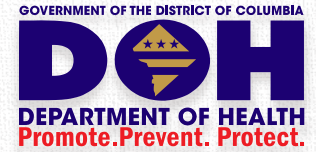


# Getting Patients Off of Opioids

# Collaborators

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Milken Institute School  
of Public Health

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THE GEORGE WASHINGTON UNIVERSITY

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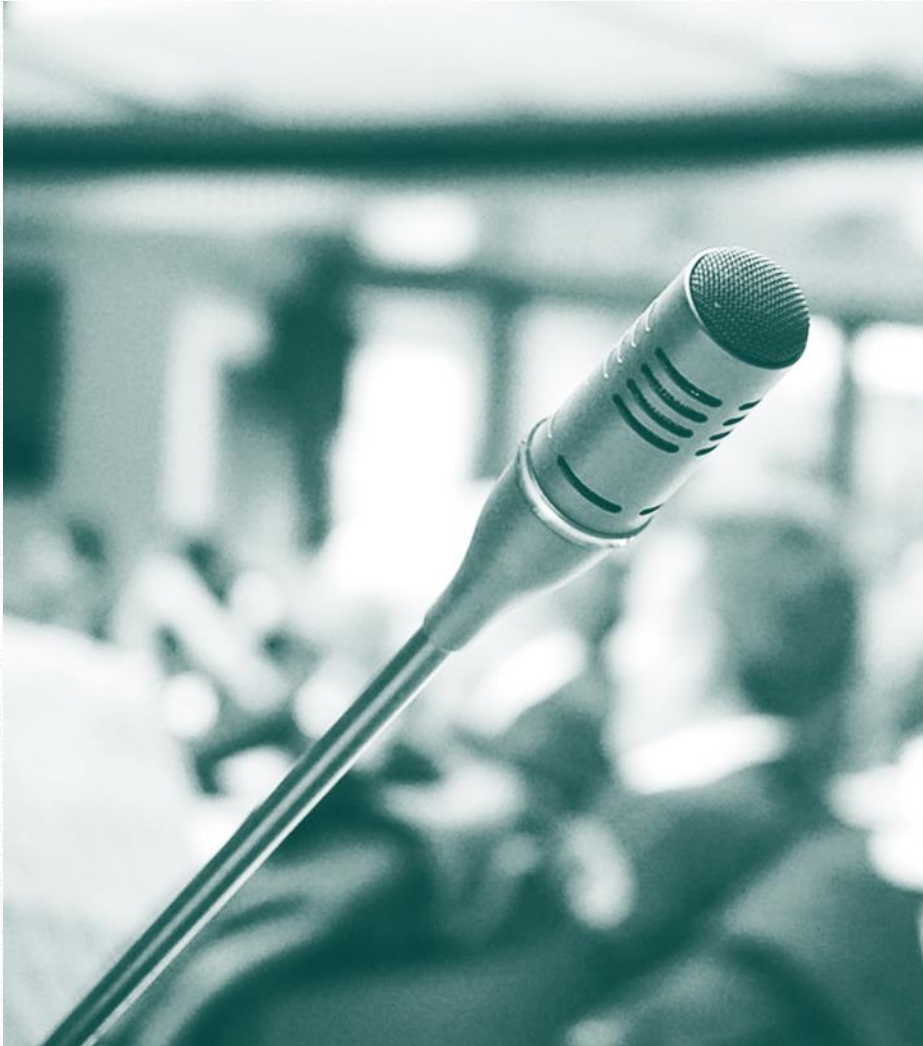


GEORGETOWN UNIVERSITY



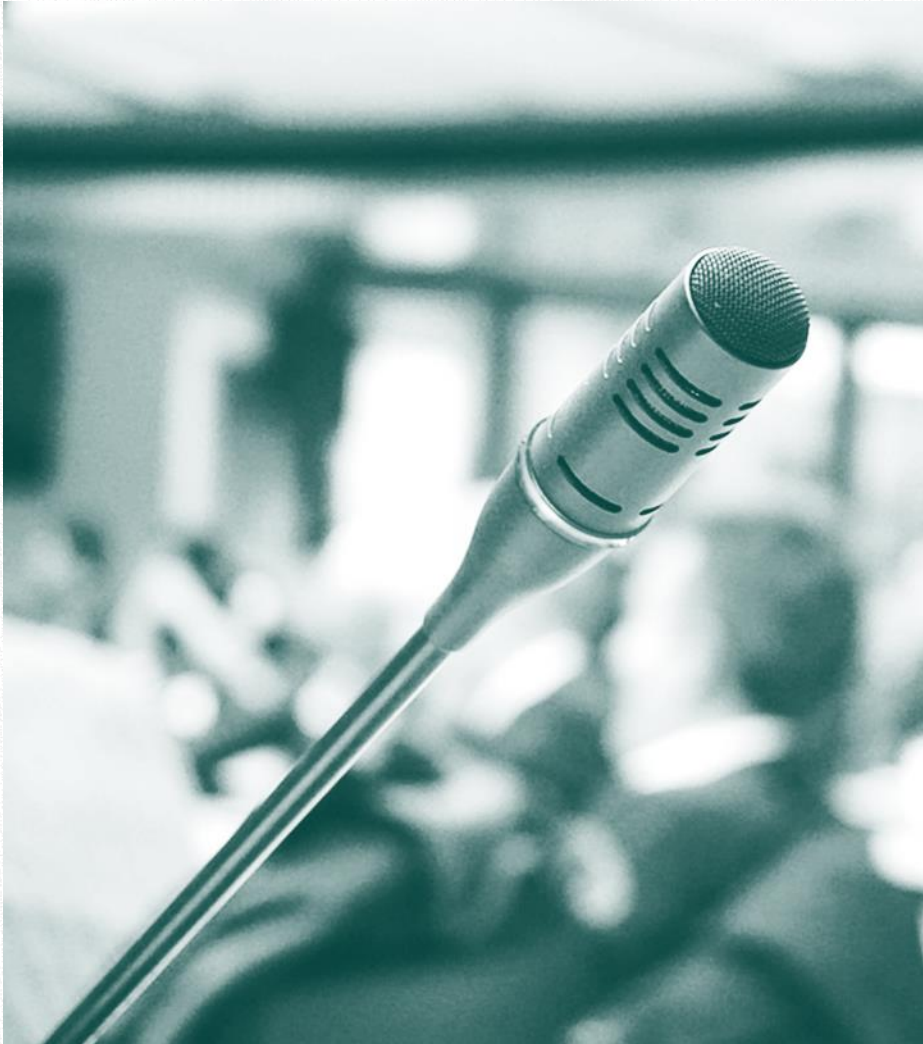
More resources available at the DC Center for Rational Prescribing  
[doh.dc.gov/dcrx](https://doh.dc.gov/dcrx)

# Presented by



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# Important Information

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 The slides will progress at their own pace.

 Do not attempt to speed up the video.

 The Post Test will only unlock after viewing the entire video.

 The video can be paused and resumed later.

# Learning Objectives

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Differentiate

Between tolerance, dependence, and addiction.

Integrate

Strategies for tapering patients off of opioids safely.

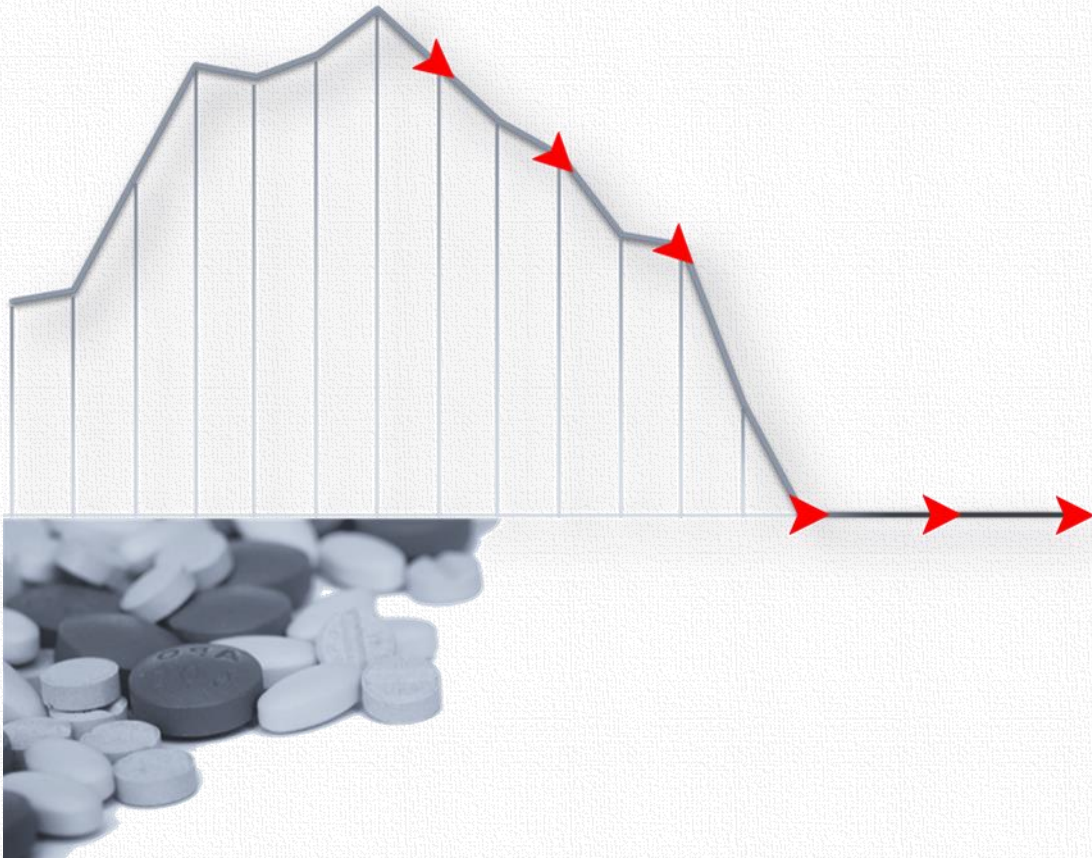
List

Three symptoms of opioid withdrawal.

Compare  
and Contrast

The use of buprenorphine and methadone for weaning patients off of opioids.

# Tolerance



When a patient begins to  
lose the beneficial effects  
of a drug.

# Dependence



If a patient tries to  
discontinue a  
medication, the  
patient goes into  
withdrawal.

# Addiction



1. Out of control use
2. Compulsive use
3. Continued use despite consequences

# CDC Guidelines: Assessing Risk

## Determining When to Initiate or Continue Opioids for Chronic Pain

1. Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain. Clinicians should consider opioid therapy only if expected benefits for both pain and function are anticipated to outweigh risks to the patient. If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy, as appropriate.
2. Before starting opioid therapy for chronic pain, clinicians should establish treatment goals with all patients, including realistic goals for pain and function, and should consider how therapy will be discontinued if benefits do not outweigh risks. Clinicians should continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety.
3. Before starting and periodically during opioid therapy, clinicians should discuss with patients known risks and realistic benefits of opioid therapy and patient and clinician responsibilities for managing therapy.

## Opioid Selection, Dosage, Duration, Follow-up, and Discontinuation

4. When starting opioid therapy for chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids.
5. When opioids are started, clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when increasing dosage to 50 morphine milligram equivalents (MME) or more per day, and should avoid increasing dosage to 90 MME or more per day or carefully justify a decision to titrate dosage to 90 MME or more per day.
6. Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than 7 days will rarely be needed.
7. Clinicians should evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose

## Assessing Risk and Addressing Harms of Opioid Use

8. Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms. Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages ( $\geq 50$  MME/d), or concurrent benzodiazepine use are present.
9. Clinicians should review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him or her at high risk for overdose. Clinicians should review PDMP data when starting opioid therapy for chronic pain and periodically during opioid therapy for chronic pain, ranging from every prescription to every 3 months.
10. When prescribing opioids for chronic pain, clinicians should use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.
11. Clinicians should avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible.
12. Clinicians should offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.

# Adverse Effects of Opioids

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- ☐ Constipation
- ☐ Depression
- ☐ Hyperalgesia
- ☐ Increased risk of myocardial infarction
- ☐ Memory Problems
- ☐ Opioid Withdrawal
- ☐ Loss of Libido/Sexual Function

# Hypoxia

A retrospective analysis of 98 patients found that opioids were potentially responsible for hypoxemia during



WAKEFULNESS

10%  
of patients

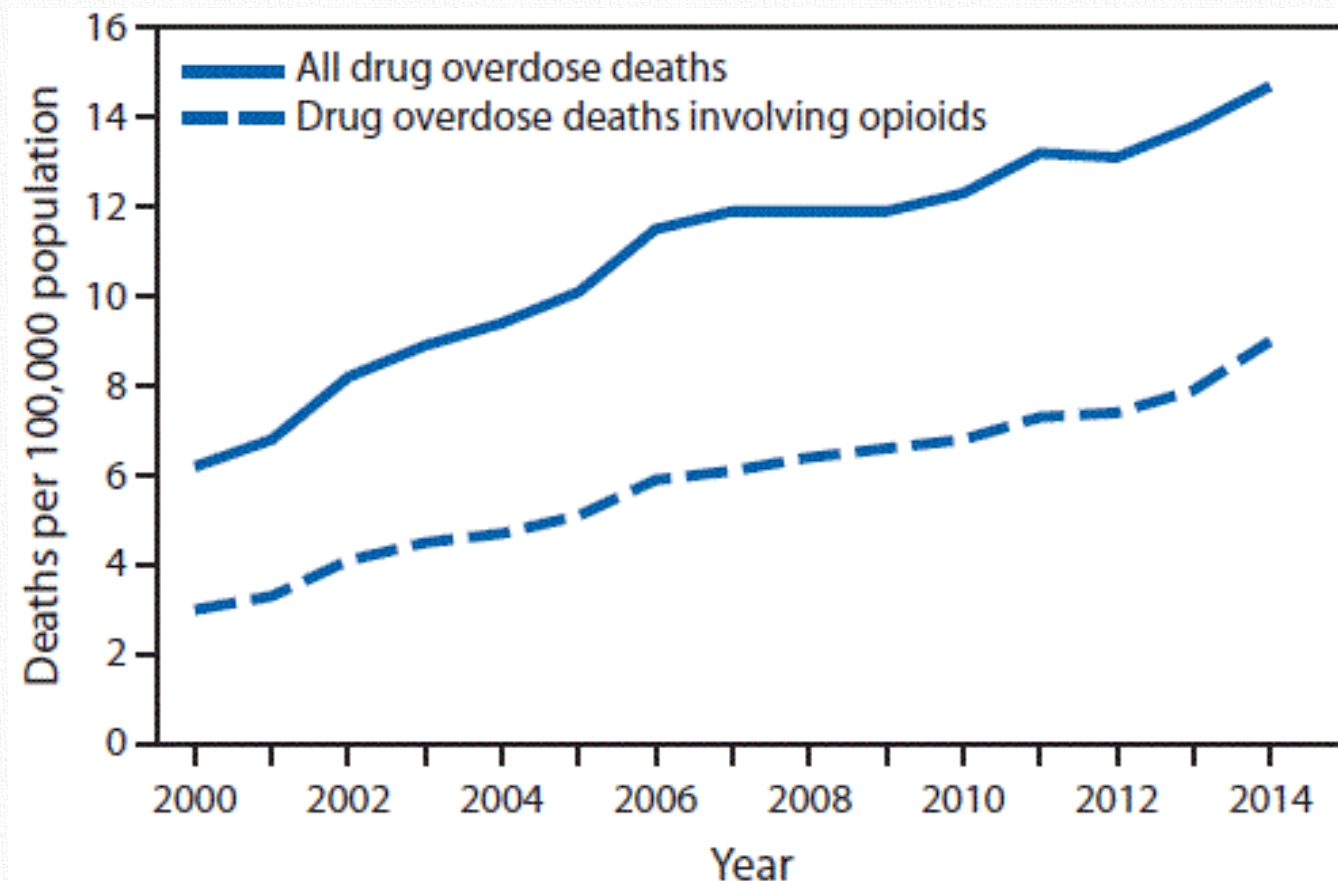


SLEEP

8%  
of patients

*(Mogri 2007)*

# Increases in Drug and Opioid Overdose Deaths United States, 2000–2014



At least  
**HALF**

of all opioid overdose  
deaths involve a  
**prescription opioid.**



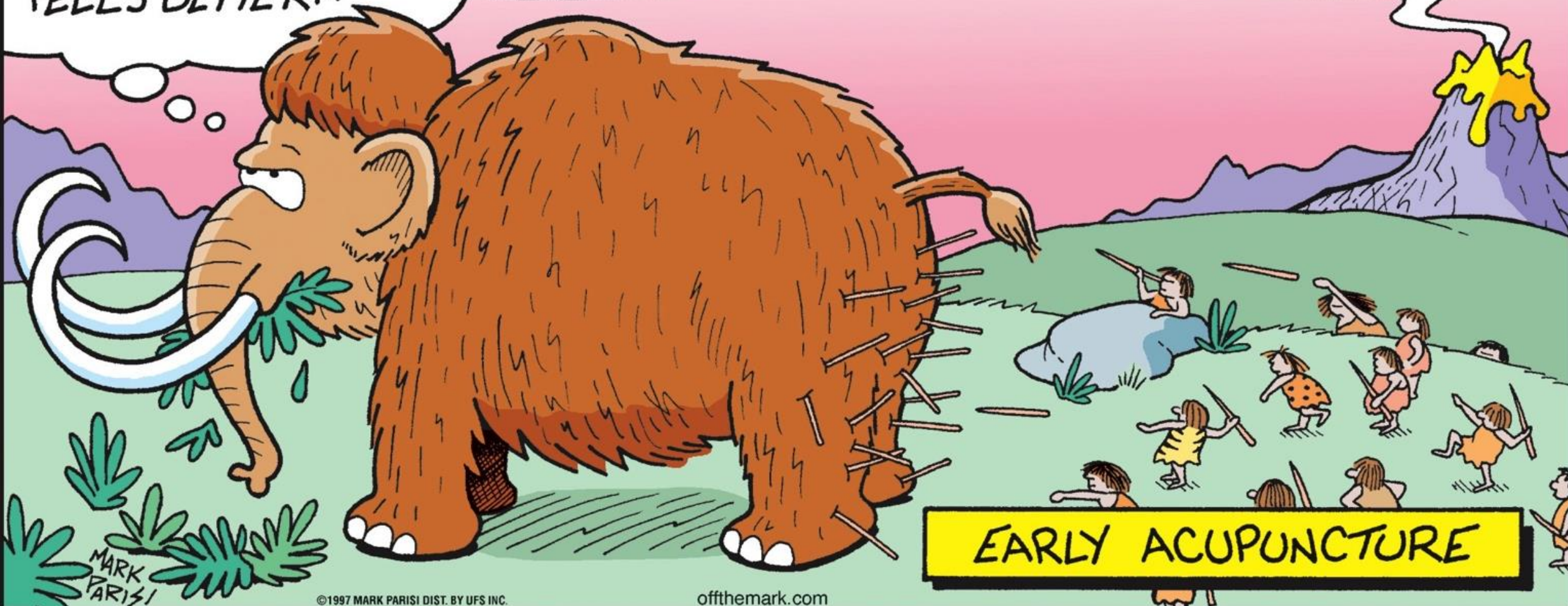
MMWR 2016, 64(50);1378-82.

# Narcan Kit



“We went down on your  
Percocet by 10 milligrams,  
how was that?”

THAT'S ODD... MY NECK SUDDENLY  
FEELS BETTER...



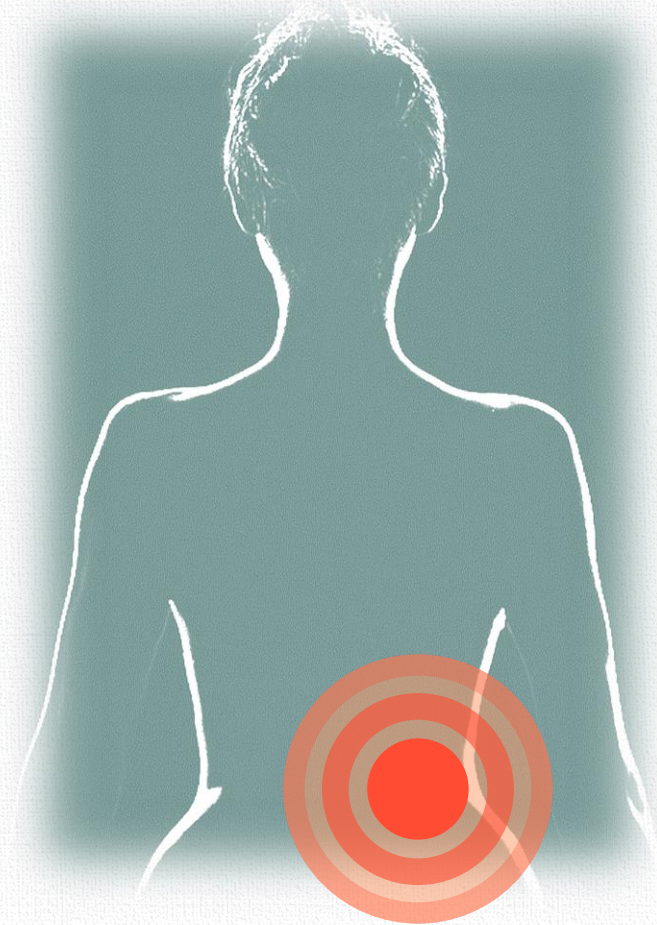
EARLY ACUPUNCTURE

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# Non-Opioid Alternatives for Acute Low Back Pain



## Effective

- ☐ Exercise
- ☐ NSAID
- ☐ Muscle relaxants
- ☐ Superficial heat

## Ineffective

- ☐ Acetaminophen
- ☐ Corticosteroids

# Non-Opioid Alternatives for Chronic Pain

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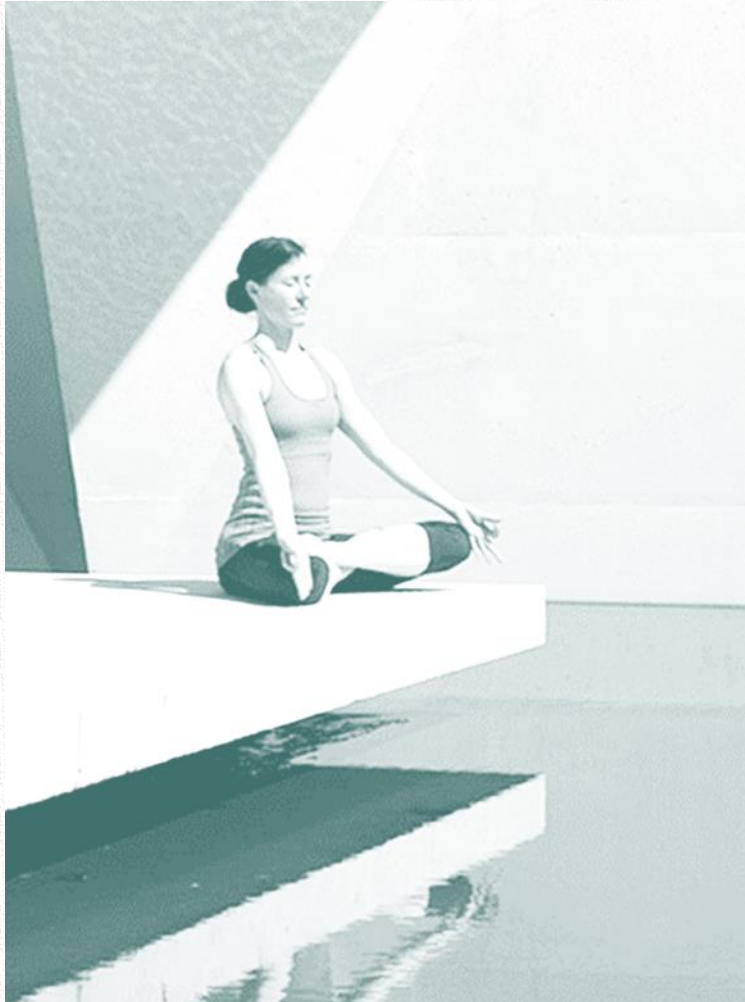
- ☐ NSAIDs
- ☐ Duloxetine, other anti-depressants
- ☐ Yoga
- ☐ Massage
- ☐ Exercise
- ☐ Acupuncture
- ☐ Tai chi
- ☐ Psychologic therapies
- ☐ Low-level laser therapy
- ☐ Spinal manipulation

# Exercise: Best evidence of efficacy



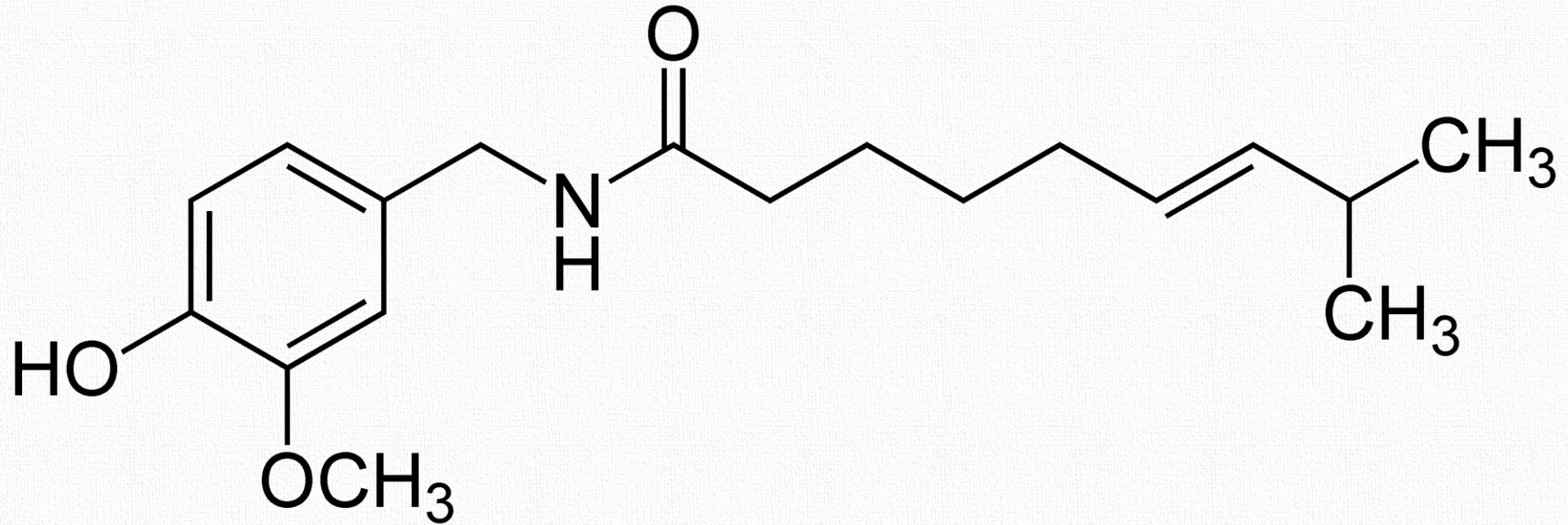
- ❑ In Cochrane systematic reviews, regular exercise (Fransen 2015) and aquatic exercise (Bartels 2016) benefit
  - ❑ Pain
  - ❑ Disability
  - ❑ QoL measures for osteoarthritis
- ❑ Exercise also benefits
  - ❑ Low back pain (Macedo 2016)
  - ❑ Fibromyalgia (Busch 2007)

# Yoga



- ❑ Pre-post treatment trials show that yoga appears to be an effective treatment for LBP
- ❑ Few trials with active controls exist (Chang 2016, Holtzman 2013)

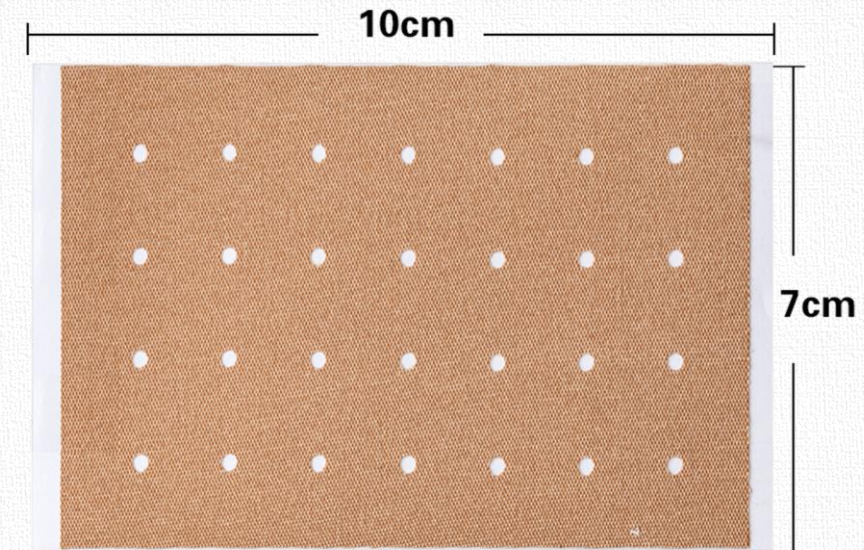
# Capsaicin



- ❑ Depletes Substance P
- ❑ Chronic administration desensitizes sensory neurons through a calcium channel blocking effect

# Capsaicin Patch

- ❑ A capsaicin dermal patch has been approved for treating post-herpetic neuralgia (30-60 minute application every 3 months) (McCormack 2010)
- ❑ Capsaicin selectively binds to a vanilloid receptor (transient receptor potential ion-TRPV1) common in pain-transmitting C fibers



# Capsaicin cream

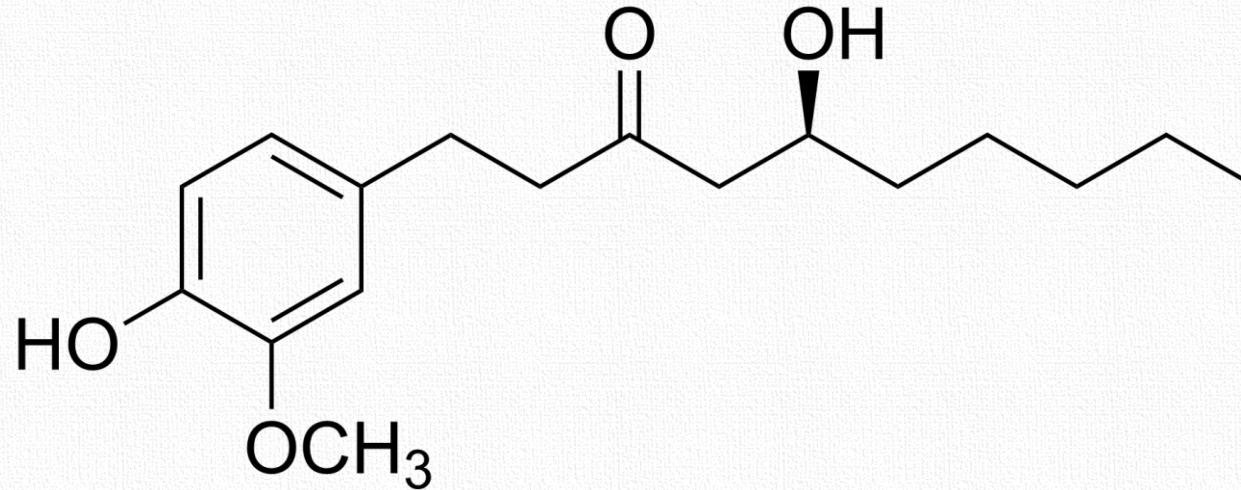


- ❑ Is sold OTC
- ❑ Usually 0.25% or 0.75% capsaicin
- ❑ Applied up to 4 times daily
- ❑ Wash hands after applying!
- ❑ Can cause burning, stinging, or itching, especially with initial use

# Topical High-Dose Capsaicin

- ❑ A Cochrane review of 6 placebo-controlled RCTs, at least 6 weeks long, of topical high-dose capsaicin for neuropathic pain found significant benefits in
  - ❑ All 4 studies (n=1272) of patients with postherpetic neuralgia
  - ❑ 2 studies (n=801) of patients with painful HIV-neuropathy
- ❑ All efficacy outcomes were significantly better than control (Derry et al 2013).

# Gingerols



- ❑ Gingerols are agonists of the capsaicin-activated vanilloid receptor VR1, which integrates chemical and thermal nociceptive stimuli.
- ❑ Activating VR1 is associated with analgesia.
- ❑ Gingerols are less potent than capsaicin (Dedov 2002).

# Ginger and Turmeric



- ❑ Trials of Zingiberaceae (ginger, turmeric, galangal) extracts have shown efficacy in osteoarthritis in 4 controlled studies.
- ❑ Several studies have found that
  - ❑ Zingiberaceae extracts are as effective as NSAIDs.
  - ❑ Turmeric extracts or curcumin may be more effective than ginger extracts. (Lakhan et al, 2015)

# COWS



## The COWS (Clinical Opiate Withdrawal Scale) includes

- ☐ Resting pulse rate
- ☐ Gooseflesh skin
- ☐ Bone or joint aches
- ☐ Tremor
- ☐ Anxiety / Irritability
- ☐ Runny nose or tearing
- ☐ Sweating
- ☐ Pupil size
- ☐ GI upset
- ☐ Yawning
- ☐ Restlessness

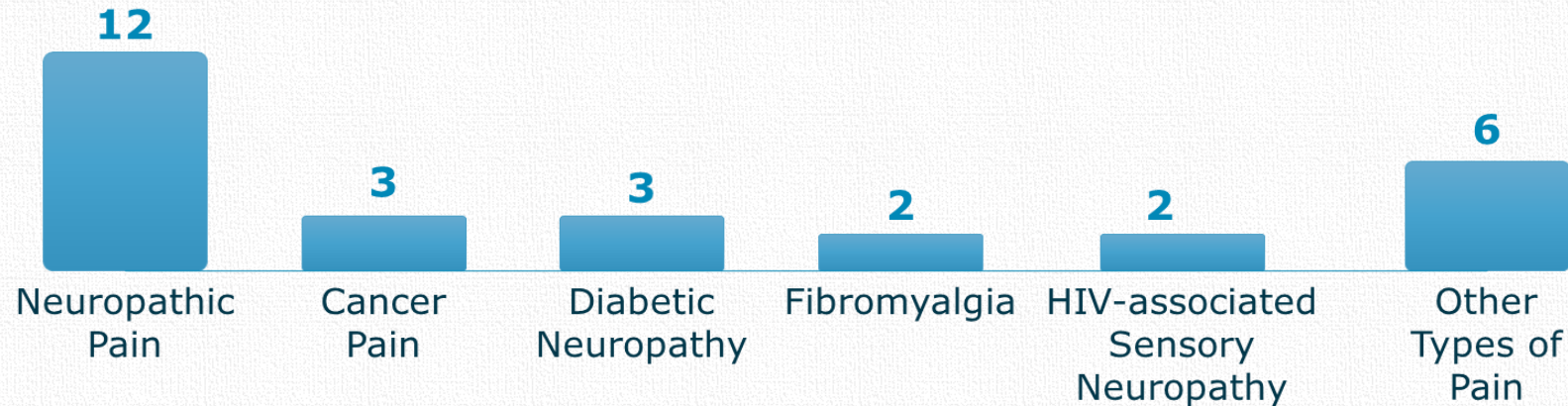
# Don't replace one addiction by another



Benzodiazepine  
withdrawal can be  
life-threatening.

# Chronic Pain

A systematic review identified 28 studies (27 placebo-controlled, 1 treatment-controlled) of cannabis with 2454 participants. Preparations tested included nabiximols, inhaled cannabis, THC, dronabinol for the follow conditions



**Studies generally showed improvements in pain measures with cannabis and cannabinoids.** (Whiting 2015)

# How do you prepare patients for tapering?



- ❑ Set expectations early and often!
- ❑ Go slowly.
- ❑ Give patients a sense of agency.
- ❑ Coach patients about potential withdrawal symptoms.



More resources available at the DC Center for Rational Prescribing  
[doh.dc.gov/dcrx](https://doh.dc.gov/dcrx)

# Other DCRx Modules



Medical Cannabis: An Introduction to the Biochemistry & Pharmacology



Medical Cannabis: Evidence on Efficacy



Medical Cannabis: Adverse Effects and Drug Interactions



Rational Prescribing in Older Adults



Drug Approval and Promotion in the United States



Generic Drugs: Myths and Facts

More resources available at the DC Center for Rational Prescribing

[doh.dc.gov/dcrx](https://doh.dc.gov/dcrx)