



# CDC Guideline for Prescribing Opioids for Chronic Pain

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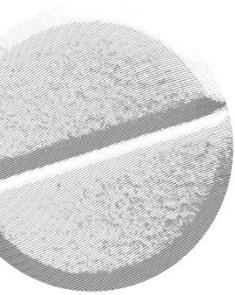
**Division of Unintentional Injury Prevention**

Prevention for States Awardee Meeting

May 4, 2016

# Chronic Pain and Prescription Opioids

- 11% of Americans experience daily (chronic) pain
- Opioids frequently prescribed for chronic pain
- Primary care providers commonly treat chronic, non-cancer pain
  - account for ~50% of opioid pain medications dispensed
  - report concern about opioids and insufficient training



The amount  
of opioids prescribed has  
**QUADRUPLED**  
from 1999-2014,



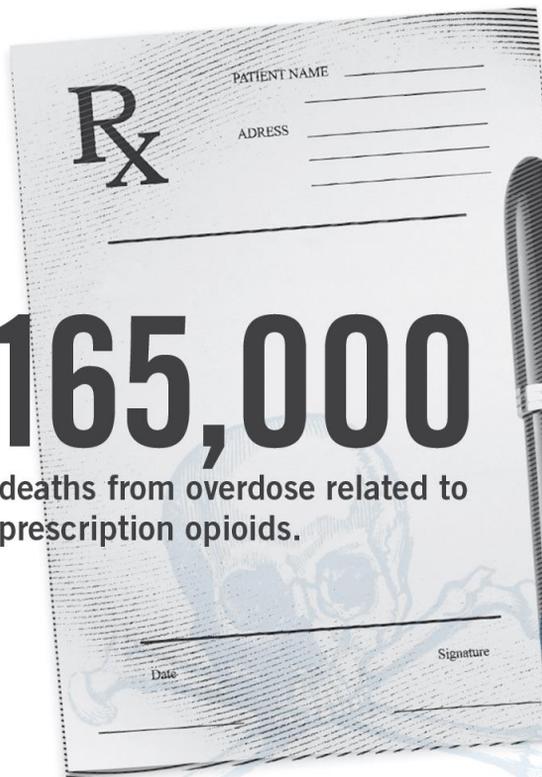
but the pain that  
Americans report remains  
**UNCHANGED**



Since 1999, there  
have been more than

**165,000**

deaths from overdose related to  
prescription opioids.



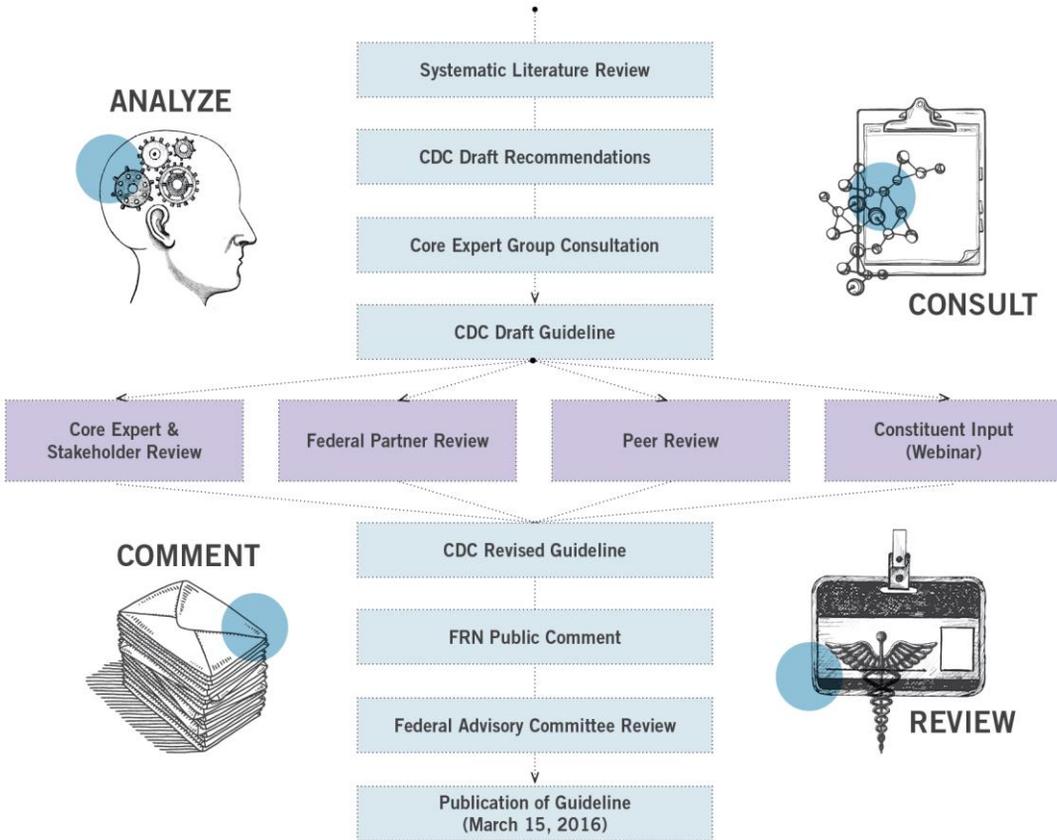
# Need for Opioid Prescribing Guidelines

- Most recent national guidelines are several years old and do not incorporate the most recent evidence
- Need for clear, consistent recommendations

# Purpose, Use, and Primary Audience

- Recommendations for the prescribing of opioid pain medications
  - for patients 18 and older
  - in outpatient, primary care settings
  - in treatment for chronic pain
- Not intended for use in active cancer treatment, palliative care, or end-of-life care
- Primary Audience: Primary Care Providers
  - Family Practice, Internal medicine
  - Physicians, nurse practitioners, physician assistants

# Guideline Development Process



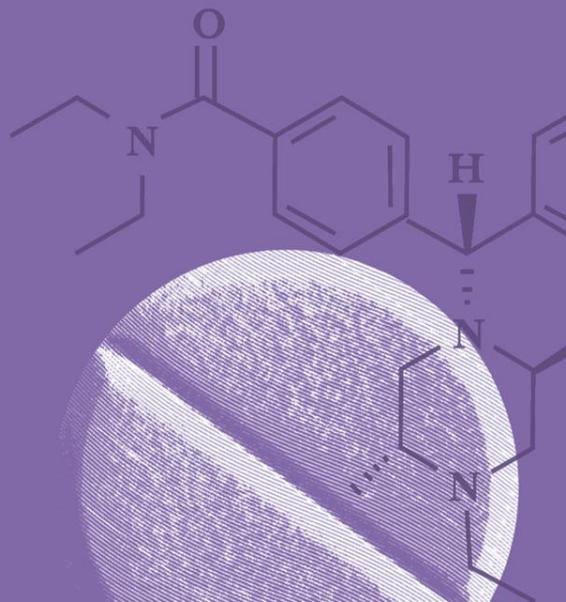
## CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016



Continuing Education Examination available at <http://www.cdc.gov/mmwr/cme/conted.html>.



U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention



## Special Communication

## CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016

Deborah Dowell, MD, MPH; Tamara M. Haegerich, PhD; Roger Chou, MD

**IMPORTANCE** Primary care clinicians find managing chronic pain challenging. Evidence of long-term efficacy of opioids for chronic pain is limited. Opioid use is associated with serious risks, including opioid use disorder and overdose.

**OBJECTIVE** To provide recommendations about opioid prescribing for primary care clinicians treating adult patients with chronic pain outside of active cancer treatment, palliative care, and end-of-life care.

**PROCESS** The Centers for Disease Control and Prevention (CDC) updated a 2014 systematic review on effectiveness and risks of opioids and conducted a supplemental review on benefits and harms, values and preferences, and costs. CDC used the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) framework to assess evidence type and determine the recommendation category.

**EVIDENCE SYNTHESIS** Evidence consisted of observational studies or randomized clinical trials with notable limitations, characterized as low quality using GRADE methodology. Meta-analysis was not attempted due to the limited number of studies, variability in study designs and clinical heterogeneity, and methodological shortcomings of studies. No study evaluated long-term (>1 year) benefit of opioids for chronic pain. Opioids were associated with increased risks, including opioid use disorder, overdose, and death, with dose-dependent effects.

**RECOMMENDATIONS** There are 12 recommendations. Of primary importance, nonopioid therapy is preferred for treatment of chronic pain. Opioids should be used only when benefits for pain and function are expected to outweigh risks. Before starting opioids, clinicians should establish treatment goals with patients and consider how opioids will be discontinued if benefits do not outweigh risks. When opioids are used, clinicians should prescribe the lowest effective dosage, carefully reassess benefits and risks when considering increasing dosage to 50 morphine milligram equivalents or more per day, and avoid concurrent opioids and benzodiazepines whenever possible. Clinicians should evaluate benefits and harms of continued opioid therapy with patients every 3 months or more frequently and review prescription drug monitoring program data, when available, for high-risk combinations or dosages. For patients with opioid use disorder, clinicians should offer or arrange evidence-based treatment, such as medication-assisted treatment with buprenorphine or methadone.

**CONCLUSIONS AND RELEVANCE** The guideline is intended to improve communication about benefits and risks of opioids for chronic pain, improve safety and effectiveness of pain treatment, and reduce risks associated with long-term opioid therapy.

JAMA. doi:10.1001/jama.2016.1656  
Published online March 15, 2016

### Editorials

Author Audio Interview at [jama.com](http://jama.com)

Related articles and JAMA Patient Page

Supplemental content at [jama.com](http://jama.com)

Related articles at [jamanetwork.com](http://jamanetwork.com), [jamaopharmacology.com](http://jamaopharmacology.com), and [jamaneurology.com](http://jamaneurology.com)

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# JAMA: The Journal of American Medical Association

Deborah Dowell, Tamara Haegerich, and Roger Chou

CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016

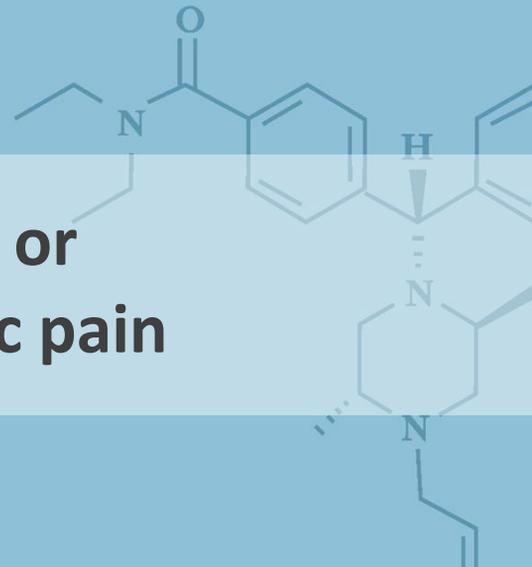
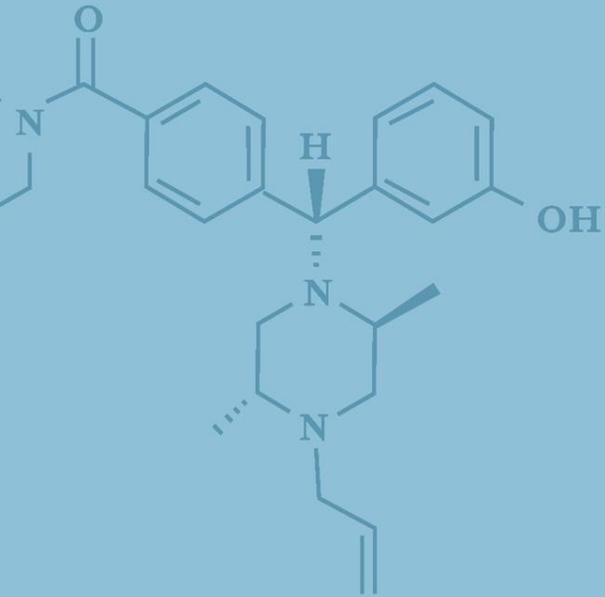
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# JAMA®

The Journal of the American Medical Association

# Organization of Recommendations

- **The 12 recommendations are grouped into three conceptual areas:**
  - Determining when to initiate or continue opioids for chronic pain
  - Opioid selection, dosage, duration, follow-up, and discontinuation
  - Assessing risk and addressing harms of opioid use



**Determine when to initiate or continue opioids for chronic pain**

# 1

## Opioids not first-line or routine therapy for chronic pain

- 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.

(Recommendation category A: Evidence type: 3)

# 2

## Establish and measure progress toward goals

- 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.

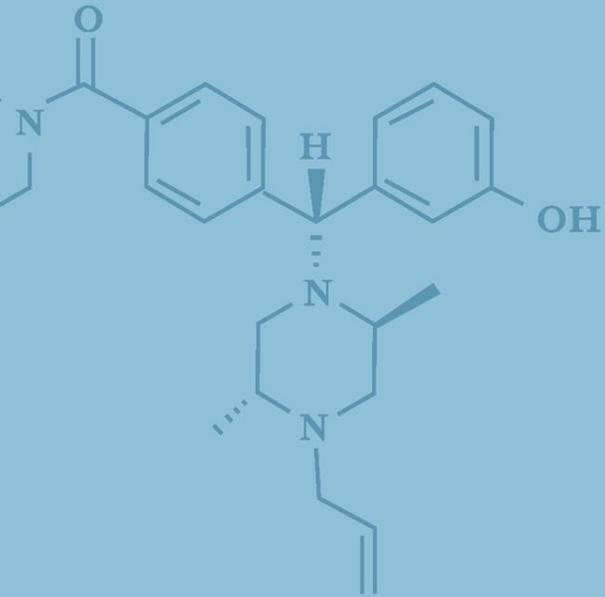
(Recommendation category A: Evidence type: 4)

# 3

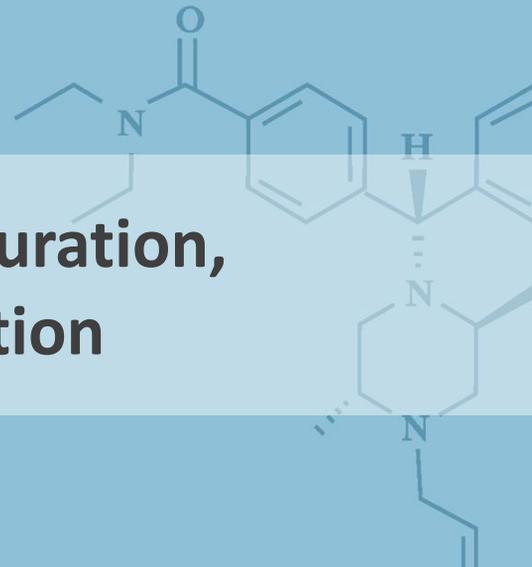
## Discuss benefits and risks with patients

- 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.

(Recommendation category A: Evidence type: 3)



**Opioid selection, dosage, duration,  
follow-up, and discontinuation**



# 4

## Use immediate-release opioids when starting

- When starting opioid therapy for chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids.

(Recommendation category A: Evidence type: 4)

### *Additional cautions for*

- *Methadone*
- *Transdermal fentanyl*
- *Immediate-release opioids combined with ER/LA opioids*

# 5

## Use caution at any dose and avoid increasing to high dosages

- 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  $\geq 50$  morphine milligram equivalents (MME)/day, and should avoid increasing dosage to  $\geq 90$  MME/day or carefully justify a decision to titrate dosage to  $\geq 90$  MME/day.

(Recommendation category A: Evidence type: 3)

# 6

## Prescribe no more than needed

- 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.
- 3 days or less will often be sufficient; more than 7 days will rarely be needed.

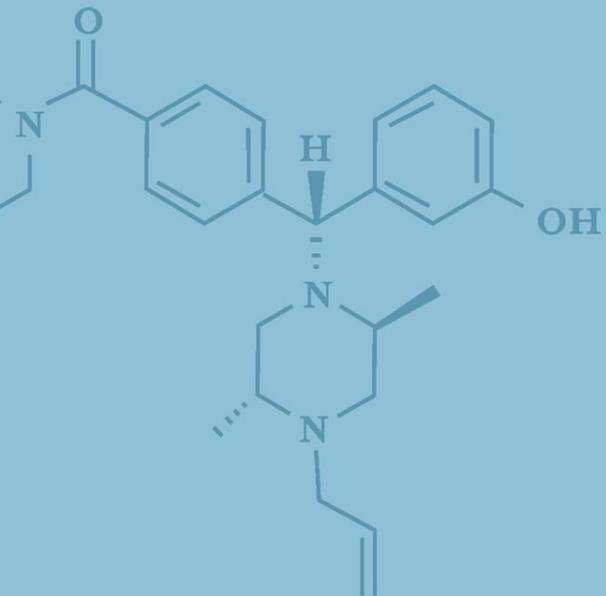
(Recommendation category A: Evidence type: 4)

# 7

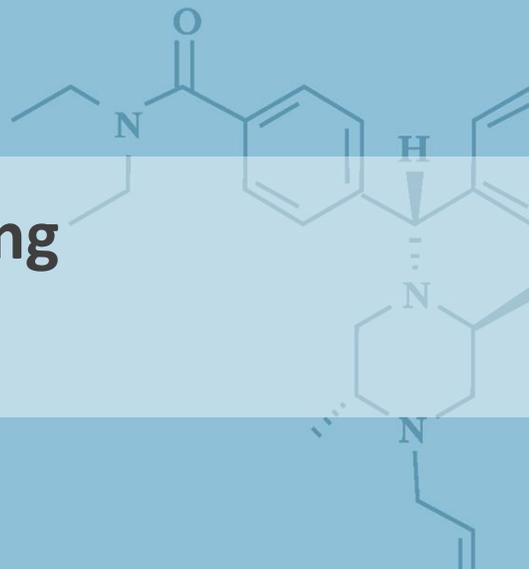
## Offer a taper if opioids cause harm or are not helping

- Clinicians should evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation.
- Clinicians should evaluate benefits and harms of continued therapy with patients every 3 months or more frequently.
- If benefits do not outweigh harms of continued opioid therapy, clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue opioids.

(Recommendation category A: Evidence type: 4)



## Assessing risk and addressing harms of opioid use



# 8

## Evaluate risks for opioid-related harms

- 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/day), or concurrent benzodiazepine use, are present.

(Recommendation category A: Evidence type: 4)

## Check PDMP for high dosages and dangerous combinations

- Clinicians should review the patient's history of controlled substance prescriptions using state PDMP data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him/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.

(Recommendation category A: Evidence type: 4)

## Test urine for prescribed opioids and other drugs

- 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.

(Recommendation category B: Evidence type: 4)

## Avoid concurrent opioid and benzodiazepine prescribing

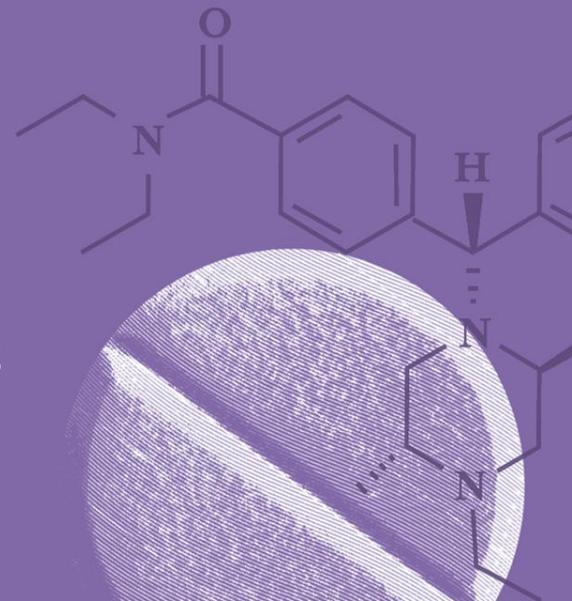
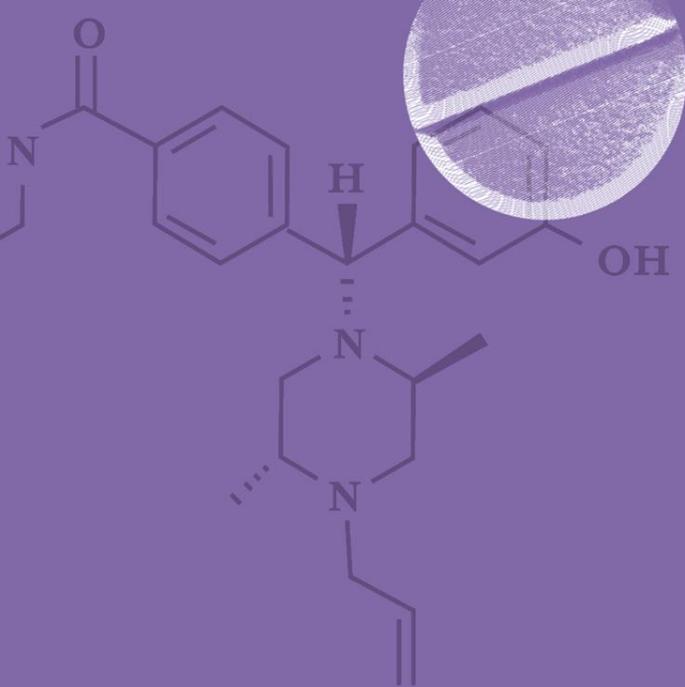
- Clinicians should avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible.

(Recommendation category A: Evidence type: 3)

## Treat patients for opioid use disorder (OUD) if needed

- 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.

(Recommendation category A: Evidence type: 2)



## Implementation Activities



# CDC Guideline Implementation

1



Translation and Communication

2



Clinical Training

3



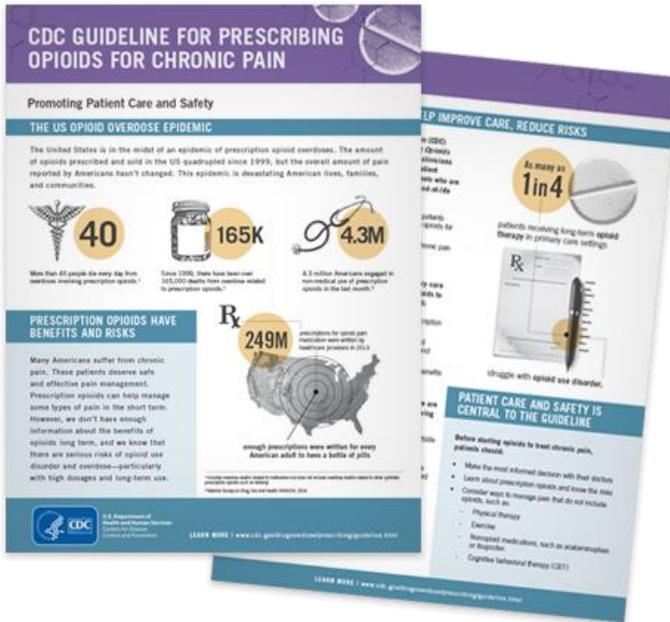
Health System Implementation

4



Insurer/Pharmacy Benefit Manager  
Implementation

# Resources



- Fact sheets
  - New Opioid Prescribing Guideline
  - Assessing Benefits and Harms of Opioid Therapy
  - Prescription Drug Monitoring Programs
  - Calculating Total Daily Dose of Opioids for Safer Prescribing
  - Pregnancy and Opioid Pain Medications

# PRESCRIPTION DRUG MONITORING PROGRAMS (PDMPs)

# EXAMPLE FACT SHEET

## WHAT IS A PDMP?

A PDMP is a statewide electronic database that tracks all controlled substance prescriptions. Authorized users can access prescription data such as medications dispensed and doses.

PDMPs improve patient safety by allowing clinicians to:

- Identify patients who are obtaining opioids from multiple providers.
- Calculate the total amount of opioids prescribed per day (in MME/day).
- Identify patients who are being prescribed other substances that may increase risk of opioids—such as benzodiazepines.

## WHAT SHOULD I CONSIDER WHEN PRESCRIBING OPIOIDS?



High Dosage

Talk to your patient about the risks for respiratory depression and overdose. Consider offering to taper opioids as well as prescribing naloxone for patients taking 50 MME/day or more.



Multiple Providers

Counsel your patient and coordinate care with their other prescribers to improve safety and discuss the need to obtain opioids from a single provider. Check the PDMP regularly and consider tapering or discontinuation of opioids if pattern continues.



Drug Interactions

Whenever possible, avoid prescribing opioids and benzodiazepines concurrently. Communicate with other prescribers to prioritize patient goals and weigh risks of concurrent opioid and benzodiazepine use.

## WHEN SHOULD I CHECK THE PDMP?

State requirements vary, but CDC recommends checking at least once every 3 months and consider checking prior to every opioid prescription.



## WHAT SHOULD I DO IF I FIND INFORMATION ABOUT A PATIENT IN THE PDMP THAT CONCERNS ME?

Patients should not be dismissed from care based on PDMP information. Use the opportunity to provide potentially life-saving information and interventions.

- 1 Confirm that the information in the PDMP is correct.**  
Check for potential data entry errors, use of a nickname or maiden name, or possible identity theft to obtain prescriptions.
- 2 Assess for possible misuse or abuse.**  
Offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients who meet criteria for opioid use disorder. If you suspect diversion, urine drug testing can assist in determining whether opioids can be discontinued without causing withdrawal.
- 3 Discuss any areas of concern with your patient and emphasize your interest in their safety.**

# Checklist for prescribing opioids for chronic pain

For primary care providers treating adults (18+) with chronic pain  $\geq 3$  months, excluding cancer, palliative, and end-of-life care

## CHECKLIST

### When CONSIDERING long-term opioid therapy

- Set realistic goals for pain and function based on diagnosis (eg, walk around the block).
- Check that non-opioid therapies tried and optimized.
- Discuss benefits and risks (eg, addiction, overdose) with patient.
- Evaluate risk of harm or misuse.
  - Discuss risk factors with patient.
  - Check prescription drug monitoring program (PDMP) data.
  - Check urine drug screen.
- Set criteria for stopping or continuing opioids.
- Assess baseline pain and function (eg, PEG scale).
- Schedule initial reassessment within 1–4 weeks.
- Prescribe short-acting opioids using lowest dosage on product labeling; match duration to scheduled reassessment.

### If RENEWING without patient visit

- Check that return visit is scheduled  $\leq 3$  months from last visit.

## REFERENCE

### EVIDENCE ABOUT OPIOID THERAPY

- *Benefits of long-term opioid therapy for chronic pain not well supported by evidence.*
- *Short-term benefits small to moderate for pain; inconsistent for function.*
- *Insufficient evidence for long-term benefits in low back pain, headache, and fibromyalgia.*

### NON-OPIOID THERAPIES

Use alone or combined with opioids, as indicated:

- Non-opioid medications (eg, NSAIDs, TCAs, SNRIs, anti-convulsants).
- Physical treatments (eg, exercise therapy, weight loss).
- Behavioral treatment (eg, CBT).
- Procedures (eg, intra-articular corticosteroids).

### EVALUATING RISK OF HARM OR MISUSE

**Known risk factors** include:

- Illegal drug use; prescription drug use for nonmedical reasons.
- History of substance use disorder or overdose.
- Mental health conditions (eg, depression, anxiety).
- Sleep-disordered breathing.
- Concurrent benzodiazepine use.

## When REASSESSING at return visit

*Continue opioids only after confirming clinically meaningful improvements in pain and function without significant risks or harm.*

- Assess pain and function (eg, PEG); compare results to baseline.
- Evaluate risk of harm or misuse:
  - Observe patient for signs of over-sedation or overdose risk.
    - If yes: Taper dose.
  - Check PDMP.
  - Check for opioid use disorder if indicated (eg, difficulty controlling use).
    - If yes: Refer for treatment.
- Check that non-opioid therapies optimized.
- Determine whether to continue, adjust, taper, or stop opioids.
- Calculate opioid dosage morphine milligram equivalent (MME).
  - If  $\geq 50$  MME/day total ( $\geq 50$  mg hydrocodone;  $\geq 33$  mg oxycodone), increase frequency of follow-up; consider offering naloxone.
  - Avoid  $\geq 90$  MME/day total ( $\geq 90$  mg hydrocodone;  $\geq 60$  mg oxycodone), or carefully justify; consider specialist referral.
- Schedule reassessment at regular intervals ( $\leq 3$  months).

**Urine drug testing:** Check to confirm presence of prescribed substances and for undisclosed prescription drug or illicit substance use.

**Prescription drug monitoring program (PDMP):** Check for opioids or benzodiazepines from other sources.

### ASSESSING PAIN & FUNCTION USING PEG SCALE

**PEG score** = average 3 individual question scores  
(30% improvement from baseline is clinically meaningful)

**Q1:** *What number from 0–10 best describes your **pain** in the past week?*

0 = “no pain”, 10 = “worst you can imagine”

**Q2:** *What number from 0–10 describes how, during the past week, pain has interfered with your **enjoyment of life**?*

0 = “not at all”, 10 = “complete interference”

**Q3:** *What number from 0–10 describes how, during the past week, pain has interfered with your **general activity**?*

0 = “not at all”, 10 = “complete interference”



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#### TO LEARN MORE

[www.cdc.gov/drugoverdose/prescribing/guideline.html](http://www.cdc.gov/drugoverdose/prescribing/guideline.html)

## Coming soon

- Mobile “app” with MME calculator
- Videos and podcast
- Brochures and pocket guides
- Online training for providers
- Additional materials, such as matre articles, blogs, infographics

# Training

- Training modules for clinicians
  - Online modules
  - CME credits
- Guideline-concordant education
  - Medical schools
  - Nursing schools
  - Pharmacy schools

# Health Systems Interventions

- Clinical quality improvement technical package
  - Help health systems develop guideline-concordant quality improvement processes
  - Facilitate adoption and use of recommendations
- Updated clinical decision supports for EHRs
- Coordinated Care Plan for Safer Practice
  - Recommendations on health system operations
  - Content closely aligned to the CDC Guideline
  - Focus: reducing risk if already on chronic opioid therapy

# Insurer Interventions

- Cover non-pharmacologic treatments, e.g.,
  - Exercise therapy
  - Cognitive Behavioral Therapy
- Reimburse clinicians for high-quality pain management
  - Counseling
  - Coordination of care
  - Checking PDMPs
- Support guideline-concordant opioid stewardship
  - Drug utilization review
  - Prior authorization

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



# Extra Slides



# GRADE Method

- Standard for guideline development
- Transparent approach for conducting systematic review, rating quality of evidence, and determining strength of recommendations
- Used by > 100 organizations (including Advisory Committee on Immunization Practices)
- Recommendations based on:
  - Quality of evidence
  - Balance between benefits and harms
  - Values and preferences
  - Cost

# GRADE Evidence Types

- Evidence Types:
  - Type 1: Randomized controlled trials (RCTs); overwhelming observational studies
  - Type 2: RCTs (limitations); strong observational
  - Type 3: RCTs (notable limitations); observational
  - Type 4: RCTs (major limitations); observational (notable limitations) clinical experience

# GRADE Recommendation Categories

- Recommendation categories:
  - Category A: applies to all patients; most patients should receive recommended course of action
  - Category B: individual decision making required; providers help patients arrive at decision consistent with values/preferences and clinical situation

# Clinical Evidence Summary

- No long-term ( $\geq 1$  year) outcomes in pain/function; most placebo-controlled trials  $\leq 6$  weeks
- Opioid dependence in primary care: 3%-26%
- Dose-dependent association with risk of overdose/harms
- Inconsistent results for different dosing protocols; initiation with LA/ER increased risk of overdose
- Methadone associated with higher mortality risk
- No differences in pain/function with dose escalation
- Risk prediction instruments have insufficient accuracy for classification of patients
- Increased likelihood of long-term use when opioids used for acute pain

# Contextual Evidence Summary

- Effective nonpharmacologic therapies: exercise, cognitive behavioral therapy (CBT), interventional procedures
- Effective nonopioid medications: acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs), anticonvulsants, antidepressants
- Opioid-related overdose risk is dose-dependent
- Factors that increase risk for harm: pregnancy, older age, mental health disorder, substance use disorder, sleep-disordered breathing
- Providers lack confidence in ability to prescribe safely and are concerned about opioid use disorder
- Patients are ambivalent about risks/benefits and associate opioids with addiction

Dosages at or **above 50 MME/day**  
increase risks for overdose by at least

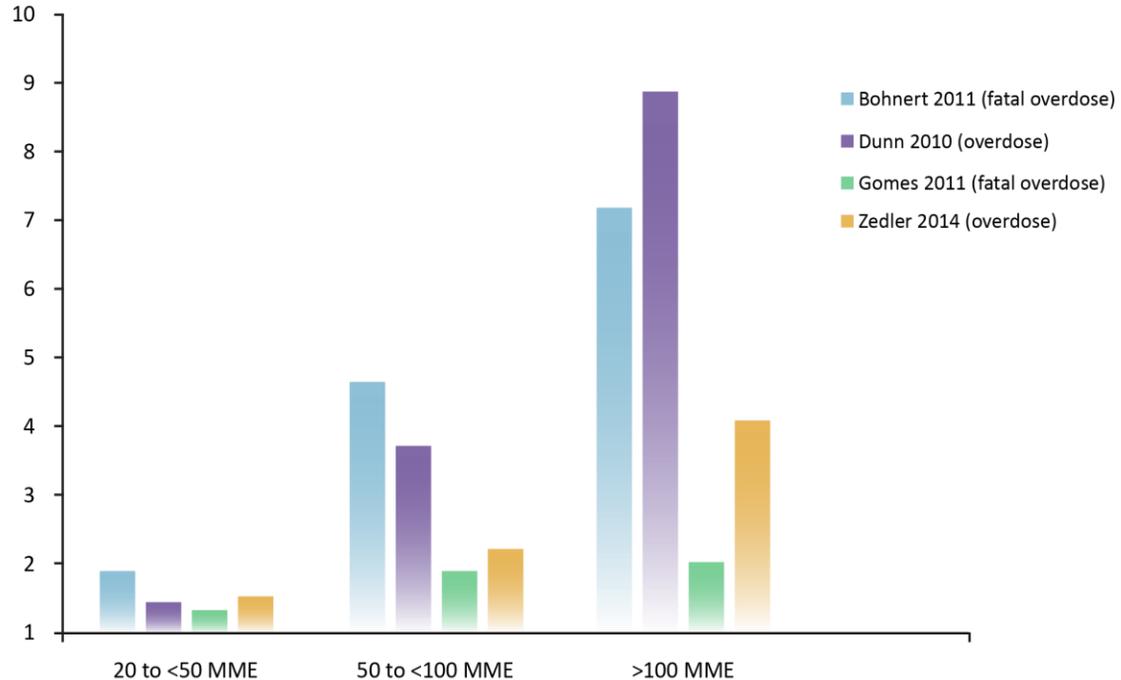
**2x**

the risk at  
**<20  
MME/day.**



# Relationship of prescribed opioid dose (MME) and overdose

Odds Ratio or Hazard Ratio for Overdose Relative to 1 to <20 MME



# Checklist for prescribing opioids for chronic pain

## Checklist for prescribing opioids for chronic pain

For primary care providers treating adults (18+) with chronic pain ≥3 months, excluding cancer, palliative, and end-of-life care

### GOAL

#### When CONSIDERING long-term opioid therapy

- Set realistic goals for pain and function based on diagnosis (eg, walk around the block).
- Check that non-opioid therapies tried and optimized.
- Discuss benefits and risks (eg, addiction, overdose) with patient.
- Evaluate risk of harm or misuse.
  - Discuss risk factors with patient.
  - Check prescription drug monitoring program (PDMP) data.
  - Check urine drug screen.
- Set criteria for stopping or continuing opioids.
- Assess baseline pain and function (eg, PEG scale).
- Schedule initial reassessment within 1-4 weeks.
- Prescribe short-acting opioids using lowest dosage on product labeling; match duration to scheduled reassessment.

#### If RENEWING without patient visit

- Check that return visit is scheduled ≤3 months from last visit.

#### When REASSESSING at return visit

Continue opioids only after confirming clinically meaningful improvements in pain and function without significant risks or harm.

- Assess pain and function (eg, PEG); compare results to baseline.
- Evaluate risk of harm or misuse:
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- Determine whether to continue, adjust, taper, or stop opioids.
- Calculate opioid dosage morphine milligram equivalent (MME).
  - If ≥50 MME/day total (≥50 mg hydrocodone; 2-33 mg oxycodone), increase frequency of follow-up; consider offering buprenorphine.
  - Avoid ≥90 MME/day total (≥90 mg hydrocodone; 2-60 mg oxycodone), or carefully justify; consider specialist referral.
- Schedule reassessment at regular intervals (≤3 months).

### EVIDENCE

#### EVIDENCE ABOUT OPIOID THERAPY

- Benefits of long-term opioid therapy for chronic pain not well supported by evidence.
- Short-term benefits small to moderate for pain; inconsistent for function.
- Insufficient evidence for long-term benefits in low-back pain, headache, and fibromyalgia.

#### NON-OPIOID THERAPIES

Use alone or combined with opioids, as indicated.

- Non-opioid medications (eg, NSAIDs, TCAs, SNRIs, anti-convulsants).
- Physical treatments (eg, exercise therapy, weight loss).
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#### EVALUATING RISK OF HARM OR MISUSE

Known risk factors include:

- Illegal drug use, prescription drug use for nonmedical reasons.
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Urine drug testing: Check to confirm presence of prescribed substances and for undisclosed prescription drug or illicit substance use.

#### Prescription drug monitoring program (PDMP)

Check for opioids or benzodiazepines from other sources.

#### ASSESSING PAIN & FUNCTION USING PEG SCALE

PEG score = average 3 individual question scores (50% improvement from baseline & clinically meaningful)

- 1) What number from 0-10 best describes your pain in the past week?  
0="no pain"; 10="worst you can imagine"
- 2) What number from 0-10 describes how, during the past week, pain has interfered with your enjoyment of life?  
0="not at all"; 10="complete interference"
- 3) What number from 0-10 describes how, during the past week, pain has interfered with your general activity?  
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#### TO LEARN MORE

[www.cdc.gov/ncjdp/oaas/prescribing-guidance.html](http://www.cdc.gov/ncjdp/oaas/prescribing-guidance.html)

March 2013