the patient is sedated (POSS is 3 or greater) on assessment
  - Follow site-specific protocols to address patient sedation
  - If required, administer naloxone
    - See Reversal of Overdose
    - Follow site-specific protocols
- ☐ Respond to overdose following organization protocols

Discharge Planning Considerations for Opioid Withdrawal

Provide discharge prescriptions or medications.

- **Buprenorphine** can be given or prescribed as take-home doses
- **Methadone** and **SROM** prescriptions to be filled by a community pharmacy must be written by a prescriber who has completed POATSP and a preceptorship
  - Liaise with the local inpatient consult team, virtual addiction clinic, or community OAT clinic to ensure a discharge prescription is faxed to a community pharmacy
  - Follow organizational protocols on how to discharge a patient when a prescriber is not immediately available
- PRN medications
  - Some patients may need PRN medications (e.g., for acute pain) following discharge
  - Generally, discharge prescriptions for PRN medications should be short-term with a plan for outpatient follow-up arranged prior to discharge
  - Consider consulting with the local inpatient consult team, 24/7 Addiction Medicine Clinician Support Line, RACEapp, or other local addiction medicine resources to discuss discharge PRN medications
- Offer non-opioid adjunct medications if needed

Further discharge planning considerations can be found in Acute Care and Opioid Use Disorder.

Consultation

Consult with an addiction specialist, such as the local inpatient addiction medicine consult team (available at some acute care sites), for any questions or concerns.

24/7 Addiction Medicine Clinician Support Line

- Consult with an addictions medicine specialist 24 hours a day, 7 days a week
- Available to physicians, nurse practitioners, nurses, midwives, and pharmacists who are involved in addiction and substance use care and treatment in BC
- 778-945-7619

Rapid Access to Consultative Expertise (RACE)

- Online application where primary care providers (physicians and nurse practitioners) can receive specialist advice

Resources

BCCSU: *A Guideline for the Clinical Management of Opioid Use Disorder (2023)*

Appendix 1: Pasero Opioid-induced Sedation Scale

Level of Sedation	Appropriate Action
1. Awake and alert	Acceptable; no action necessary; may continue with opioid use
2. Slightly drowsy, easily aroused	Acceptable; no action necessary; may continue with opioid use
3. Frequently drowsy, arousable, drifts off to sleep during conversation	Unacceptable; monitor respiratory status and sedation level closely until sedation level is stable at less than 3 and respiratory status is satisfactory; notify prescriber for orders
4. Somnolent, minimal or no response to verbal or physical stimulation	Unacceptable; hold opioid; consider administering naloxone; notify prescriber; monitor respiratory status and sedation closely until sedation level is stable at less than 3 and respiratory status is satisfactory