Opioids and Chronic Pain

A GUIDE FOR PRIMARY CARE PROVIDERS









Contents



Prescribing opioids for chronic pain

Managing chronic non-cancer pain	3
Non-pharmacologic treatment of chronic pain	4
Non-opioid pharmacologic treatment of chronic pain	5
Considering opioids for pain management	6
Opioid dose considerations	7
Managing patients on opioids	8
Preparing to reduce opioid dose	9
Shared decision-making for opioid therapy	10
Mechanics of a taper	11
Example tapers for opioids	12



Opioid stewardship

Pain and function assessments	14
Risk factor assessment	15
Urine drug screening (UDS)	16
Interpreting UDS	17
Informed consent and treatment agreements	18
Controlled substance monitoring	19
Overdose prevention	20
Naloxone is effective as overdose prevention	21
Indications for naloxone prescribing	22
Naloxone formulations	23



Opioid use disorder management

Recognizing opioid use disorder (OUD)	25
Managing OUD	26
Buprenorphine overview and safety profile	27
Buprenorphine is an effective medication to treat OUD in primary care	28
Obtaining the DATA 2000 waiver to prescribe buprenorphine for OUD	29
Planning for buprenorphine	30
Starting buprenorphine	31
Continuing buprenorphine	32
Substance use disorder (SUD) therapies	33
Additional medical care for patients who use drugs	34
Deferences	75

Prescribing opioids for chronic pain





3

Managing chronic non-cancer pain

Integrative therapies Manual medicine

- Chiropractic, acupuncture
- Herbs, supplements, anti-inflammatory eating
- Yoga, Tai Chi, mindful movement
- Mind-body therapies

Behavioral therapies

- Depression/anxiety group
- Health/pain group
- Social engagement plan
- Cognitive Behavioral Therapy (CBT)
- Acceptance and Commitment Therapy (ACT)

Movementbased therapies

- Physical/occupational therapy
- Supervised/graded physical activity

Medication

- NSAIDs/Acetaminophen
- Anticonvulsants
- Antidepressants
- Topical (lidocaine, capsaicin)
- Immune modulators
- Muscle relaxants
- Cannabinoids
- Lowest effective opioid dose

Procedures

- Ice/heat
- Injections (joint, trigger point, epidural)
- Transcutaneous electrical nerve stimulation (TENS)
- Referrals (orthopedics, neurosurgery, procedural pain clinic)

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 CURES every 4 months
- PRESCRIBE NALOXONE: at least every two years

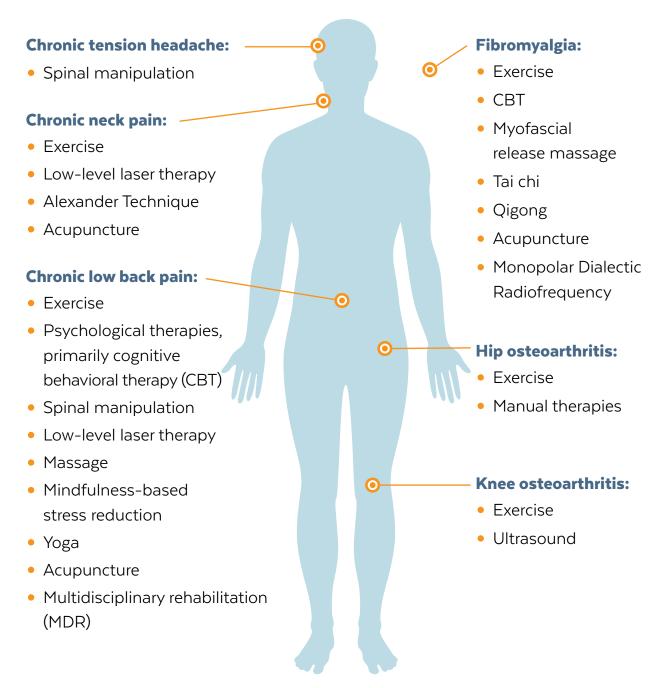
If managing opioid use disorder, options include:

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



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





5

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.

The Agency for Healthcare Research and Quality (AHRQ) evaluated the impact of non-opioid medications on chronic pain measures from 184 randomized controlled trials.

AHRQ EVIDENCE FOR NON-OPIOID PHARMACOLOGIC TREATMENTS FOR CHRONIC PAIN²

Condition	Improvement				
Condition	Pain	Function	Quality of life		
Neuropathic	SHORT-TERM: Duloxetine	SHORT TERM:	SHORT TERM:		
pain	INTERMEDIATE TERM: Duloxetine, Pregabalin, Gabapentin, Oxcarbazepine	Duloxetine	Duloxetine		
Fibromyalgia	SHORT TERM: Duloxetine	SHORT TERM:	SHORT TERM:		
	INTERMEDIATE TERM:	Duloxetine, Pregabalin, Gabapentin	Duloxetine		
	Duloxetine, Pregabalin, Gabapentin, Memantine	INTERMEDIATE TERM: Memantine	Duloxetine, Memantine		
Lower back pain	SHORT TERM : Duloxetine, Amitriptyline	_	_		
Osteoarthritis	SHORT TERM: Duloxetine, NSAIDs, Diclofenac	SHORT TERM: Duloxetine, NSAIDs, Diclofenac	SHORT TERM: Duloxetine		
Inflammatory SHORT OR LONG TERM: Arthritis NSAIDs		SHORT OR INTERMEDIATE TERM: NSAIDs	_		

Pain scores were abstracted from Visual Analog Scale or Numerical Rating Scale; improvement defined as greater than or equal to 30% improvement. Function and quality of life outcomes abstracted data from validated scales including WOMAC function subscale, EuroQoL-5 Dimensions, and Short Form-36. Short term = 3-6 mo; Intermediate term = 6-12 mo; Long term ≥ 12 mo.

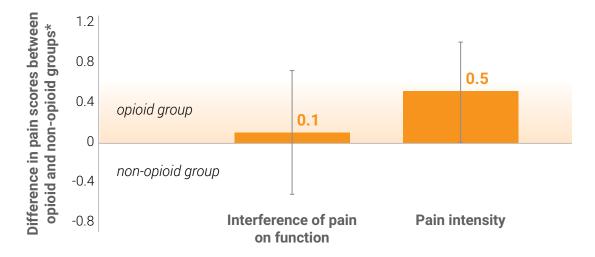


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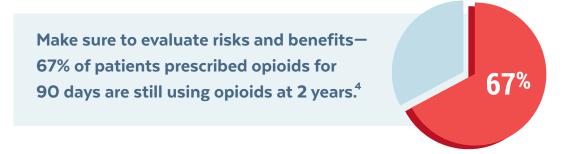
Considering opioids for pain management

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.³



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



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.

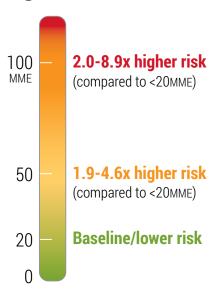


Opioid dose considerations

CALCULATING MORPHINE MILLIGRAM EQUIVALENTS (MME)

Opioid (doses in mg/day except where noted)	Conversion factor
Codeine	0.15
Morphine	1
Hydrocodone	1
Oxycodone	1.5
Fentanyl transdermal (in mcg/hr)	2.4
Oxymorphone	3
Hydromorphone	4
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 overdose⁵



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.



CDC recommends

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



Exercise caution:

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



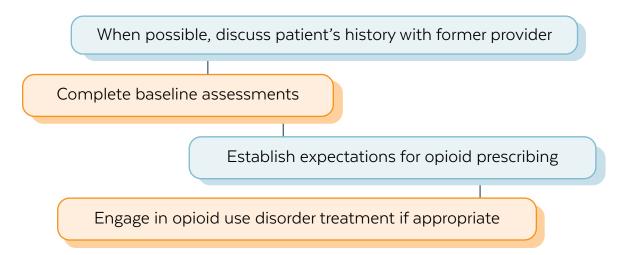
Avoid if possible:

- Dose ≥ 90 MME
- Opioid prescription > 3 months



Managing patients on opioids

INHERITING PATIENTS ALREADY ON OPIOID THERAPY CAN BE COMPLEX

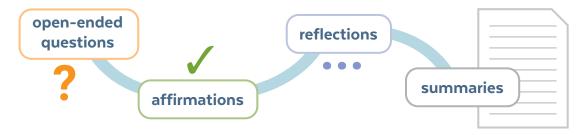


PATIENT ENGAGEMENT

- Recognize patient (e.g. psychosocial stressors), provider (e.g. time pressure, burnout), and environmental factors (e.g. regulatory changes) that lead to challenging conversations.
- Stigma can have a negative impact on the patient-provider relationship and a patient's mental health.⁶ Use patient-first language.

Instead of these terms:	Use these:
addict	person with a substance use disorder
dirty urine	unexpected results
abuse	problematic use

• Use motivational interviewing techniques



For more information, go to: motivationalinterviewing.org

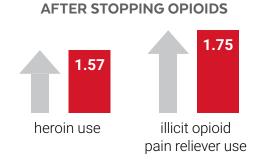


Preparing to reduce opioid dose

Tapering opioids may improve pain, based on a systematic review of 20 studies demonstrating improved or similar pain after a successful taper.⁷

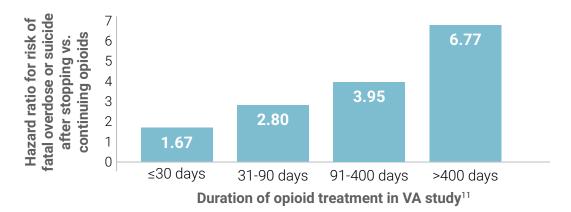
HOWEVER, THERE ARE RISKS TO REDUCING OPIOID THERAPY:

- Complex persistent dependence:
 Patients living with chronic pain may experience neuroplastic effects from long-term opioid use, which may cause increased pain, decreased function, and psychological distress.⁸
- Increased illicit substance use: Stopping prescribed opioids increased the chance of more frequent heroin and illicit opioid pain reliever use.⁹



Adjusted odds ratio of increased use⁹ baseline odds ratios 1.0

- 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.¹⁰
- **Mortality**: In a study of 1,394,102 patients in the VA, patients were at greater risk of fatal overdose or suicide after stopping opioid treatment, with increasing risk the longer patients had been treated before stopping. Other studies have shown similar findings. 12



FDA and CDC recommend opioid prescribing be individualized for each patient to modulate the risks of changing dose. Go to: bit.ly/CDC_opioidguide and bit.ly/FDA_opioidguide



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
- Other risky medications (e.g. benzodiazepines)
 Active opioid use disorder
- Adverse effects (constipation, overdose, etc.)
- Worsening comorbidities

Develop a plan with the patient.

SHARED DECISION-MAKING PROCESS

Taper opioids

Patient perspective "I'm afraid my pain will get worse."







Provider perspective "I want to keep this patient safe."

Continue opioids

Communication techniques:

- Validate patient's pain and experience
- Recognize power dynamics
- Empower patient to participate in treatment planning

Don't judge

Transition to meds for OUD

- 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



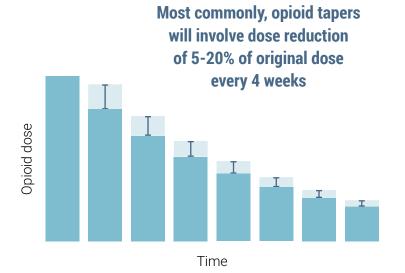
Mechanics of a taper

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



Successful tapers look different for each patient and often include pauses, stops, and dynamic goals. Any reduction may be considered a success.



12

Example tapers for opioids¹³

Slowest taper	over v	vears)
Olonest tapel		Cui 3/

Reduce by 2% to 10% every 4 to 8 weeks with

pauses in taper as needed.

Consider for patients taking high doses of long-acting opioids for many years.

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

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

Rapid 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

OPIOIDS AND CHRONIC PAIN > Table of Contents

^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

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	oain									Pain as bad as you can imagine
		nber be njoyme			s how,	during	g the p	ast we	ek, pa	in has interfered
0	1	2	3	4	5	6	7	8	9	10
	s not fere									Completely interferes
		nber be eneral 2			s how,	during 6	g the p	ast we	ек, ра 9	in has interfered

CAUTION

Among racial and ethnic minority groups, women, and patients who are elderly or have cognitive impairment, pain can be underrecognized and inadequately treated. 14,15

The PEG is as valid and reliable as the longer Brief Pain Inventory scale and is sensitive to changes in pain.¹⁶



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**:

Consider closer monitoring when initiating opioids for patients with these characteristics¹⁷

History of Opioid Use Disorder (OUD)

Certain mental health diagnoses, such as personality disorders Concomitant prescription of some psychiatric medications

History of Substance Use Disorder (SUD)

15

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 ¹⁸
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 UDS at first opioid prescription and at least 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:

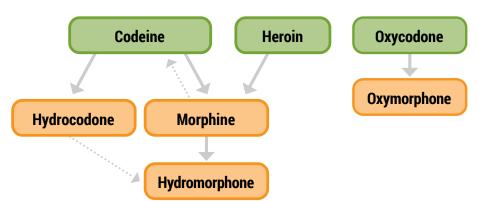
- Point-of-care
- Oualitative
- Show both metabolites and parent drug

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 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 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.

The use of opioid pain medication is	only one part of treatment for chronic pain
The goals for using this medici	ne are:
To improve my ability to work or fu To help my problem as much as po	
Provider's Responsibilities	Patient Responsibilities
Refills	Privacy
Prescriptions from Other Provi	ders
Stopping the Medication	
have been told about the pos nedicine.	sible risks and benefits of this
	Date
neurene.	

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

California's controlled substance monitoring program (CURES) is an online system used by prescribers to review prescriptions for controlled substances.

All California licensed prescribers and pharmacists who are authorized to prescribe, order, administer, or dispense scheduled drugs must register for CURES, check it when starting controlled substances and re-check it every 4 months.

CURES CONTACT INFO:

Email: CURES@doj.ca.gov Phone: (916) 210-3187

To register: oag.ca.gov/cures

FEATURES OF CURES

- Save search list: Save patient searches so they are easily available next time you log in.
- **Peer-to-peer communication**: Send communications securely to providers about mutual patients.
- Alerts/messaging: Receive daily alerts with information on patients who reach prescribing thresholds.



CURES alerts prescribers to patients

with multiple prescribers, high-dose opioid prescriptions, concomitant opioids and benzodiazepines, and daily opioids over 90 days.

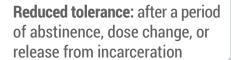


Overdose prevention

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.¹⁹

OTHER FACTORS THAT INCREASE RISK OF OVERDOSE



Genetic predisposition

Concomitant use of substances: benzodiazepines, alcohol



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.²⁰



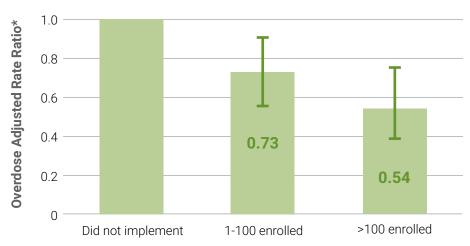
The word "overdose" may have negative connotations and prescription opioid users may not relate to it. Instead of using the word "overdose", consider language like "accidental overdose" or "bad reaction", or talk about "opioid safety".



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 MASSACHUSETTS²¹



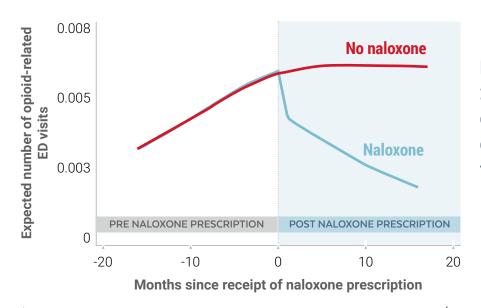
Training enrollments per 100,000 population

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 22**



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



- Prescribing naloxone for patients on prescribed opioids with:
 - Opioid use ≥50 MMEs/day
 - Benzodiazepine use
 - History of substance use disorder
 - History of opioid overdose
 - Other factors that increase overdose risk, including comorbidities or concomitant medications



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 prescriber can prescribe naloxone.** California law provides additional protections to encourage naloxone prescribing and distribution.

NALOXONE CO-PRESCRIBING (AB2760)

• Prescribers in California are required to offer a prescription for naloxone to a patient who is receiving 90 MME or higher per day, receiving concurrent benzodiazepine, or at risk of overdose.

PHARMACIST PROVISION OF NALOXONE (CA AB1535)

• Pharmacists are allowed to directly prescribe and dispense naloxone to patients at risk of experiencing or witnessing an opioid overdose.

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

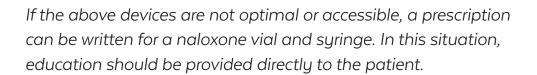
INTRANASAL

Naloxone 4mg #1 two pack,
 use PRN for suspected opioid overdose



AUTO-INJECTOR

 Naloxone auto-injector 2mg #1 two pack, use PRN for suspected opioid overdose





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:	MediCal:	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 SUBSTANCE USE DISORDER (SUD)*



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 (ONLY IF NOT PRESCRIBED):

- 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

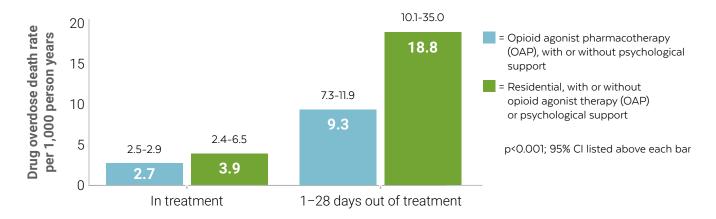
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^{*}Used to diagnose OUD as well as other SUDs.

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 KINGDOM²³



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.

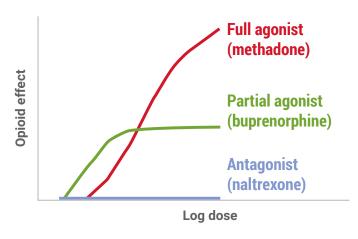
BEHAVIORAL/PSYCHOLOGICAL INTERVENTIONS

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

If not personally providing OUD treatment, a warm hand-off to other 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.²⁴
- 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 PAIN²⁵

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



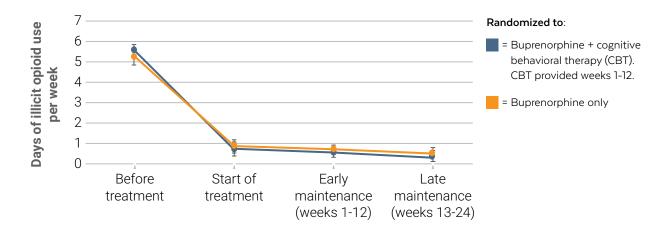
Range of pain scores = 0-10



Buprenorphine is an effective medication to treat OUD in primary care

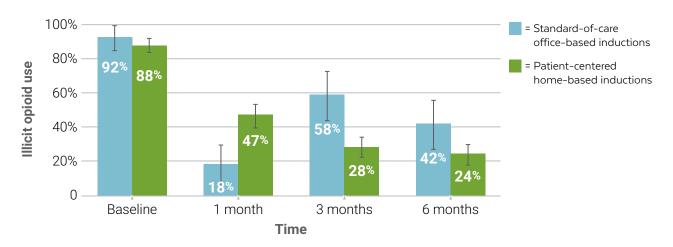
ROUTINE MEDICATION MANAGEMENT CAN BE AS EFFECTIVE AS COMBINING BUPRENORPHINE WITH COUNSELING

While counseling should be sought if available, lack of access should not be a barrier to treatment.²⁶



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.²⁷





Obtaining the DATA 2000 waiver to prescribe buprenorphine for OUD

- The DATA 2000 waiver or "X" number is a separate DEA registration number that must be used when buprenorphine is prescribed for OUD. Prescribing buprenorphine ONLY for pain does NOT require an "X" number, but may require prior authorization.
- After getting an "X" number, you can prescribe:
 - ≤30 patients in year one
 - ≤100 patients in subsequent years upon notifying SAMHSA
 - **OR** in year one if you meet the criteria in the SUPPORT Act (i.e. work in qualified practice setting or boarded in addiction medicine)
- MDs and DOs can apply to treat ≤275 patients after treating 100 patients for a year.
- **1** Complete free training: bit.ly/X-waiver
 - If you are a licensed MD or DO:
 8-hour training (or have substance use disorder treatment experience)
- If you are a licensed NP, PA, CNM, CNS or CNRA:
 24-hour training
- Complete and submit online buprenorphine waiver notification form.
- **3** Receive second DEA registration card with your "X" number.

For more information, contact SAMHSA:

866-BUP-CSAT (866-287-2728) or infobuprenorphine@samhsa.hhs.gov



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.

BUPRENORPHINE/NALOXONE (CO-FORMULATED)





Sublingual tablets



Sublingual film

MONOFORMULATED BUPRENORPHINE







Subcutaneous injection



Transdermal patch

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

30

Alcohol



Starting buprenorphine

Have patient sign a consent form for treatment

Make sure patient is in withdrawal

12-48 hours after last opioid dose, **COWS score > 8**, and at least one objective sign

Decide on induction location and timing

Home, clinic or hospital

HOME OR CLINIC

Usual first dose: 4mg

DAY 1

If still in withdrawal, repeat dose every 1-2 hours until stable.

Max dose Day 1 = 12mg

DAY 2

Start total Day 1 dose (or less if sedated).

Max dose Day 2 = 16mg

DAY 1

HOSPITAL

Usual first dose, either: 4mg or 8mg

Assess every hour. If still in withdrawal but symptoms improving, repeat dose until stable.

Max dose day 1 = 16mg

DAY 2

Start total Day 1 dose (or less if sedated).

Max dose Day 2 = 32mg

Subsequent days

Follow similar protocol. Usual final dose = 8-24mg

✓ 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

31



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.



32

FOR PAIN

- Any formulation can be used, including the transdermal patch.
- Prior authorization may be required.
- No "X" number or waiver required.
- Medication is generally administered 2-3 times daily.
- **Acute pain**: May require a temporary dose increase.
- Peri-operative pain: Usually continue buprenorphine (Project Shout has a helpful template: bit.ly/PainControl)



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 ^{28,29}
Nicotine	AAR • Ask • Assist • Refer	Nicotine replacementVareniclineBupropion	 CBT^c Smoking cessation
Alcohol	CAGE(-AID), AUDIT	 Naltrexone IR or ER Acamprosate Disulfiram Gabapentinb Topiramateb 	 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

References

- Skelly AC, Chou R, Dettori JR, Turner JA, Friedly JL, Rundell SD, Fu R, Brodt ED, Wasson N, Winter C, Ferguson AJR. Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review. Comparative Effectiveness Review No. 209. AHRQ Publication No 18-EHC013-EF. Rockville, MD: Agency for Healthcare Research and Quality; June 2018. doi.org/10.23970/AHRQEPCCER209
- McDonagh MS, Selph SS, Buckley DI, Holmes RS, Mauer K, Ramirez S, Hsu FC, Dana T, Fu R, Chou R. Nonopioid Pharmacologic Treatments for Chronic Pain. Comparative Effectiveness Review No. 228. (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. 290-2015-00009-I.) AHRQ Publication No. 20-EHC010. Rockville, MD: Agency for Healthcare Research and Quality; April 2020. doi.org/10.23970/AHRQEPCCER228
- Krebs EE, Gravely A, Nugent S, et al. Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain: The SPACE Randomized Clinical Trial. JAMA. 2018;319(9):872-882. doi.org/10.1001/jama.2018.0899
- Martin BC, Fan MY, Edlund MJ, Devries A, Braden JB, Sullivan MD. Long-term chronic opioid therapy discontinuation rates from the TROUP study. J Gen Intern Med. 2011;26(12):1450–1457. doi.org/10.1007/s11606-011-1771-0
- Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016. JAMA. 2016;315(15):1624-1645. doi.org/10.1001/jama.2016.1464
- Holloway I, Sofaer-Bennett B, Walker J. The stigmatisation of people with chronic back pain. *Disabil Rehabil*. 2007;29(18):1456-1464. doi.org/10.1080/09638280601107260
- David A Fishbain, MD, FAPA, Aditya Pulikal, MD, JD, Does Opioid Tapering in Chronic Pain Patients Result in Improved Pain or Same Pain vs Increased Pain at Taper Completion? A Structured Evidence-Based Systematic Review, Pain Medicine, Volume 20, Issue 11, November 2019, Pages 2179–2197. doi.org/10.1093/pm/pny231
- 8. Ajay Manhapra MD, Albert J. Arias MD & Jane C. Ballantyne MD. The conundrum of opioid tapering in long-term opioid therapy for chronic pain: A commentary, *Substance Abuse*. 2018;39(2):152-161. doi.org/10.1080/08897077.2017.1381663
- Coffin PO, Rowe C, Oman N, Sinchek K, Santos G-M, Faul M, Bagnulo R, Mohamed D, Vittinghoff E. Illicit Opioid Use following Changes in Opioids Prescribed for Chronic Non-Malignant Pain. Plos One. doi.org/10.1371/journal.pone.0232538
- Tami ML, Parish W. Opioid medication discontinuation and risk of adverse opioid-related health care events. J Sub Ab Treatment. 2019;103:58-63. doi.org/10.1016/j.jsat.2019.05.001
- Oliva EM, Bowe T, Manhapra A, Kertesz S, Hah JM, Henderson P et al. Associations between stopping prescriptions for opioids, length of opioid treatment, and overdose or suicide deaths in US veterans: observational evaluation. BMJ. 2020; 368:m283. doi.org/10.1136/ bmi.m283
- James JR, Scott JM, Klein JW, et al. Mortality After Discontinuation of Primary Care-Based Chronic Opioid Therapy for Pain: a Retrospective Cohort Study. J Gen Intern Med. 2019;34(12): 2749-2755. doi.org/10.1007/s11606-019-05301-2
- 13. Opioid Taper Decision Tool: www.pbm.va.gov/AcademicDetailing Service/Documents/Pain_Opioid_Taper_Tool_IB_10_939_P96820.pdf
- Green, C. et al. The Unequal Burden of Pain: Confronting Racial and Ethnic Disparities in Pain. Pain Medicine, Volume 4, Issue 3, September 2003, Pages 277–294. doi.org/10.1046/j.1526-4637.2003.03034.x

- Chen, E. et al. Gender disparity in analgesic treatment of emergency department patients with acute abdominal pain. Academic Emergency Medicine, Vol 15, No 5, May 2008, pg 414-418. doi.org/10.1111/j.1553-2712.2008.00100.x
- Krebs EE, Lorenz KA, Bair MJ, et al. Development and initial validation of the PEG, a three-item scale assessing pain intensity and interference. *J Gen Intern Med*. 2009;24(6):733–738. doi.org/10.1007/s11606-009-0981-1
- Klimas J, Gorfinkel L, Fairbairn N, et al. Strategies to Identify Patient Risks of Prescription Opioid Addiction When Initiating Opioids for Pain: A Systematic Review. JAMA Netw Open. 2019;2(5):e193365.
 Published 2019 May 3. doi.org/10.1001/jamanetworkopen.2019.3365
- Starrels JL, Becker WC, Alford DP, et al. Systematic Review: Treatment Agreements and Urine Drug Testing to Reduce Opioid Misuse in Patients With Chronic Pain. Ann Intern Med. 2010;152: 712-720. doi.org/10.7326/0003-4819-152-11-201006010-00004
- Darke S, Williamson A, Ross J, Teesson M. Non-fatal heroin overdose, treatment exposure and client characteristics: findings from the Australian treatment outcome study (ATOS). *Drug Alcohol Rev.* 2005 Sept;24(4):425-32. doi.org/10.1080/09595230500286005
- 20. Behar E, Rowe C, Santos GM, Murphy S, Coffin PO. Primary Care Patient Experience with Naloxone Prescription. Ann Fam Med. 2016;14(5):431-436. doi.org/10.1370/afm.1972
- 21. Walley AY, Xuan Z, Hackman HH, Quinn E, Doe-Simkins M, Sorensen-Alawad A et al. Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. BMJ. 2013; 346: f174. doi.org/10.1136/bmj.f174
- 22. Coffin PO, Behar E, Rowe C, et al. Nonrandomized Intervention Study of Naloxone Coprescription for Primary Care Patients Receiving Long-Term Opioid Therapy for Pain. Ann Intern Med. 2016;165(4):245–252. doi.org/10.7326/M15-2771
- Pierce M, Bird SM, Hickman M, et al. Impact of treatment for opioid dependence on fatal drug-related poisoning: a national cohort study in England. Addiction. 2016;111(2):298–308. doi.org/10.1111/add.13193
- 24. Clinical Guidance for Treating Pregnant and Parenting Women With Opioid Use Disorder and Their Infants: store.samhsa.gov/sites/default/files/d7/priv/sma18-5054.pdf
- Danielle Daitch, MD, Jonathan Daitch, MD, Daniel Novinson, MPH, Michael Frey, MD, Carol Mitnick, ARNP, Joseph Pergolizzi, Jr, MD, Conversion from High-Dose Full-Opioid Agonists to Sublingual Buprenorphine Reduces Pain Scores and Improves Quality of Life for Chronic Pain Patients. *Pain Medicine*. 2014;15(12):2087-2094. doi.org/10.1111/pme.12520
- 26. Fiellin DA, Barry DT, Sullivan LE, et al. A randomized trial of cognitive behavioral therapy in primary care-based buprenorphine. Am J Med. 2013;126(1):74.e11-74.e7.4E17. doi.org/10.1016/j.amjmed.2012.07.005
- Cunningham CO, Giovanniello A, Li X, Kunins HV, Roose RJ, Sohler NL. A comparison of buprenorphine induction strategies: patientcentered home-based inductions versus standard-of-care office-based inductions. J Subst Abuse Treat. 2011;40(4):349–356. doi.org/10.1016/j.jsat.2010.12.002
- 28. Barrett K, Chang YP. Behavioral Interventions Targeting Chronic Pain, Depression, and Substance Use Disorder in Primary Care. J Nurs Scholarsh. 2016;48(4):345-353. doi.org/10.1111/jnu.12213
- 29. McHugh RK, Hearon BA, Otto MW. Cognitive behavioral therapy for substance use disorders. *Psychiatr Clin North Am.* 2010;33(3):511-525. doi.org/10.1016/j.psc.2010.04.012

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