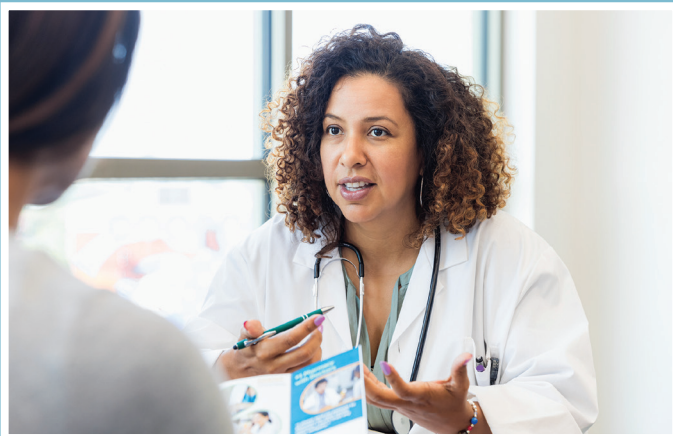


# Opioids and Chronic Pain

A GUIDE FOR HEALTHCARE PROFESSIONALS



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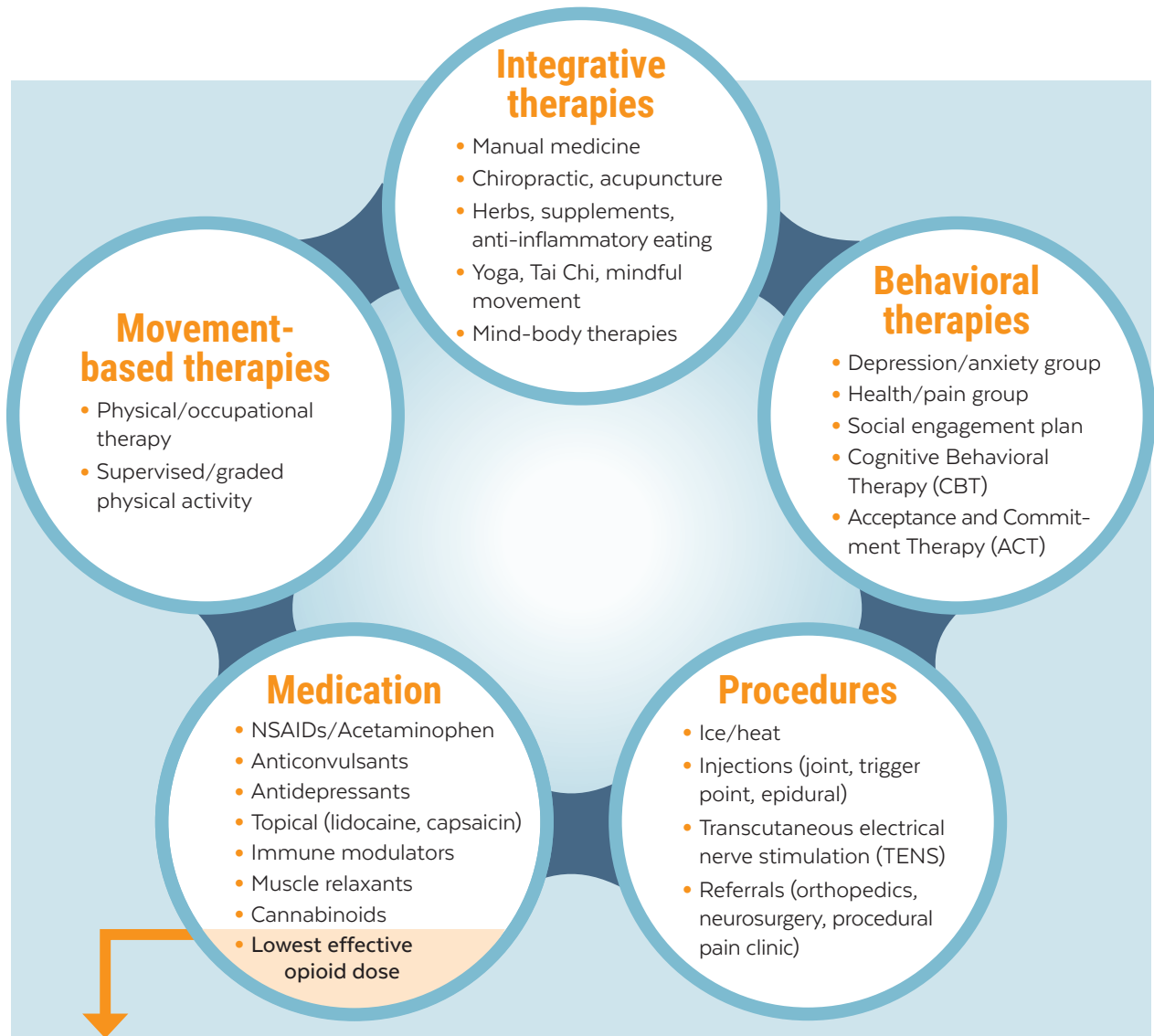
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# Prescribing opioids for chronic pain





# Managing chronic non-cancer pain



*If an opioid medication is part of the treatment plan, take the following steps:*

- >> **ASSESSMENT OF RISK, ADHERENCE, FUNCTION AND PAIN:** at least annually
- >> **INFORMED CONSENT OR CONTROLLED SUBSTANCE AGREEMENT:** at least annually
- >> **CONTROLLED SUBSTANCE MONITORING PROGRAM:** check regularly
- >> **PRESCRIBE NALOXONE**

*If managing opioid use disorder, options include:*

- > Medications for opioid use disorder (buprenorphine, methadone, naltrexone)
- > Inpatient or outpatient substance use treatment
- > Behavioral health treatment and other referrals



# Non-pharmacologic treatment of chronic pain

The Agency for Healthcare Research and Quality conducted a systematic review of noninvasive non-pharmacological treatment for chronic pain and found the following interventions led to significant improvement in function and pain outcomes at least 1 month after completion of treatment:<sup>1</sup>

## Chronic tension headache:

- Spinal manipulation

## Chronic neck pain:

- Exercise
- Low-level laser therapy
- Alexander Technique
- Acupuncture

## Chronic low back pain:

- Exercise
- Psychological therapies, primarily cognitive behavioral therapy (CBT)
- Spinal manipulation
- Low-level laser therapy
- Massage
- Mindfulness-based stress reduction
- Yoga
- Acupuncture
- Multidisciplinary rehabilitation (MDR)

## Fibromyalgia:

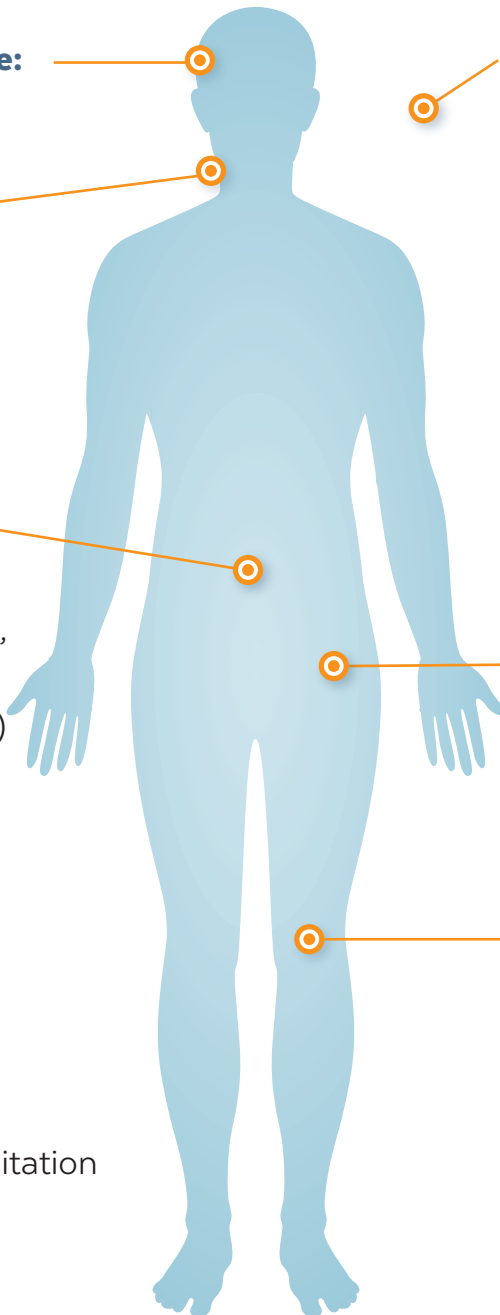
- Exercise
- CBT
- Myofascial release massage
- Tai chi
- Qigong
- Acupuncture
- Monopolar Dialectic Radiofrequency

## Hip osteoarthritis:

- Exercise
- Manual therapies

## Knee osteoarthritis:

- Exercise
- Ultrasound












# Non-opioid pharmacologic treatment of chronic pain

## Use a systematic approach to initiating pharmacologic therapy for pain:

1. Record history and physical, pain description, function/social assessment.
2. Determine mechanism of pain.
3. Consider non-pharmacologic options.
4. Consider pharmacologic options that may help.
5. Reassess response at regular intervals and modify treatment accordingly.

Condition	Treatment
 <b>Acute, inflammatory pain</b> (e.g., lumbar radiculopathy, bursitis, tendonitis, gout)	<ul style="list-style-type: none"> <li>• Corticosteroids</li> <li>• NSAIDs</li> </ul>
 <b>Headaches</b> (e.g., tension-type, migraine)	<ul style="list-style-type: none"> <li>• Acetaminophen</li> <li>• NSAIDs</li> <li>• Antidepressants (e.g., tricyclics)</li> <li>• Anticonvulsants (e.g., topiramate)</li> </ul>
 <b>Fibromyalgia</b>	<ul style="list-style-type: none"> <li>• Anticonvulsants (e.g., pregabalin)</li> <li>• Duloxetine</li> <li>• Amitriptyline</li> </ul>
 <b>Muscle spasm or spasticity</b>	<ul style="list-style-type: none"> <li>• Muscle relaxants (e.g., baclofen)</li> <li>• NSAIDs</li> </ul>
 <b>Neuropathic pain</b> (e.g., peripheral neuropathy)	<ul style="list-style-type: none"> <li>• Anticonvulsants (e.g., gabapentin, topiramate)</li> <li>• Antidepressants</li> <li>• Topical local anesthetics (e.g., lidocaine)</li> </ul>
 <b>Osteoarthritis or rheumatoid arthritis</b>	<ul style="list-style-type: none"> <li>• NSAIDs</li> <li>• DMARDs (for RA)</li> </ul>
 <b>Chronic musculoskeletal pain</b> (e.g., bone pain)	<ul style="list-style-type: none"> <li>• Antidepressants (e.g., duloxetine)</li> <li>• NSAIDs</li> </ul>

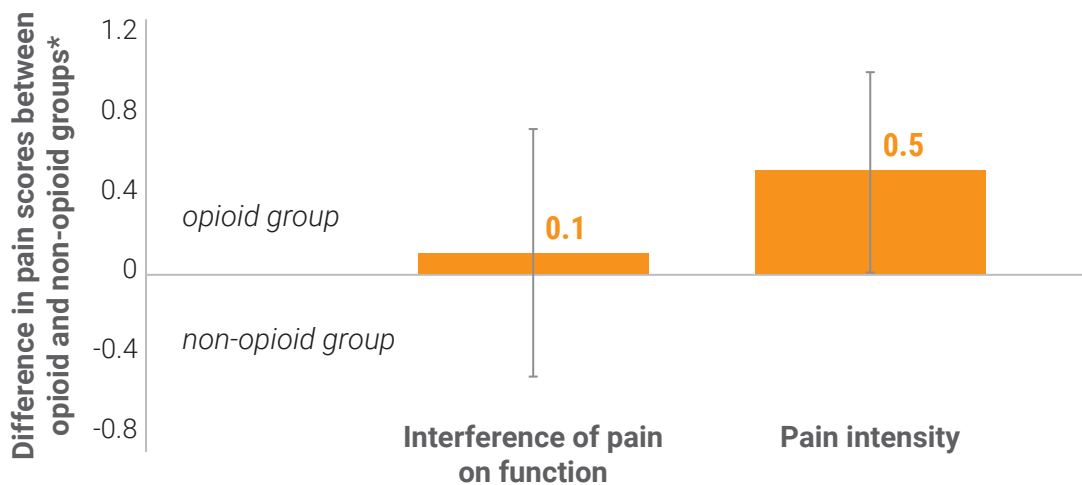
Treatments listed for each condition are examples of options for the condition type, but are not applicable for all of the examples listed under the condition (e.g., tension-type headaches are not treated by anticonvulsants).



# Considering opioids for pain management

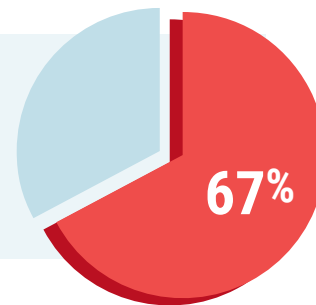
## Avoid opioids as first-line therapy for chronic, non-cancer pain.

Patients randomized to opioids had **similar pain-related function and greater pain intensity** compared to those randomized to non-opioid medications.<sup>2</sup>



\*Pain scores measured by Brief Pain Inventory (BPI) Interference and Severity Scales. Patients had no contraindications to acetaminophen or NSAIDs.

**Make sure to evaluate risks and benefits—  
67% of patients prescribed opioids for  
90 days are still using opioids at 2 years.<sup>3</sup>**



## When *should* healthcare professionals consider opioids for chronic conditions?

- When other therapies are contraindicated
- When other therapy trials were implemented and unsuccessful
- After a full assessment and discussion of risks and benefits

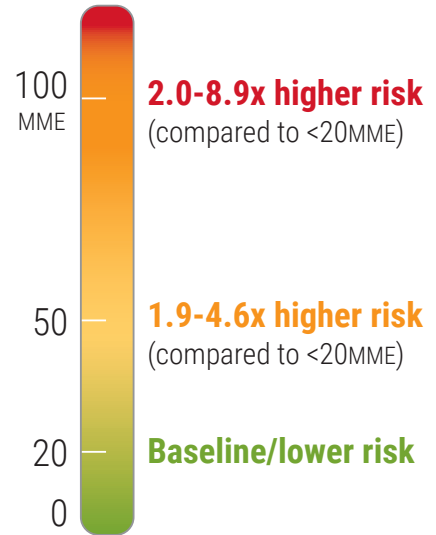


# Opioid dose considerations

## CALCULATING MORPHINE MILLIGRAM EQUIVALENTS (MME)

Opioid (doses in mg/day except where noted)	Conversion factor
Codeine	0.15
Morphine	1
Hydrocodone	1
Oxycodone	1.5
Fentanyl transdermal (in mcg/hr)	2.4
Oxymorphone	3
Hydromorphone	5
Methadone	
1-20 mg/day	4
21-40 mg/day	8
41-60 mg/day	10
≥61 mg/day	12

Higher opioid dose = higher risk of overdose<sup>4</sup>



These dose conversions are estimated and cannot account for all individual differences in genetics and pharmacokinetics. Some opioids, including methadone and fentanyl, have complex conversion factors and require expertise to manage.



recommends

If opioids *are* appropriate, consider using episodic, short-acting opioids and keep at the lowest effective dose—**low and slow**.



### Starting opioids:

Starting dose for opioid-naive patients is generally 5-30 MME/day



### Exercise caution:

- Doses ≥ 50 MME
- Concurrent use of a benzodiazepine, alcohol, or methadone for pain





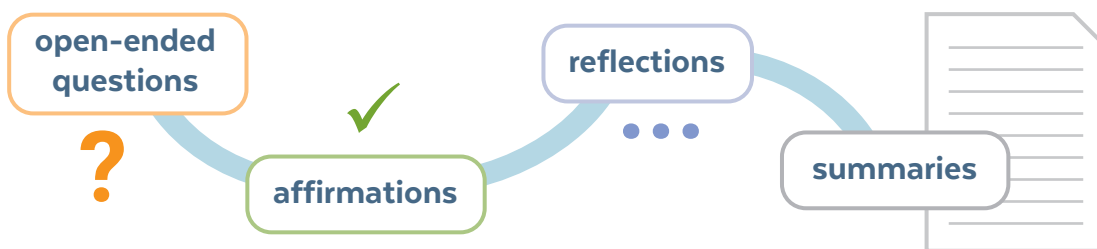
# Managing patients on opioids

## INHERITING PATIENTS ALREADY ON OPIOID THERAPY CAN BE COMPLEX

- 1 Review case with former healthcare professionals if possible.**  
 Develop a treatment plan that slowly adjusts to your style of management to avoid a radical divergence from the prior plan of care.
- 2 Consider bridging the patient until a plan of care is determined.**  
 Abruptly tapering or stopping opioids can be dangerous:
  - a. Opioids may be crucial to the patient’s condition.
  - b. Patient may be at risk of other harms (see next page)
- 3 Develop a patient-centered care plan.**
- 4 Screen for opioid use disorder; start discussing medication options right away.**  
 The patient may struggle with an opioid use disorder diagnosis—give them time.
- 5 Document opioid stewardship and rationale for treatment plan.**  
 Investigations into opioid prescribing often focus on insufficient documentation.

## PATIENT ENGAGEMENT

- Recognize external factors that can make any patient-healthcare professionals conversation challenging, especially **patient stressors** (e.g. psychological stressors) and **healthcare professionals stressors** (e.g. time pressure, clinic/health system policies).
- Use motivational interviewing techniques.



For more information, go to: [motivationalinterviewing.org](https://www.motivationalinterviewing.org)



# Risks of reducing opioid dose

## INCREASED ILLICIT SUBSTANCE USE:

Stopping prescribed opioids increased the chance of more frequent heroin and illicit opioid pain reliever use.<sup>5</sup>



## OPIOID-RELATED ADVERSE EVENTS:

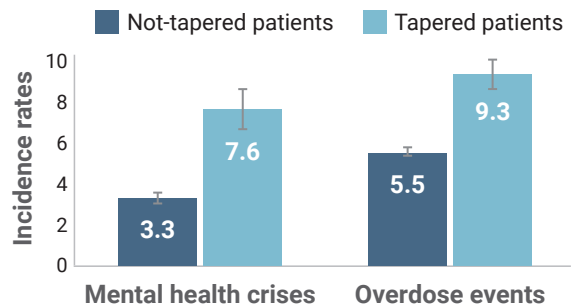
Approximately half of Medicaid patients in Vermont had an opioid-related ED visit or hospitalization following discontinuation of high-dose opioids. Speed of taper and substance use disorder diagnosis were the strongest predictors.<sup>6</sup>



Each additional day of taper was associated with a 1% reduction in the likelihood of an opioid-related event.

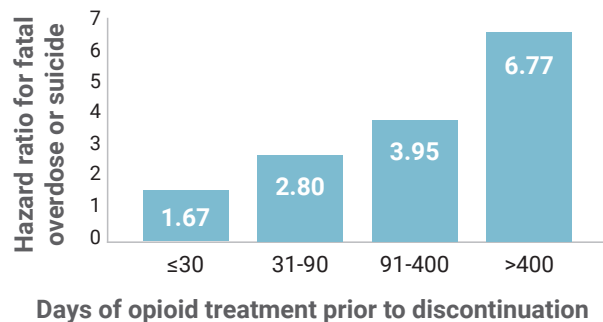
## INCREASED MENTAL HEALTH CRISES AND OVERDOSE EVENTS:

Among 113,618 patients on high-dose stable opioid therapy, tapering was associated with significant increases in mental health crises and overdose.<sup>7</sup>



## MORTALITY:

Among 1,394,102 VA patients, risk for fatal overdose or suicide rose after stopping opioid therapy, with increasing risk the longer patients had been treated before stopping.<sup>8</sup> Other studies have shown similar findings.<sup>9</sup>





# Shared decision-making for opioid therapy

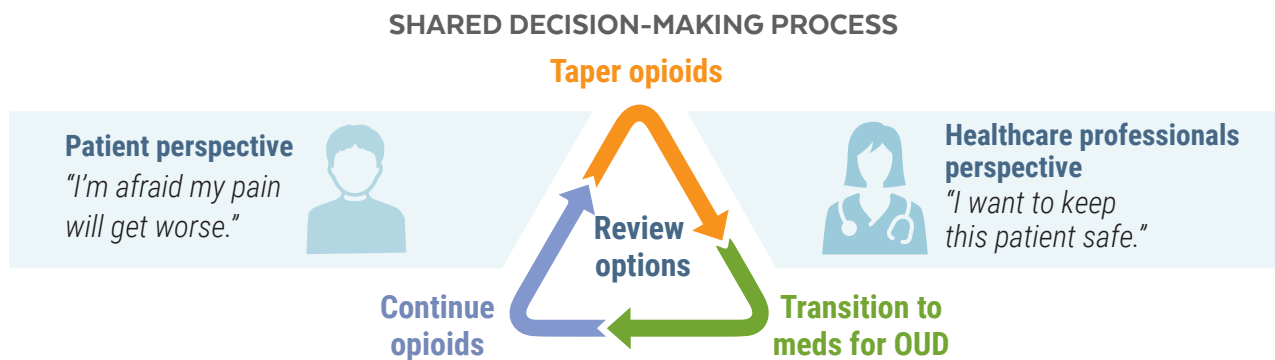
Avoid making a decision without an individualized conversation with the patient.

## 1 Ask the patient to describe perceived risks and benefits.

Patients may identify scenarios with limited benefit or increasing risk such as:

- On opioids after pain condition addressed
- No evidence of pain/function improvement
- Very high dose of opioids
- Other risky medications (e.g. benzodiazepines)
- Adverse effects (constipation, overdose, etc.)
- Worsening comorbidities
- Active opioid use disorder

## 2 Develop a plan with the patient.



### Communication techniques:

- Validate patient's pain and experience
- Recognize power dynamics
- Empower patient to participate in treatment planning
- Don't judge
- Be flexible
- Prepare for emotion

## 3 Before implementing change, review and develop a plan for:

- Social issues (e.g. housing, finances, intimate partner violence)
- Alternative pain management strategy (other medication and non-medication strategies)
- Mental health services
- Social support
- Withdrawal medications
- Changes in tolerance and overdose risk



# Mechanics of a taper

## BUILD THE CASE

1. Get to know the patient’s stressors, needs, and pain:
  - don’t rush to start a taper immediately: patient buy-in is important
  - individualize the taper plan (see “Example tapers for opioids”)
2. Discuss the risks of tapering.
3. Involve patient in the selection of a taper speed and frequency of dose reduction (see “Example tapers for opioids”).
4. Tapering should **not** result in withdrawal. However, in some circumstances, you may prescribe adjunctive medications to treat withdrawal symptoms.

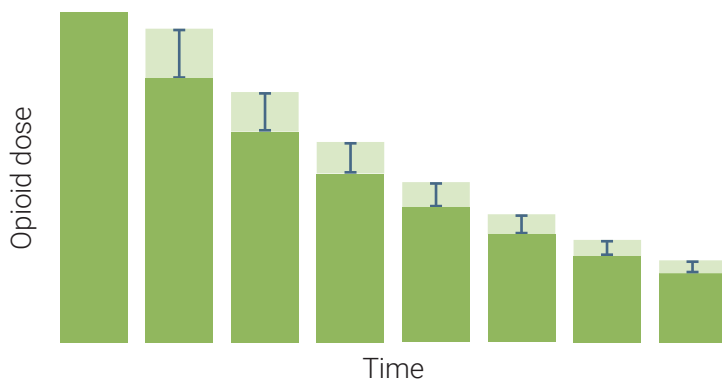
## TIP

**If a taper is needed, empower the patient—successful tapers may take years, but can be associated with less or similar pain.<sup>10</sup> Any reduction is a success.**

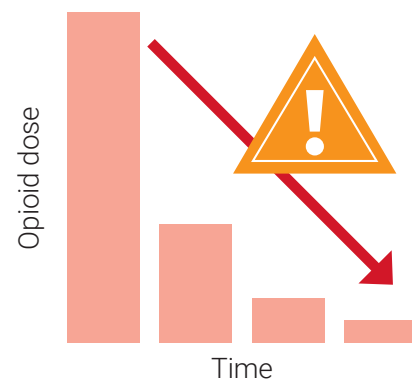
Symptom	Medication
Cold sweats, chills, feeling “jittery”	Clonidine: 0.1 mg tablet
Anxiety, problems sleeping	Hydroxyzine: 50 mg tablet
Nausea or vomiting	Ondansetron: 4 mg tablet
Diarrhea	Loperamide: 2 mg tablet
Body aches or muscle pain	NSAIDS or Acetaminophen

## TAPER GOALS

Most commonly, opioid tapers will involve **dose reduction of 5-20%** of original dose every 4 weeks



**Abrupt tapers (>20% of original dose) should be avoided whenever possible**





# Example tapers for opioids<sup>11</sup>

Slowest taper (over years)	
<p>Reduce by 2% to 10% every 4 to 8 weeks with pauses in taper as needed.</p> <p>Consider for patients taking high doses of long-acting opioids for many years.</p>	<p>Ex: morphine SR 90 mg q8h = 270 MED*</p> <p><b>Month 1:</b> 90 mg SR qAM, 75 mg noon, 90 mg qPM [5% reduction]<sup>a</sup></p> <p><b>Month 2:</b> 75 mg SR qAM, 75 mg noon, 90 mg qPM</p> <p><b>Month 3:</b> 75 mg SR (60 mg+15 mg) q8h</p> <p><b>Month 4:</b> 75 mg SR qAM, 60 mg noon, 75 mg qPM</p> <p><b>Month 5:</b> 60 mg SR qAM, 60 mg noon, 75 mg qPM</p> <p><b>Month 6:</b> 60 mg SR q8h</p> <p><b>Month 7:</b> 60 mg SR qAM, 45 mg noon, 60 mg qPM</p> <p><b>Month 8:</b> 45 mg SR qAM, 45 mg noon, 60 mg qPM</p> <p><b>Month 9:</b> 45 mg SR q8h<sup>b</sup></p>
Standard taper (over months or years) – MOST COMMON	
<p>Reduce by 5% to 20% every 4 weeks with pauses in taper as needed.</p>	<p>Ex: morphine SR 90 mg q8h = 270 MED</p> <p><b>Month 1:</b> 75 mg (60 mg+15 mg) SR q8h [16% reduction]</p> <p><b>Month 2:</b> 60 mg SR q8h; <b>Month 3:</b> 45 mg SR q8h</p> <p><b>Month 4:</b> 30 mg SR q8h; <b>Month 5:</b> 15 mg SR q8h</p> <p><b>Month 6:</b> 15 mg SR q12h; <b>Month 7:</b> 15mg SR qhs, then stop</p>
Faster taper (over weeks)	
<p>Reduce by 10% to 20% every week.</p>	<p>Ex: morphine SR 90 mg q8h = 270 MED</p> <p><b>Week 1:</b> 75 mg SR q8h [16% reduction]</p> <p><b>Week 2:</b> 60 mg SR (15 mg x 4) q8h; <b>Week 3:</b> 45 mg SR (15 mg x 3) q8h</p> <p><b>Week 4:</b> 30 mg SR (15 mg x 2) q8h; <b>Week 5:</b> 15 mg SR q8h</p> <p><b>Week 6:</b> 15 mg SR q12h; <b>Week 7:</b> 15 mg SR qhs x 7 days, then stop</p>
Rapid taper (over days) – RARELY INDICATED	
<p>Reduce by 20% to 50% of first dose if needed, then reduce by 10% to 20% every day.</p>	<p>Ex: morphine SR 90 mg q8h = 270 MED</p> <p><b>Day 1:</b> 60 mg SR (15 mg x 4) q8h [33% reduction]</p> <p><b>Day 2:</b> 45 mg SR (15 mg x 3) q8h; <b>Day 3:</b> 30 mg SR (15 mg x 2) q8h</p> <p><b>Day 4:</b> 15 mg SR q8h; <b>Days 5-7:</b> 15 mg SR q12h</p> <p><b>Days 8-11:</b> 15 mg SR qhs, then stop</p>

<sup>a</sup>Continue the taper based on patient response.

<sup>b</sup>Continue following this rate of taper until off the morphine or the desired dose of opioid is reached.

\*MED = morphine equivalent dose

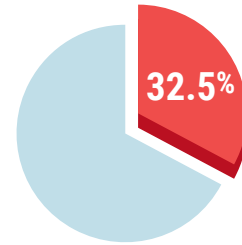


# Benzodiazepines with opioids

**Benzodiazepines are overprescribed for anxiety and sleep.** Risks of use include falls, sedation, and cognitive/functional impairment.

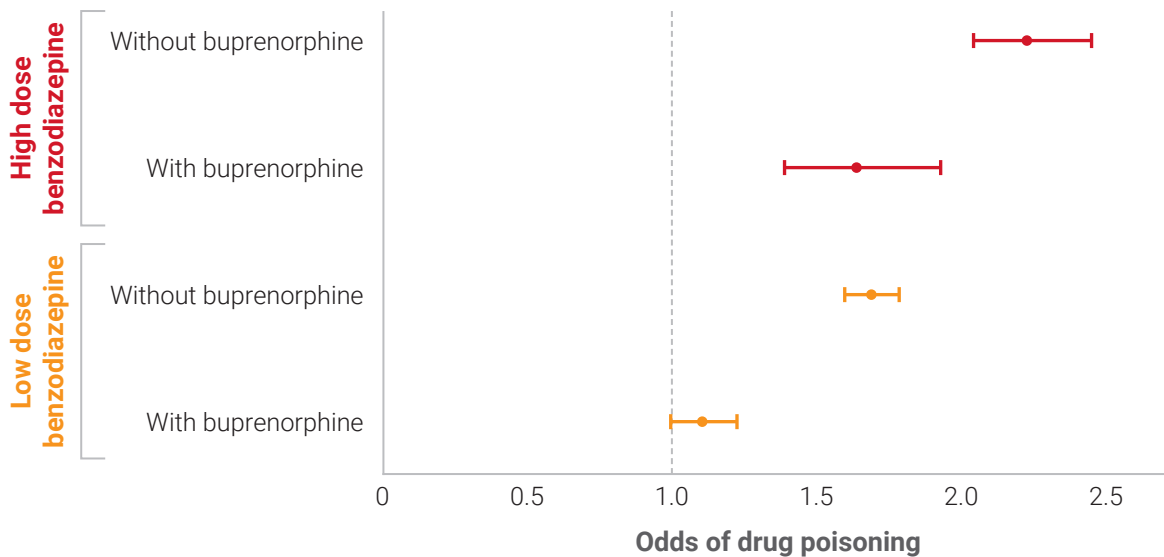


In 2017, approximately 1/5 of U.S. patients on an opioid prescription had at least 1 day of **overlapping benzodiazepine prescription**.<sup>12</sup>



**32.5% of opioid-related overdose deaths involved a benzodiazepine** during the first half of 2018.<sup>13</sup>

## FOR PATIENTS WITH OUD BUPRENORPHINE IMPROVES SAFETY OF PRESCRIBED BENZODIAZEPINES<sup>14</sup>



For patients with OUD prescribed a benzodiazepine, the odds of drug overdose is lower if OUD is treated with buprenorphine.

**FDA and SAMHSA state not to withhold buprenorphine for patients using benzodiazepines.**



# Benzodiazepines with opioids *(continued)*

## OVERDOSE RISK FROM OPIOID-BENZODIAZEPINE OVERLAP<sup>15</sup>

**One prescriber:  
Lower risk**

**Multiple prescribers:  
1.8-fold higher risk**



## MANAGEMENT

- 1 Coordinate prescribing.
- 2 Ensure underlying psychiatric or medical conditions are effectively managed.
- 3 Consider changing full agonist opioid to buprenorphine for safety.
- 4 If needed, taper opioid or benzo slowly in collaboration with patient.
 

**Benzodiazepine taper example:**

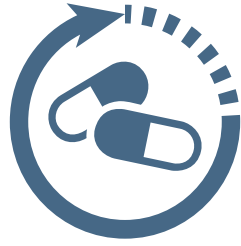
  - Reduce dose by 10-25% every 2 weeks.
  - Consider switching to lorazepam for ease of dose reductions and CBT for taper success.
  - Treat withdrawal symptoms.
- 5 Treat any return to use with compassion.



**Abrupt tapers/  
stopping can be life-  
threatening (e.g.,  
seizures).**

**Approaches to benzodiazepines should be patient-centered, minimize risk, maximize benefit, and involve shared decision-making.**

# Opioid stewardship







# Pain and function assessments

Assessments should focus on both pain and function.

- Assessments are essential when initiating opioid treatment or seeing a new patient already on long-term opioid therapy.
- Reassessments should take place at regular intervals to ensure benefit and evaluate adverse events.



recommends

**Assessments should take place within three months of starting treatment and at least annually thereafter.**

## PAIN, ENJOYMENT, GENERAL ACTIVITY (PEG) SCALE FOR ASSESSING PAIN INTENSITY AND INTERFERENCE: A SIMPLE, 3-QUESTION TOOL

**1. What number best describes your pain on average in the past week:**

0	1	2	3	4	5	6	7	8	9	10	
No pain											Pain as bad as you can imagine

**2. What number best describes how, during the past week, pain has interfered with your enjoyment of life?**

0	1	2	3	4	5	6	7	8	9	10	
Does not interfere											Completely interferes

**3. What number best describes how, during the past week, pain has interfered with your general activity?**

0	1	2	3	4	5	6	7	8	9	10	
Does not interfere											Completely interferes

### CAUTION

**Among racial and ethnic minority groups, women, and patients who are elderly or have cognitive impairment, pain can be underrecognized and inadequately treated.<sup>16,17</sup>**

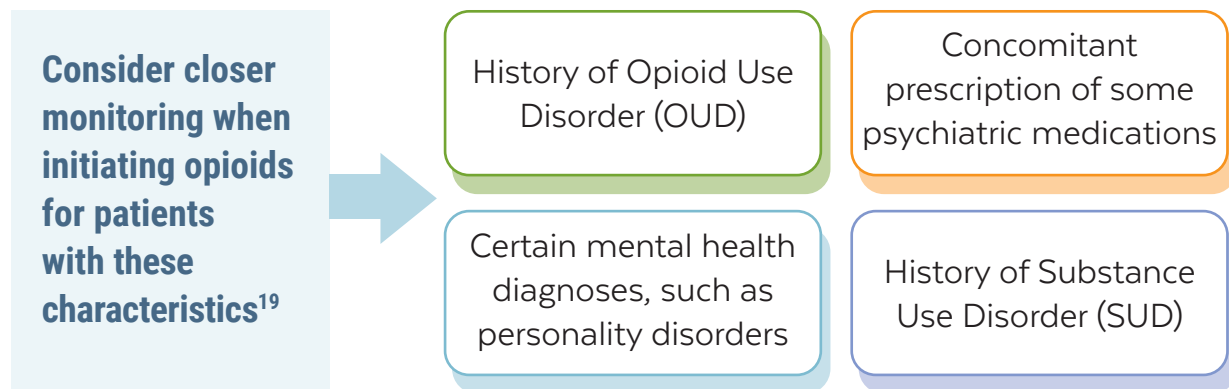
The PEG is as valid and reliable as the longer Brief Pain Inventory scale and is sensitive to changes in pain.<sup>18</sup>



## Risk factor assessment

Once you have determined that opioids are indicated for a patient, assessing for risk of opioid use disorder may help guide how closely you monitor.

A systematic review found that **the following may be associated with increased risk of use disorder due to prescribed opioids:**



Screening tools (e.g. Opioid Risk Tool) are often used in protocols, but do not accurately predict outcomes.



### In the presence of risk factors, consider increasing the frequency of:

- Pain/function assessments
- Urine drug screening
- Checking Prescription Drug Monitoring Program (PDMP)
- Screening for opioid use disorder



# Urine drug screening (UDS)

**UDS should not be used punitively, but as a clinical tool to facilitate discussion and support patient care.**

UDS does:	UDS does not:
Support patient care	Prevent opioid-related problems among patients with chronic pain <sup>20</sup>
Detect whether a substance has been used in a particular window of time	Diagnose addiction, dependence or diversion of controlled substances
Guide optimal care, like hemoglobin A1c	Singlehandedly provide justification to stop prescribing opioids for patients

## HOW FREQUENTLY SHOULD I ORDER UDS FOR MY PATIENTS?

- CDC recommends considering the risks and benefits of UDS before a patient starts opioids and periodically (e.g., annually) thereafter.
- Most clinics adopt a uniform testing policy to prevent unintentional bias.
- Some facilities establish UDS frequency and timing independently of clinicians.



**A UDS WILL DETECT SUBSTANCE(S) THAT THE TEST IS DESIGNED TO EVALUATE IF ABOVE A SPECIFIC CUT OFF THRESHOLD. THUS, TO INTERPRET A UDS IT IS IMPORTANT TO KNOW:**

- a) What substances your UDS is designed to detect
- b) The cut off threshold for a positive test for each substance
- c) Common or known potential false positives



# Interpreting UDS

## Most UDS is in the form of immunoassays:

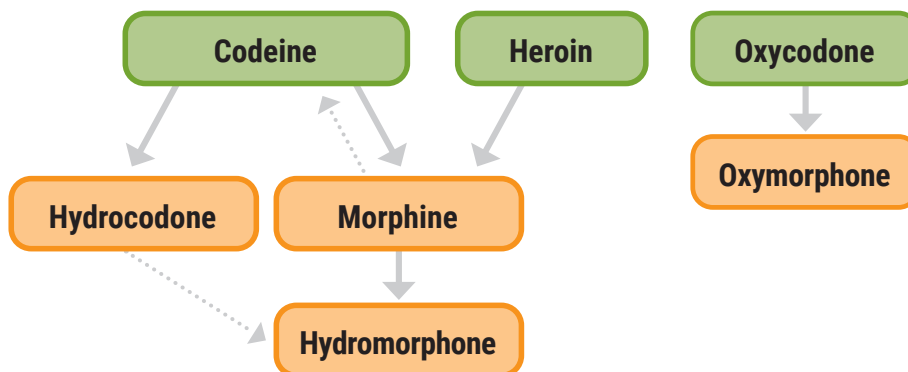
- Point-of-care
- Qualitative
- May test for metabolites and/or parent drug

**Know your lab's standard testing panel/options.**

### LIMITATIONS:

- Do not test for all substances
- Methadone, buprenorphine, and fentanyl often require a separate test
- Many false positives/negatives

### OPIOID METABOLIC PATHWAYS



### EXAMPLE:

**Prescription:** Morphine

**UDS results:** hydromorphone + morphine

**Interpretation:** a) Patient most likely taking morphine only;  
b) Patient could be taking morphine + hydromorphone

### If UDS results are hard to explain:

- Talk with the patient
- Contact the lab
- Consider confirmatory testing via mass spectrometry (GC/MS or LC-MS):
  - Lab-based
  - Quantitative
  - More expensive

### If UDS results are negative, consider:

- Is the patient taking the medication?
- Is the patient taking a lower dose of the medication, or more infrequently?
- Are negative results due to duration of use, body mass, hydration, etc.?

\*If long-term suspicion for diversion or SUD, engage with patient to create a plan (e.g. OUD treatment, tapering, referrals).

**Always discuss results with patient before drawing conclusions;  
avoid changing therapy based on one unexpected result.**



# Informed consent and treatment agreements

- **Informed consent** is a joint, documented discussion between healthcare professionals and patient to address risks associated with opioids and clarify expectations.
- **Controlled substance agreements** are written documents, similar to and possibly replacing informed consent, which include expectations of both the patient and healthcare professionals. They are generally signed by the patient and renewed annually.



recommends

**Review informed consent or controlled substance agreements at least annually.**

PATIENT-PROVIDER AGREEMENT (PPA) for Opioid Treatment

The use of opioids (morphine-like drugs) is only one part of pain treatment. Opioids can be very useful, but can also cause serious problems and are not always effective in the treatment of pain. The purpose of this agreement is to outline the safest manner to prescribe opioids.

**The goals for using this medicine are:**

- To improve daily functional activities and/or the ability to work.
- To decrease the intensity of pain.

**Provider Responsibilities**

- To explain to me the risks and benefits of using opioids for pain.
- To actively engage me in the creation, and periodic review, of a treatment plan for my pain.
- To explain alternative or complementary therapies for pain management.
- To check the Prescription Monitoring Program to see what medications I may be prescribed by other providers.
- To communicate with me any concerns regarding my use of opioid medications.
- If needed, and in collaboration with me, to work with other specialists to ensure I am receiving effective pain treatment. This may include referral to addiction treatment if opioids become a problem for me.
- To protect the confidentiality of my health care and prescription information to the extent authorized by law.

**Patient Responsibilities**

I understand and commit to the following for the best treatment of my pain and the safest use of opioids:

- ✓ Follow my treatment plan.
- ✓ Tell my provider all the medications that I take (including herbal remedies and over-the-counter medications).
- ✓ Communicate with my provider how I am doing, such as, daily functioning, pain level, and side effects.
- ✓ Obtain opioids from one provider (or provider group) only.
- ✓ Take medications exactly as prescribed.
- ✓ Not use medicine that has not been prescribed to me or use street drugs.
- ✓ Not use alcohol with this medicine unless my provider says it is safe to do so.
- ✓ Secure my medicine so no one else can take it. Safely dispose of unused medicine. Not share, sell or trade my medicine.
- ✓ My medicine will probably not be replaced if it is lost, stolen, damaged or used-up sooner than prescribed.

*At a minimum, healthcare professionals should offer written information to patients about the benefits and risks of opioid therapy and document patients' understanding and agreement.*

Controlled substance agreement templates are available online:

<https://health.ri.gov/forms/agreements/SamplePrescriberPatientAgreementOpioidTreatmentForNonCancerPain.doc>

## Additional considerations

- Remind patients to keep opioids in a locked and safe place.
- Encourage safe disposal of drugs, like take-back programs.





# Prescription Drug Monitoring (PDMP)

The Rhode Island PDMP collects data on all controlled substance prescriptions (schedules II-V) and opioid antagonists that are dispensed for outpatient use in Rhode Island or to Rhode Island residents.

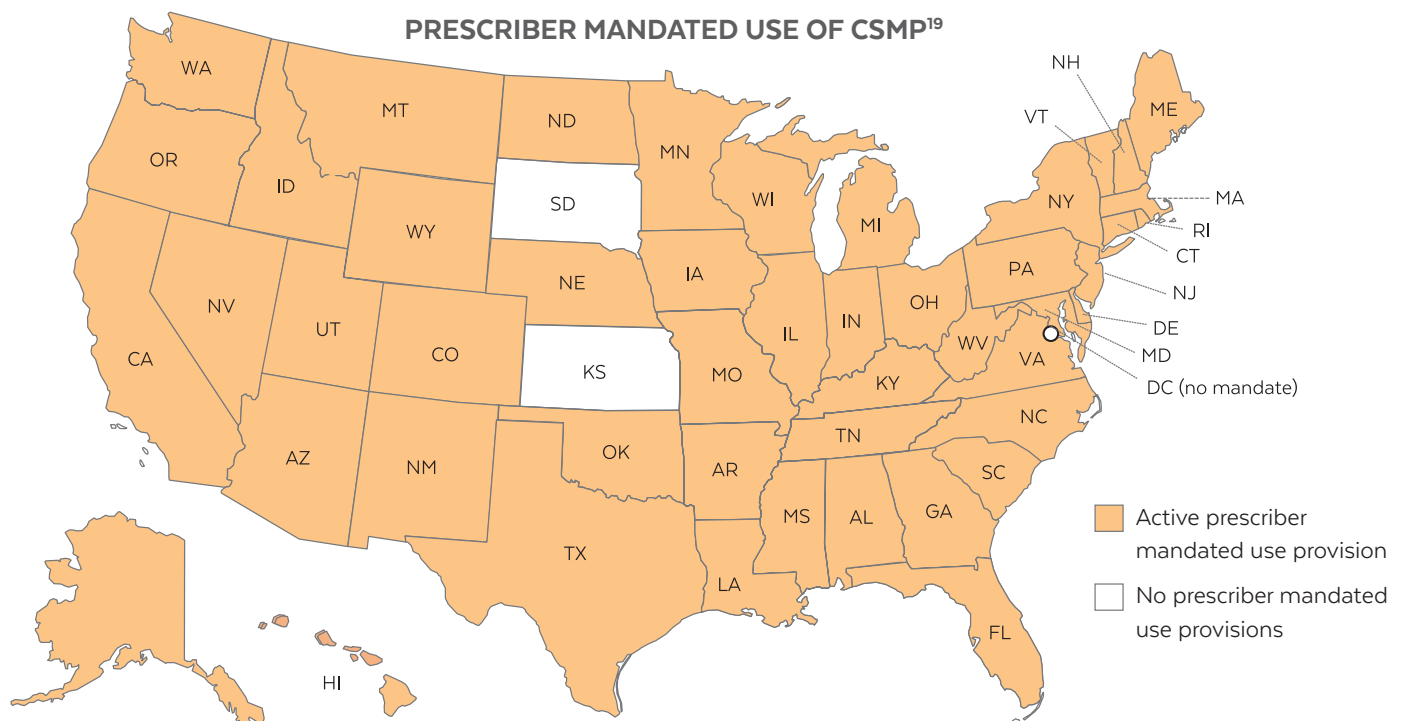
This online system provides a database for prescribers, dispenser, law enforcement, and other licensing authorities.

RI has mandatory use for prescribers. Prescribers are required to check the PDMP prior to opioid initiation and every 3 months when a patient is on long-term opioid therapy.

## FEATURES OF PRESCRIPTION DRUG MONITORING PROGRAMS:

- **Alerts** on patients who reach prescribing thresholds or have multiple prescribers
- **Peer-to-peer communication** and interstate data sharing (for some states)
- **Patient reports**

For information: <https://rhodeisland.pmpaware.net/login>



Map courtesy of PDMP TTAC: [www.namsdl.org/wp-content/uploads/Prescriber-Mandated-Use-of-PDMPs-Map.pdf](http://www.namsdl.org/wp-content/uploads/Prescriber-Mandated-Use-of-PDMPs-Map.pdf)

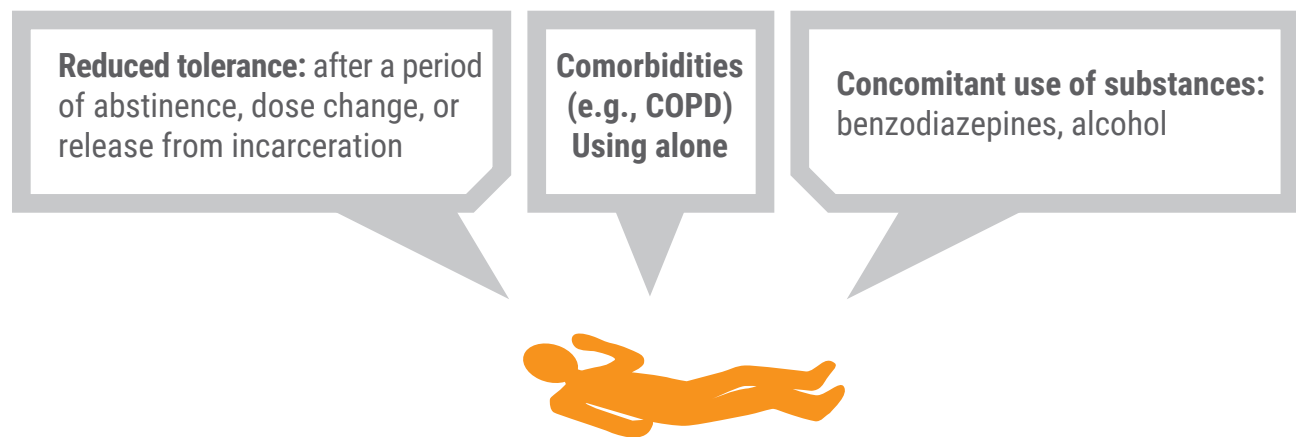


# Overdose prevention

## Prior opioid overdose is a major risk for future overdose.

A patient who has previously overdosed is greater than **seven times more likely** to overdose in the subsequent year.<sup>21</sup>

### OTHER FACTORS THAT INCREASE RISK OF OVERDOSE



## Some patients have overdosed and don't realize it.

In one study, out of 60 patients on opioid therapy for pain, 37% had stopped breathing or required help to be woken up due to opioids.<sup>22</sup>

**45%**

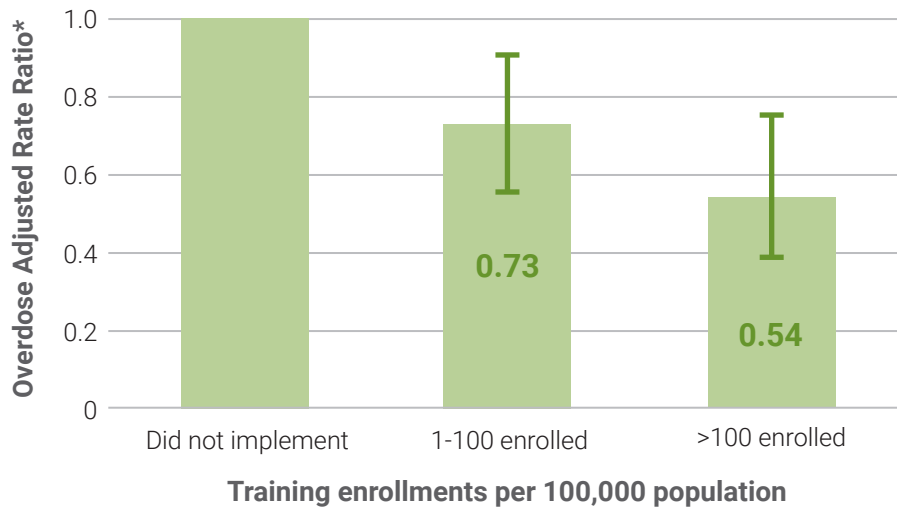
of those patients denied overdosing, calling it a bad reaction.



# Naloxone is effective as overdose prevention

## GIVING NALOXONE TO PEOPLE WHO USE DRUGS IS ASSOCIATED WITH REDUCED OVERDOSE MORTALITY

### FATAL OPIOID OVERDOSE RATES BY NALOXONE IMPLEMENTATION IN MASSACHUSETTS<sup>23</sup>

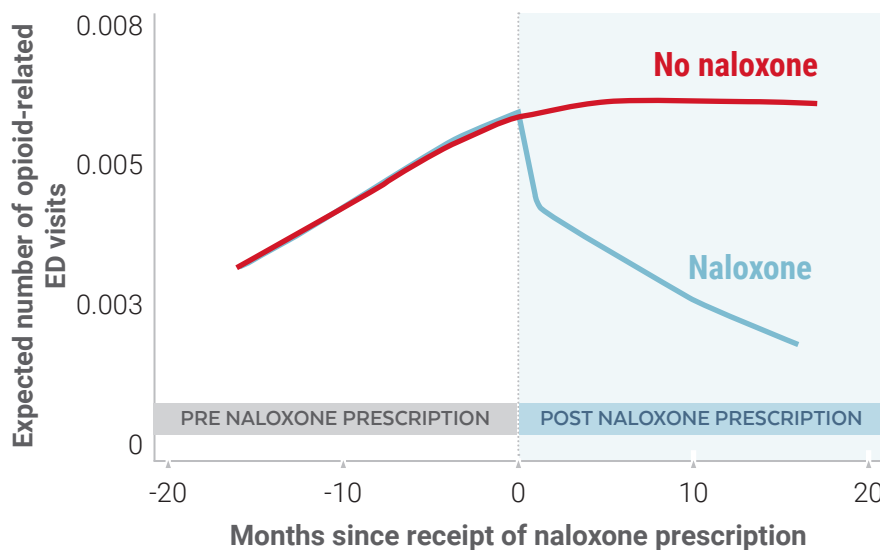


Overdose education and nasal naloxone distribution programs trained 2912 potential bystanders who reported 327 rescues.

Compared to communities that did not implement these programs, both groups had significantly reduced adjusted rate ratios ( $p < 0.01$ ). The adjusted odds ratio measured the incidence of overdoses, controlling for confounding variables.

## NALOXONE MAY REDUCE OPIOID-RELATED ADVERSE EVENTS

### OPIOID-RELATED EMERGENCY DEPARTMENT VISITS BY RECIPIENT OF NALOXONE PRESCRIPTION AMONG PRIMARY CARE PATIENTS ON OPIOID THERAPY FOR CHRONIC PAIN<sup>24\*\*</sup>



Prescribing naloxone to 29 patients averted 1 opioid-related emergency department visit in the following year.

\*Ratios with 95% confidence intervals, adjusted for population age <18, male, race/ethnicity, below poverty level, medically supervised inpatient withdrawal, methadone and buprenorphine treatment, prescriptions to doctor shoppers, year.

\*\*In a population with a rate of opioid-related emergency department visits of 7/1000 person years.





# Indications for naloxone prescribing



## recommends

- Prescribe naloxone for patients taking opioids with:
  - Opioid use  $\geq 50$  MMEs/day
  - Benzodiazepine use
  - History of substance use disorder
  - History of opioid overdose
  - Comorbidities or medications that increase overdose risk
  - Loss of tolerance (e.g., after tapering or incarceration)



## Also offer naloxone to patients:

- With any illicit substance use
- At risk of witnessing an opioid overdose

### Naloxone is NOT a controlled substance.

Any licensed healthcare professional can prescribe naloxone.

Naloxone is also available without a prescription or can be accessed for free at <https://preventoverdoseri.org/get-naloxone/>

### NALOXONE LEGISLATION VARIES BY STATE:

- Some states (i.e., AR, AZ, CA, FL, IN, NJ, NM, NY, OH, RI, VT, VA, WA) have **co-prescribing laws** that require healthcare professionals to prescribe or offer a naloxone prescription to patients on high doses of opioid pain medications or with high risk of overdose.<sup>25</sup>
  - The FDA, American Medical Association, and Department of Health and Human Services all recommend that healthcare professionals co-prescribe naloxone.
- All 50 states and the District of Columbia have enacted “**good Samaritan**” laws, allowing private citizens to administer naloxone without legal liability.<sup>26</sup>
- All states except MN and KS allow healthcare professionals to write **prescriptions for third parties** (i.e., friends, family) to have in case of a witnessed overdose.<sup>25</sup>
- **All 50 states have either laws or standing order protocols** allowing certified pharmacists or community organizations to dispense naloxone to anyone at risk of overdose or in a position to assist without a prescription.



# Naloxone formulations

## Naloxone mechanism of action

- Highly specific, high-affinity opioid antagonist used to reverse the effects of opioids
- Lasts 30-90 minutes

### INTRANASAL

- Naloxone 4mg #1 two pack. Use PRN for suspected opioid overdose and call 911. Repeat every 2-3 minutes if symptoms persist.



*If intranasal naloxone is not optimal or accessible, an injectable naloxone prescription may be written. Provide direct education to patients for vial and syringe administration of naloxone.*

### INJECTABLE

- Naloxone 0.4mg IM #2, use PRN for suspected overdose, IM syringe (3ml 25g 1" syringe) #2



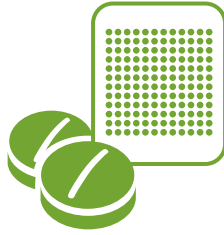
### SBIRT CODES

To bill time for naloxone training  
(per 15 min intervals)

MediCare:	Medicaid:	Commercial:
G0396	H0050	CPT99408

**SBIRT:** Screening, Brief Intervention, and Referral to Treatment

# Opioid use disorder management





# Recognizing opioid use disorder (OUD)

Ask non-judgmental, open-ended questions about patterns of drug use and how use affects the patient's life.

## DSM-5 CRITERIA FOR OPIOID USE DISORDER (OUD)\*



### USE PATTERNS:

- **More/longer** use than intended
- **Unable to stop** or cut down
- **Excessive time** dealing with opioids
- **Craving**



### CONTINUED USE EVEN WHEN:

- **Responsibilities** not fulfilled
- **Social** and interpersonal problems
- **Activities** reduced
- **Physical** hazards from use
- **Health** problems patient knows are caused by opioids



### DRUG EFFECTS\*\*

- **Tolerance:** requiring more to achieve effect
- **Withdrawal** symptoms if opioids are stopped



## SCORING

**Give 1 point** for each domain endorsed by the patient or observed by the clinician.

**Mild SUD** = 2-3

**Moderate SUD** = 4-5

**Severe SUD** = 6 or more

\*Used to diagnose OUD as well as other substance use disorders.

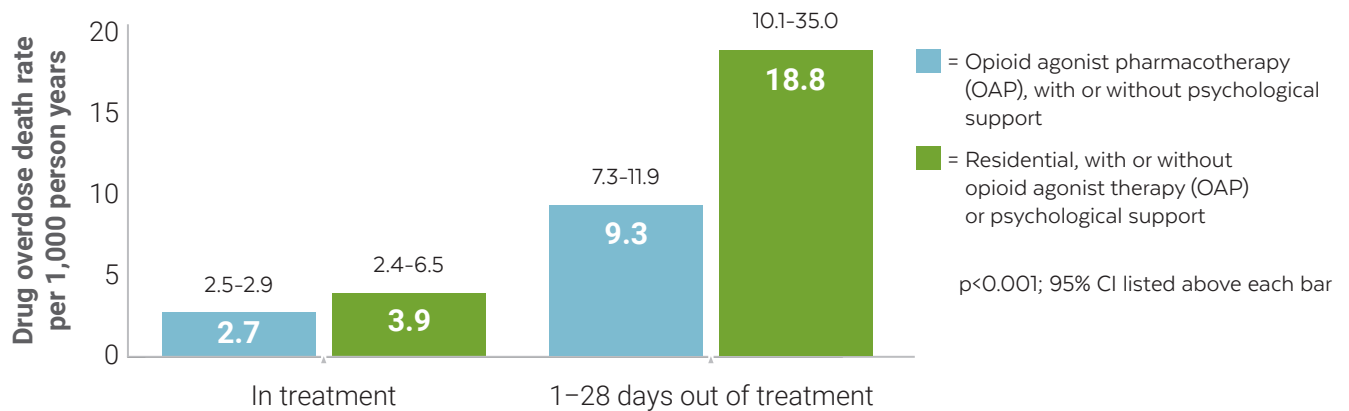
\*\*Tolerance and withdrawal are expected physiologic effects of chronic opioid use and are not sufficient to diagnose OUD. Additional criteria must be met.



# Managing OUD

- If your patient has OUD, it is essential to arrange for treatment.
- **Treatment with medications has the best evidence for managing OUD** and should be considered for all patients.
- When therapy for OUD is stopped, the risk of death increases.

**DRUG OVERDOSE DEATH RATE PER 1,000 PERSON YEARS AMONG 151,983 PEOPLE WITH OUD SEEKING TREATMENT IN THE UNITED KINGDOM<sup>27</sup>**



## FDA-APPROVED MEDICATION TREATMENT OPTIONS

- Buprenorphine (with or without naloxone)
- Methadone
- Extended-release naltrexone

Like treatment for other chronic diseases such as diabetes, these medications should be considered long-term therapy.

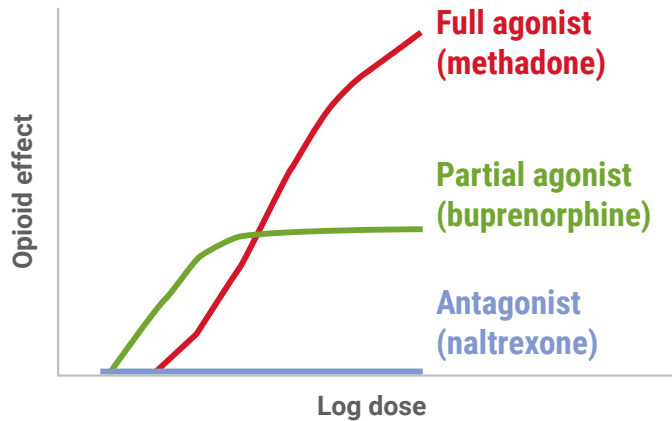
## BEHAVIORAL/PSYCHOLOGICAL INTERVENTIONS

- Outpatient or inpatient rehabilitation and counseling
- Support groups such as Narcotics Anonymous

**If not personally providing OUD treatment, a warm hand-off to other healthcare professionals is critical.**



# Buprenorphine overview and safety profile



## BUPRENORPHINE

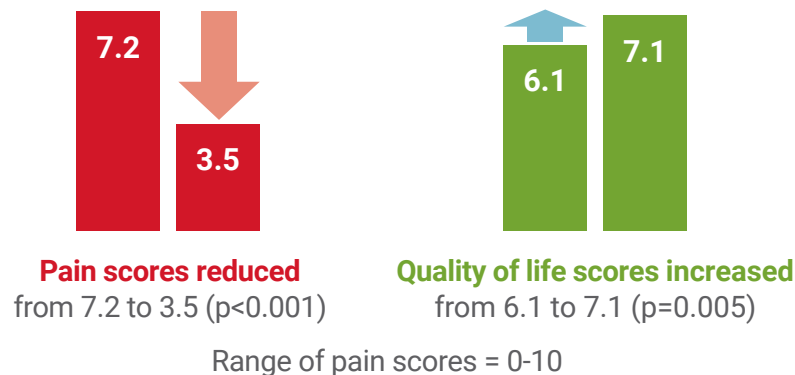
- A partial opioid agonist
- Time to peak: 30 min to 3 days depending on formulation
- Has very high affinity, blocking effects of heroin or other opioids

## SAFETY PROFILE

- Due to the “ceiling effect” of a partial agonist, buprenorphine has:
  - **Low potential for misuse** and diversion
  - **Low risk** of respiratory depression or overdose
  - **Ability to reduce craving and withdrawal** without the euphoria of full agonist
- Maintenance is critical: OUD requires long-term care.
- Buprenorphine treatment is safe and effective during pregnancy.<sup>28</sup>

## STUDIES ALSO SUPPORT USE OF BUPRENORPHINE FOR CHRONIC PAIN<sup>29</sup>

In a study of 35 patients on 200-1,370 morphine equivalent milligrams of opioids for chronic pain, after two months of sublingual buprenorphine:





# Substance use disorder (SUD) therapies

- **Screening for substance use and SUD:** Ask about type, frequency, amount, route, complications and withdrawal symptoms.
- **Diagnosing SUD:** Use DSM-5 criteria—the criteria apply across substances. The use disorder is considered mild, moderate or severe based on the number of criteria a patient meets.
- Assess the patient's readiness to change.

	Screening tools <sup>a</sup>	Medications	Behavioral interventions <sup>35,36</sup>
<b>Nicotine</b>	AAR <ul style="list-style-type: none"> <li>• Ask</li> <li>• Assist</li> <li>• Refer</li> </ul>	<ul style="list-style-type: none"> <li>• Nicotine replacement</li> <li>• Varenicline</li> <li>• Bupropion</li> </ul>	<ul style="list-style-type: none"> <li>• CBT<sup>c</sup></li> <li>• Smoking cessation</li> </ul>
<b>Alcohol</b>	CAGE(-AID), AUDIT	<ul style="list-style-type: none"> <li>• Naltrexone IR or ER</li> <li>• Acamprosate</li> <li>• Disulfiram</li> <li>• Gabapentin<sup>b</sup></li> <li>• Topiramate<sup>b</sup></li> </ul>	<ul style="list-style-type: none"> <li>• CBT<sup>c</sup></li> <li>• AA</li> <li>• Mindfulness<sup>c</sup></li> <li>• MI<sup>c</sup></li> </ul>
<b>Opioids</b>	TAPS, DAST-10	<ul style="list-style-type: none"> <li>• Buprenorphine</li> <li>• Methadone</li> <li>• ER Naltrexone</li> </ul>	<ul style="list-style-type: none"> <li>• CBT<sup>c</sup></li> <li>• NA</li> <li>• Mindfulness-oriented recovery enhancement</li> </ul>
<b>Stimulants</b>	NM ASSIST, TAPS, DAST-10	For methamphetamine: <ul style="list-style-type: none"> <li>• Mirtazapine<sup>b</sup></li> <li>• Bupropion<sup>b</sup></li> </ul>	<ul style="list-style-type: none"> <li>• CBT<sup>c</sup></li> <li>• Contingency management</li> </ul>

<sup>a</sup> SBIRT can be used to screen for all substances: [bit.ly/SBIRT\\_screen](http://bit.ly/SBIRT_screen); <sup>b</sup>off-label use; <sup>c</sup> CBT, Mindfulness and MI target both use disorder and depression symptoms



## Additional medical care for patients who use drugs

Due to increased risk for various complications, patients who use drugs should also be considered for:



**Screening for infections** such as HIV, hepatitis B, hepatitis C, sexually-transmitted infections and tuberculosis (at least annually for most patients)



**Vaccinations** such as hepatitis A, hepatitis B, human papillomavirus, tetanus-diphtheria-pertussis, influenza and pneumococcus



**Management of cardiac risk factors**, particularly for people who use stimulants or tobacco, including blood pressure and lipid control, as well as smoking cessation



**Treatment of other comorbid substance use disorders**, including tobacco and alcohol use disorders



**Treatment of comorbid psychiatric disorders**



**Education** about safe injection practices and provision of clean injection equipment



**Naloxone** to reverse the effects of an opioid overdose



**Pre- and post-exposure prophylaxis (PrEP and PEP)** for HIV prevention



Rhode Island specific harm reduction resources for people who use drugs can be found at:

<https://preventoverdoseri.org/people-who-use-drugs/>



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**The recommendations contained in this brochure are general and informational only; specific clinical decisions should be made by healthcare professionals on an individual case basis.**



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