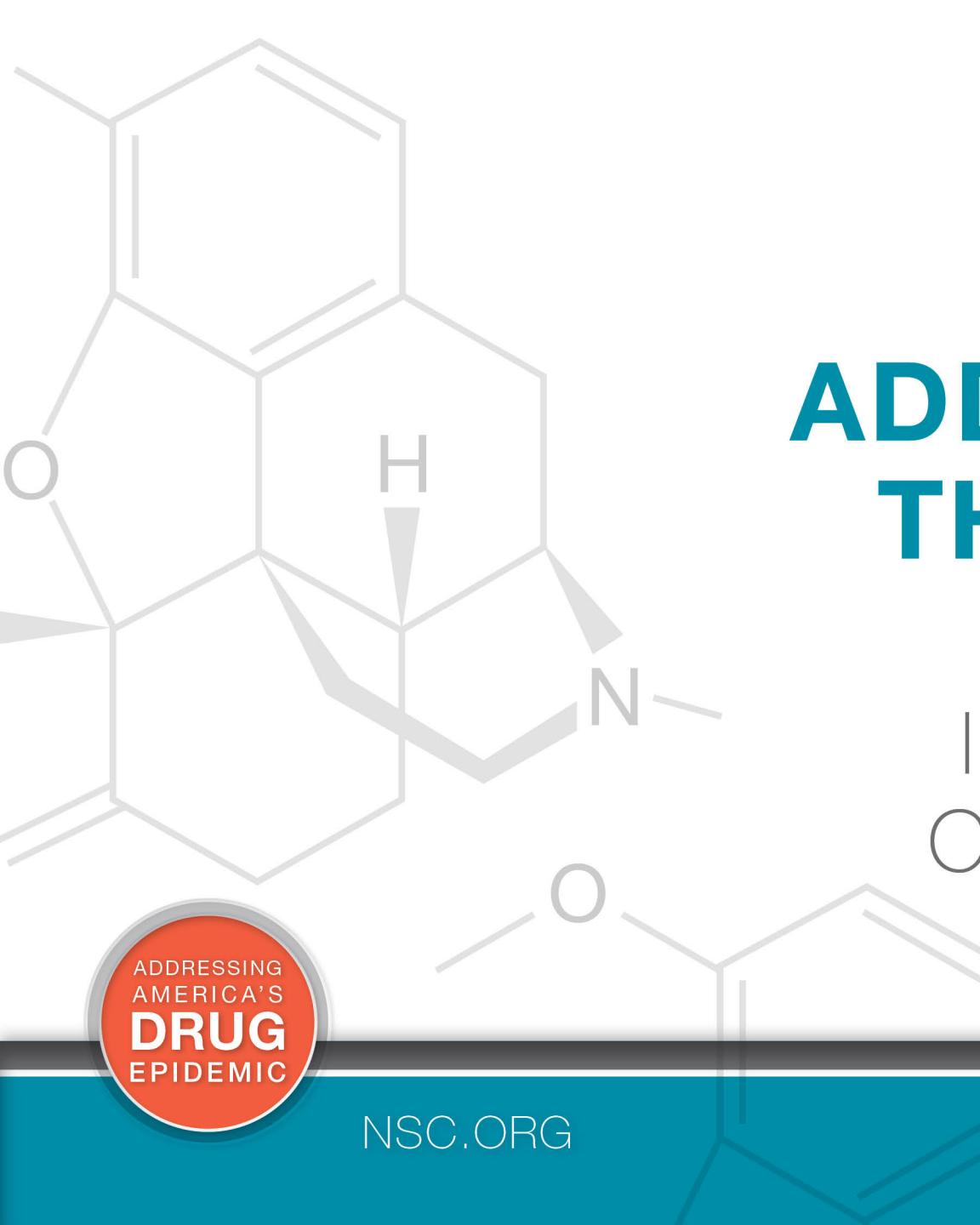


FOR
PRESCRIBERS

ADDRESSING THE OPIOID CRISIS

IN THE ACUTE CARE SETTING



ADDRESSING
AMERICA'S
DRUG
EPIDEMIC

NSC.ORG



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Medical Advisor:

National Safety Council
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Professional Background:

Attending Physician, Assistant Professor

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DC Chapter, American College of Emergency Physicians (ACEP)
Washington, DC

NSC MISSION

The National Safety Council eliminates preventable deaths at work, in homes and communities, and on the road through leadership, research, education and advocacy.



AT WORK



IN HOMES



COMMUNITIES



ON THE ROADS



OBJECTIVES

1. Reinforce the scope and etiology of the opioid epidemic.
2. Describe acute pain and its effective treatment.
3. Compare the risks and benefits of opioid and non-opioid analgesics for pain management.
4. Become familiar with evidence-based guidelines for pain management at multiple organizational levels.

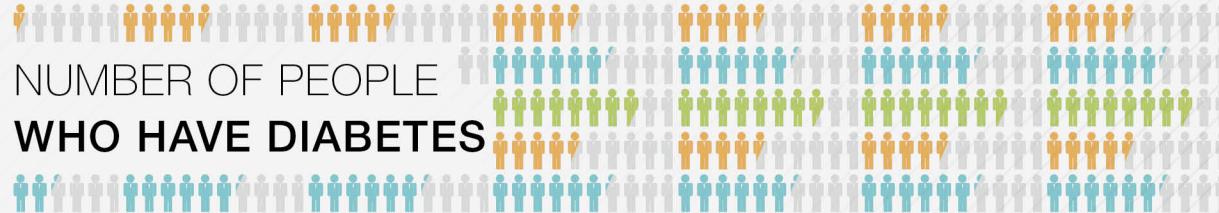
OBJECTIVES

5. Describe patient and prescriber misconceptions surrounding opioid use.
6. Become an advocate for safer analgesic prescribing.
7. Understand the basics of opioid use disorder treatment.
8. Become familiar with keys sources of information and services available to prescribers.

OPIOID DEFINITION

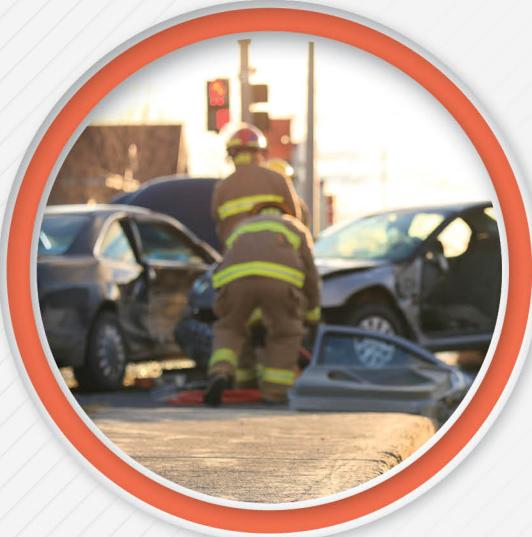


20.8 MILLION PEOPLE IN THE U.S. ARE LIVING WITH A SUBSTANCE USE DISORDER



DRUG OVERDOSES

Cause more deaths than vehicle crashes

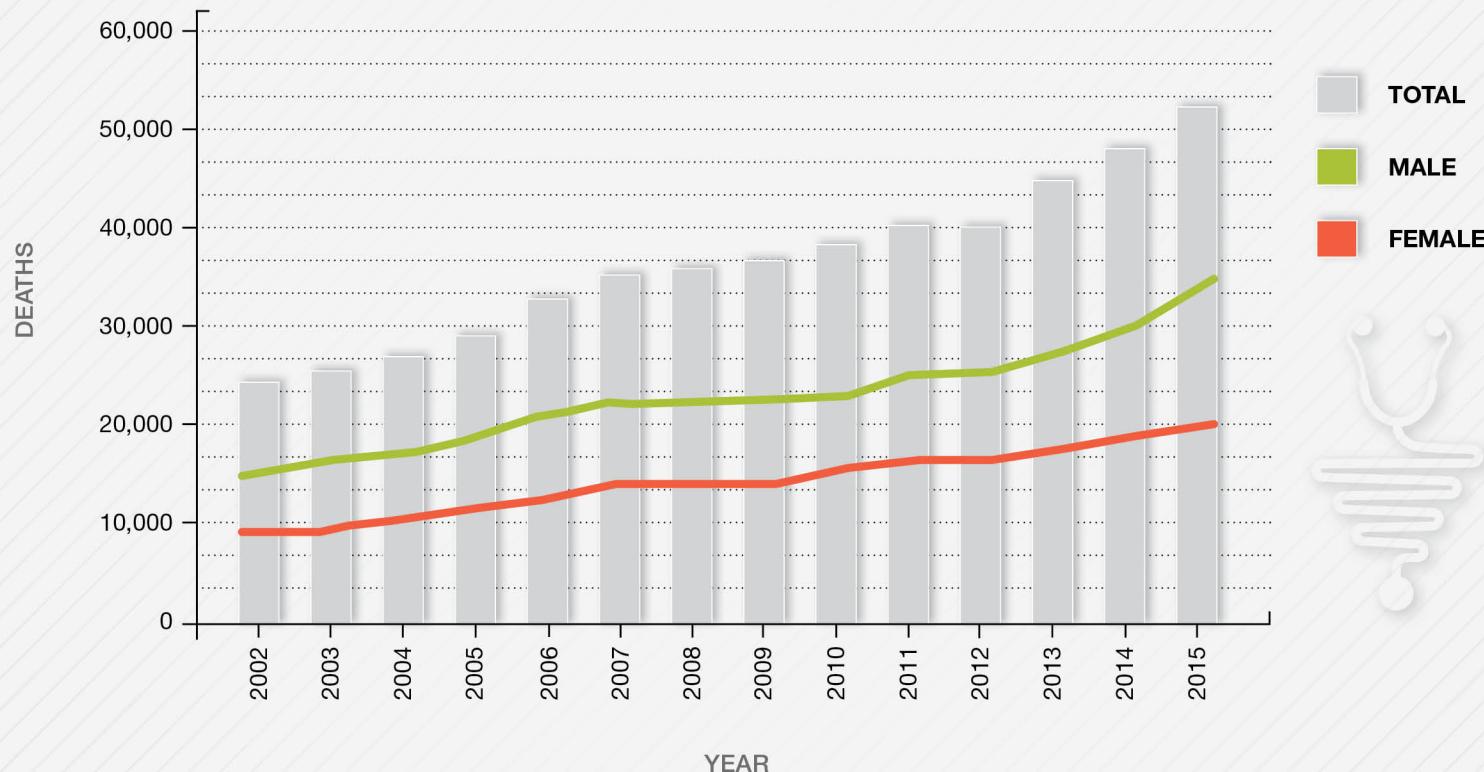


Biggest contributor is prescription painkillers



NATIONAL OVERDOSE DEATHS

NUMBER OF DEATHS FROM ALL DRUGS

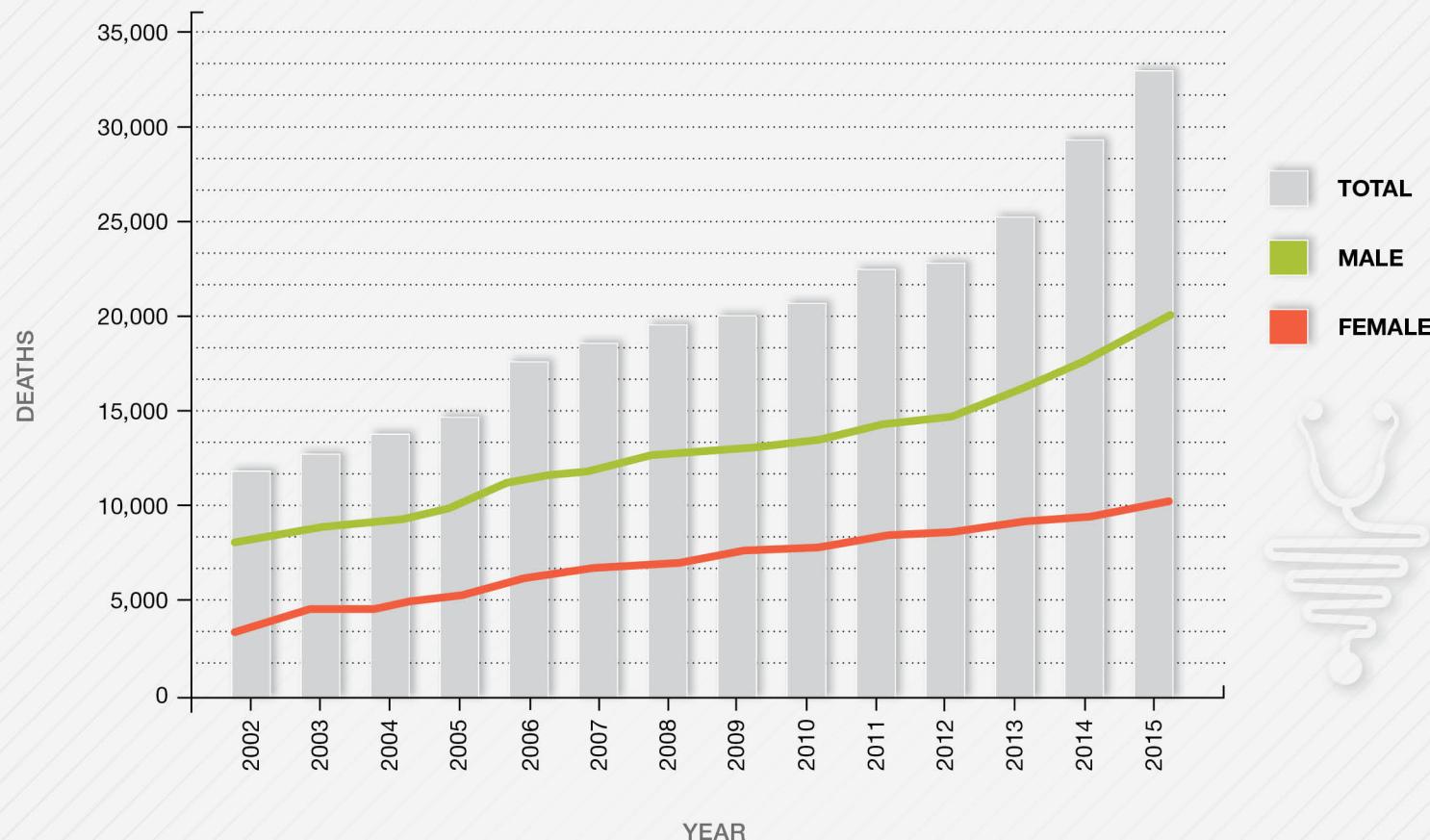


National Center for Health Statistics, CDC Wonder



NATIONAL OVERDOSE DEATHS

NUMBER OF DEATHS FROM OPIOID DRUGS



National Center for Health Statistics, CDC Wonder



NATIONAL OVERDOSE DEATHS

NUMBER OF DEATHS FROM HEROIN

45% of people who used heroin were also addicted to prescription opioid painkillers.

72 %

Overdose deaths involving synthetic opioids other than methadone, which includes fentanyl, increased by 72% from 2014 to 2015.

M367

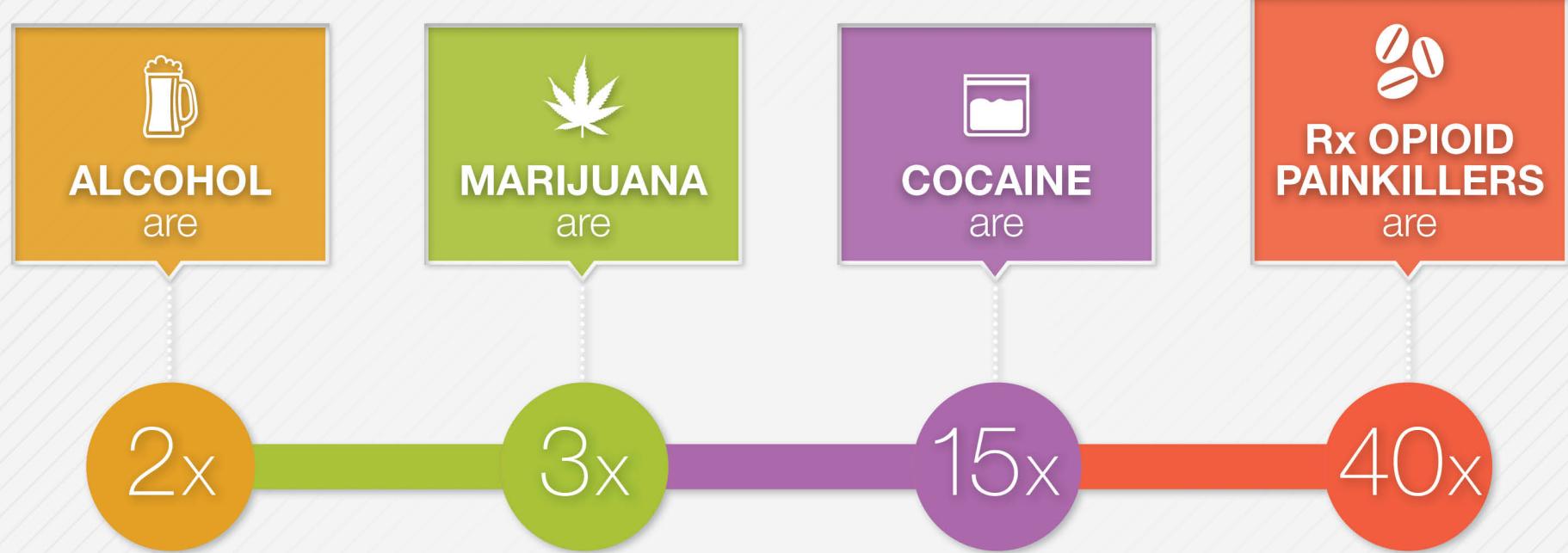
45%

Rudd RA, Seth P, David F, Scholl L. Increases in Drug and Opioid-Involved Overdose Deaths - United States, 2010–2015. MMWR Morb Mortal Wkly Rep. ePub: 16 December 2016.
DOI: <http://dx.doi.org/10.15585/mmwr.mm6550e1>.

Peterson AB, Gladden RM, Delcher C, Spies E, Garcia-Williams A, Wang Y, et al. Increases in fentanyl-related overdose deaths - Florida and Ohio, 2013-2015. Morb Mortal Wkly Rep. 2016;65(33):844-9.



PEOPLE WHO ARE **ADDICTED TO** ...

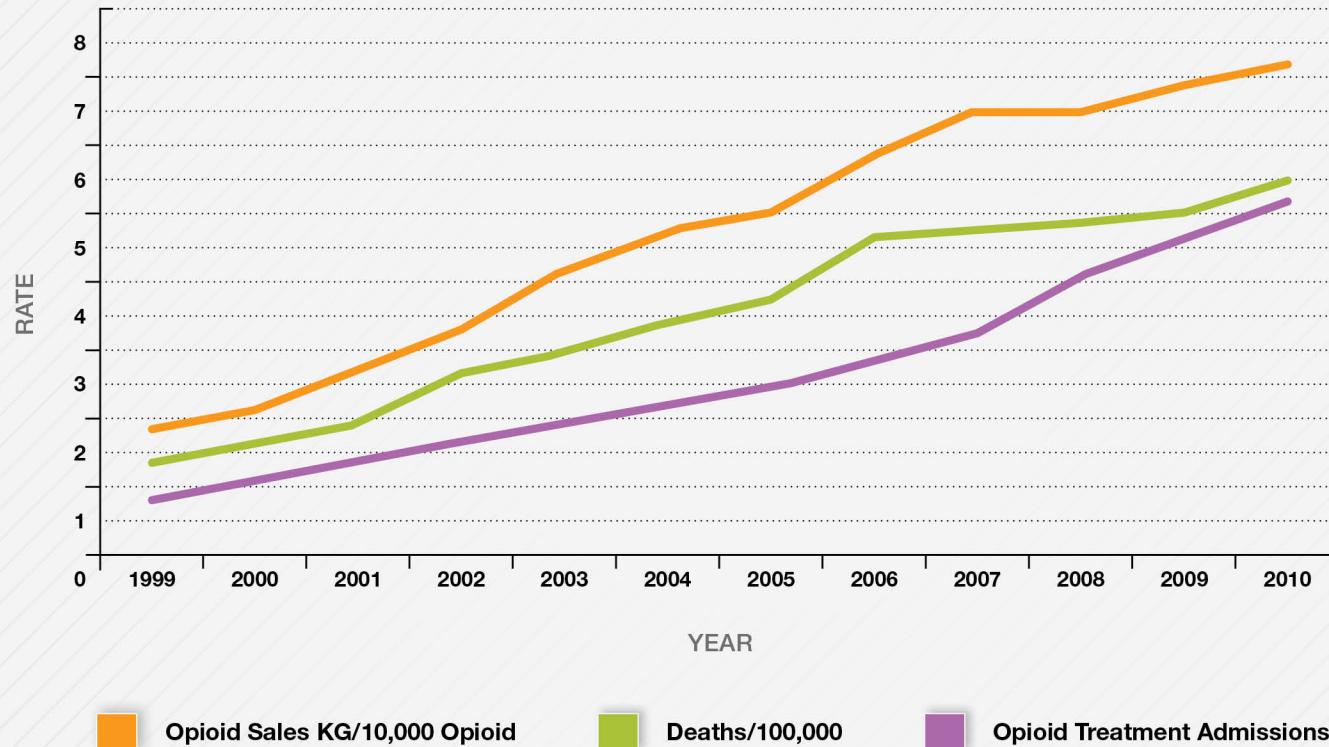


... MORE LIKELY TO BE
ADDICTED TO HEROIN.

National Survey on Drug Use and Health (NSDUH), 2011-2013



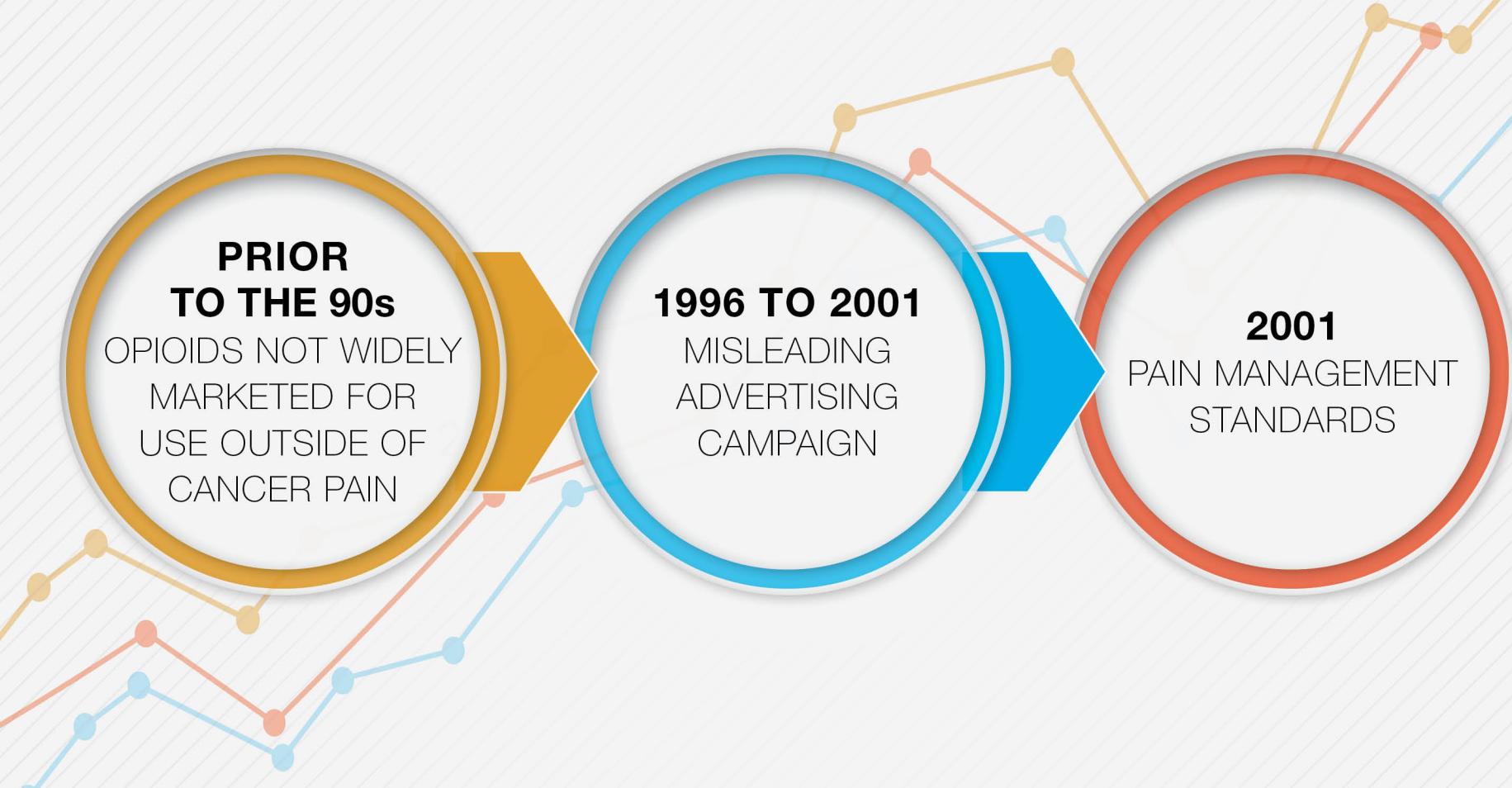
RATES OF OPIOID OVERDOSE DEATHS, SALES AND TREATMENT ADMISSIONS, 1999-2010



National Vital Statistics System, DEA's Automation of Reports



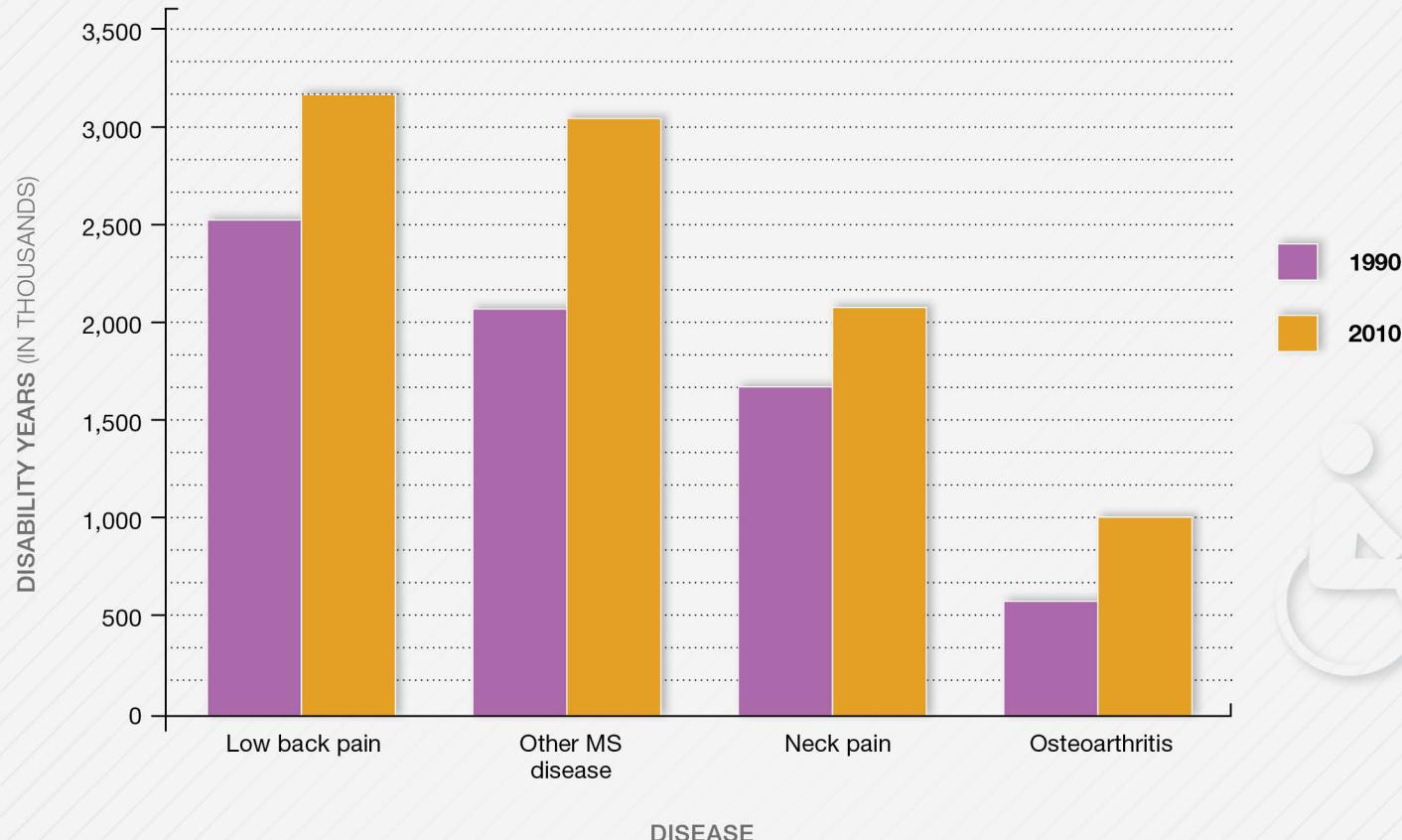
INCREASE IN PRESCRIBING TRENDS



STATE OF U.S. HEALTH

YEARS LIVED WITH DISABILITY

(IN THOUSANDS)



Murray, C. (2013). The state of US health, 1990-2010: burden of diseases, injuries, and risk factors. *JAMA : The Journal of the American Medical Association*, 310(6), 591–608.



PAIN DEFINITION

An unpleasant **sensory** and **emotional** experience associated with actual or potential tissue damage, or described in terms of such damage



NUMBER NEEDED TO TREAT (NNT)

NNT = number of people who must be treated by a specific intervention for 1 person to receive a certain effect

LOWER #S MORE EFFECTIVE

NNT of 1.5 is very good

NNT of 2.5
considered good

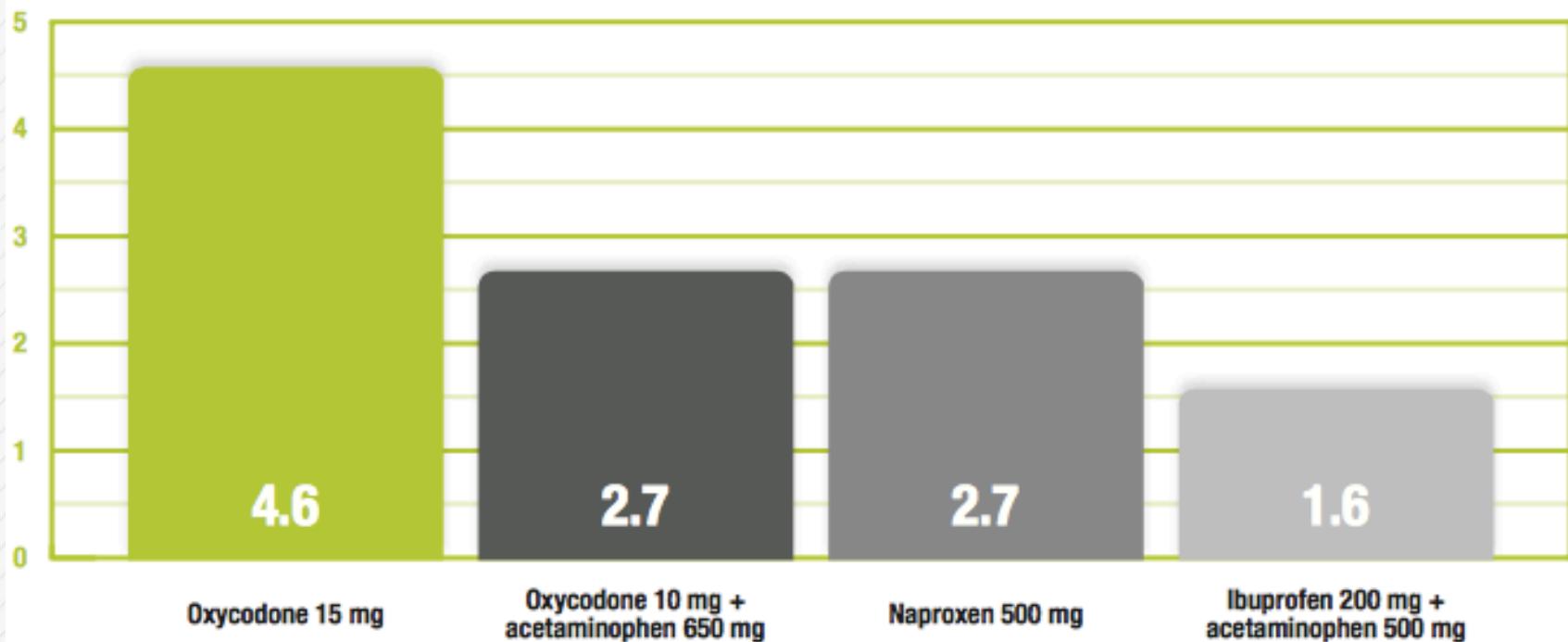
50% PAIN RELIEF CONSIDERED EFFECTIVE PAIN TREATMENT.[†]

[†]Cochrane, org. 2014



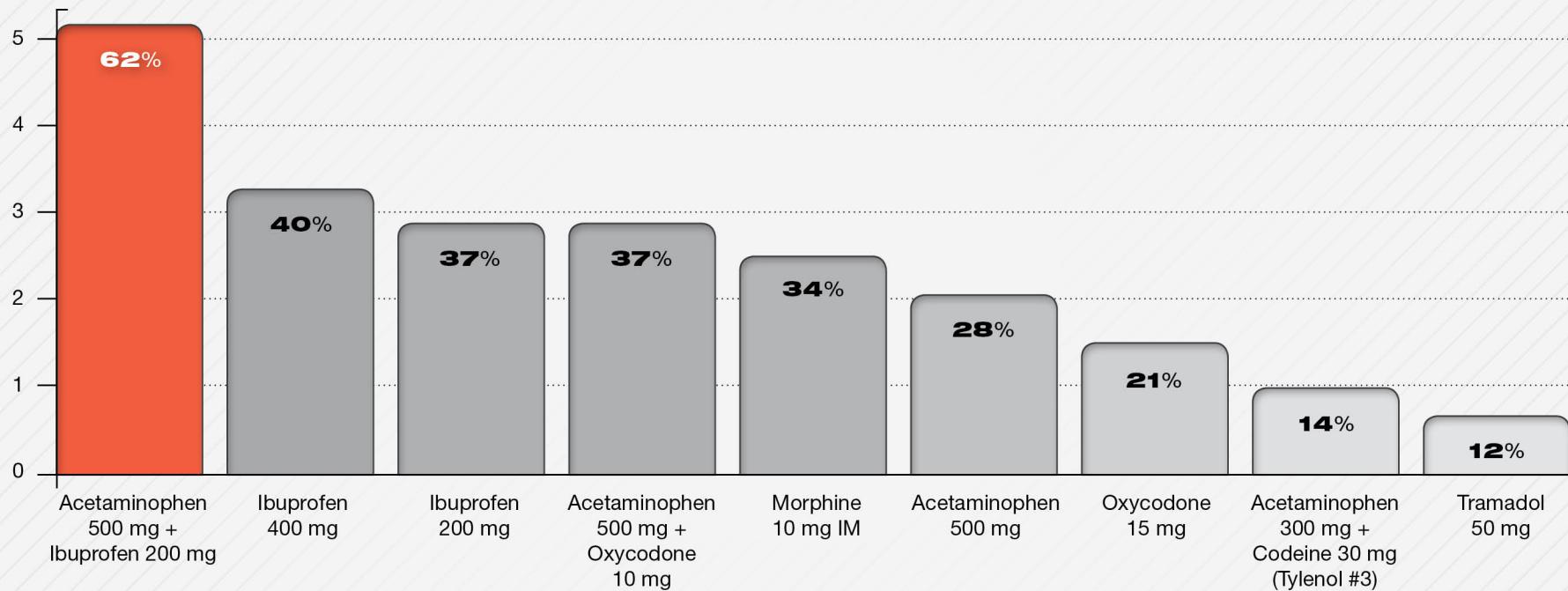
EFFICACY OF MEDICATIONS FOR ACUTE PAIN

Number of people needed to treat for one person to get 50% pain relief



Cochrane research cited in the NSC white paper, Evidence for the Efficacy of Pain Medications

EFFICACY OF PAIN MEDICATIONS FOR ACUTE PAIN



Cochran research cited in the NSC white paper, Evidence for the Efficacy of Pain Medications



OPIOID ANALGESICS



NON-OPIOID ALTERNATIVES

- Acetaminophen
- NSAIDs
- Anticonvulsants
 - Gabapentin, Pregabalin
- Tricyclic Antidepressants
 - Amitriptyline, nortriptyline...etc.
- Other Antidepressants
 - SNRI – Cymbalta, Savella, Effexor
- Muscle Relaxants
 - Flexeril, Skelaxin, Zanaflex...etc.
- Topicals

“KEEP OPIOID NAÏVE PATIENTS OPIOID NAÏVE”

NON-OPIOID ANALGESICS: **ACETAMINOPHEN**

BENEFITS

- ✓ Antipyretic
- ✓ 3.5 NNT for 500 mg for 50% pain relief
- ✓ Safe in almost all patients at <4g per day
- ✓ Minimal GI side effects
- ✓ Oral and IV options

RISKS

- ✓ No anti-inflammatory properties
- ✓ Acute liver injury in high doses or chronic dosing



NON-OPIOID ANALGESICS: NSAIDS

BENEFITS

- ✓ Antipyretic
- ✓ Anti-inflammatory
- ✓ 2.7 NNT for 50% pain relief
(Ibuprofen 200 mg)
- ✓ Oral, IM and IV

RISKS

- ✓ GI and renal side effects
- ✓ Increased cardiovascular risk
- ✓ interference with blood thinners
- ✓ Lower doses are less likely to cause these issues



NON-OPIOID ANALGESICS: **ANTI-SEIZURES**

BENEFITS

- ✓ Can be used daily to prevent/treat pain, twice to three times per day dosing
- ✓ 3+ NNT

RISKS

- ✓ Dizziness, somnolence, peripheral edema, weight gain, asthenia, headache and dry mouth



NON-OPIOID ANALGESICS: TRICYCLIC ANTIDEPRESSANTS

BENEFITS

- ✓ Can be used daily to prevent/treat pain, once a day dosing
 - ✓ 3+ NNT
- ✓ Less anticholinergic action and side effects with Imipramine and Nortriptyline
- ✓ More anticholinergic activity and side effects with Amitriptyline but may be more efficacious
- ✓ Can help with sleep

RISKS

- ✓ Dry mouth, sweating, dizziness, blurred vision, drowsiness and constipation
- ✓ Cardiovascular (arrhythmia, palpitations and hypotension)
- ✓ Sedation and urinary retention
- ✓ Cognitive/confusion
- ✓ Gait disturbance/falls



NON-OPIOID ANALGESICS: SNRIs

BENEFITS

- ✓ Can be used daily to prevent/treat pain, once to twice a day dosing
- ✓ 3+ NNT

RISKS

- ✓ Nausea, somnolence, dry mouth, constipation, reduced appetite, diarrhea, hyperhidrosis and dizziness
- ✓ Rare elevations of plasma glucose, hepatic enzymes or blood pressure reported with Duloxetine



COMMONLY PRESCRIBED BENZODIAZEPINES



ATIVAN



HALCION



KLONOPIN



ROHYPNOL



• VALIUM



XANAX



NON-OPIOID ANALGESICS: **TOPICAL ANALGESICS**

BENEFITS

- ✓ Can be used daily to treat/ prevent pain
- ✓ Generally safe with low absorption

RISKS

- ✓ Local adverse reactions (skin irritation)



NON-PHARMACOLOGICAL TREATMENTS FOR PAIN

PHYSICAL THERAPY



OCCUPATIONAL THERAPY



PAIN PSYCHOLOGY



MIND-BODY



MASSAGE



ACUPUNCTURE



MUSIC THERAPY



PET THERAPY



NON-PHARMACOLOGICAL TREATMENTS FOR PAIN

COLD/HEAT



DIVERSION



MODIFYING ENVIRONMENTAL
FACTORS



POSITIONING/REPOSITIONING



RELAXATION/IMAGERY



MEDICAL FOOD



DIET



EXERCISE



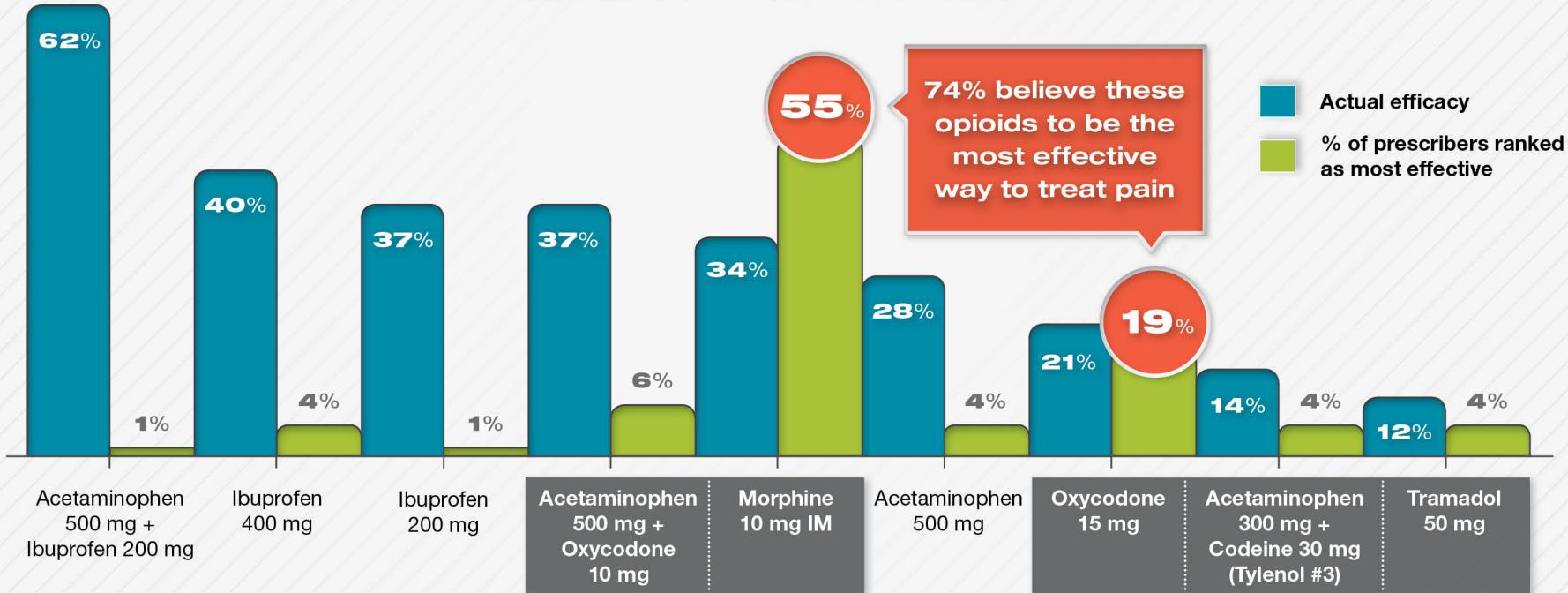
INTERVENTIONAL TECHNIQUES

- Muscular injections
 - Trigger point injections
- Joint injections
 - Shoulder, knee, bursa, etc.
- Nerve blocks
 - Occipital nerve block for headache
 - Stellate ganglion block for complex regional pain syndrome
 - Dental anesthesia
- Spine
 - Epidural steroid injection
 - Sacroiliac joint procedures (injection, radiofrequency)
 - Facet procedures (injection, radiofrequency)
- Neuromodulation
 - Spinal cord stimulators/peripheral nerve stimulators
 - Implantable pain pumps
- Botulinum Toxin A
 - Chronic migraine
 - Possible treatment for chronic pain

OPIOIDS EFFICACY & SAFER ALTERNATIVES

Opioid Medications

PERCENT WITH 50% PAIN RELIEF

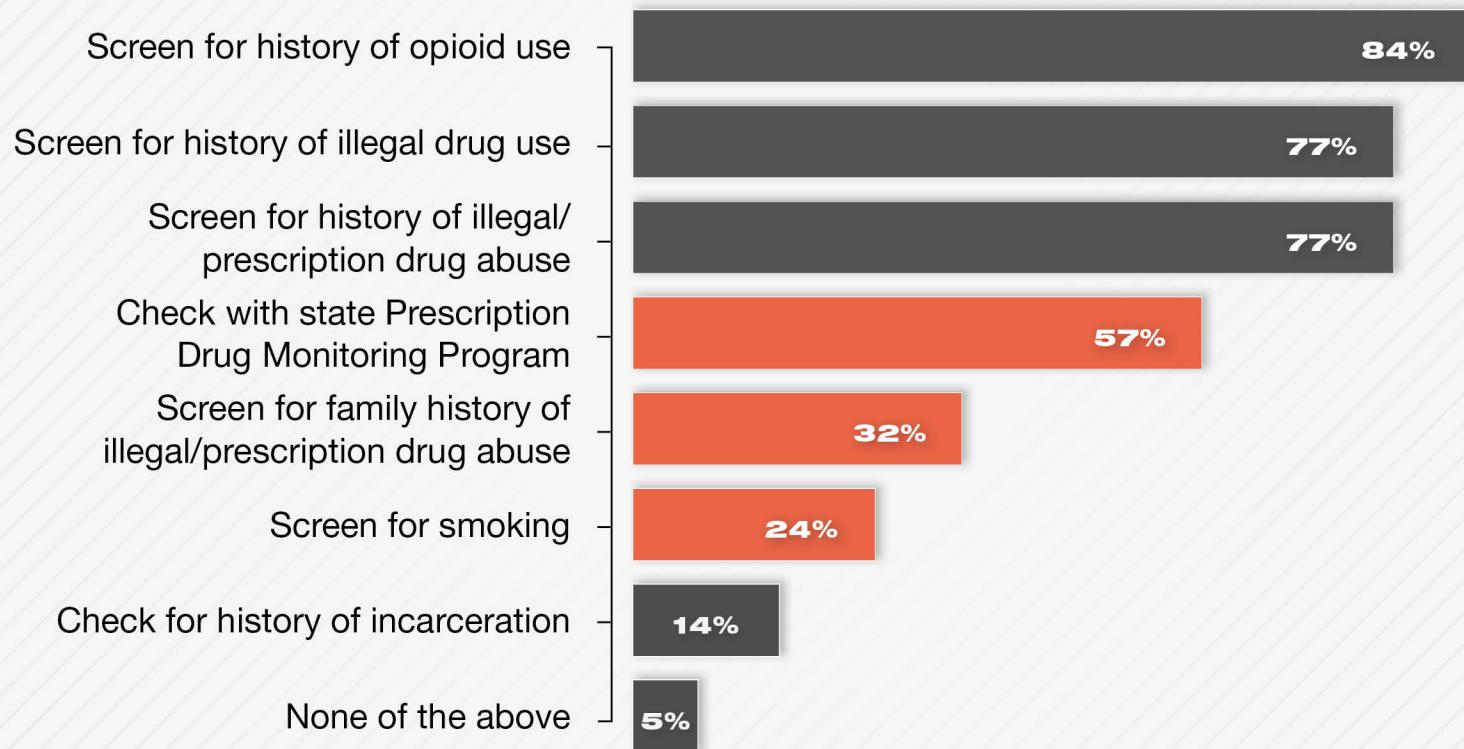


(Blue) Cochran research cited in the NSC white paper, Evidence for the Efficacy of Pain Medications; (Green) NSC Rx Study – Q8. Please rank the following medications in terms of how successful you feel they are at providing pain control or relief. (Total –n=201)



ONLY 32% SCREEN FOR FAMILY HISTORY OF ADDICTION

Actions taken **before** prescribing opioids



Source: NSC Rx Study - Q12. Which of the following do you regularly do before prescribing a patient an opioid pain medication? ? (Total - n=201)



PRESCRIPTION OPIOID PAINKILLERS:

NSC PUBLIC OPINION POLL, 2015

Don't know
painkillers
contain opioids
or it is a felony
to share them

Unconcerned
about
addiction,
but most
have reason
to worry
given risk
factors

KEY FINDINGS



PUBLIC POLL

Overestimate
benefits and
underestimate
risks of addiction
or death





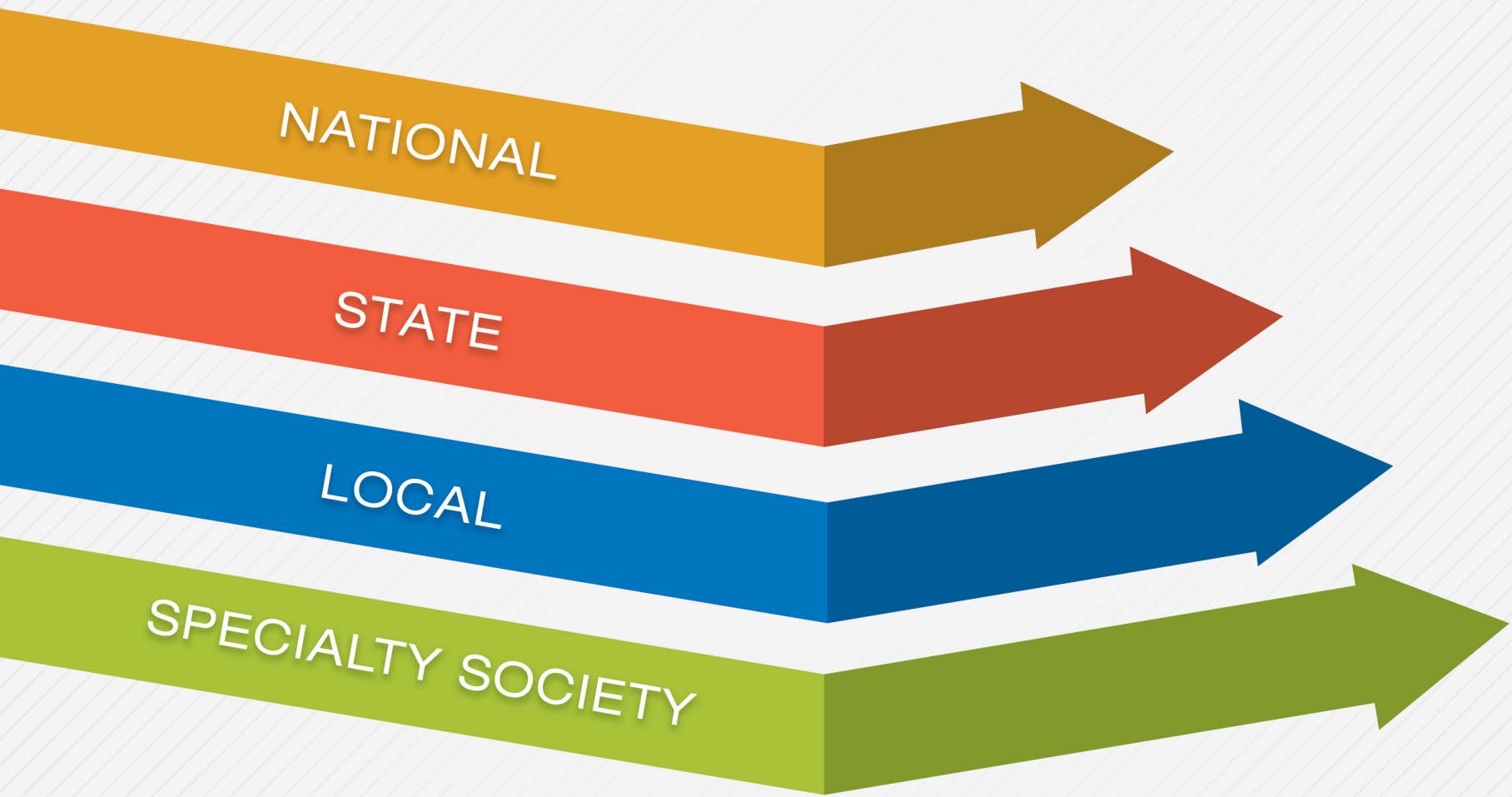
**PATIENT
EXPECTATIONS
IMPACT DECISION
TO PRESCRIBE
OPIOIDS**



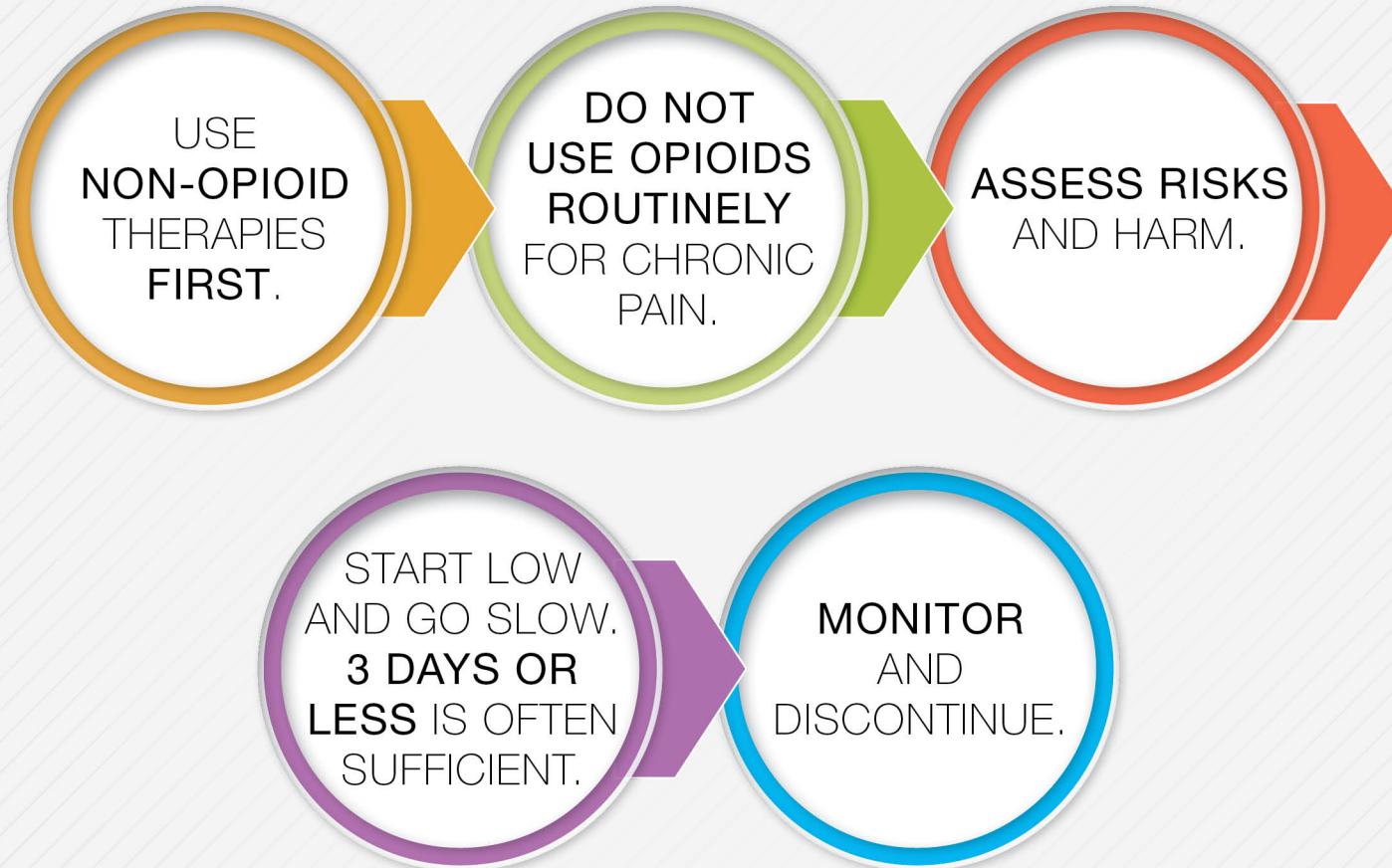
**PATIENT
EXPECTATIONS
ARE A BARRIER
TO PRESCRIBING
ALTERNATIVES
TO OPIOIDS**

NSC Rx Study: Q11. Which of the following would you say impacts your decision to prescribe opioid pain medication to patients? (Total - n=201); Q15. Which of the following, if any, do you feel are barriers to prescribing NSAID or other alternatives to opioid pain medication? (Total - n=201); Q.19 What is your likelihood you would visit your doctor again if they offer a range of alternative painkillers for discussion? (Total – n=1,014)

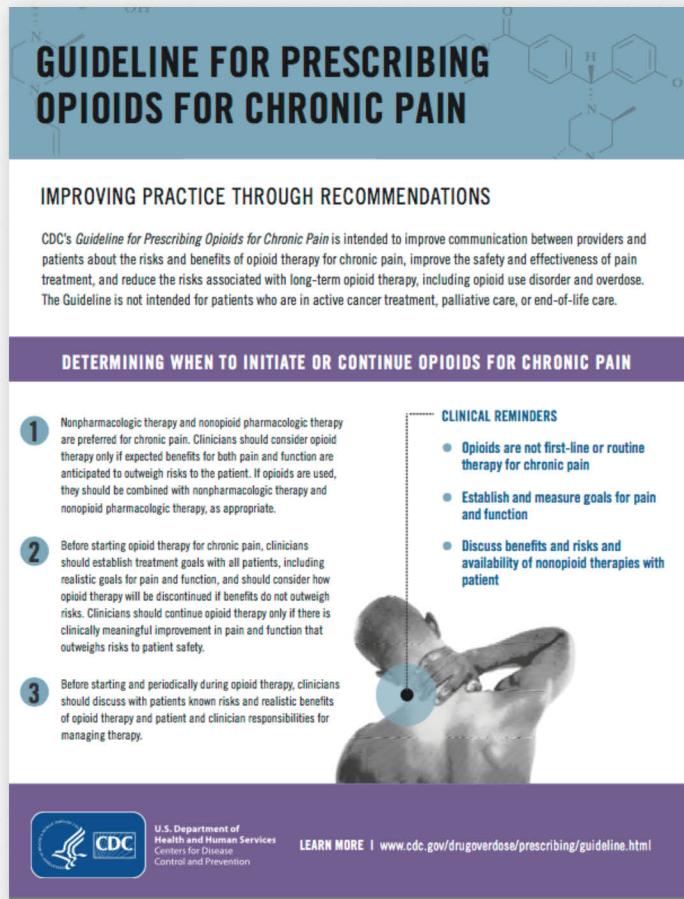
LEVELS OF EVIDENCE-BASED GUIDELINES



GENERAL PRESCRIBING GUIDELINES



CDC GUIDELINES



GUIDELINE FOR PRESCRIBING OPIOIDS FOR CHRONIC PAIN

IMPROVING PRACTICE THROUGH RECOMMENDATIONS

CDC's *Guideline for Prescribing Opioids for Chronic Pain* is intended to improve communication between providers and patients about the risks and benefits of opioid therapy for chronic pain, improve the safety and effectiveness of pain treatment, and reduce the risks associated with long-term opioid therapy, including opioid use disorder and overdose. The Guideline is not intended for patients who are in active cancer treatment, palliative care, or end-of-life care.

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 opioid 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.

CLINICAL REMINDERS

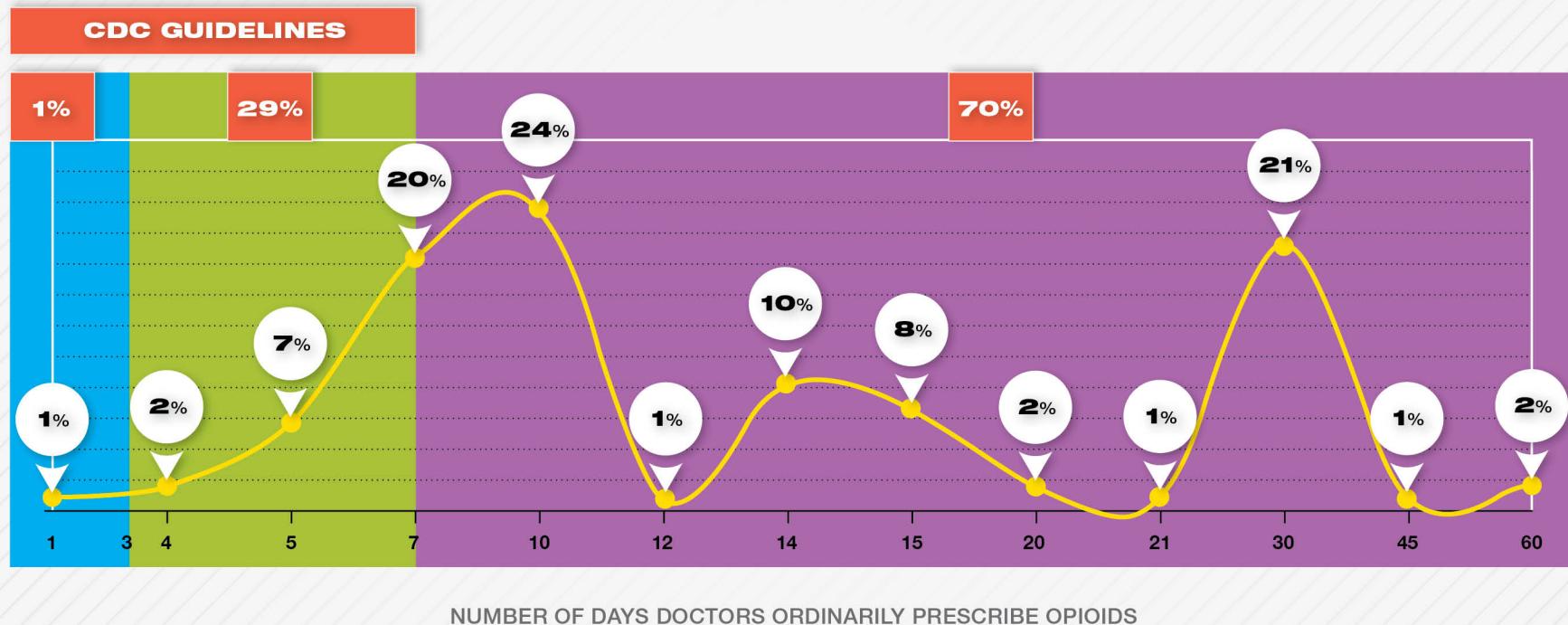
- Opioids are not first-line or routine therapy for chronic pain
- Establish and measure goals for pain and function
- Discuss benefits and risks and availability of nonopioid therapies with patient

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

LEARN MORE | www.cdc.gov/drugoverdose/prescribing/guideline.html



MANY PRESCRIBE OPIOIDS FOR LONGER THAN CDC GUIDELINE



NSC Rx Study – Q10. For what period of time do you ordinarily prescribe opioid pain medication? (Total - n=201)



STATE GUIDELINES



**Interagency Guideline on
Prescribing Opioids for Pain**

Developed by the Washington State Agency Medical Directors' Group (AMDG) in collaboration with an Expert Advisory Panel, Actively Practicing Providers, Public Stakeholders, and Senior State Officials.

www.agencymeddirectors.wa.gov

 **AMDG** agency medical directors' group

A collaboration of state agencies, working together to improve health care quality for Washington State citizens.

*Written for Clinicians who Care for People with Pain
3rd Edition, June 2015*



ER IS FOR EMERGENCIES PROGRAM



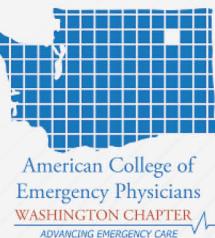
**ER
IS FOR
EMERGENCIES**

RESULTS AFTER ONE YEAR:

- ✓ MEDICAID VISITS FOR CONTROLLED SUBSTANCES DOWN 25%
- ✓ MEDICAID ED COSTS DOWN \$34 MILLION

WASHINGTON ED OPIOID PRESCRIBING GUIDELINES

- Use single prescriber
- Avoid IV/IM formulas
- No opioid replacement scripts
- No LA/ER scripts
- Enforce photo IDs
- 30 pill limit
- Employ SBIRT
- Distribute outpatient resources at POC
- Follow pain contracts
- Contact PCP for acute visits
- Clarify legal concerns



SPECIALTY SOCIETY GUIDELINES



ACEP CLINICAL POLICY ON OPIOID PRESCRIBING

FOUR **CRITICAL** AREAS

01

Utility of
PDMPs

02

Management
of acute low
back pain

03

Short-acting
schedule II vs
short-acting
schedule III
opioids

04

Benefits vs
harms of
opioids for
acute
exacerbations
of chronic pain

LOCAL GUIDELINES ALTO PROGRAM PROTOCOLS

HEADACHE/MIGRAINE	<ul style="list-style-type: none">⦿ Metoclopramide, Ketorolac, IV fluids, Sumatriptan<ul style="list-style-type: none">– If <50% relief, then⦿ Magnesium, Valproic acid, Dexamethasone<ul style="list-style-type: none">– If <50% relief, then⦿ Haloperidol<ul style="list-style-type: none">– If <50% relief, then⦿ Observation with neuro consult
EXTREMITY FRACTURE OR DISLOCATION	<ul style="list-style-type: none">⦿ Nitrous oxide + intranasal Ketamine<ul style="list-style-type: none">– Set up for block⦿ Ultrasound-guided regional Anesthesia
MUSCULOSKELETAL PAIN	<ul style="list-style-type: none">⦿ Ibuprofen + Acetaminophen⦿ Lidocaine or Diclofenac patches⦿ Cyclobenzaprine or Diazepam⦿ Trigger-point or other soft tissue injection
LUMBAR RADICULOPATHY	<ul style="list-style-type: none">⦿ Ibuprofen + Acetaminophen⦿ Cyclobenzaprine or Diazepam⦿ Gabapentin⦿ Lidocaine patch⦿ Ketamine infusion + drip
RENAL COLIC	<ul style="list-style-type: none">⦿ Ketorolac + Acetaminophen + IVF⦿ Cardiac lidocaine – 1.5 mg/kg IV, max 200 mg

LaPietra, Alexis. Cutting Edge Pain Management/ ACEPnow, August 2016, 15-16.



IF YOU MUST USE OPIOIDS...

- ✓ Start low, go slow and reassess
- ✓ Use MME calculators
- ✓ Limit use of combination products
- ✓ Treat Tramadol as an opioid
- ✓ Exercise caution in elderly
- ✓ Counsel patients appropriately

USE RISK ASSESSMENT TOOLS

Opioid Risk Tool

Introduction

The Opioid Risk Tool (ORT) is a brief, self-report screening tool designed for use with adult patients in primary care settings to assess risk for opioid abuse among individuals prescribed opioids for treatment of chronic pain. Patients categorized as high-risk are at increased likelihood of future abusive drug-related behavior. The ORT can be administered and scored in less than 1 minute and has been validated in both male and female patients, but not in non-pain populations.

Opioid Risk Tool

This tool should be administered to patients upon an initial visit prior to beginning opioid therapy for pain management. A score of 3 or lower indicates low risk for future opioid abuse, a score of 4 to 7 indicates moderate risk for opioid abuse, and a score of 8 or higher indicates a high risk for opioid abuse.

Mark each box that applies	Female	Male
1		3
2		
4		
5		
1		
3		
4		
5		
1		
3		
2		
1		

R. Webster, MD to assess aberrant behaviors in 2005; 6 (6) : 432

Opioid Risk Tool (ORT)
Questionnaire developed by Lynn R. Webster, MD to assess risk of opioid addiction.

MARK EACH BOX THAT APPLIES	FEMALE	MALE
FAMILY HISTORY OF SUBSTANCE ABUSE		
Alcohol	<input type="checkbox"/> 1	<input type="checkbox"/> 3
Illegal drugs	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Rx drugs	<input type="checkbox"/> 4	<input type="checkbox"/> 4
PERSONAL HISTORY OF SUBSTANCE ABUSE		
Alcohol	<input type="checkbox"/> 3	<input type="checkbox"/> 3
Illegal drugs	<input type="checkbox"/> 4	
Rx drugs	<input type="checkbox"/> 5	
AGE BETWEEN 16-45 YEARS		
HISTORY OF PREADOLENT SEXUAL ABUSE	<input type="checkbox"/> 1	<input type="checkbox"/> 3
PSYCHOLOGIC DISEASE		
ADD, OCD, bipolar, schizophrenia	<input type="checkbox"/> 2	<input type="checkbox"/> 2
Depression	<input type="checkbox"/> 1	<input type="checkbox"/> 1
SCORING TOTALS		

ADMINISTRATION

- On initial visit
- Prior to opioid therapy

SCORING (RISK)

0-3: low
4-7: moderate
≥8: high

Opioid Conversion Equivalents Table

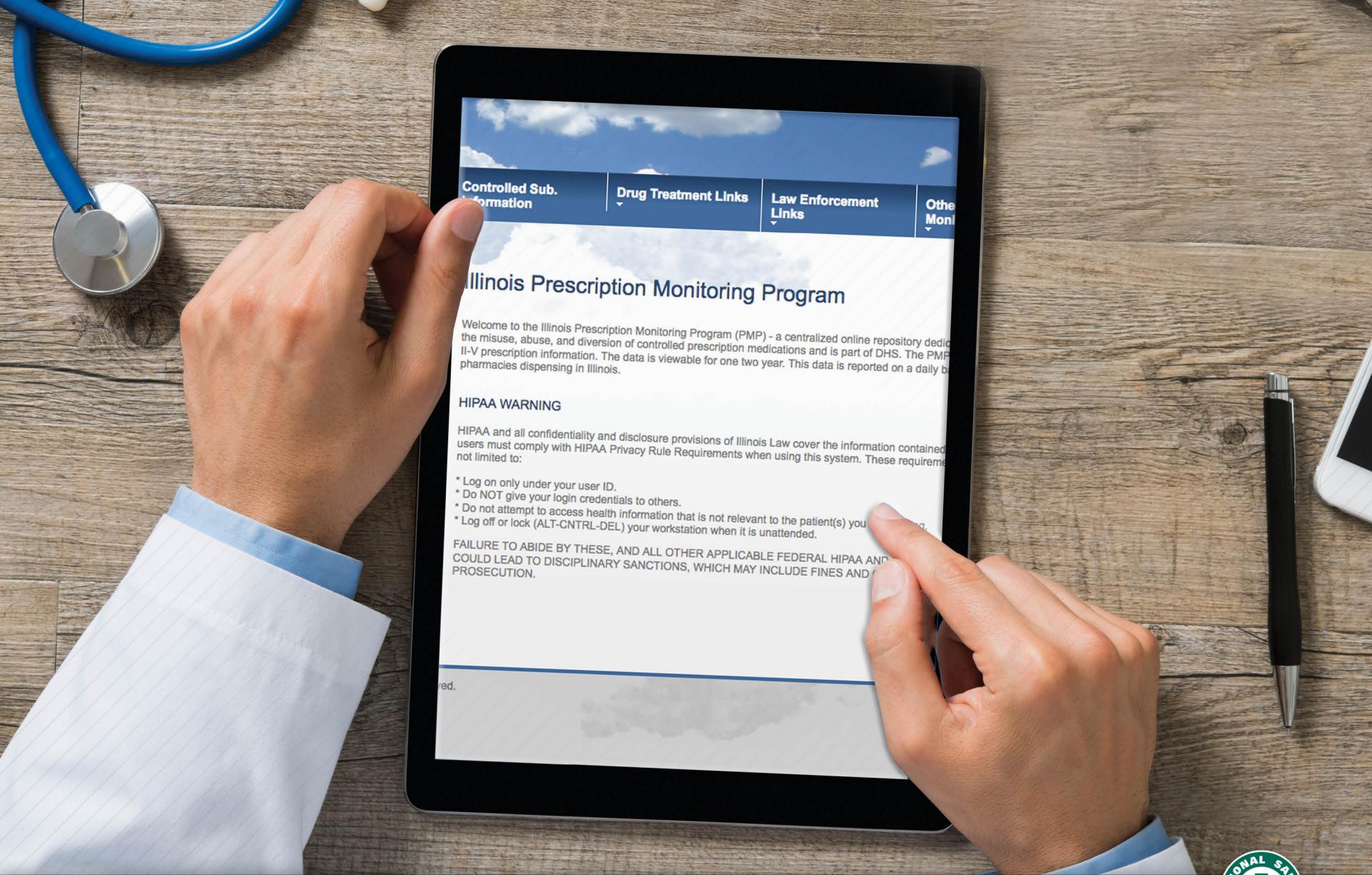
DRUG	PARENTERAL	ORAL
Morphine	10 mg	30 mg
Oxycodone	NA	20 mg
Fentanyl	100 mcg	15 mcg TD
Hydromorphone	1.5 mg	7.5 mg
Methadone	5 mg	10 mg

<http://www.drugabuse.gov/nidamed-medical-health-professionals>

<https://www.drugabuse.gov/sites/default/files/files/OpioidRiskTool.pdf>

<http://www.prescriberesponsibly.com/sites/default/files/pdf/risk/Opioid%20Risk%20Tool.pdf>





PATIENT EDUCATION STRATEGIES



8 OPIOID SAFETY PRINCIPLES

1

NEVER TAKE
AN OPIOID PAIN
MEDICATION
THAT IS NOT
PRESCRIBED
TO YOU.

2

NEVER
ADJUST YOUR
OWN DOSE.

3

NEVER MIX
WITH
ALCOHOL.

4

USING SLEEP
AIDS AND
ANXIETY
MEDICATIONS
WITH OPIOIDS
IS DANGEROUS.



8 OPIOID SAFETY PRINCIPLES

5

ALWAYS
DISCLOSE
ALL OF YOUR
MEDICATIONS
TO PROVIDERS.

6

KEEP TRACK
OF WHEN
YOU TAKE
MEDICATIONS.

7

KEEP
MEDICATIONS
IN A
SAFE PLACE.

8

DISPOSE
OF UNUSED
MEDICATIONS.



TREATING OVERDOSE AND OPIOID USE DISORDER: MEDICATIONS

- OD Reversal
 - Naloxone
- Opioid Agonists
 - Methadone
 - Buprenorphine
- Opioid Antagonists
 - Naltrexone

NALOXONE: ACUTE CARE CONSIDERATIONS

Management of
opioid overdoses

Prehospital
considerations

- ✓ Patient monitoring
- ✓ Re-dosing
- ✓ Fentanyl
- ✓ Third party prescribing/
standing orders
- ✓ Case study: Baltimore

4 TREATMENT OPTIONS



Detox
followed
by
abstinence



Detox
followed by
Naltrexone
monthly shots



MAT with
Buprenorphine



MAT with
Methadone



2016 OPIOID USE DISORDER TREATMENT STUDY

TREATMENT ➤ **OUTCOME**

MAT ➤ **BEST OUTCOMES**

**COUNSELING
WITHOUT MAT** ➤ **2X MORTALITY RATE**

**LEFT RESIDENTIAL
TREATMENT** ➤ **4-FOLD MORTALITY
INCREASE**

LEFT MAT ➤ **2X MORTALITY RATE**



Pierce, M., Bird, S. M., Hickman, M., Marsden, J., Dunn, G., Jones, A., & Millar, T. (2016). Impact of Treatment for Opioid Dependence on Fatal Drug-Related Poisoning: A National Cohort Study in England. *Addiction*, 111(2), 298–308. <http://doi.org/10.1111/add.13193>

PHYSICIAN ADVOCACY

ADOPT
EVIDENCE-BASED
OPIOID
PRESCRIBING
PRACTICES



PHYSICIAN ADVOCACY

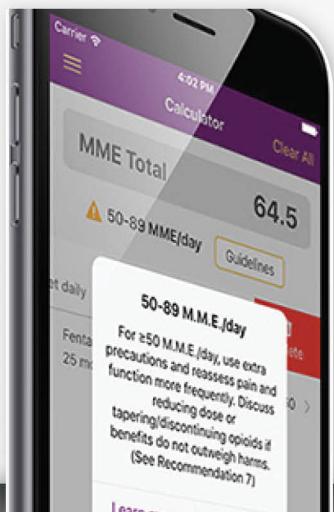
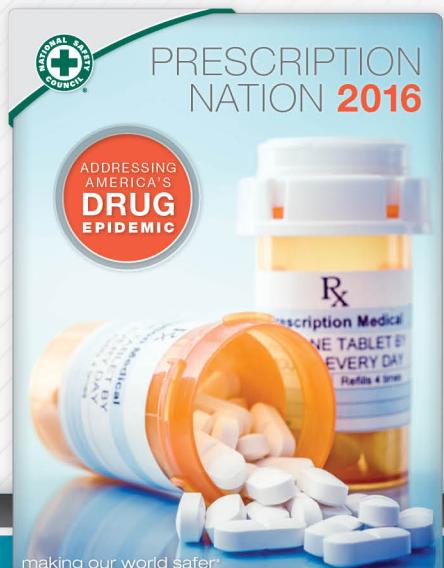
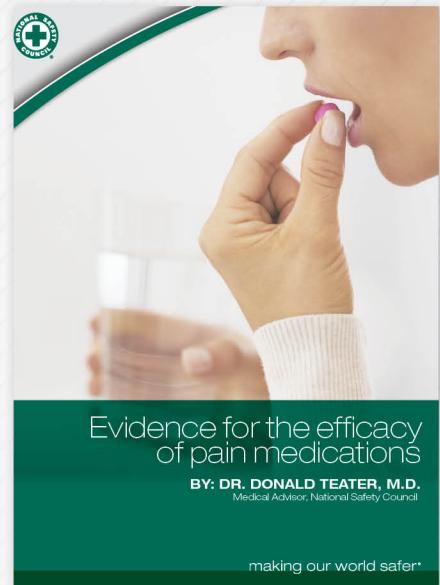
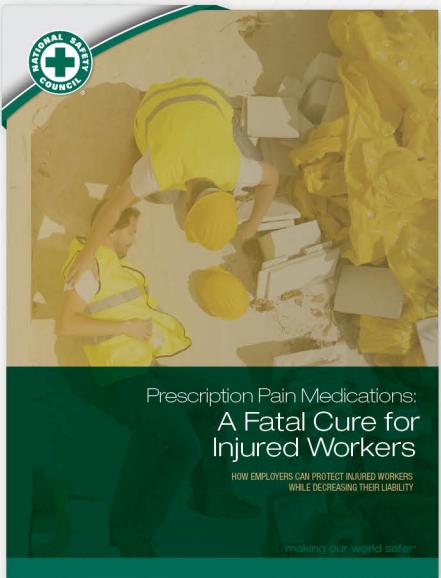
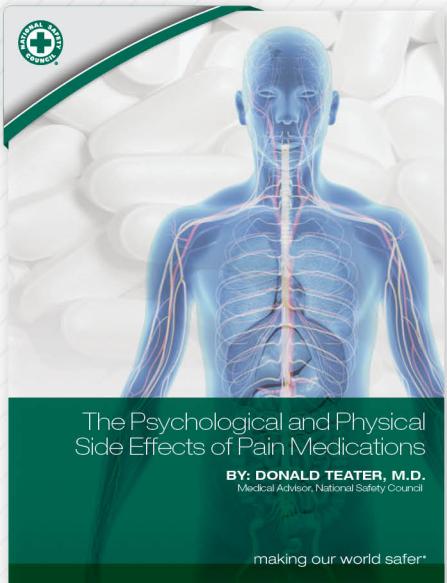
ADVOCATE
FOR PAYMENT
AND
REIMBURSEMENT
CODES



PHYSICIAN ADVOCACY

SUPPORT
COMMUNITY,
STATE AND
FEDERAL EFFORTS





OPIOID GUIDELINES mobile app



**QUESTIONS
WELCOME**