



Pharmaceutical Assistance  
Contract for the Elderly



# Treating acute pain without overusing opioids

Evidence-based pain management approaches



# Several medications can relieve acute pain without resorting to addictive options

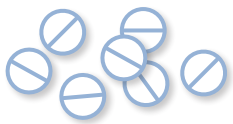
Despite the effectiveness of other treatment alternatives, opioids are still overused for acute pain.<sup>1-3</sup>



**2 out of 5 U.S. adults** were prescribed an opioid in one recent year.



**1 in 5 adults** share their opioid medications with others.



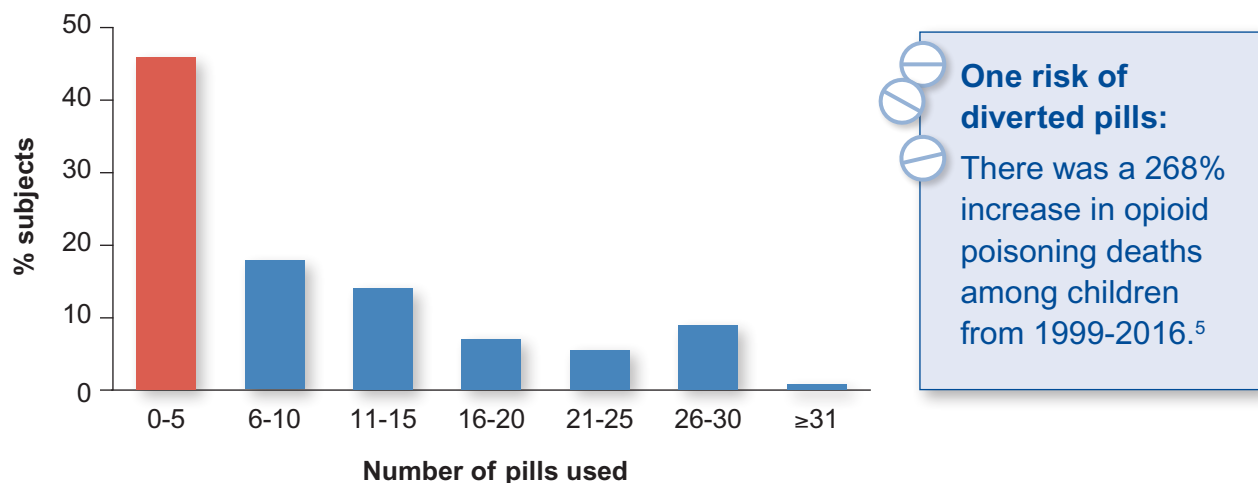
**More than half of patients** surveyed expect to have leftover opioid medications.



**54% of adults** who misuse prescription opioids received them from family or friends.

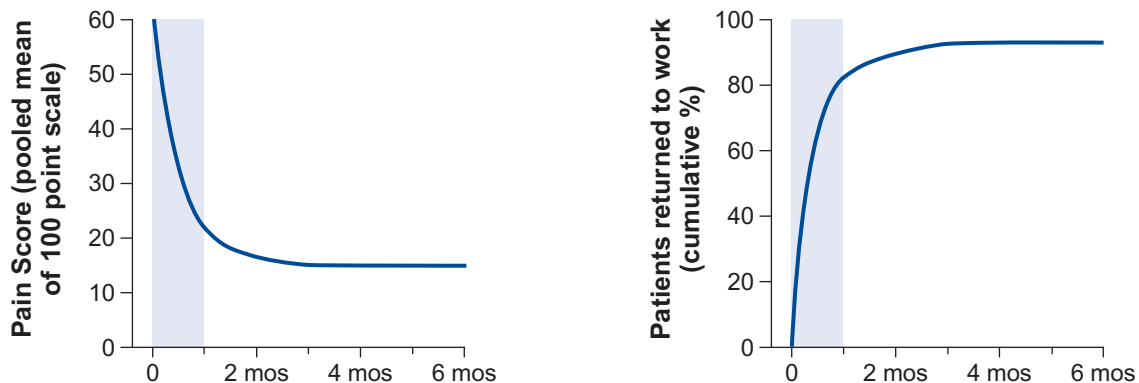
Too-large opioid prescriptions increase the risk of addiction, accidental overdose, and diversion.

**FIGURE 1.** Of patients prescribed an opioid after an outpatient orthopedic procedure, almost half used fewer than 5 pills from the average of 30 dispensed.<sup>4</sup>

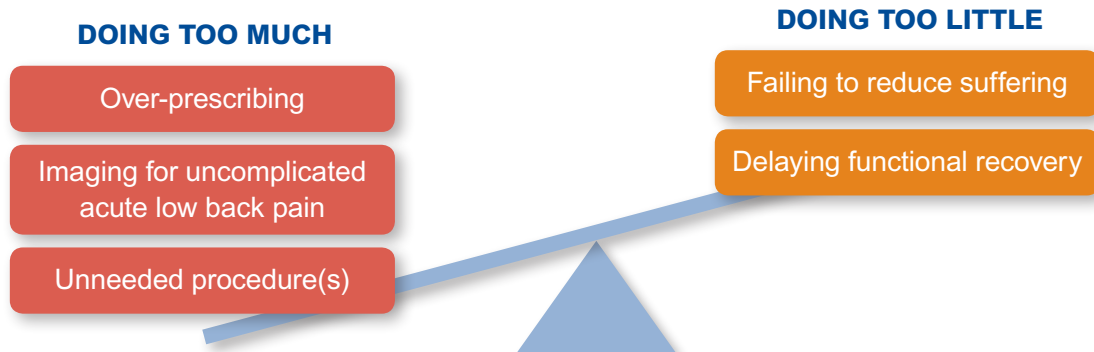


# Acute pain typically resolves rapidly and without intervention

**FIGURE 2.** 82% of patients who were unable to work because of acute low back pain returned to work within 30 days, however they were managed.<sup>6</sup>



Find a balance between undertreating and overtreating self-limited acute pain conditions.



Engage and educate patients in making a plan to address acute pain.

- **Establish clear functional goals.**
  - The goal is restoring as much normal activity as possible, not necessarily eliminating all discomfort.
- **Help the patient to have realistic expectations about acute pain.**
  - Structured messaging can reassure patients.
  - Example: “Based on your history and exam, you have a good prognosis.”
- **If an opioid must be used, engage the patient in a discussion of goals and prescription size to help reduce the amount prescribed.<sup>7,8</sup>**

# Selected evidence-based treatments

**TABLE 1. Summary of acute pain management options**

INTERVENTION		Acute strains and sprains	Acute low back pain	Acute post-op pain
NON-DRUG OPTIONS	compression	●	⊘	⊘
	exercise	●	●	○
	casting (severe sprains)	●	⊘	⊘
	physical therapy	○	○	○
	massage	○	●	●
	acupuncture	○	●	●
	spinal manipulation	⊘	●	⊘
	TENS*	○	⊘	●
DRUG OPTIONS	acetaminophen	●	○	●
	oral NSAIDs	●	●	●
	topical NSAIDs	●	⊘	○
	opioids	●	●	●
	skeletal muscle relaxants	⊘	○	○
	systemic oral steroids	⊘	○	⊘
	epidural steroids (for sciatica)	○	●	○
	NSAID + acetaminophen	●	●	●
	gabapentin; pregabalin	⊘	⊘	●

**Risk/benefit:** ● = favorable; ● = potentially favorable; ● = unfavorable; ○ = neutral; ⊘ = not studied

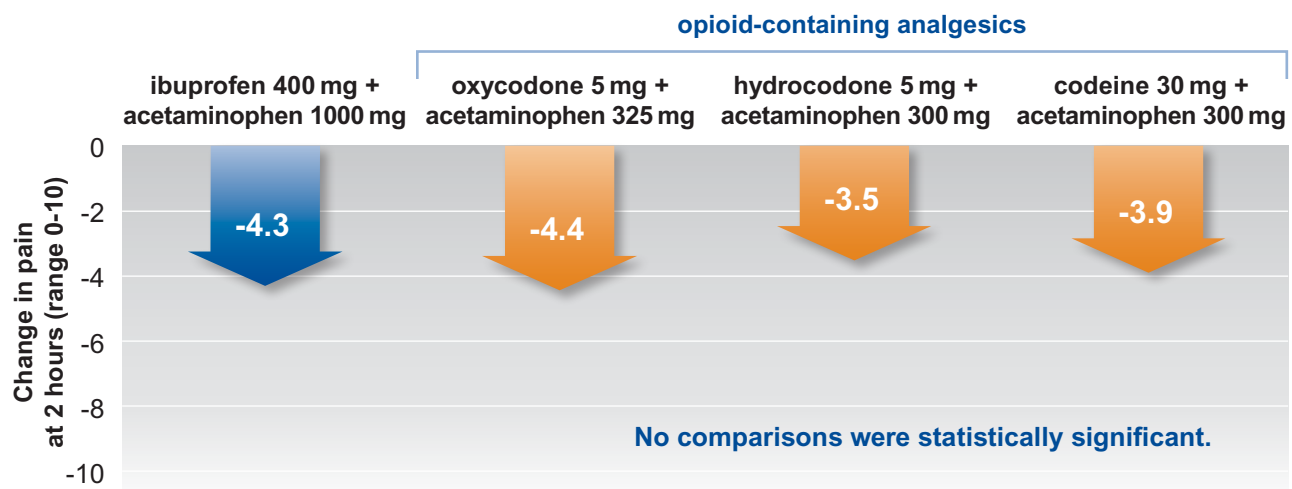
\* TENS: transcutaneous electrical nerve stimulation

# Randomized trials found that opioids usually provide no benefit over other alternatives

Most treatment options for acute pain are available over the counter or as generics, such as topical NSAIDs like diclofenac gel. Topical NSAID can produce the same benefit as systemic NSAID,<sup>9,10</sup> with less risk of severe side effects.<sup>9</sup>

## Musculoskeletal pain:

**FIGURE 3.** A double-blind randomized trial found opioids were no more effective than a combination of ibuprofen + acetaminophen in patients with severe acute musculoskeletal pain.<sup>11</sup>



## Low back pain:

**FIGURE 4.** Adding an opioid or cyclobenzaprine to naproxen to treat acute low back pain was no better than naproxen alone in reducing pain or function scores at one week.<sup>12</sup>



<sup>†</sup> naproxen 500 mg + oxycodone 5 mg/acetaminophen 325 mg; <sup>§</sup> naproxen 500 mg + cyclobenzaprine 5 mg

# If an opioid must be used for acute pain



## Prescribe a short course.

A usual course of opioid for acute pain should be less than three days; the vast majority of patients need less than seven days of treatment.<sup>13</sup> Each refill or additional week of opioid prescribed increases the risk of misuse by 20%.<sup>14</sup>



## Continue non-opioid treatments.



## Avoid co-prescribing with benzodiazepines.

This increases the risk of overdose death by two-fold.<sup>15</sup>



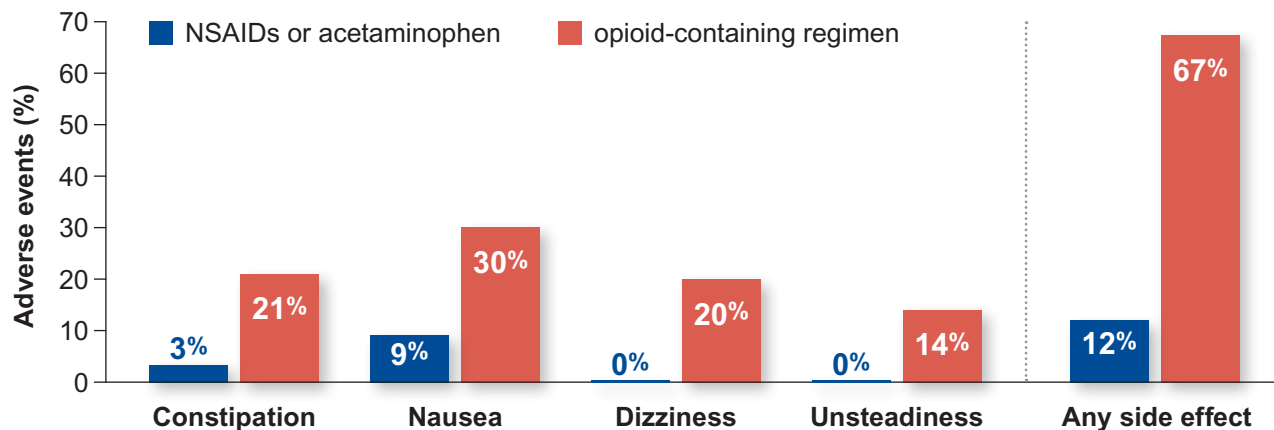
## Avoid long-acting or extended-release opioids.

“Abuse-deterrent” formulations simply make it harder to use a drug by injection; they are still just as addictive when taken by mouth.



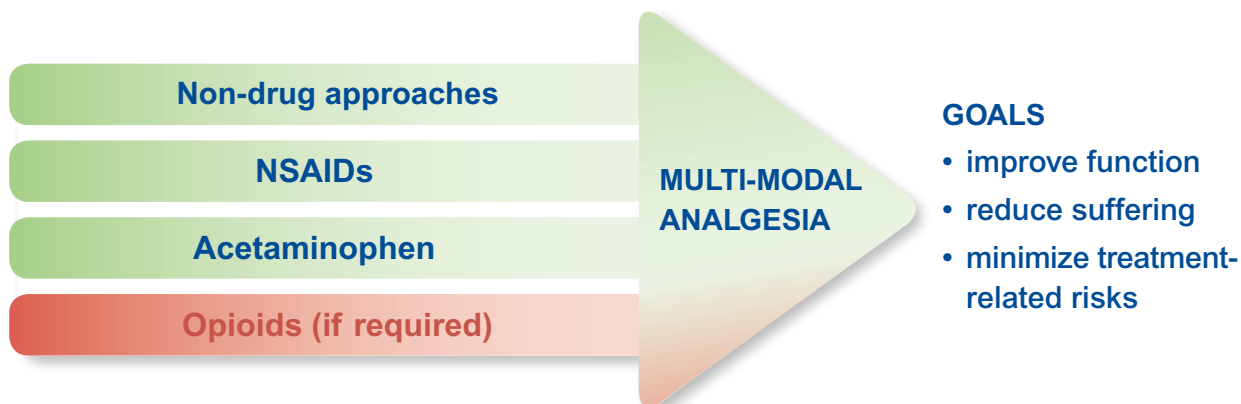
## Watch for expected side effects.

**FIGURE 5.** Patients over age 65 reported higher rates of adverse events within one week when prescribed opioids vs. NSAIDs or acetaminophen.<sup>16</sup>



Other common opioid-induced adverse events included gait instability, erectile dysfunction, and confusion.<sup>16</sup>

**Combining pharmacologic and non-pharmacologic treatments can produce a synergistic effect in managing acute pain.**



## Key points

- **Many clinicians still overprescribe opioids for acute pain.**
  - Leftover prescription opioids increase the risk of misuse or accidental overdose by the patient or others.
- **Manage patient expectations about acute pain by discussing realistic goals.**
  - Reassurance and realistic expectations can reduce fear, worry, and distress, as well as the demand for pain medications.
- For many acute pain conditions, **opioids are no more effective than other treatments**, though they do add increased risk.

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**More information is available at [AlosaHealth.org/AcutePain](https://AlosaHealth.org/AcutePain)**

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### References:

(1) Han B, Compton WM, Blanco C, Crane E, Lee J, Jones CM. Prescription Opioid Use, Misuse, and Use Disorders in U.S. Adults: 2015 National Survey on Drug Use and Health. *Ann Intern Med.* 2017;167(5):293-301. (2) Kennedy-Hendricks A, Gielen A, McDonald E, McGinty EE, Shields W, Barry CL. Medication Sharing, Storage, and Disposal Practices for Opioid Medications Among US Adults. *JAMA Intern Med.* 2016;176(7):1027-1029. (3) Jones CM, Paulozzi LJ, Mack KA. Sources of prescription opioid pain relievers by frequency of past-year nonmedical use United States, 2008-2011. *JAMA Intern Med.* 2014;174(5):802-803. (4) Rodgers J, Cunningham K, Fitzgerald K, Finnerty E. Opioid consumption following outpatient upper extremity surgery. *J Hand Surg Am.* 2012;37(4):645-650. (5) Gaither JR, Shabanova V, Leventhal JM. US National Trends in Pediatric Deaths From Prescription and Illicit Opioids, 1999-2016. *JAMA network open.* 2018;1(8):e186558. (6) Pengel LH, Herbert RD, Maher CG, Refshaug KM. Acute low back pain: systematic review of its prognosis. *BMJ.* 2003;327(7410):323. (7) Prabhu M, Dubois H, James K, et al. Implementation of a Quality Improvement Initiative to Decrease Opioid Prescribing After Cesarean Delivery. *Obstet Gynecol.* 2018;132(3):631-636. (8) Holland E, Bateman BT, Cole N, et al. Evaluation of a Quality Improvement Intervention That Eliminated Routine Use of Opioids After Cesarean Delivery. *Obstet Gynecol.* 2019;133(1):91-97. (9) Derry S, Moore RA, Gaskell H, McIntyre M, Wiffen PJ. Topical NSAIDs for acute musculoskeletal pain in adults. *Cochrane Database Syst Rev.* 2015(6). (10) Moore RA, Derry S, Aldington D, Wiffen PJ. Single dose oral analgesics for acute postoperative pain in adults: an overview of Cochrane reviews. *Cochrane Database Syst Rev.* 2015(9). (11) Chang AK, Bijur PE, Esses D, Barnaby DP, Baer J. Effect of a Single Dose of Oral Opioid and Nonopioid Analgesics on Acute Extremity Pain in the Emergency Department: A Randomized Clinical Trial. *JAMA.* 2017;318(17):1661-1667. (12) Friedman BW, Dym AA, Davitt M, et al. Naproxen With Cyclobenzaprine, Oxycodone/Acetaminophen, or Placebo for Treating Acute Low Back Pain: A Randomized Clinical Trial. *JAMA.* 2015;314(15):1572-1580. (13) Mundkur ML, Franklin JM, Abdia Y, et al. Days' Supply of Initial Opioid Analgesic Prescriptions and Additional Fills for Acute Pain Conditions Treated in the Primary Care Setting—United States, 2014. *MMWR Morb Mortal Wkly Rep.* 2019;68(6):140-143. (14) Brat GA, Agniel D, Beam A, et al. Postsurgical prescriptions for opioid naive patients and association with overdose and misuse: retrospective cohort study. *BMJ.* 2018;360:j5790. (15) Sun EC, Dixit A, Humphreys K, Darnall BD, Baker LC, Mackey S. Association between concurrent use of prescription opioids and benzodiazepines and overdose: retrospective analysis. *BMJ.* 2017;356:j760. (16) Hunold KM, Esserman DA, Isaacs CG, et al. Side effects from oral opioids in older adults during the first week of treatment for acute musculoskeletal pain. *Acad Emerg Med.* 2013;20(9):872-879.



## About this publication

These are general recommendations only; specific clinical decisions should be made by the treating clinician based on an individual patient's clinical condition. More detailed information on this topic is provided in a longer evidence document at [AlosaHealth.org](https://AlosaHealth.org).



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This material was produced by Julie Lauffenburger, PharmD, Ph.D., Instructor in Medicine; Jing Luo, M.D., M.P.H., Instructor in Medicine; Jerry Avorn, M.D., Professor of Medicine (principal editor); Brian Bateman, M.D., M.Sc., Associate Professor of Anesthesia; Michael A. Fischer, M.D., M.S., Associate Professor of Medicine; all at Harvard Medical School; and Ellen Dancel, PharmD, M.P.H., Director of Clinical Materials Development at Alosa Health. Drs. Avorn, Bateman, Fischer, and Luo are physicians and Dr. Lauffenburger is a pharmacist at the Brigham and Women's Hospital in Boston. None of the authors accepts any personal compensation from any drug company.

Medical writers: Stephen Braun and Jenny Cai

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