NATIONAL EDITION

Opioids and Chronic Pain

A GUIDE FOR PRIMARY CARE PROVIDERS





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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:** at least every two years

If managing opioid use disorder, options include:

- Start buprenorphine, methadone maintenance, or extended-release naltrexone
- >> Arrange for outpatient or residential treatment
- >> Consider behavioral health and other referrals

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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:¹

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

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• 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
XX X	Acute, inflammatory pain (e.g., lumbar radiculopathy, bursitis, tendonitis, gout)	CorticosteroidsNSAIDs
	Headaches (e.g., tension-type, migrane)	 Acetaminophen NSAIDs Antidepressants (e.g., tricyclics) Anticonvulsants (e.g., topiramate)
A Contraction	Fibromyalgia	Anticonvulsants (e.g., pregabalin)
	Muscle spasm or spasticity	Muscle relaxants (e.g., baclofen)
W.	Neuropathic pain (e.g., peripheral neuropathy)	 Anticonvulsants (e.g., gabapentin, topiramate) Antidepressants Topical local anesthetics (e.g., lidocaine)
	Osteoarthritis or rheumatoid arthritis	NSAIDs
M/	Chronic musculoskeletal pain (e.g., bone pain)	Antidepressants (e.g., duloxetine)NSAIDs

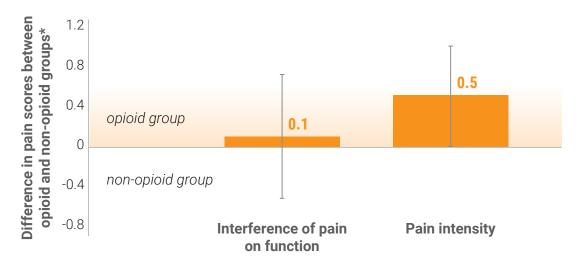
Treatments listed for each condition are examples of options for the condition type, but are not applicable for all of the examples listed under the condition (e.g., tension-type headaches are not treated by anticonvulsants).



Considering opioids for pain management

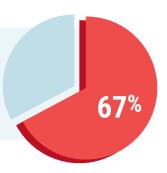
Avoid opioids as first-line therapy for chronic, non-cancer pain.

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



*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.³



When should a provider 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		r opioid dose =
Codeine	0.15	higher	risk of overdose ⁴
Morphine	1		
Hydrocodone	1	100	
Oxycodone	1.5	MME	2.0-8.9x higher risk (compared to <20MME)
Fentanyl transdermal (in mcg/hr)	2.4		
Oxymorphone	3		
Hydromorphone	5		
Methadone		50 -	1.9-4.6x higher risk
1-20 mg/day	4		(compared to <20мме)
21-40 mg/day	8	20 -	Baseline/lower risk
41-60 mg/day	10	20	Daschille/10wei 11sk
≥61 mg/day	12		

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.



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

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Starting opioids:

Starting dose for opioidnaive 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



Review case with former provider 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 (e.g. sickle cell disease)
b. Patient may be at risk of other harms (see next page)

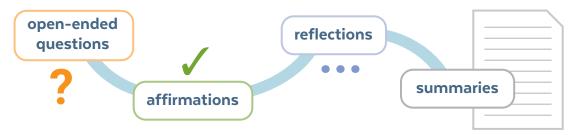
Develop a patient-centered care plan.

Screen for opioid use disorder; start discussing medication options right away. The patient may struggle with an opioid use disorder diagnosis—give them time.

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-provider conversation challenging, especially **patient stressors** (e.g. psychological stressors) and **provider stressors** (e.g. time pressure, clinic/health system policies).
- Use motivational interviewing techniques.



For more information, go to: 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.⁵



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.⁶

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.⁷

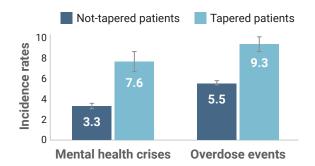
MORTALITY:

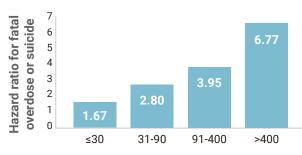
Among 1,394,102 VA patients, risk for fatal overdose or suicide rose after stopping opioid therapy, with increasing risk the longer patients had been treated before stopping.⁸ Other studies have shown similar findings.⁹



49% of patients had an opioid-related event

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





Days of opioid treatment prior to discontinuation



Shared decision-making for opioid therapy

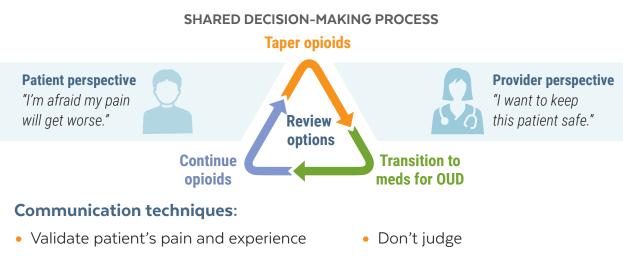
Avoid making a decision without an individualized conversation with the patient.

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

- Adverse effects (constipation, overdose, etc.)
- Worsening comorbidities
- Other risky medications (e.g. benzodiazepines) Active opioid use disorder
- Develop a plan with the patient.



- Recognize power dynamics
- Empower patient to participate in treatment planning
- Be flexible
- Prepare for emotion

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

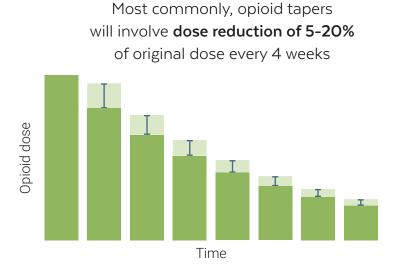
Mechanics of a taper

BUILD THE CASE

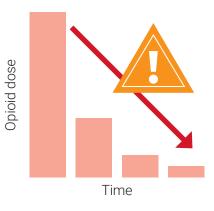
- **1.** Get to know the patient's stressors, needs, and pain:
 - don't rush to start a taper immediately:
 patient buy-in is important
 - individualize the taper plan
 (see "Example tapers for opioids")
- 2. Discuss the risks of tapering.
- **3.** Involve patient in the selection of a taper speed and 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.

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



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



TIP

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

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Example tapers for opioids[¬]

Slowest taper (over y	years)
-----------------	--------	--------

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

^aContinue the taper based on patient response.

^bContinue 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.

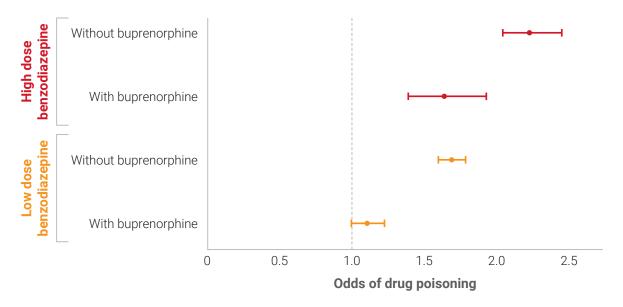


In 2017, approximately 1/5 of U.S. patients on an opioid prescription had at least 1 day of **overlapping benzodiazepine prescription**.¹²



32.5% of opioid-related overdose deaths involved a benzodiazepine during the first half of 2018.¹³

BUPRENORPHINE IMPROVES SAFETY FOR PATIENTS WITH OUD PRESCRIBED BENZODIAZEPINES¹⁴



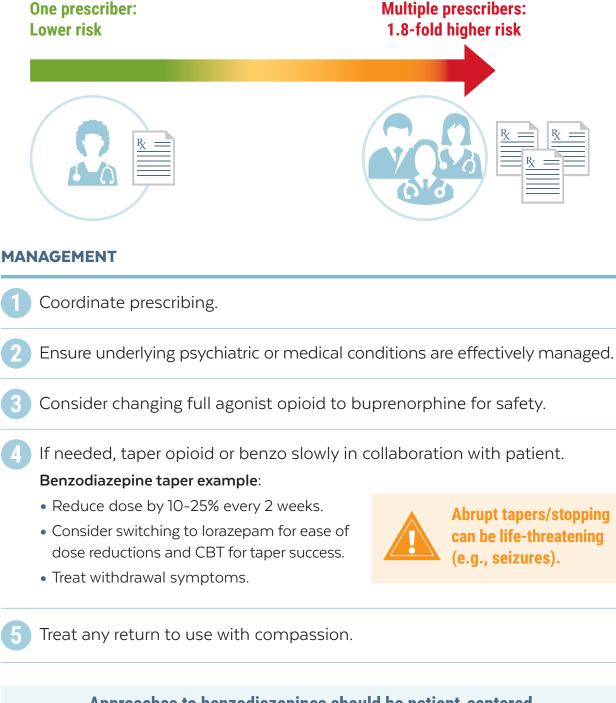
The odds of drug poisoning is lower if buprenorphine is added to benzodiazepines.

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



Benzodiazepines with opioids (continued)

OVERDOSE RISK FROM OPIOID-BENZODIAZEPINE OVERLAP¹⁵



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.



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

0	1	2	3	4	5	6	7	8	9	10
No	bain									Pain as bad as you can imagine
	at nun our <u>er</u>				s how,	during	g the p	ast we	eek, pa	in has interfered
0	1	2	3	4	5	6	7	8	9	10
	s not fere									Completely interferes
	at num our <u>ge</u> 1				s how, 5	during 6	g the p 7	ast we	eek, pa 9	nin has interfered
0										Completely

CAUTION

Among racial and ethnic minority groups, women, and patients who are elderly or have cognitive impairment, pain can be underrecognized and inadequately treated.^{16,17}

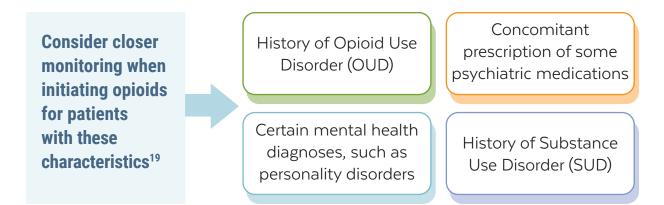
The PEG is as valid and reliable as the longer Brief Pain Inventory scale and is sensitive to changes in pain.¹⁸



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 controlled substance monitoring program (CSMP)
- Screening for opioid use disorder



Urine drug screening (UDS)

Goal of UDS: Support patient care

UDS does:	UDS does not:
Support patient care	Prevent opioid-related problems among patients with chronic pain ²⁰
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.

EXAMPLE

Use risk assessment to guide urine drug screening frequency.

- Low risk: every 12 mo
- Higher risk or opioid dose > 120 MME/day: consider more frequent screening





Interpreting UDS

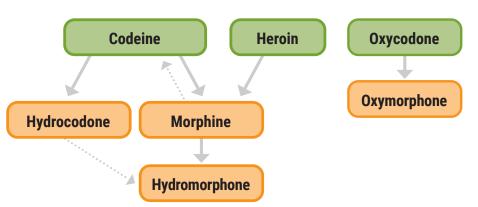
Most UDS is in the form of immunoassays:

- Point-of-care
- Qualitative
- Show both metabolites and 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 mostlikely taking morphine only;b) Patient could be takingmorphine + hydromorphone

If UDS results are hard to explain:

- Talk with the patient
- Contact the lab
- Consider mass spectrometry (GC/MS or LC-MS):
 - Lab-based
 - Quantitative
 - Fewer false positives/negatives
 - 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 provider 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 provider. They are generally signed by the patient and renewed annually.



Review informed consent or controlled substance agreements at least annually.

	ATIENT-PROVIDER AGREEMENT only one part of treatment for chronic pain.
The goals for using this medicine • To improve my ability to work or fur • To help my problem as much as pos	nction at home.
Provider's Responsibilities	Patient Responsibilities
Refills	Privacy
Prescriptions from Other Provid	lers
Stopping the Medication	
I have been told about the poss medicine.	ible risks and benefits of this
Patient's name and signature	Date
Provider's name and signature	Date

At a minimum, providers 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: **bit.ly/PA_form**

Additional considerations

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





Controlled substance monitoring

In the U.S., **49 states** (except Missouri, which will launch its program in 2023) and the District of Columbia have their own controlled substance monitoring program (CSMP), an online system that tracks certain controlled substances and provides a database for prescribers, dispensers, law enforcement, and other licensing authorities.

CSMPs are often called prescription drug monitoring programs (PDMPs), however not all prescription drugs are tracked.

Many states have both mandated enrollment in the CSMP and query conditions (e.g., requiring licensed providers who prescribe, order, administer, or dispense scheduled drugs to check CSMP upon first prescription and at regular intervals).

FEATURES OF CONTROLLED SUBSTANCE 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



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

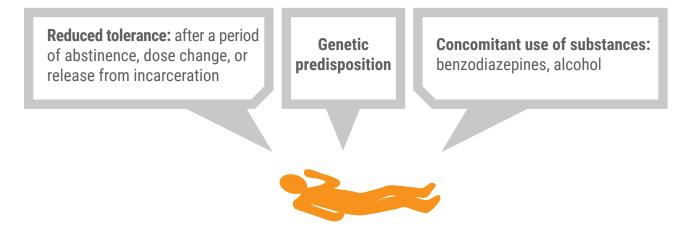


Overdose prevention

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.²¹

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.²²



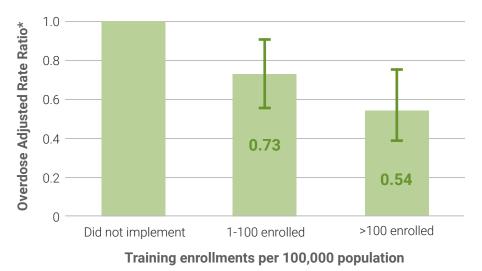
The word "overdose" may have negative connotations and people who use prescription opioids may not relate to it. Instead of using the word "overdose", consider language like "accidental overdose" or "bad reaction", or talk about "opioid safety".



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 MASSACHUSETTS²³

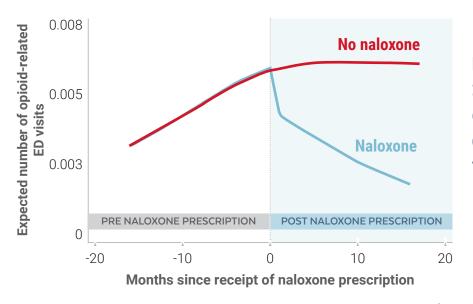


Overdose education and nasal naloxone distribution programs trained 2912 potential bystanders who reported 327 rescues.

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^{24**}



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

DC) recommends

- Prescribe naloxone for patients taking opioids with:
 - Opioid use ≥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)

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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 provider can prescribe 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 providers to prescribe or offer a naloxone prescription to patients on high doses of opioid pain medications or with high risk of overdose.²⁵
 - The FDA, American Medical Association, and Department of Health and Human Services all recommend that providers 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.²⁶
- All states except MN and KS allow providers to write **prescriptions for third parties** (i.e., friends, family) to have in case of a witnessed overdose.²⁵
- 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
- Virtually no side effects

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.

MediCare:

G0396

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)

SBIRT: Screening, Brief Intervention, and Referral to Treatment



Medicaid:

H0050

Commercial:

CPT99408



Opioid use disorder management

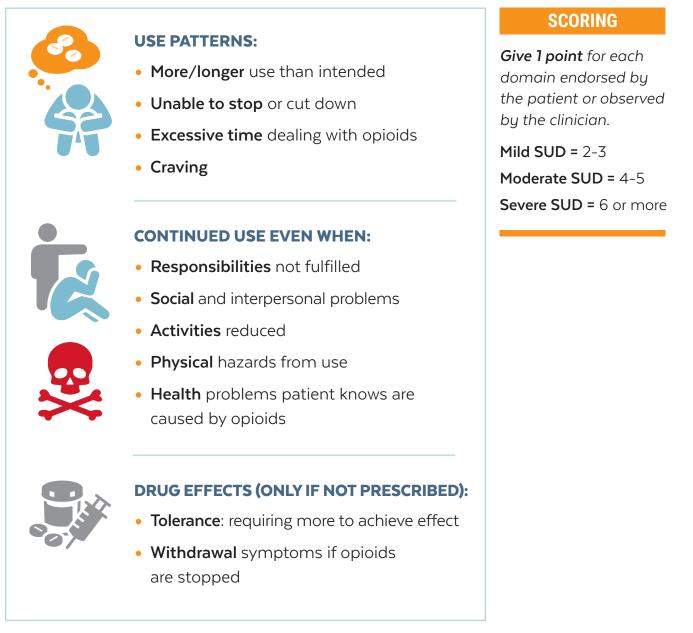




Recognizing opioid use disorder (OUD)

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)*



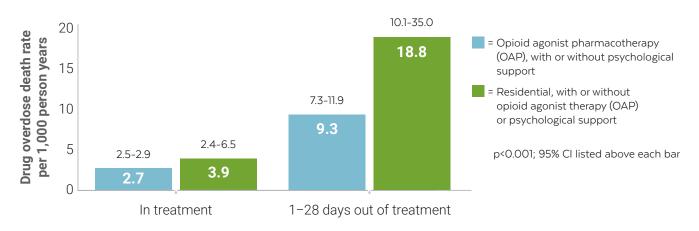
*Used to diagnose OUD as well as other substance use disorders.



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 KINGDOM²⁷



FDA-APPROVED MEDICATION TREATMENT OPTIONS

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

BEHAVIORAL/PSYCHOLOGICAL INTERVENTIONS

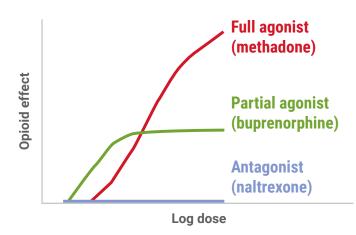
- Outpatient or inpatient rehabilitation and counseling
- Support groups such as Narcotics Anonymous

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

If not personally providing OUD treatment, a warm hand-off to other providers 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.²⁸
- Most buprenorphine for OUD treatment is co-formulated with naloxone to discourage diversion or injection of the product.

STUDIES ALSO SUPPORT USE OF BUPRENORPHINE FOR CHRONIC PAIN²⁹

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



Pain scores reduced from 7.2 to 3.5 (p<0.001)



Quality of life scores increased from 6.1 to 7.1 (p=0.005)

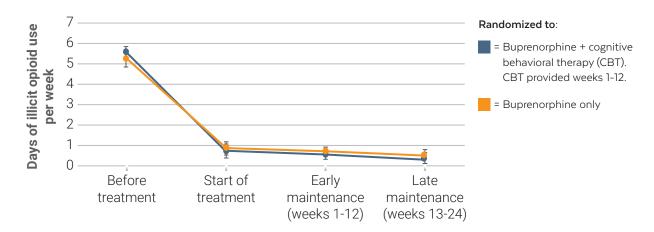
Range of pain scores = 0-10



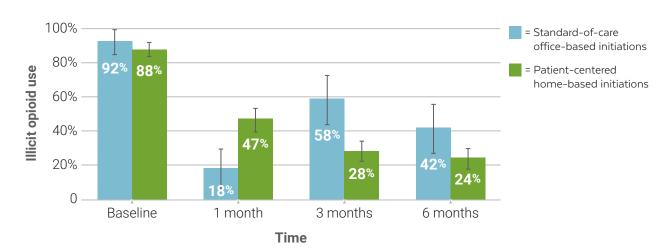
Buprenorphine is an effective medication to treat OUD in primary care

ROUTINE MEDICATION MANAGEMENT CAN BE AS EFFECTIVE AS COMBINING BUPRENORPHINE WITH COUNSELING

While counseling should be sought if available, lack of access should not be a barrier to treatment.³⁰



PATIENTS CAN BE STARTED ON BUPRENORPHINE IN THE OFFICE OR AT HOME



Reductions in opioid use are similar when patients start therapy themselves at home compared to office-based settings.³¹



Planning for buprenorphine

Formulations

- Keep buprenorphine tablet or film under tongue until dissolved (5-15 min).
 DO NOT SWALLOW.
- OK to cut film in half or quarter pieces.
- Therapy usually involves buprenorphine with naloxone, although the monoformulated product can also be used.



Patient education and considerations

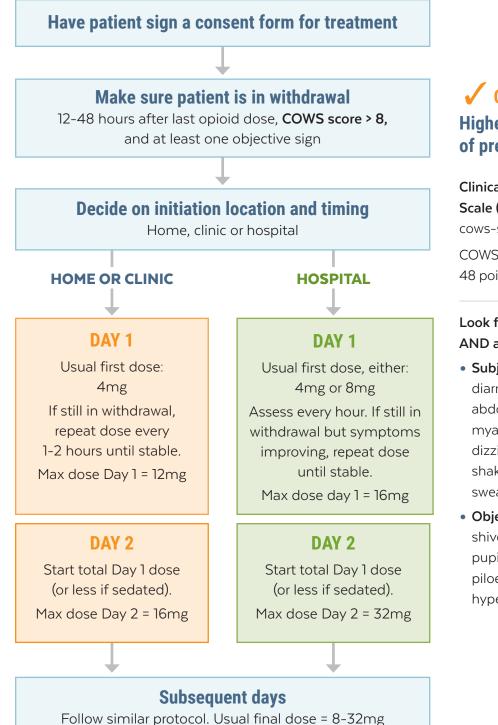
- Manage withdrawal symptoms when starting
- **Side effects**: fatigue, agitation, headache (from naloxone), nausea
 - Precipitated withdrawal: too large a dose started too soon after last opioid agonist (patient should call provider or go to the emergency department if severe symptoms present).
- Treatment is as long as needed; longer is usually better, and lifelong is normal

Not contraindications:

- Pregnancy
- Benzodiazepines
- Stimulants/other illicit drugs
- Alcohol



Starting buprenorphine



CHECK COWS: Higher score = less risk of precipitated withdrawal

Clinical Opioid Withdrawal

Scale (COWS): mdcalc.com/ cows-score-opiate-withdrawal

COWS has 11 items and up to 48 points.

Look for subjective symptoms AND at least one objective sign.

- Subjective: insomnia, vomiting, diarrhea, restlessness, anxiety, abdominal cramps, diaphoresis, myalgias/arthralgias, hot flashes, dizziness, tearing, goosebumps, shaking, yawning, twitching, sweating
- **Objective**: restlessness, shivering, rhinorrhea, dilated pupils, tachycardia, yawning, piloerection, tremor, sweating, hypertension



Continuing buprenorphine

- Document OUD in chart.
- Optimal dose varies by patient.
 ≥16mg/day may aid in retention, block other opioids, and reduce relapse, pain, and dysphoria.
- Follow-up visits: tailor frequency to patient stability. Weekly visits at start of treatment or when unstable; monthly or longer when stable.

Review:

- Buprenorphine adherence, illicit opioid use, UDS, CSMP
- Mental health and comorbid substance use disorders
- Healthcare maintenance
- If unsuccessful, consider other OUD medications such as methadone or extended-release naltrexone.

Remember that buprenorphine:

- Gives patients control over opioid use.
- Lowers overdose risk, even if still using illicit opioids, by binding very tightly to µ receptors.
- Does not treat other substance use disorders.



FOR PAIN

- Any formulation can be used, including the transdermal patch.
- Prior authorization may be required.
- Medication is generally administered 2-3 times daily.
- Acute pain: May require a temporary dose increase.
- **Peri-operative pain**: A multidisciplinary expert panel now agrees that buprenorphine should not routinely be discontinued during the perioperative period.³²



Buprenorphine overlap initiation

Extremely high tolerance to opioids increases the risk of **precipitated withdrawal**. **An alternative is buprenorphine overlap initiation** which avoids this risk.

CONSIDER WHEN PATIENT:

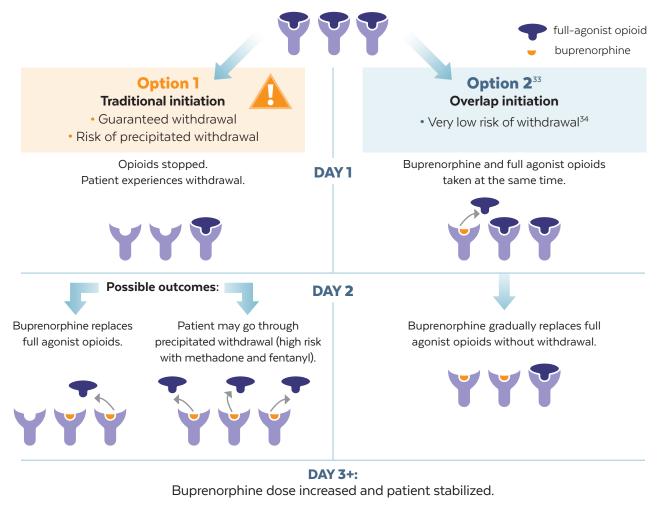
- Doesn't want to experience withdrawal
- Had prior difficulty starting buprenorphine
- Uses fentanyl
- Wants to switch from methadone

AVOID WHEN PATIENT:

 Prefers a rapid start or is already in significant withdrawal
 Is unable to take buprenorphine multiple times a day

TRADITIONAL VS. OVERLAP INITIATION OF BUPRENORPHINE:

Patient taking full-agonist opioids (e.g., methadone, fentanyl)



For overlap initiation protocols, go to: https://cabridge.org/resource/starting-buprenorphine-with-microdosing

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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 ^a	Medications	Behavioral interventions ^{35,36}
Nicotine	AAR • Ask • Assist • Refer	Nicotine replacementVareniclineBupropion	 CBT^c Smoking cessation
Alcohol	CAGE(-AID), AUDIT	 Naltrexone IR or ER Acamprosate Disulfiram Gabapentin^b Topiramate^b 	 CBT^c AA Mindfulness^c MI^c
Opioids	TAPS, DAST-10	BuprenorphineMethadoneER Naltrexone	 CBT^c NA Mindfulness-oriented recovery enhancement
Stimulants	NM ASSIST, TAPS, DAST-10	For methamphetamine: • Mirtazapine ^b • Bupropion ^b	 CBT^c Contingency management

^a SBIRT can be used to screen for all substances: bit.lySBIRT_screen; ^boff-label use; ^cCBT, Mindfulness and MI target both use disorder and depression symptoms

Urine drug screening can help assess whether or not a substance has been used but do not diagnose substance use disorders.





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

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







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