

# Opioids in Workers' Compensation and Non-Opioid Alternatives

Continuing Education Webinar

April 22, 2025

3:00 PM ET

All attendees are in listen-only mode.

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## Opioid in Workers' Compensation and Non-Opioid Alternatives

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The screenshot displays the MyMatrixx webinar interface. At the top, the MyMatrixx logo is visible with the tagline 'By EVERNORTH'. Below the logo, there's a navigation bar with a 'Slides' tab. The main content area shows a slide titled 'Opioids in Workers' Compensation and Non-Opioid Alternatives'. The slide text includes 'Continuing Education Webinar', 'April 22, 2025', '3:00 PM ET', and 'All attendees are in listen-only mode.' At the bottom of the slide, the MyMatrixx logo is repeated, along with copyright information: '© 2025 Matrix Healthcare Services, Inc. | An Express Scripts Company. | All Rights Reserved.' and the date '4/17/2025'. On the left side, there's a sidebar with an 'Ask a Question' section. It features a text input field, a 'Send' button, and a counter showing 'Total Answered Questions: 0'. Above the sidebar, there's a 'Live' indicator and a 'Send' button. The entire interface is set against a dark teal background.

Questions for our speakers will be answered as time allows.

For the questions we do not get to, we will respond via email after the webinar.

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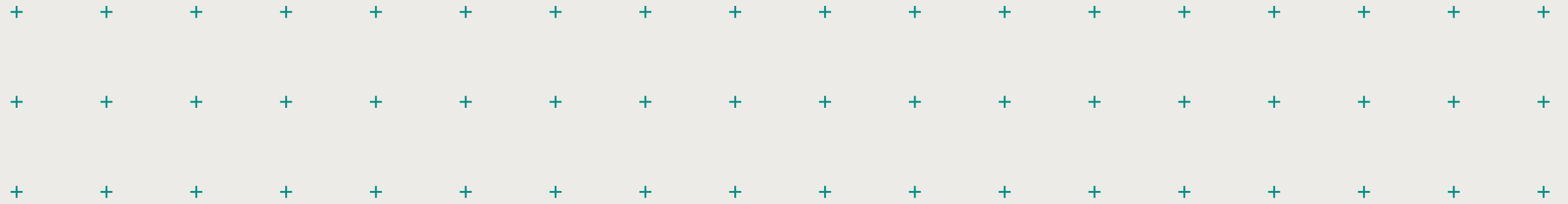
# Today's presenters



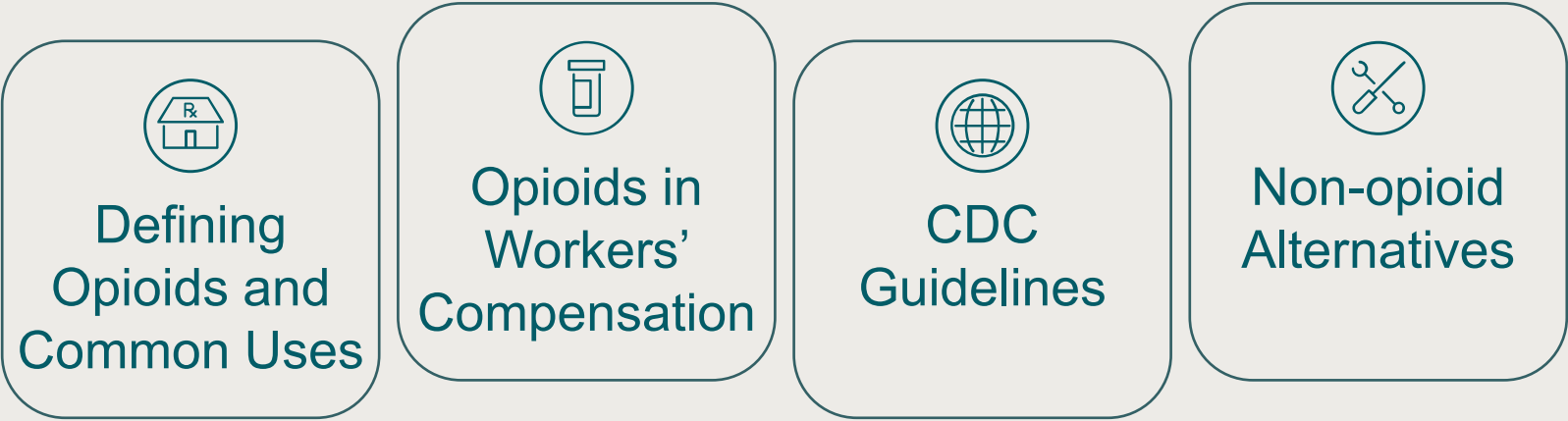
**JULIE BLACK, RPH**  
Senior Clinical Account Executive



**COURTNEY DECK, RPH**  
Senior Clinical Account Executive



# Agenda





# Opioids and their common uses

Opioids are substances that work in the body's nervous system or in specific receptors in the brain to reduce pain intensity



# Prescription opioids can be used to treat moderate-to-severe pain

- + Often prescribed following surgery or injury, or for health conditions such as cancer
- + Have known risks associated with their use
- + May lead to misuse

## Common Opioid Side Effects

- + Tolerance
- + Physical Dependence
- + Increased sensitivity to pain
- + Constipation
- + Nausea, vomiting, and dry mouth
- + Sleepiness
- + Dizziness
- + Confusion
- + Depression
- + Itching
- + Sweating

# Opioid types

## Natural

- + Morphine
- + Codeine

## Semi-Synthetic


- + Oxycodone
- + Hydrocodone
- + Hydromorphone
- + Oxymorphone

## Synthetic

- + Methadone
- + Tramadol
- + Fentanyl
- + Tapentadol
- + Buprenorphine

# Opioid Epidemic





**In 2017, the President  
of the United States  
declared a national public health  
emergency in response to  
the opioid epidemic.**

Some state legislatures:

- + Implemented controls to reduce the dose or days' supply of initial opioid prescriptions
- + Mandated the use of prescription drug monitoring programs (PDMPs) for prescribers and pharmacies

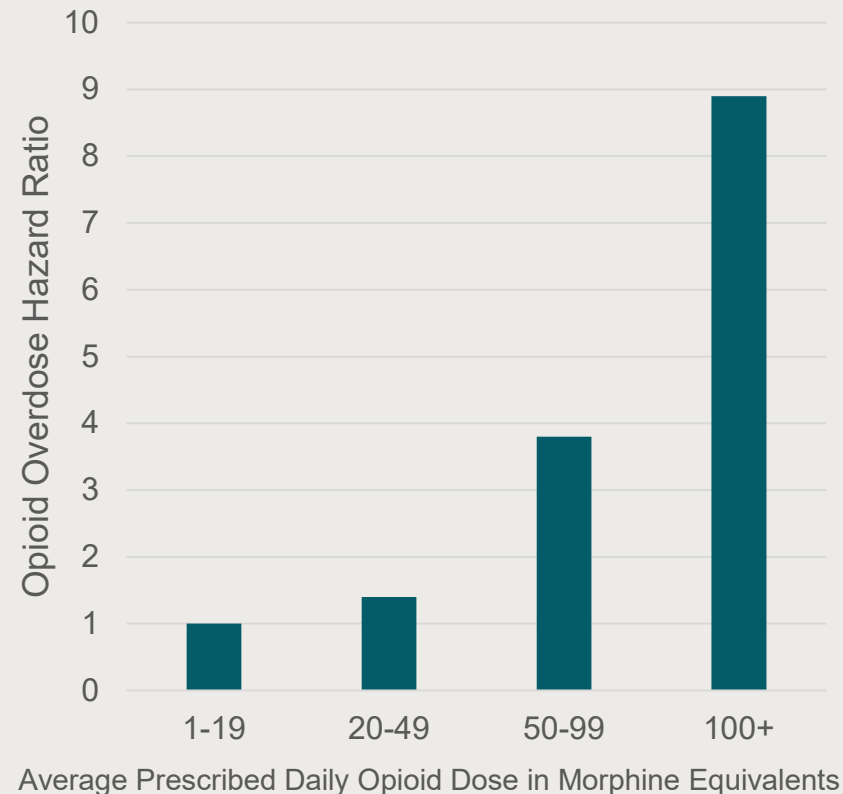
. National Conference of State Legislatures. Prescribing Policies: States Confront Opioid Overdose Epidemic. Published October 31, 2018.



Patients who receive high initial doses of opioids are more likely to overdose



Patients on long-acting or extended-release opioids have a greater risk of overdose than patients taking short-acting opioids



*Banta-Green et al. (2010). A comprehensive approach to address the prescription opioid epidemic in Washington State: milestones and lessons learned. American Journal of Public Health, 105(3), 463–469*  
*Dunn KM, Saunders KW, Rutter CM, et al. Opioid prescriptions for chronic pain and overdose: a cohort study. Ann Intern Med. 2010;152(2):85-92*  
*Miller M, Barber CW, Leatherman S, et al. Prescription opioid duration of action and the risk of unintentional overdose among patients receiving opioid therapy. JAMA Intern Med. 2015;175(4):608-15.*

# Opioids in Workers' Compensation



# Chronic opioid use in workers' comp. often begins with treatment of acute pain

- + As early opioid exposure increases, the risk of long-term use increases
- + Chronic opioid use contributes to indemnity losses and longer disability duration

Duration of opioid  
strongest predictor of misuse

Each refill and additional  
week of opioid use  
=

**44% increase**  
in the rate of misuse

Retrospective cohort study of surgical claims

*Brat GA, Agniel D, Beam A, et al. Postsurgical prescriptions for opioid naïve patients and association with overdose and misuse: retrospective cohort study. BMJ 2018;360:j5790.*

*Rosenblum KE. Opioids Wreak Havoc on Workers' Compensation Costs. August 2012.*

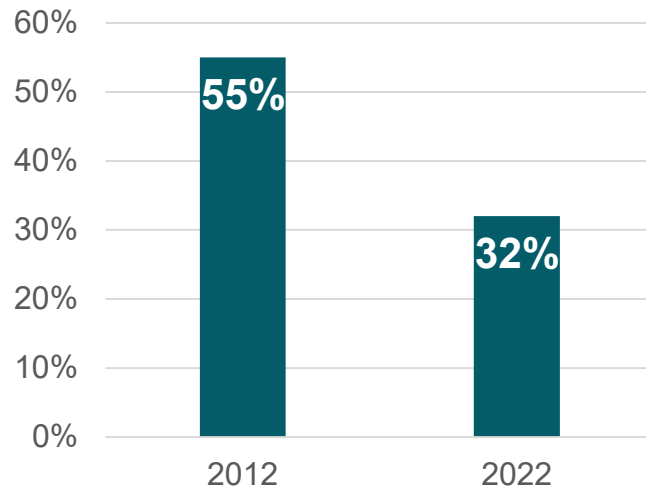
*Savych B, Neumark D, Lea R. Workers Compensation Research Institute. The impact of opioid prescriptions on duration of temporary disability. March 2018.*

**MyMatrixx**

By EVERNORTH

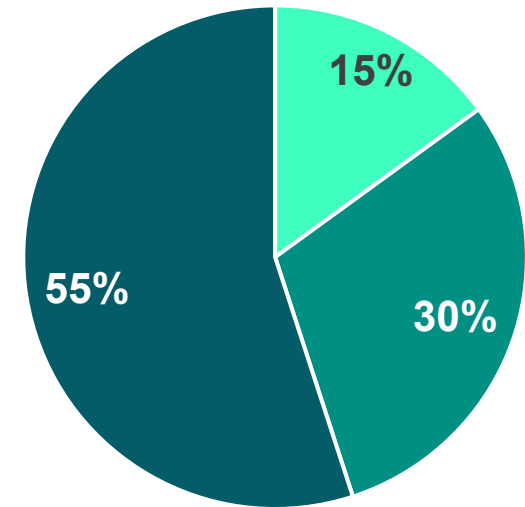
# Opioids in workers' compensation claims

% of Work Comp Claims with Rx with at Least 1 Opioid



Temporary disability period  
**3X longer**  
with longer-term opioids

% of Claims with At Least One Opioid Rx from Injury in Previous Years



- 6 or more years prior
- 2-5 years prior
- Less than 2 years prior

<https://www.cdc.gov/niosh/substance-use/opioids-and-work/workers-comp.html>

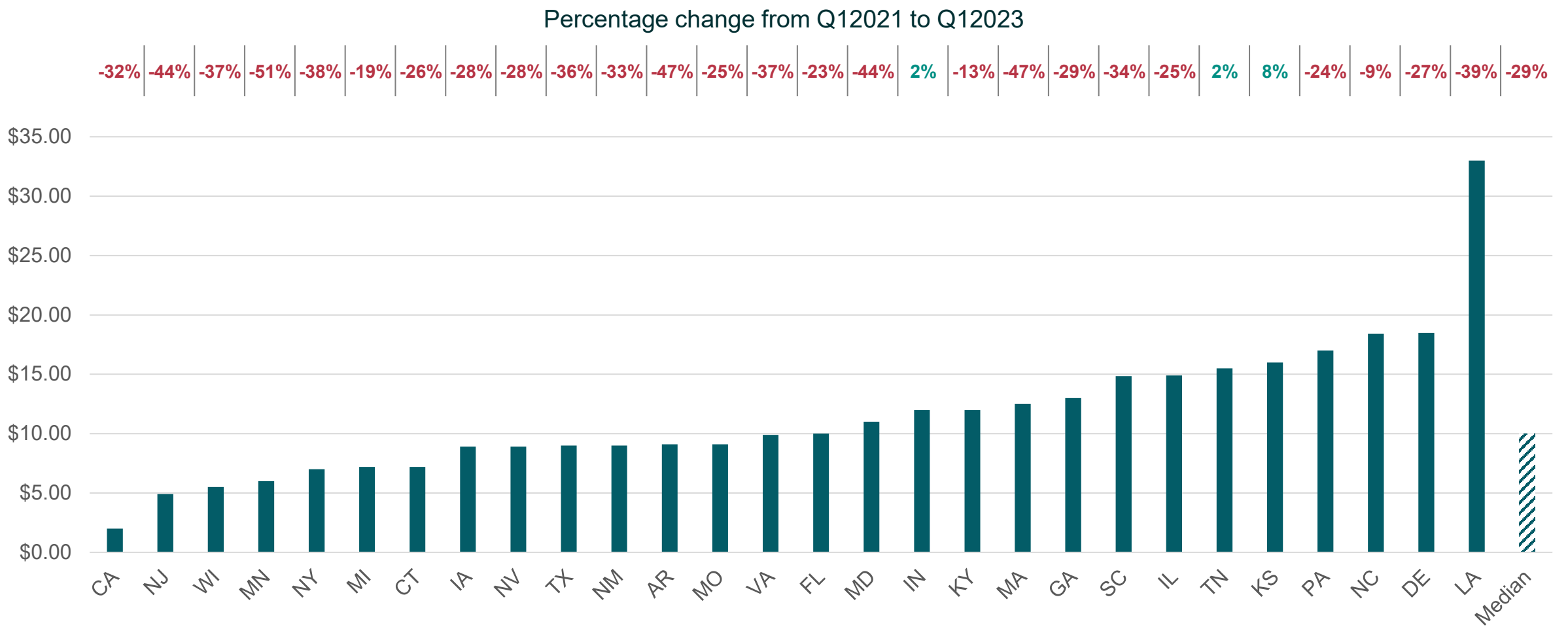
<https://www.wcrinet.org/reports/the-impact-of-opioid-prescriptions-on-duration-of-temporary-disability>

2016 Data from the National Council on Compensation Insurance data for 39 states and DC

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# Opioid payments per claim across the states: Q1 2023



<https://www.wcrinet.org/reports/interstate-variation-and-trends-in-workers-compensation-drug-payments-5th-editiona-wcri-flashreport>

# A multi-pronged approach results in the reduction of opioid prescribing in injured workers

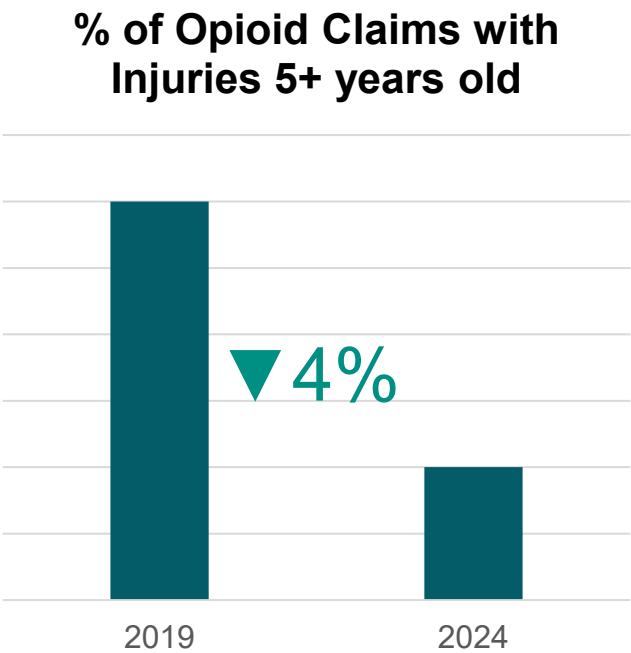
Opioid management policies include:

- + Prescription Guidelines
- + Prescription Drug Monitoring Programs (PDMPs)
- + Dispensing Limits
- + Patient Education
- + Provider Education
- + Laws and Policies
- + Pharmacist Interventions
- + Automated Alerts



*Workers' Compensation and the Opioid Epidemic: State of the Field in Opioid Prescription Management (dol.gov)*

# Opioids use in aging workers' comp claims



% of NEW opioid patients  
in 2024 is  
**50% less**  
than in 2018

# Average Days' Supply of Opioids by Injury Year

| Claim Year            | 2020 | 2021 | 2022 | 2023 | 2024 |
|-----------------------|------|------|------|------|------|
| Injured in 2024       |      |      |      |      | 14   |
| Injured in 2023       |      |      |      | 14   | 28   |
| Injured in 2022       |      |      | 15   | 30   | 55   |
| Injured in 2021       |      | 14   | 30   | 56   | 75   |
| Injured in 2020       | 14   | 31   | 57   | 83   | 100  |
| Injured prior to 2020 | 152  | 187  | 193  | 221  | 215  |

# Factors contributing to opioid dispensing patterns in workers' compensation



## Industry

Highest opioid dispensing rates: Mining (oil and gas); Construction; Agriculture; Forestry; Fishing; Public safety



## Company Size

Smaller companies have higher opioid dispensing rates than larger companies



## Injured Worker Age

Older workers have higher opioid dispensing rates than younger workers



## Injury Type

Fractures and carpal tunnel syndrome have the highest opioid dispensing rates, followed by neurologic spine pain



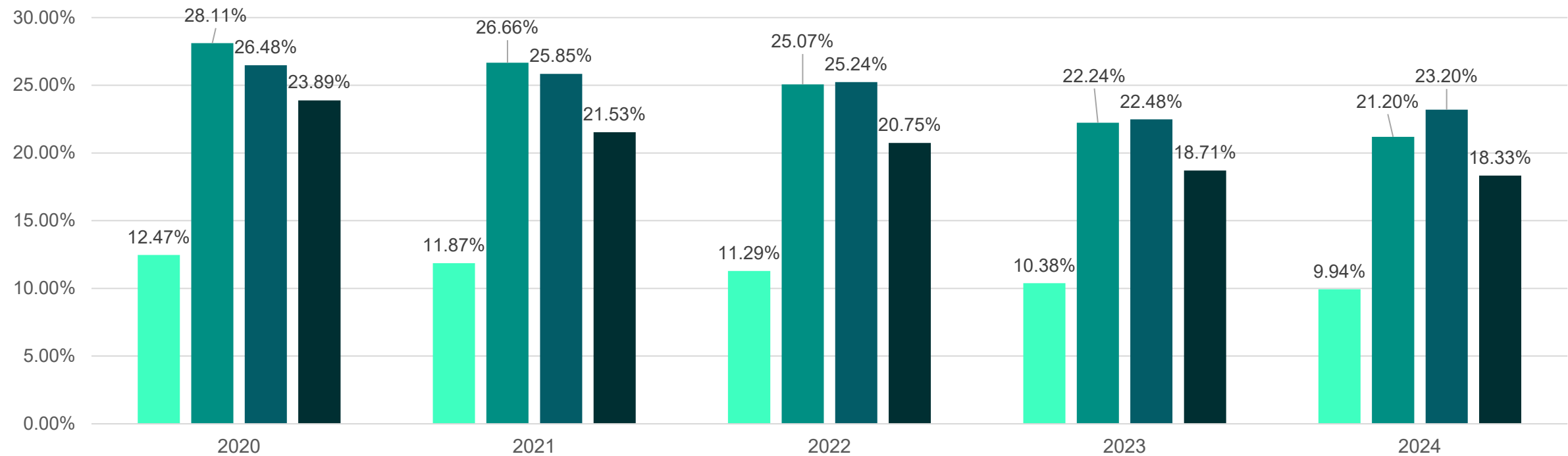
## County Level

- + Rural areas have higher opioid dispensing rates than urban areas.
- + Areas with low rates of health insurance have higher rates for opioid dispensing than areas with high rates of health insurance

24

Thumula, V., Liu, T-C. (2018). *Correlates of Opioid Dispensing*. Workers' Compensation Research Institute, Cambridge, Massachusetts. Update, December 2018, WC-18-48.

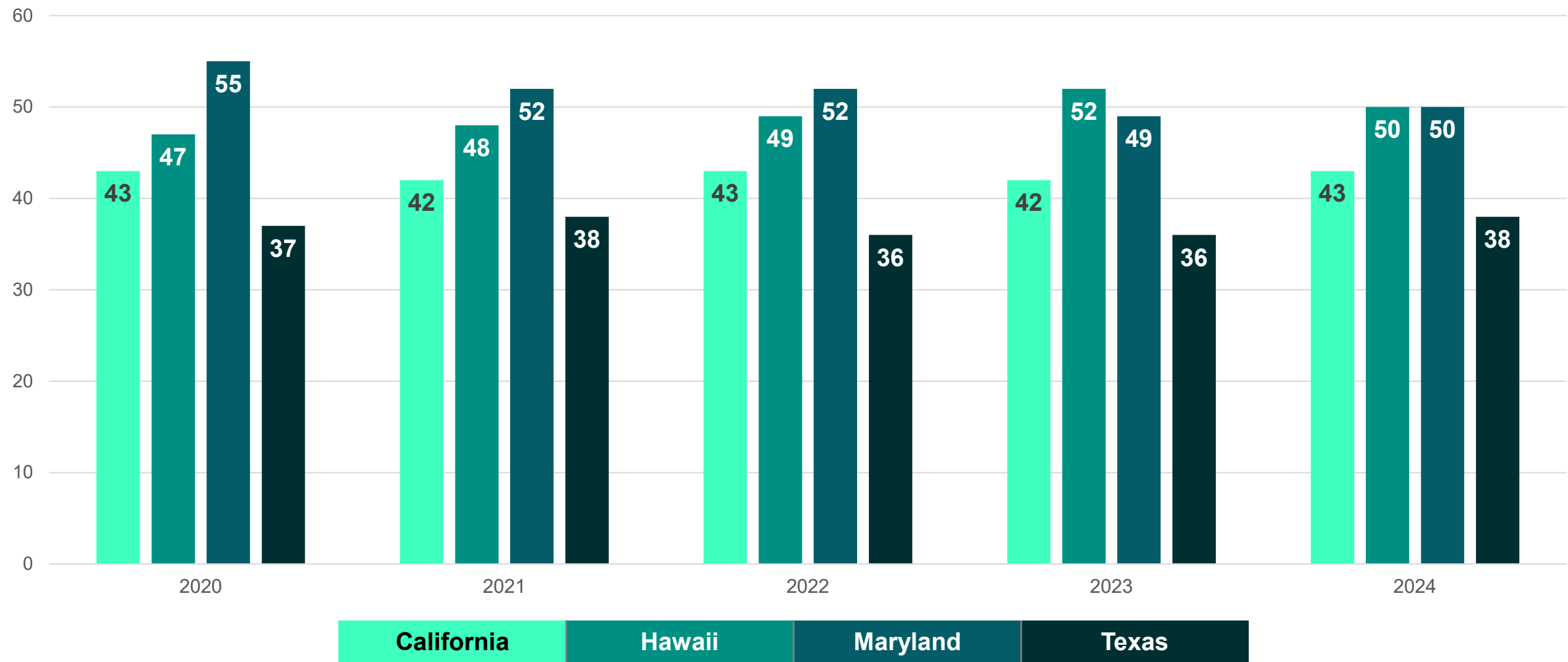
# State claims comparison: % of opioid scripts



| California  | Hawaii  | Maryland | Texas                       |
|---|---|----------|-----------------------------|
| Opioid Treatment guidelines and/or Chronic Pain guidelines and ACOEM, drug formulary limiting opioids | Initial 30-day limit, initial post-surgery less than 3-day supply | None     | Initial 10-day supply Limit |



# State claims comparison: Average MED



# Centers for Disease Control and Prevention (CDC) Opioid Guidelines

# Non-opioid therapies are at least as effective as opioids for many common types of acute pain



## Non-opioid medications

such as acetaminophen, non-steroidal anti-inflammatory drugs (NSAIDs), and selected antidepressants and anticonvulsants




## Physical treatments

such as heat therapy, acupuncture, spinal manipulation, remote electrical neuromodulation, massage, exercise therapy, weight loss



## Behavioral treatment

such as cognitive behavior therapy, mindfulness-based stress reduction



As appropriate, clinicians  
should maximize  
non-pharmacologic and non-opioid  
pharmacologic therapies for the specific  
condition and patient  
and only consider opioid therapy for acute  
pain if the benefits are anticipated to  
outweigh risks to the patient

# Opioid therapy for acute, subacute, and chronic pain



## Starting opioid therapy:

Clinicians should prescribe immediate-release opioids instead of extended-release and long-acting (ER/LA) opioids



## Opioids for acute pain:

Clinicians should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids



## Opioids for

## opioid-naïve patients:

Clinicians should prescribe the lowest effective dosage

# With continued opioid therapy for acute, subacute, and chronic pain, clinicians should...

- + Use caution when prescribing opioids at any dosage
- + Evaluate individual benefits and risks when considering increasing dosage

| Benefits outweigh risks   | Benefits do not outweigh risks  |
|---|---|
| Work closely with patients to optimize non-opioid therapies while continuing opioid therapy | Optimize other therapies and work closely with patients to gradually taper to lower dosages or, based on the patient, appropriately taper and discontinue opioids |

- + Avoid increasing dosage above levels likely to yield diminishing returns in benefits relative to patient risks
- + Not abruptly discontinue opioids or rapidly reduce dosages unless there are indications of life-threatening issue/impending overdose (e.g., confusion, sedation, or slurred speech)
- + Evaluate benefits and risks with patients within 1–4 weeks of starting opioid therapy for subacute or chronic pain or of dosage escalation.
- + Regularly reevaluate benefits and risks with patients

# Non-opioid Alternatives



## Non-opioid medications may be beneficial in managing pain



**Nonsteroidal  
Anti-Inflammatory  
Drugs(NSAIDs)**



**Antidepressants**




**Anticonvulsants**



**Topical  
Analgesics**

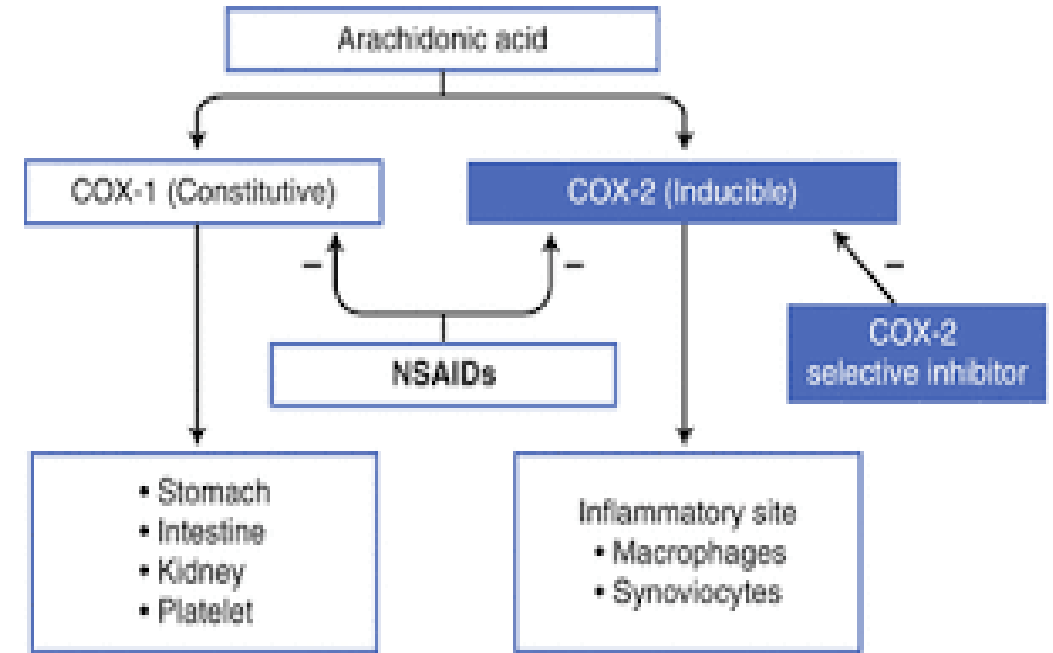


A man in a warehouse setting, wearing a green t-shirt and a high-visibility yellow safety vest with reflective stripes. He is holding a yellow hard hat in his right hand and has his left hand on his lower back, looking upwards with a pained expression. The background shows blue metal shelving units and cardboard boxes.

NSAIDs are a class of medications that reduce pain, inflammation, and fever

# NSAIDs reduce inflammation, fever, and pain by inhibiting prostaglandin production

- + NSAIDs inhibit the cyclooxygenase-1 (COX-1) and cyclooxygenase-2 (COX-2) enzymes
- + COX-1 and COX-2 enzymes play a critical role in the inflammatory cascade leading to the production of prostaglandins



Hylands-White N, Duarte RV, Raphael JH. An overview of treatment approaches for chronic pain management. *Rheumatol Int.* 2017 Jan;37(1):29-42.

# Benefits and Risks of NSAIDs

## Benefits

- + Over the counter products available
- + Lower abuse and misuse potential
- + Most are relatively inexpensive
- + Available in topical formulations
  - Diclofenac sodium 1.5% topical solution, diclofenac 1.3% patch, and diclofenac sodium 1% gel
  - Useful for treating pain due to soft-tissue injuries and osteoarthritis

## Risks

- + Increased risk of serious gastrointestinal (GI) adverse events (Bleeding, ulceration, and perforation)
- + Increased risk of cardiovascular thrombotic events, myocardial infarction (MI), and stroke (Associated with COX-2 selective NSAIDs)
- + Renal toxicity and increased blood pressure
- + Contraindicated during the third trimester of pregnancy

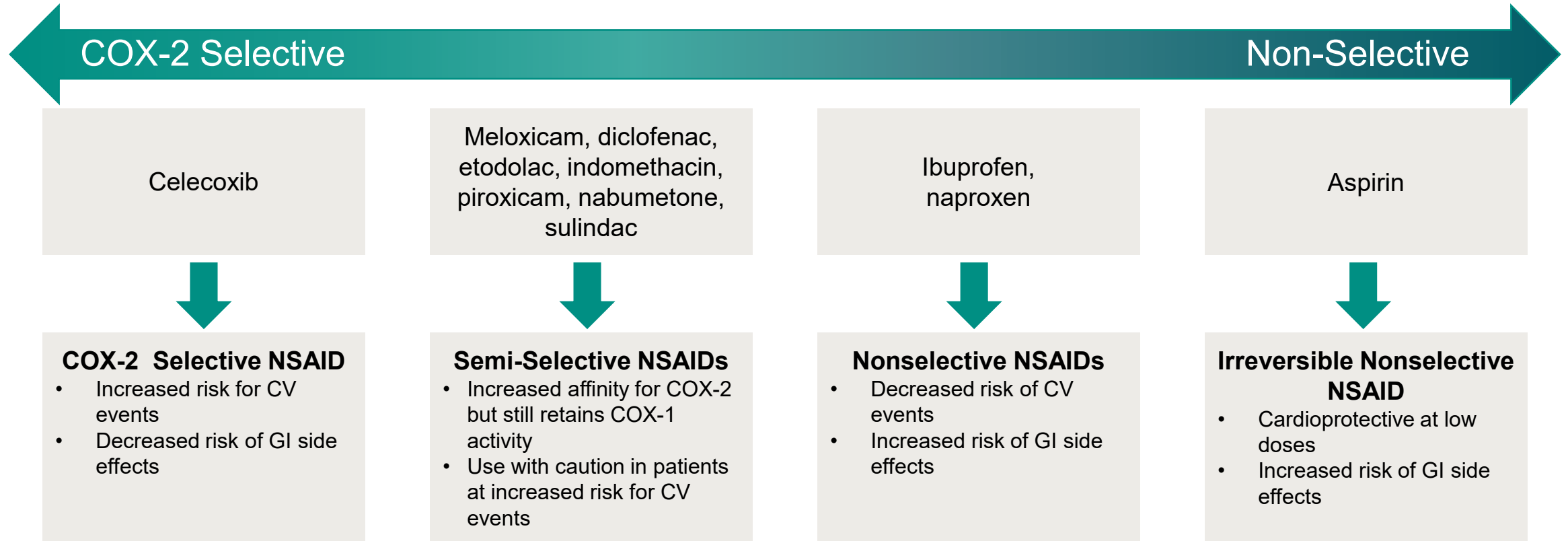
*Fendrick, A. M., & Greenberg, B. P. (2009). A review of the benefits and risks of nonsteroidal anti-inflammatory drugs in the management of mild-to-moderate osteoarthritis. Osteopathic Medicine and Primary Care, 3(1), 1.*

# Choosing an NSAID should be based on a patient's risk of developing gastrointestinal and cardiovascular events

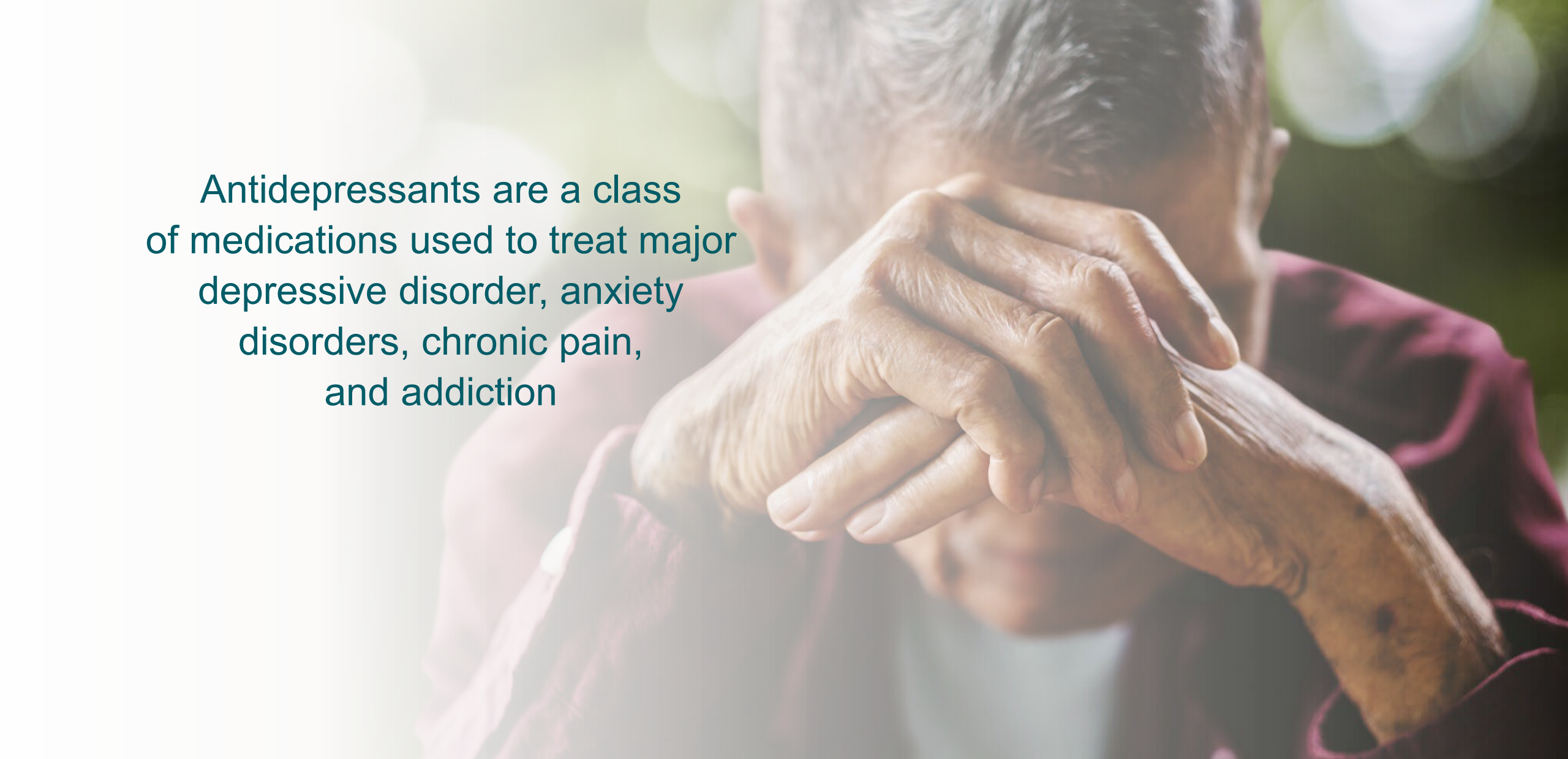
- + Upper and lower gastrointestinal adverse events need to be considered when evaluating NSAID tolerability
- + Use of a prophylactic Proton Pump Inhibitor (e.g., omeprazole, lansoprazole, esomeprazole) can improve gastrointestinal tolerability, particularly for preventing adverse upper gastrointestinal tract events



# COX Selectivity







Antidepressants are a class  
of medications used to treat major  
depressive disorder, anxiety  
disorders, chronic pain,  
and addiction

# Serotonin Norepinephrine Reuptake Inhibitors (SNRIs): Duloxetine and Venlafaxine

- + Facilitates descending inhibition by blocking serotonin and noradrenaline re-uptake
- + Common Uses:
  - Peripheral neuropathy (secondary to diabetes, multiple sclerosis, or other cause)
  - Osteoarthritis, chronic low back pain, fibromyalgia, and depression
  - Duloxetine is effective in treating chronic musculoskeletal pain

## Common Side Effects

- + Drowsiness
- + Insomnia
- + Nausea
- + Dry mouth
- + Dizziness
- + Constipation
- + Excessive sweating

# Tricyclic Antidepressants (TCAs): Amitriptyline, Nortriptyline, Doxepin, Imipramine, Clomipramine, Desipramine

- + Inhibits serotonin and noradrenaline re-uptake
- + Blocks histamine, adrenalin, acetylcholine, and sodium channels, accounting for their broad side effect profile
- + Common Uses:
  - Peripheral neuropathy, post-herpetic neuralgia, neuropathic pain post–spinal cord injury
  - Limited effect in radiculopathy, and chemotherapy-induced peripheral neuropathy

## Common Side Effects

- + Blurred vision
- + Drowsiness
- + Dry mouth
- + Nausea
- + Orthostatic hypotension
- + Weight gain
- + Constipation
- + Difficulty urinating
- + Arrhythmias



# Benefits and Risks of Antidepressants

## Benefits


- + Effective in neuropathic pain, fibromyalgia, and migraines
- + Treats depression and/or anxiety (both are often shared diagnoses in chronic pain patients)
- + May be considered first-line for neuropathic pain
- + TCAs may improve insomnia

*Fendrick, A. M., & Greenberg, B. P. (2009). A review of the benefits and risks of nonsteroidal anti-inflammatory drugs in the management of mild-to-moderate osteoarthritis. Osteopathic Medicine and Primary Care, 3(1), 1.*

## Risks

- + Increased risk of suicidal ideation  
(Black box warning for all antidepressants)
- + SNRIs are safer than TCAs
- + TCAs\*
  - Anticholinergic side effects
  - Cardiotoxicity
  - Narrow therapeutic index
- + Drug-Drug Interactions (Serotonin Syndrome)

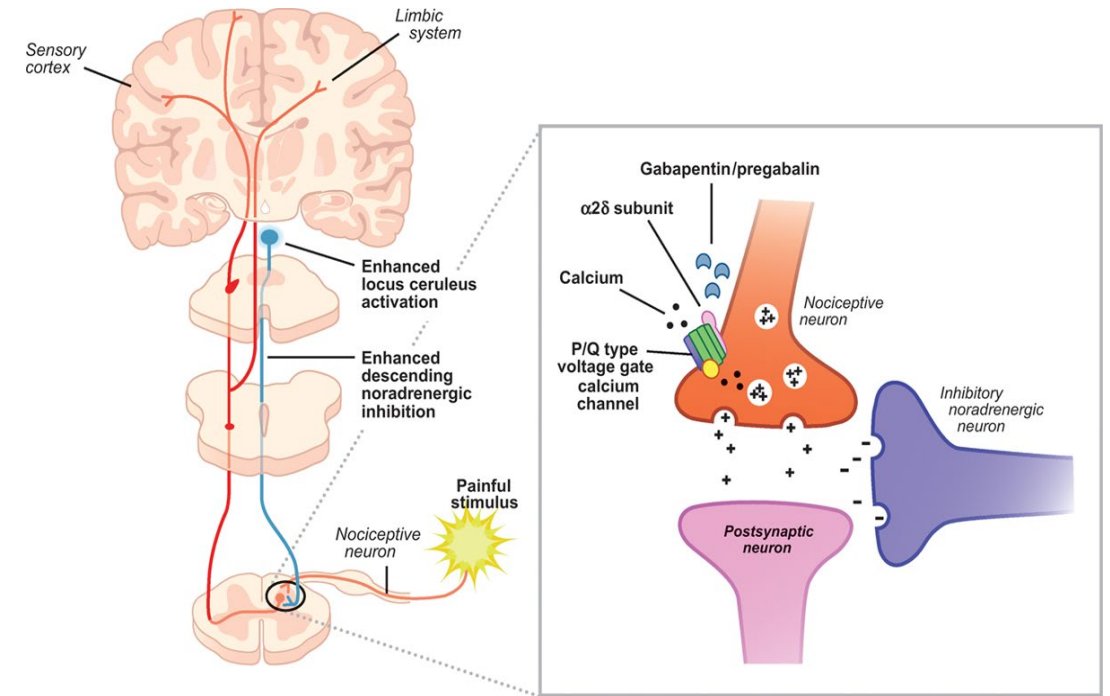
\*Beers Criteria cautions use in geriatric adults due to potential for orthostatic hypotension, anticholinergic effects or toxicity, or sedation



Antiseizure medications  
(anticonvulsants) help treat epilepsy  
and other causes of seizures.  
They can also treat anxiety  
and neuropathic pain.

# Gabapentin and Pregabalin

- + Blocks presynaptic alpha-2-delta calcium channels in the dorsal horn, inhibiting neurotransmitter release
- + Increases GABA synthesis
- + Blocks glutamate receptors
- + Should be trialed for a four-to-six-week period with two weeks at the maximum tolerated dose
- + Common Uses:  
Chronic neuropathic pain, post-herpetic neuralgia, diabetic peripheral neuropathy, fibromyalgia, and neuropathy in spinal cord injuries



Bates D, Schultheis BC, Hanes MC, Jolly SM, Chakravarthy KV, Deer TR, Levy RM, Hunter CW. A Comprehensive Algorithm for Management of Neuropathic Pain. *Pain Med.* 2019 Jun 1;20(Suppl 1):S2-S12.

# Side Effects of Gabapentin and Pregabalin

- + Severity of side effects is dose dependent
- + Side effects are frequently transient with most patients reporting side effects during the first few weeks of treatment
- + Poorly tolerated side effects or inadequate pain relief should prompt dosage adjustment, or cessation of the medication

## Common Side Effects

- + Somnolence
- + Fatigue
- + Dizziness
- + Lower extremity edema
- + Ataxia

*Wiffen PJ, Derry S, Bell RF, et al. Gabapentin for chronic neuropathic pain in adults. Cochrane Database Syst Rev 2017;6:CD007938.*

# Benefits and Risks of Anticonvulsants

## Benefits

- + Effective in multiple types of neuropathic pain and fibromyalgia
- + Usually well tolerated as they have few side effects
- + Side effects are usually mitigated with a reduction in dose
- + Extended Release/Controlled Release formulations available

## Risks

- + Suicidal ideation
- + Respiratory depression
- + Concomitant use of opioids with gabapentin or pregabalin may cause excessive sedation, somnolence, and respiratory depression



Topical analgesics are medications applied directly to the skin to relieve pain. They work by blocking pain signals or reducing inflammation at the site of application.



# Topical analgesics are effective at the application site with negligible systemic absorption

## Common Topical Preparations

- + Lidocaine
- + Capsacin
- + NSAIDs
- + Salicylates

## Indications

- + Neuropathic pain
- + Osteoarthritis
- + Acute Injuries  
(sprains, strains)



# Topical analgesics

| Lidocaine  | Capsaicin  | Topical Diclofenac   | Salicylates   |
|--|--|--|---|
| Decreases ectopic firing of peripheral nerves  | Binds to the TRPV1 receptor located on the A $\delta$ and C-nerve fibers which results in the depolarization of the nerve                              | Inhibits COX-1 and COX-2 enzymes resulting in a decrease in inflammation and pain  | Decreases inflammation  |
| <b>Common Uses</b> <ul style="list-style-type: none"><li>• Local neuropathic pain</li><li>• Post-herpetic neuralgia</li><li>• Diabetic peripheral neuropathy</li><li>• Neuropathic pain in cancer patients</li><li>• Chronic lower back pain</li></ul> | <b>Common Uses</b> <ul style="list-style-type: none"><li>• Minor aches and pains of muscles and joints</li><li>• Neuropathic pain (8% patch)</li></ul> | <b>Common Uses</b> <ul style="list-style-type: none"><li>• Topical gel relieves arthritis pain of the hand, wrist, elbow, foot, ankle or knee</li><li>• 1.3% patch treats acute pain due to minor strains, sprains or contusions</li></ul> | <b>Common Uses</b> <ul style="list-style-type: none"><li>• Relieves minor aches and pains of muscles and joints associated with arthritis, bruises, backaches, sprains, and strains</li></ul> |

Jara C, Del Barco S, Gravalos C, et al: SEOM clinical guideline for treatment of cancer pain (2017). Clin Transl Oncol 2018; 20(1):97-107.

Flector (diclofenac epolamine) [prescribing information]. Parsippany, NJ; IBSA Pharma Inc; November 2020.

Voltaren (diclofenac sodium) [prescribing information]. Malvern, PA: Endo Pharmaceuticals, Inc; February 2018.

Asperflex Advance Patch (camphor, menthol, methyl salicylate) [prescribing information]. Fairfield, NJ: Akron Pharma Inc; March 2023.



# Benefits and Risks of Topical Analgesics

## Benefits

- + Better side effect profile than oral alternatives especially in elderly patients or patients with pre-existing conditions
- + Many formulations available over-the-counter
- + Many formulations relatively inexpensive
- + Low risk of abuse

## Risks

- + Long-term exposure to capsaicin causes overstimulation, desensitization of the nerve, and reversible nerve degeneration
- + May cause reactions at the site of application
- + Exposure to large areas of the body can increase the risk of systemic absorption
- + Hypersensitivity reactions

# Presentation takeaways



It is our priority to combat the opioid epidemic and reduce the potential for opioid misuse and abuse



Prescription opioids are powerful pain-reducing medications, but have risks



Chronic opioid use in injured workers often begins with treatment of acute pain



Early opioid exposure increases risk of long-term use



Clinicians should maximize non-pharmacologic and non-opioid pharmacologic therapies as appropriate



Clinicians should carefully weigh the benefits and risks of continuing opioid therapy

# Thank you!

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Watch for information on our next CE webinars!

Workers' Comp. Legislative Wrap-Up:  
**July 29, 2025**

Behavioral Health Medications in Workers' Comp.  
**October 21, 2025**

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